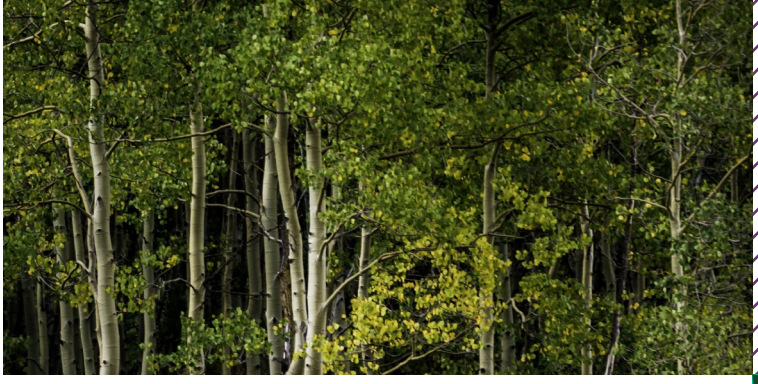

Effectiveness Evaluation of Sustainable Production Activities Projects of

Agglutinating Entities in the Amazon Fund

MATERIALIZE – RECA

STRENGTHENING THE FOREST BASED SUSTAINABLE ECONOMY - COOPERACRE

SMALL ECO-SOCIAL PROJECTS IN THE AMAZON - ISPN

DEMA FUND – FASE

March2023

EFFECTIVENESS EVALUATION OF SUSTAINABLE PRODUCTION ACTIVITIES PROJECTS OF AGGLUTINATING ENTITIES IN THE AMAZON FUND

This report presents the results of the ex post effectiveness evaluation of projects on the theme of Sustainable Productive Activities within the scope of the Amazon Fund/ BNDES. The evaluation was carried out by a team formed by independent consultants under the coordination of the German Cooperation for Sustainable Development through the Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH (GIZ), within the scope of the technical cooperation with BNDES about the Amazon Fund. All opinions expressed herein are the sole responsibility of the authors, not necessarily reflecting the position of GIZ and BNDES. The recommendations presented are neither prescriptive nor mandatory.

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SUMMARY

LIST OF ACRONYMS

Amacro	Amazonas, Acre, Rondônia
APL	Local Productive Arrangement
Apib	Articulation of Indigenous Peoples of Brazil
PPA	Permanent Preservation Area
APS	Sustainable Production Activities
Arpa	Protected Areas of the Amazon
ASA	Semi-arid Articulation
ATER	Technical Assistance and Rural Extension
BNDES	Brazilian Development Bank
CAR	Rural Environmental Registry
Ceplac	Executive Committee of the Cocoa Farming Plan
CNS	National Council of Extractive Populations
CGN	National Management Council (PPP-Ecos)
Conab	National Supply Company
Cooperacre	Central Cooperative for Extractive Marketing of Acre
EBC	Brazil Communication Company
Embrapa	Brazilian Agricultural Research Corporation
ENREDD+	National Strategy for REDD+
FA	Amazon Fund
Fase	Federation of Agencies for Social and Educational Assistance
FEPASA	Pará Railroad
Funai	National Indian Foundation
Funbio	Brazilian Biodiversity Fund
GEF	Global Environment Facility
GIZ	German Agency for International Cooperation (Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH)
Ibama	Brazilian Institute of Environment and Renewable Natural Resources
IBGE	Brazilian Institute of Geography and Statistics
ICMBio	Chico Mendes Institute for Biodiversity Conservation
IN	Normative Instruction
Inpe	National Institute for Space Research
Ipam	Amazon Environmental Research Institute
ISPN	Society, Population and Nature Institute
MMA	Ministry of the Environment
OECD	Organization for Economic Cooperation and Development
Oema	State Environment Agency
UN	United Nations

PA	Settlement Project
PAA	Food Purchase Program
PCT	Traditional Peoples and Communities
PGPM-Bio	Minimum Price Guarantee Policy for Socio-Biodiversity Products
Planaveg	National Plan for the Recovery of Native Vegetation
PMFC	Community and Family Forest Management Program
PMFS	Sustainable Forest Management Plan
PNAE	Food Purchase Program
PNPSB	National Plan for the Promotion of Socio-biodiversity Product Chains
UNDP	United Nations Development Program
PPCDAm	Plan for the Prevention and Control of Deforestation in the Brazilian Amazon
PPP-Ecos	Small Eco-social Projects Program
PRA	Environmental Regularization Program
Prad	Degraded Areas Recovery Plan
Pronaf	National Program for Strengthening Family Farming
PSA	Payment for Environmental Services
RAE	Effectiveness Evaluation Report
RAR	Results Evaluation Reports
RDC	Collegiate Board Resolution
Reca	Consortium and Densified Economic Reforestation Project
RED	Performance Reports
REDD+	Reduction of Emissions from Deforestation and Forest Degradation (+ conservation of forest carbon stocks, sustainable forest management and increase of forest carbon stocks)
Resex	Extractivist Reserve
LR	Legal Reserve
SAF	Agroforestry Systems
SGP	Small Grants Project (from GEF)
TBC	Community-Based Tourism
IL	Indigenous Land
UNFCCC	United Nations Framework Convention on Climate Change
CU	Conservation Units
WWF	World Wide Fund for Nature

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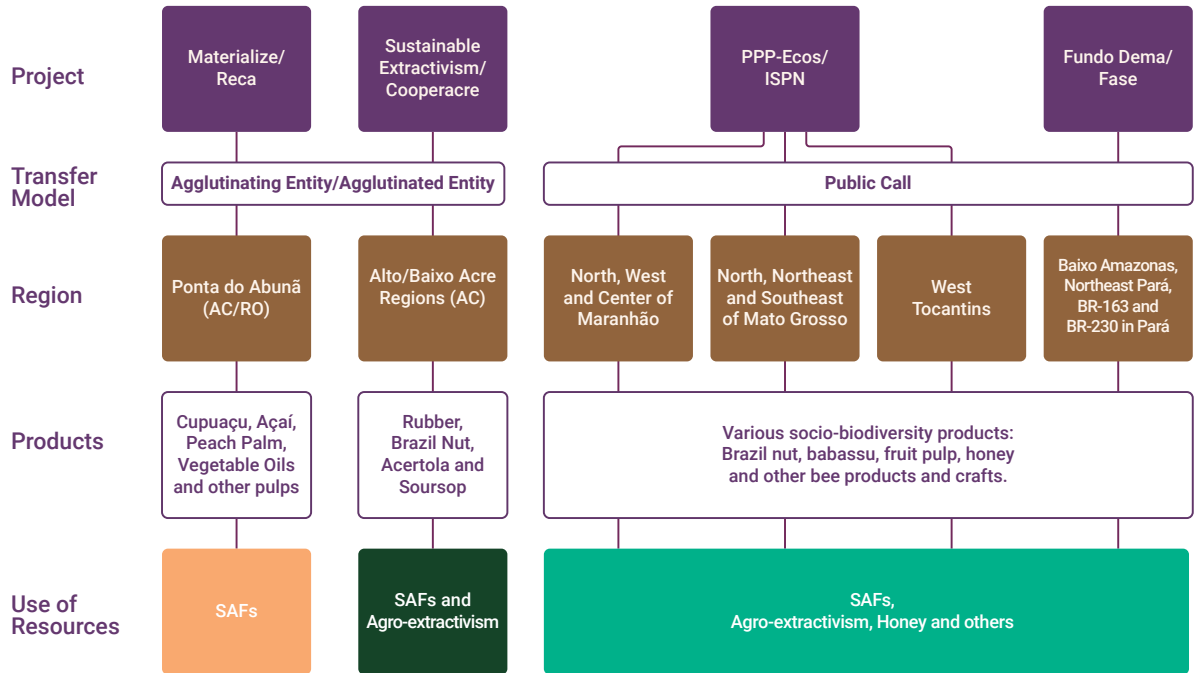
EXECUTIVE SUMMARY

The thematic effectiveness evaluation of Sustainable Production Activities (APS) projects supported by the Amazon Fund through the agglutinating and public call modalities generated individual and overall analyses of four projects that are part of the Sustainable Production Component of the Amazon Fund, as shown in Figure 1.

Figure 1: Joint simplified representation of evaluated projectss



Source: Own elaboration.

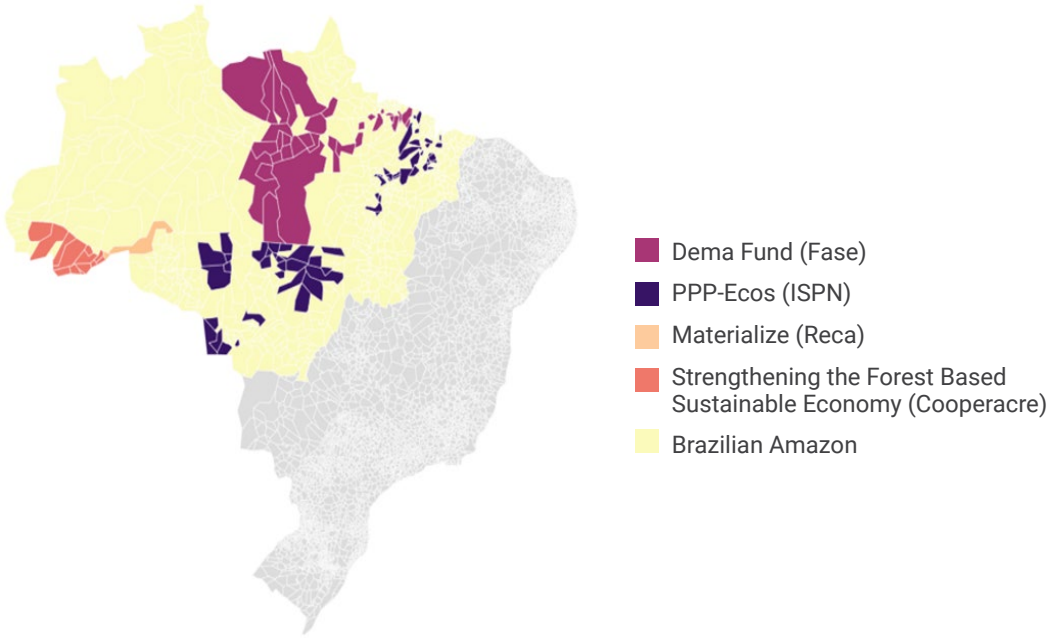
In terms of the four projects evaluated, the Materialize projects by the Consortium and Densified Economic Reforestation Project (Reca), and Strengthening the Forest Based Sustainable Economy by the Central Cooperative for Extractive Marketing of Acre (Cooperacre), were framed through the first Public Call for Support to Sustainable Productive Projects, held in 2012[1], and executed in the agglutinating modality. The Dema Fund projects, of the Federation of Agencies for Social and Educational Assistance (Fase) and the Small Eco-Social Projects Program in the Amazon – PPP-Ecos in the Amazon, of the Society, Population and Nature Institute (ISPN), were approved in the spontaneous demand category of the Amazon Fund and their execution took place through public calls for contracting the subprojects they supported. The first three projects had allocated amounts ranging between R$5.1 and R$7.4 million, while the PPP-Ecos project reached R$17.7 million, totaling R$37.6 million of investment in the projects evaluated herein. This amount corresponds to about 7.9% of the project

1. Check out details of this public call, such as values, supported projects and deadlines, at: https://www.fundoamazonia.gov.br/pt/como-apresentar-projetos/chamadas-publicas/projetos-produtivos-sustentaveis/.

portfolio of the Sustainable Production Component in 2020 (total of R$476.4 million)[2].

Due to the geographical scope of the projects, distributed along the line of the region called Areas under intense pressure for deforestation, in six of the nine states that make up the Brazilian Amazon, the learning experiences and challenges identified in this evaluation contribute to the improvement of the modes of support and consolidation of future strategies of the Amazon Fund. The projects evaluated covered a wide and complex network of territories, social groups, execution formats, products, value chains, local productive arrangements (LPAs) and land use models, which represented a challenge for the aggregation of results and their thematic analysis (Figure 2).

Figure 2: Geographical distribution of the municipalities where the resources of the Amazon Fund were applied by the four evaluated projects



Source: Own elaboration.

2. Amazon Fund. 2020 Activity Report. Rio de Janeiro: BNDES, 2021. p.53. Available at: https://www.fundoamazonia.gov.br/export/sites/default/pt/.galleries/documentos/rafa/RAFA_2020_port.pdf.

MAIN RESULTS

ECONOMIC ACTIVITIES DEVELOPED

The four projects evaluated, despite their differences, supported value chains of Amazonian socio-biodiversity products and contributed in different ways to the achievement of the objectives of the Amazon Fund. They were able to promote significant changes in the territories of incidence, allowing greater social organization, access to public policies, primary production, processing and commercialization. Furthermore, they were fundamental to strengthen successful experiences, both with small producers and with better structured productive experiences, such as in the cases of Cooperacre and Reca, and to increase the quality of life of diverse populations.

The *Materialize* project, implemented by Reca, invested in agroforestry systems (SAFs) combined with a participatory management model and good soil conservation practices, which are reflected in the improvement of farmers' quality of life. One of the important legacies of their accumulated experience was the maturation of producers, by articulating collectively, and having enabled, through various experiences, the implementation of productive forests.

Cooperacre promoted productive organization, training, technical assistance and rural extension (ATER) and processing, supporting agro-extractivist families for the production and commercialization of socio-biodiversity products. These factors demonstrate that the LPAs that the cooperative works with are complementary to the objectives and results achieved with the project *Strengthening the Forest Based Sustainable Economy*. Cooperacre is currently the largest processor of Brazil nuts in the country.

The support of the Fase project – *Dema Fund* –, to small projects in Pará, contributed to the constitution of an extraordinary diversity of productive practices. We highlight those that focus on the adoption of new production technologies, soil management and pest control based on agroecology, promoting collective activities and changes in family eating habits, promoting food and nutrition security.

In the area of operation of the *PPP-Ecos in the Amazon* project, of ISPN, several production chains were expanded, including different products such as açaí, babassu, honey, fruit pulps, palm heart, handicrafts, among others. There was greater access to institutional purchasing programs and greater organization of initiatives by indigenous, quilombola, family farmers and settlers communities. Concrete impacts were also observed in the incidence on public policies and federal and municipal legislative processes. The small projects supported by *PPP-Ecos in the Amazon* presented different strategies for income generation, ranging from fresh products to processed products, with different marketing strategies.

AGROFORESTRY AND BIODIVERSITY PRODUCT CHAINS WITH INCREASED ADDED VALUE

All projects relied on activities to strengthen the value chains of Amazonian socio-biodiversity, using various strategies. Construction, improvement or reconstruction of small, medium and large agroindustry; development of market research and support for the acquisition of environmental licenses; improvement in the beneficiation processes from the purchase of machinery for different purposes; access to public policies and institutional purchasing programs; conduction of technical training processes for various purposes, such as ATER work and production of didactic and dissemination materials; among others.

In the projects carried out by the cooperatives Cooperacre and Reca – *Strengthening the Forest Based Sustainable Economy and Materialize*, respectively, a significant amount of resources was foreseen for investments in equipment and infrastructure to expand the processing capacity of the products that are in their value chains. Cooperacre modernized two Brazil nut processing plants, and the processing plant in Xapuri received four greenhouses for processing. It also invested in expanding the areas for collecting Brazil nuts with organic certification, since it is the product that generates the most revenue. The initial goal of the project was to certify seven agglutinated entities, in addition to renewing organic certification in seven other associations, but after the end of the project, Cooperacre decided to invest in other certification processes that include aspects of food safety, due to market demands. Reca, on the other hand, invested in improving infrastructure and machinery for processing. The expansion and modernization of agroindustries, which had an investment of about 33% of the total value of the project, increased the productive capacity and processing of cupuaçu, açaí and other fruits.

In the projects within the public call modality – *Dema Fund* by Fase and *PPP-Ecos in the Amazon* by the ISPN – the average values to support the subprojects selected by each of these two projects were between R$30 thousand and R$90 thousand. These beneficiary subprojects served the interests of local organizations and communities, providing equipment purchases, renovations of processing structures, training, among others. In addition to the institutional market, many subprojects resorted to public fairs to market their products. The increase in income generation capacity was confirmed by the quantity produced, especially native products from the Amazon, especially fruits and seeds, and by the production value, calculated in November 2017, of almost R$4 million.

The main products of the subprojects supported by the *Dema Fund* and *PPP-Ecos* were fruit pulps, andiroba oils, babassu, Brazil nuts, copaiba, cassava flour, babassu derivatives and honey from bees. Regarding access to markets, around 60% of the productive initiatives accessed local markets, mainly municipal fairs, but also family farming fairs, women's groups, organic fairs and, in some cases, regional fairs.

Both the *Dema Fund* and the *PPP-Ecos* had difficulty systematically monitoring the records of financial revenues and the quantities marketed of all subprojects supported. The two initiatives invested in different strategies to try to carry out this monitoring: the Dema Fund contracted an external evaluation and the PPP-Ecos applied a questionnaire to the participating associations.

As already presented, the overall results of this evaluation showed an increase in the income of families impacted by APS projects, especially in the initiatives to implement mini fruit and cassava flour processing plants, açaí management, fish farming, handicrafts and Community-Based Tourism (TBC). The diversification of production and access to adequate equipment and more structured collective workspaces have contributed to the improvement of working conditions, making it easier and more qualified. Despite the differences in size and scope among the projects evaluated, they proved to be efficient in reaching markets, as reflected in their impact on the generation of average household income per year, which increased from R$1,850.00 to R$2,400.00 due to the sustainable productive activities supported.

EXPANDED MANAGERIAL AND TECHNICAL CAPACITIES FOR THE DEVELOPMENT OF ECONOMIC ACTIVITIES FOR THE SUSTAINABLE USE OF THE FOREST AND BIODIVERSITY

In addition to the technical support offered by the *Strengthening the Forest Based Sustainable Economy* project, Cooperacre encouraged and administratively supported local associations to assume the legal role of cooperatives, which allowed the fiscal regularity of the processes of buying and selling socio-biodiversity products. The network of cooperatives created is spread throughout Cooperacre's territory of operation, which is located in Rio Branco/AC, where its central office and the Brazil nut processing plant are located. The cooperative has six other industries processing Brazil nuts, fruit pulp, natural rubber and palm hearts, which are located in the municipalities of Xapuri, Sena Madureira, Senador Guiomar and Brasiléia, in the state of Acre. In total, 12 agglutinated associations were strengthened with the resources of the Amazon Fund for the Cooperacre project, in addition to training in agroforestry and administrative and financial management of 441 members.

Reca has its headquarters and industrial plant located in the District of New California, in Porto Velho/RO. The organization adopts the SAFs model as the main productive base. The 315 hectares of SAFs implemented with the *Materialize* project are distributed among groups of producers located on several neighboring roads that cross the BR-364 highway. 443 people were trained to implement SAFs, production and storage of socio-biodiversity products, 39% women and 61% men.

The *Dema Fund* opened seven notices to support subprojects with financing from the Amazon Fund between 2011 and 2014. The calls served various social groups of indigenous people, quilombolas and the general public, with a total of 112 projects supported. One of the major challenges to comply with the notices was the rules for the eligibility of resources from the Amazon Fund, especially regarding the regularity of the associations. As such, the *Dema Fund* provided 49 training events and seminars. The same happened for the goal of individuals trained in the elaboration, execution and evaluation of socio-environmental projects, which served an public of 1,018 people.

Similarly, the *PPP-Ecos in the Amazon* project launched four public notices, in which 88 subprojects were selected in the central region of Maranhão, north of the state of Tocantins and north of the state of Mato Grosso. The component of strengthening community organizations impacted 157 associations with training and other activities.

DEFORESTED AND RECLAIMED AREAS USED FOR ECONOMIC AND ECOLOGICAL CONSERVATION PURPOSES

The four projects evaluated allocated resources for activities to increase productive capacity, generate income and reduce the liabilities of degraded areas in communities located in quilombola territories, indigenous lands (ILs), agrarian reform settlements and conservation units (CUs) for sustainable use. The systems most used for this purpose were SAFs, which use the concept of agroecology, combining the consortium of short, medium and long term crops. In addition to soil recovery using nutrient cycling, they focus on productivity, crop diversification, seasonality in production and financial return.

In the supported projects, ATER practices aimed at the conversion of degraded areas, such as pastures with low productivity rates (below one head of cattle per hectare), were successful in approaching family farmers with the consideration that one hectare of SAF can yield more than the same pasture area. In the field visits, testimonies from members of the *Materialize* project stated that intercropped plantations of cupuaçu, peach palm and forest species are generating more revenue than cattle breeding. The use of SAFs to convert degraded areas has the potential to gain scale and attract new beneficiaries. This type of production allows traditional communities to promote, according to their ways of life, forest restoration and recovery of degraded areas, and can generate income throughout the year.

The contributions of the four APS projects evaluated, identified for direct effects and evaluated according to the criteria of the Organization for Economic Cooperation and Development (OECD), were:

- **Relevance:** The four projects evaluated can be considered references in the development and support of community productive activities. They use forest conservation and the recovery of degraded areas, with the implementation of SAFs, and combine these activities with socioeconomic development through the strengthening of Amazonian socio-biodiversity value chains. This occurs in a participatory manner and is aligned with the objectives of the Amazon Fund.
- **Efficacy:** Most of the goals were exceeded, with justifications and actions to meet those that were not achieved. It was possible to observe strong action in meeting the needs of subprojects and agglutinated entities and in strengthening land-use planning, as well as good results linked to the number of beneficiaries and income generation. It is noteworthy that there is a possibility of improving monitoring for a better evaluation of productivity in public call projects.
- **Efficiency:** The projects achieved robust results and ensured the continuity of the work of several community organizations. Considering the specificities of the execution modalities, it was possible to verify higher productivity with low investment cost in the cases of agglutinating entities and great territorial coverage in the public call projects[3]. Important results of training, audience reached and generation of knowledge through publications were also achieved at low cost.

3. The differences between some project execution formats will be addressed in more detail in section 1.2 Execution Modality.

- **Impact:** There was a significant positive impact on the strengthening of production chains, as well as on the strengthening of commercial relations and the structuring of management entities (cooperatives and associations) in different realities and with different social groups. It was possible to observe positive impacts on legislative processes (for example, the Free Babassu Law[4]) and public policies related to conservation, food security, increased income, quality of life and social inclusion.
- **Sustainability:** The projects contributed to the aggregation of value and commercialization of socio-biodiversity chains, generated knowledge and trained beneficiaries. Executing entities, agglutinated entities and subprojects are more structured than before the support and access new resources, markets (for example, projects signed between Cooperacre and Vert/Veja[5]) and projects, demonstrating their sustainability and community and territory strengthening.

CONCLUSIONS

The four projects evaluated responded positively to the diversity found in the target groups, respecting social groups, organizations and land-use dynamics, creating efficient and effective solutions and responses, especially when considering the strengthening of agro-extractivist production, access to new markets and improved quality of life. It is worth reiterating some structuring APLs that have been strengthened, such as babassu, in Maranhão; açaí, in Pará (mainly); rubber, in Acre; and Brazil nuts and fruit pulps, in various locations.

The projects went beyond the consolidation of production chains by contemplating actions and activities that boosted other income-generating activities, such as beekeeping, production of handicrafts based on vegetable fibers, fish farming, production of bio jewelry, among others. The subprojects that received support from the *Dema Fund* and the *PPP-Ecos in the Amazon* addressed issues that were beyond sustainable productive activities (APS), responding to projects of education, training, structuring of rural houses, among others. This was only possible thanks to the freedom of organizations to choose activities in the face of their greatest needs.

The role of the executing entities (agglutinating entities) was fundamental to expand the capillarity of investments from the Amazon Fund, since most projects supported by the agglutinating entities would not be able to access resources otherwise. The structuring of the value chains involved has led to better production results and income generation in the area, improving the quality of life of the population without resorting to more predatory forms of rural production (such as monocultures, livestock and timber sales), factors that are in line with the Amazon Fund's general objective.

The APS projects evaluated were able to manage their subprojects and impact their territories of operation, with different levels of incidence. Agglutinating organizations are

4. Law No. 8.815 of November 17, 2004 of the state of Maranhão. It ensures the free access of babassu coconut extractive populations to public lands for the development of this economic activity. Available at: http://arquivos.al.ma.leg.br:8080/ged/legislacao/LEI_8185

5. Vert/Veja is a French footwear company that in 2018 partnered with Cooperacre to buy latex at higher than market prices.

fundamental for the expansion and strengthening of APS in the Amazon and for the consolidation of viable economic alternatives, both in more structured and larger-scale arrangements and in strengthening initiatives with a more local impact.

The activities developed by the projects to strengthen the production chains provided greater productive and commercial autonomy, reducing the dependence on middlemen in various situations. The four projects evaluated can be considered as important vectors of knowledge, learning and training. Although they do not act directly to reduce deforestation, such as monitoring and control activities, APS provide alternatives for generating income and economies that guarantee the conservation of the standing forest, in addition to ensuring a significant improvement in the quality of life of the population in the territories and opening up opportunities for other forms of land use. Thus, they are fundamental for the construction of a promising scenario of conservation and development in the Amazon, justifying growing and more robust investments.

LESSONS LEARNED

POSITIVE ASPECTS

- The projects expanded the qualification and profitability for all links of the supported chains in which resources from the Amazon Fund were invested. Direct and indirect jobs were generated.
- The purchase of agro-extractivism products was guaranteed, such as Brazil nuts, rubber and açaí, as well as agricultural products, such as fruits for the production of industrialized pulps.
- The partnership between the agglutinating entities and their members generated a direct commercial relationship, without intermediaries, with fairer prices and a consequent improvement in income in the APLs worked on.
- The projects supported the structuring and security of the supported territories, meeting the environmental and land tenure regularization criteria of the supported organizations (Reca and Cooperacre) and supporting Indigenous and quilombola communities (Fase and ISPN).
- Due to the results achieved and the ability to generate capillarity of its actions and alignment with formats expected by BNDES, two of the four projects – *Dema Fund* and *PPP-Ecos in the Amazon* – had new investments, with higher values.
- It was possible to observe that the attractiveness of productive activities for communities is associated with economic issues and income mainly. However, factors related to improving the quality of life, food and territorial security and cultural appreciation were also of great relevance.
- The projects developed participatory governance structures and stimulated the involvement of communities in decision-making processes. Long-term capacities were generated to give sustainability to the means of production and diversification of socio-biodiversity products.

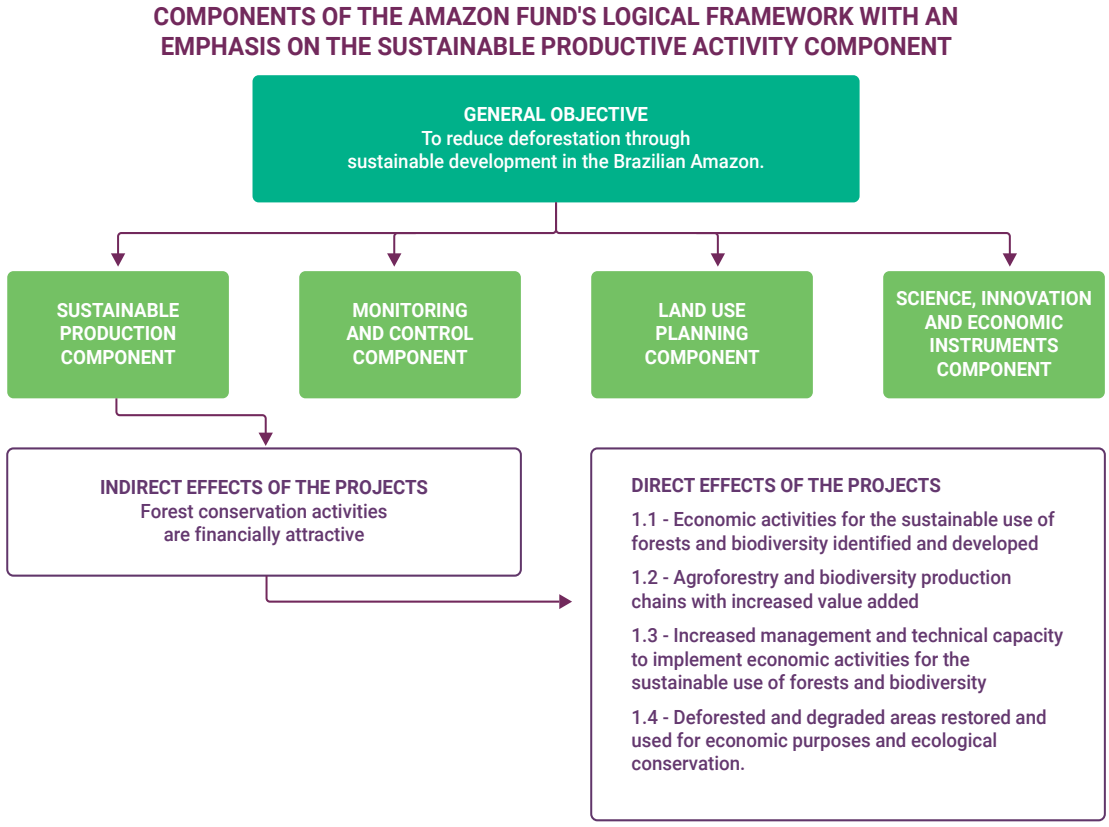
CHALLENGES

- After the termination of the contracts, ATER teams were demobilized. The maintenance of these teams and the continuity of monitoring could increase the sustainability of the results, either through fundraising from other sources or even through their own revenues.
- Despite the efforts of the projects, the work related to the recovery of degraded areas could be expanded to generate more impact in the face of the advance of deforestation.
- It is considered important to guide future actions related to the standardization of activities and products within the Logical Framework of projects and between projects, in order to facilitate the comparative evaluation of impacts and guide future conservation actions in the Amazon.
- There were difficulties, which were overcome, in regularizing the associations in view of the accountability rules of the Amazon Fund. Communities have limited experience articulating their priorities in a project format or managing projects in ways that meet donor requirements on issues such as procurement of goods and services.
- As much as the various activities developed by the public call projects – *Dema Fund* and *PPP-Ecos in the Amazon* – have effectively promoted the better structuring of the supported initiatives and strengthened different value chains in a vast territory, it is possible to say that the reach to higher value markets was limited..

1. BACKGROUND

This evaluation focuses on the Sustainable Production Component of the Logical Framework of the Amazon Fund/BNDES[6], which aims to meet its general objective of reducing deforestation and promoting sustainable development in the Amazon. The indirect effects of the evaluated projects are aligned with the Component, according to the package of activities planned for them (direct effects). The expected direct effects, in turn, are met by a series of products and services linked to the activities planned by the projects (Figure 4). It is noteworthy that this ex-post evaluation is the second thematic evaluation on projects of sustainable productive activities (APS) and the first to consider the distinction between agglutinating and public call execution modalities[7].

Figure 3: Components of the Amazon Fund's Logical Framework with an emphasis on the Sustainable Productive Activity Component



Source: Own elaboration, based on Fundo Amazônia, 2021.[8]

6. The components of the Amazon Fund are: i. Sustainable Production, ii. Monitoring and Control, iii. Land-Use Planning and iv. Science, Innovation and Economic Instruments.

7. For more information, see item 1.2 "Modalities of Execution" of this report.

8. Amazon Fund. Activity Report 2020. Rio de Janeiro, 2021. p. 35. Available at:: https://www.fundoamazonia.gov.br/export/sites/default/pt/.galleries/documentos/rafa/RAFA_2020_port.pdf.

The Amazon Fund (FA) is internationally recognized as an instrument that promotes the conservation of the Amazon Forest. The Fund supported technological innovations associated with deforestation control (such as the forest cover monitoring system implemented by the National Institute for Space Research – INPE) and activities that led to the reversal of the historical increase in deforestation rates. Its success relates directly to other actions of the Brazilian government and international agreements[9].

It is worth mentioning the relationship of the Amazon Fund with the thematic axes and strategic objectives of the Plan for the Prevention and Control of Deforestation in the Brazilian Amazon (PPCDAm). Created in 2004, the PPCDAm was structured to address deforestation comprehensively, being articulated in three thematic axes: (i) land and land-use planning, (ii) environmental monitoring and control and (iii) promotion of sustainable productive activities[10] [11].

On the other hand, the Amazon Fund reflects international efforts to reduce greenhouse gas emissions and combat global warming, with the National Strategy for Reducing Emissions from Deforestation and Forest Degradation, Conservation of Forest Carbon Stocks, Sustainable Forest Management and Enhancement of Forest Carbon Stocks (ENREDD+) as one of the guiding principles of its work[12]. The creation of the Fund aimed to enable Brazil to receive incentives for Reducing Emissions from Deforestation and Forest Degradation (+ conservation of forest carbon stocks, sustainable forest management and increase of forest carbon stocks) – REDD+ agreed according to the United Nations Framework Convention on Climate Change (UNFCCC), through the promotion of public policies aimed at reversing the scenario of forest loss[13].

1.1. THE AMAZON FUND AND OTHER CONSERVATION PROMOTION INITIATIVES

Over the past decades, several arrangements have been built to create tools aimed at conserving the Amazon biome and strengthening governance. However, even with the creation of several protected areas (CU) throughout the 1970s and 1990s, deforestation rates reached another 18,000 km² per year in 2000, reaching the historical rate of 27,800 km² in 2004, according to Prodes/Inpe[14].

It is important to mention the efforts to improve the capacity to combat deforestation and strengthen public presence in remote regions of the Amazon, led by the *World Wide Fund for Nature* (WWF) together with national and international agents, which led to the

9. For more information, see: https://www.fundoamazonia.gov.br/pt/fundo-amazonia/politicas-publicas-orientadoras/.

10. Information available in the 2016-2020 Operational Plan of the PPCDAm. Available at:: https://www.gov.br/mma/pt-br/assuntos/servicosambientais/controle-de-desmatamento-e-incendios-florestais/pdf/PlanoOperativo20162020.pdf.

11. Its results are evidenced by comparing the annual deforestation rates of 2004, the first year of the plan, and 2015, the year of the end of its third phase, when it was possible to observe a reduction in deforestation rates of 78%..

12. MMA Ordinance No. 370 of December 2, 2015..

13. For more information on ENREDD+, check out: http://redd.mma.gov.br/pt/estrategia-nacional-para-redd.

14. Project for Monitoring Deforestation in the Brazilian Amazon by Satellite of the National Institute for Space Research. Available at://terrabrasilis.dpi.inpe.br/.

creation of the Amazon Protected Areas Program (Arpa)[15] in 2001. Administered by the Brazilian Fund for Biodiversity (Funbio), Arpa is financed by the Brazilian federal government and international donors, and the funds are earmarked exclusively for public agencies to create and strengthen the management of protected areas in Brazil[16]. At the time of this evaluation (March 2023), 120 CUs were supported, covering 62 million hectares, which corresponds to 15% of the Brazilian Amazon. By allocating resources only to public entities, Arpa does not provide for transfers to civil society organizations operating in the territory[17].

In this scenario, it is important to mention the role of the Amazon Environmental Research Institute (IPAM) in fostering international discussions on the allocation of resources to reduce deforestation with international organizations. Its propositional role fostered international discussions on the REDD+ mechanism and the payment on avoided deforestation. This made possible the creation, in 2008, of the Amazon Fund, whose financing is based on compensation for the reduction in deforestation allowed by a series of actions. Due to the success in reducing deforestation rates, the Amazon Fund has already received approximately R$3.4 billion in donations from 2018 to March 2023 (carrying out this evaluation), of which R$1.5 billion has already been invested in activities that keep the forest standing, carried out by civil society organizations (38%), the public sector – including outside the Brazilian Amazon – (61%) and other countries (1%)[18].

1.2. EXECUTION MODALITIES

In 2011, the Amazon Fund established the strategy of financing projects using agglutinating institutions, which execute the resources to support subprojects, which could hardly access resources from the Fund individually[19]. The pioneering projects of the agglutinating modality were approved before the 2012 APS Public Call and served as the basis for establishing this partnership model[20]. These are:

- *Arpa Program Phase II*, by Funbio, 2010;
- *Kayapó Fund for Conservation in Indigenous Lands*, Funbio, 2011;
- *Dema Fund*, from the Federation of Agencies for Social and Educational Assistance (Fase), 2011;
- *Small Eco-social Projects Program – PPP-Ecos in the Amazon*, from the Society, Population and Na-

15. Arpa is considered one of the largest forest conservation projects in the world, with a transition fund of R$888 million at the end of 2021. For more information, check out: https://www.funbio.org.br/programas_e_projetos/programa-arpa-funbio/.

16. SILVA-MULLER, Livio; FAUL, Moira V. Protecting the Amazon and Its People: The Role of Civil Society in the Local Effectiveness of Transnational Partnerships. In: ANDONOVA, Liliana B.; FAUL, Moira V.; PISELLI, Dario. Partnerships for Sustainability in Contemporary Global Governance: Pathways to Effectiveness. New York: Routledge, 2022. p. 83-103. Available at: https://library.oapen.org/bitstream/handle/20.500.12657/57609/9781000601206.pdf?sequence=1#page=100.

17. The REDD+ concept was born from a partnership between Brazilian and American researchers, led by Márcio Santilli, who originated a proposal known as "Compensated Emission Reduction" presented during COP-19 in Milan (2003). For more information, check out: https://link.springer.com/article/10.1007/s10584-005-8074-6.

18. Amazon Fund. 2020 Activity Report. Rio de Janeiro: BNDES, 2021. p. 53. Available at: https://www.fundoamazonia.gov.br/export/sites/default/pt/.galleries/documentos/rafa/RAFA_2020_port.pdf.

19. BORBA, Maria Carla. The Amazon Fund will finance small projects. *MMA (website)*, October 28, 2011. News. Available at: https://www.gov.br/mma/pt-br/noticias/fundo-amazonia-vai-financiar-pequenos-projetos.

20. Mid-Term Effectiveness Evaluation Report of the Amazon Fund (2008-2018). Amazon Fund, December 2019. p. 98. Available at: https://www.fundoamazonia.gov.br/export/sites/default/pt/.galleries/documentos/monitoramento-avaliacao/5.avaliacoes-externas/FA-Relatorio-Avaliacao-Meio-Termo-Fundo-Amazonia.pdf.

ture Institute (ISPN), 2012.

All these projects are funds that transfer values to different subprojects, the last two being the targets of this evaluation.

According to the Mid-Term Effectiveness Evaluation Report of the Amazon Fund (2008-2018)[21], prepared by the German Cooperation for Sustainable Development through Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH (GIZ), since 2012 the agglutinating umbrella modality projects have presented different forms of action, including:

- Intermediary projects that launch public calls to support community projects. In this case, we can include both the *Dema Fund* and the *PPP-Ecos in the Amazon*, which, through public notices, select cooperatives and associations to carry out small-scale sustainable production projects. In this evaluation, it was identified that both supported 200 small projects.
- Executing institutions that work in partnership with other organizations identified prior to the signing of the project. The other two entities executing the evaluated projects – Consortium and Densified Economic Reforestation Project (Reca) and Central Cooperative of Extractive Marketing of Acre (Cooperacre) – are in this category, with their activities supporting associations and cooperatives formally constituted in the states of Acre and Rondônia.

The composition of the group of projects in this evaluation was selected by the team of the Amazon Fund/BNDES and, for analysis purposes, the projects were named as follows: those classified in the first item above, as a "public call" modality (Dema Fund by Fase and PPP-Ecos in the Amazon by the IPSN), and those classified in the second item, as an "agglutinating" modality (Materialize by Reca and Strengthening the Forest Based Sustainable Economy by Cooperacre). The projects of the "public call" modality were selected by the Amazon Fund/BNDES by spontaneous presentation (open counter), while the projects of the agglutinating modality are the result of the selection carried out by the First Public Call for Sustainable Productive Projects that was carried out in 2012[22]. The following is the basic information corresponding to each project (Chart 1). The map with the location of the agglutinated entities and subprojects supported by the executing entities can be seen in Figure 1.

21. See p. 99. Available at: https://www.fundoamazonia.gov.br/export/sites/default/pt/.galleries/documentos/monitoramento-avaliacao/5.avaliacoes-externas/FA-Relatorio-Avaliacao-Meio-Termo-Fundo-Amazonia.pdf.

22. It is possible to check details of this public call, such as values, supported projects and deadlines, at: https://www.fundoamazonia.gov.br/pt/como-apresentar-projetos/chamadas-publicas/projetos-produtivos-sustentaveis/.

Chart 1: Information about the projects supported by the Amazon Fund targeted by this evaluation

Project Name	Executor	Modality	Region of operation	Term	Total Amount	Public	Main activities
Materialize	Reca	Agglutinating entity	Ponta do Abunã (AC, RO and AM)	2015-20	R$7,126,393.21	Family Farmers and Settlements	Cupuaçu, Açaí, Peach Palm, Vegetable Oils and other pulps
Strengthening the Forest Based Sustainable Economy	Cooperacre	Agglutinating entity	Regions of Purus, Alto Acre and Baixo Acre (AC)	2014-22	R$5,190.901.39	Family Farmers and Extractivists	Rubber, Brazil nut, Acai, Acerola and Soursop
PPP-Ecos in the Amazon	ISPN	Public Call	Amazon Regions of MA, MT and TO	2012-20	R$17,796,525.00	Indigenous lands, quilombola populations, family farmers and extractivists	SAFs, agribusinesses, honey, among others
Dema Fund	Fase	Public Call	Different regions of Pará	2011-21	R$7,499,641.00	Indigenous lands, quilombola populations, family farmers and extractivists	SAFs, among others

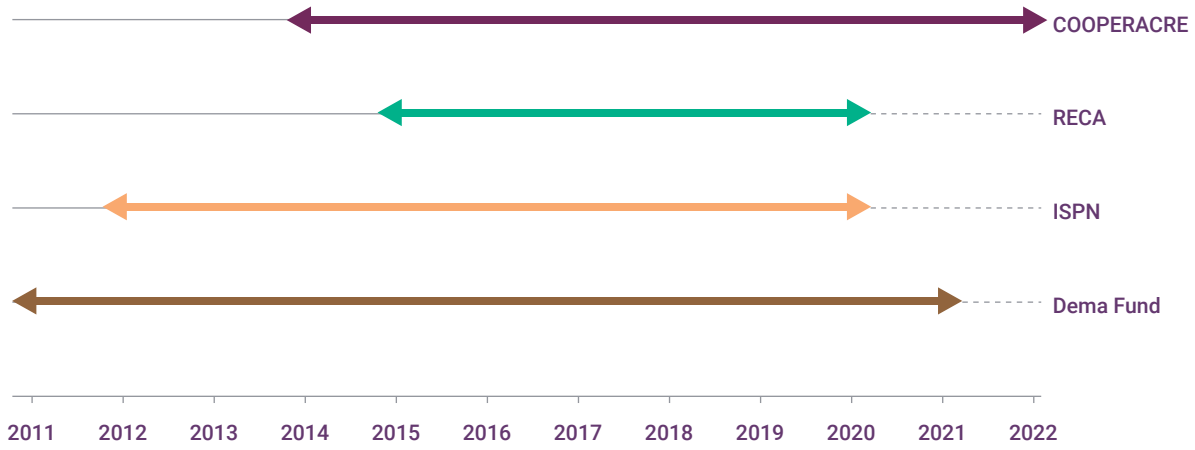
Source: Amazon Fund/BNDES

1.3. REGIONAL AND HISTORICAL CONTEXTUALIZATION

The Amazon Fund established its ground zero in 2009, when the results of PPCDAm's actions were already solid. With the beginning of its second phase and the monitoring and control area beginning to take effect[23], deforestation rates were falling. In this scenario of low deforestation, between 2011 and 2015, the four projects evaluated began their activities (Figures 5 and 6).

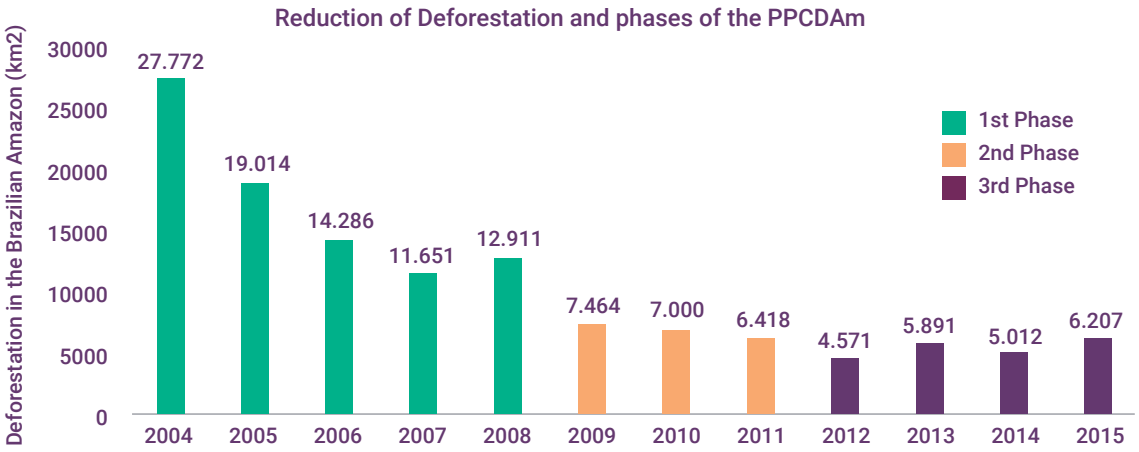
23. The main means for its success were: (i) the effective use of the deter system and (ii) the agility of integrated deforestation inspection actions, jointly between the Brazilian Institute of the Environment and Renewable Natural Resources (Ibama), the Federal Police and state environmental agencies (Oema). The implementation of this phase corresponded to the years with the lowest deforestation rates in the Brazilian Amazon (Figure 5)

Figure 4: Comparative timeline of the execution of the evaluated projects



Source: Own elaboration, based on the information of the evaluated projects

Figure 5: Comparison between three initial phases of the PPCDAm and the reduction of deforestation rates



Source: Ministry of the Environment, 2017[24].

1.3.1. PUBLIC POLICIES

The PPCDAm also brought together public policies whose objectives contribute to the prevention and control of deforestation in the Amazon. Among these programs and policies, it is possible to mention some that have their own resources, objectives and target audience defined and that converge with the objectives of the Sustainable Production Component of the Amazon Fund and with the projects dealt with in this evaluation.

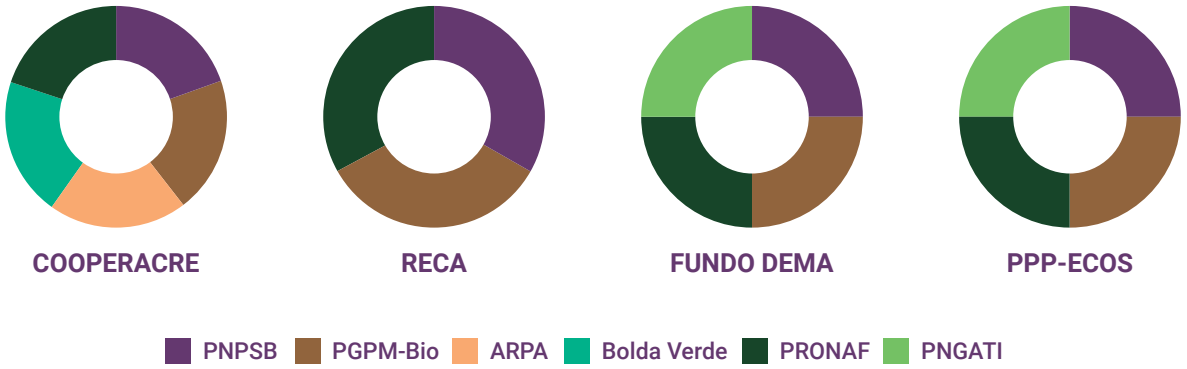
- National Plan for the Promotion of Sociobiodiversity Product Chains – PNPSB;
- Minimum Price Guarantee Policy for Sociobiodiversity Products – PGPM-Bio;
- National Policy for Territorial and Environmental Management of Indigenous Lands – PNGATI;
- Amazon Protected Areas Program – Arpa;

24. http://redd.mma.gov.br/pt/acompanhamento-e-a-analise-de-impacto-das-politicas-publicas/ppcdam.

- Environmental Conservation Support Program – Bolsa Verde (an integral part of the Brazil Without Extreme Poverty Plan);
- National Program for Strengthening Family Farming – Pronaf;

These policies influenced the four projects evaluated in different factors, such as the commercialization of socio-biodiversity products, guarantee of minimum prices, granting credit to families, among others[25]. In Figure 7, it is possible to observe a representative scheme that shows the relationship of the projects with the receipt of support from these public policies associated with the PPCDAm.

Figure 6: Public Policies associated with PPCDAm accessed by projects

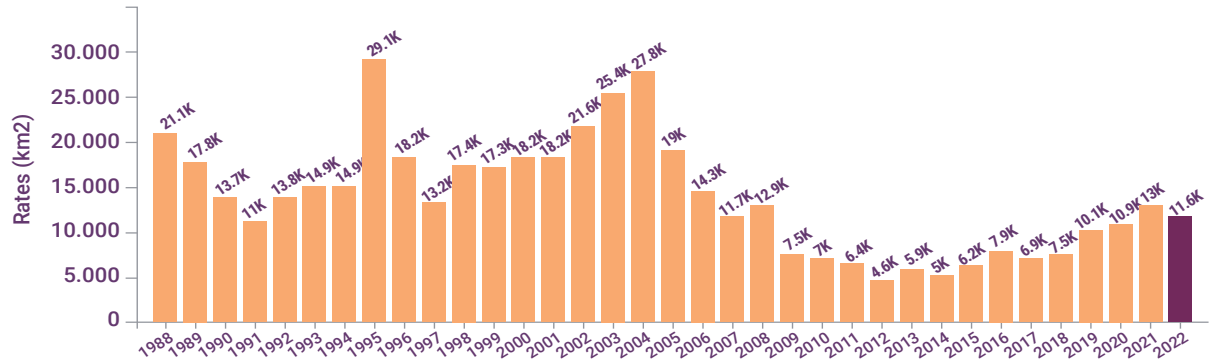


Source: Own elaboration.

From 2013 to 2018, although they fluctuated, deforestation rates registered a trend of gradual increase. As of 2019, there was a more intense increase in these rates, an escalation that was accompanied by aggravating factors, such as the accelerated increase in deforestation rates recorded in CUs, which had been indicating a drop since 2007 (Figure 8).

25. The Chico Mendes Extractive Reserve, for example, one of Cooperacre's areas of activity, was contemplated with resources from Arpa and Bolsa Verde.

Figure 7: History of deforestation in the Brazilian Amazon



Source: Prodes/Inpe[26]

1.3.2. DEFORESTATION AND INFRASTRUCTURE WORKS

The distribution of deforestation in the Amazon is not uniform, and occurs for several causes, according to localities and land categories. From 2009 to 2022, it is observed that deforestation is concentrated in the areas of influence of some highways, with a high concentration in the northern region of the State of Rondônia and in the southern region of the State of Amazonas (confluence of BR-230 and 364), as well as in the region that includes areas of the States of Amazonas, Mato Grosso and Pará, delimited by the confluence of three roads: BR-163, BR-230 and BR-158[27].

The projects being evaluated were executed between 2011 and 2022, a period in which important events and major infrastructure works took place in the areas of influence of the projects, such as the construction of the Belo Monte hydroelectric plant, inaugurated in 2019[28]. Field visits highlighted the impact of other infrastructure works on the daily lives of communities. In some cases, the interventions of the implementers (Fase and ISPN) were fundamental to ensure rights to socio-environmental compensation and prior consultations. The main existing infrastructure works, or under design, with an impact on the regions of the evaluated projects are presented in Chart 2 and Figure 9.

Chart 2: Details of the types of infrastructure of the projects

Project	Highways	Railways	Transmission Lines	Ports
Reca	BR-364	-	-	-
Cooperacre	BR-364 e BR 317	-	-	-
ISPN	BR-135 e BR 402	Vale and Norte-Sul	Argo	-
Fase	BR-230 e BR-163	Fepasa29 and Norte--Sul	Belo Monte and Tucuruí	Cargill (Santarém and Abaetetuba) and Miritituba

Source: Own elaboration, based on what was identified during the field interviews.

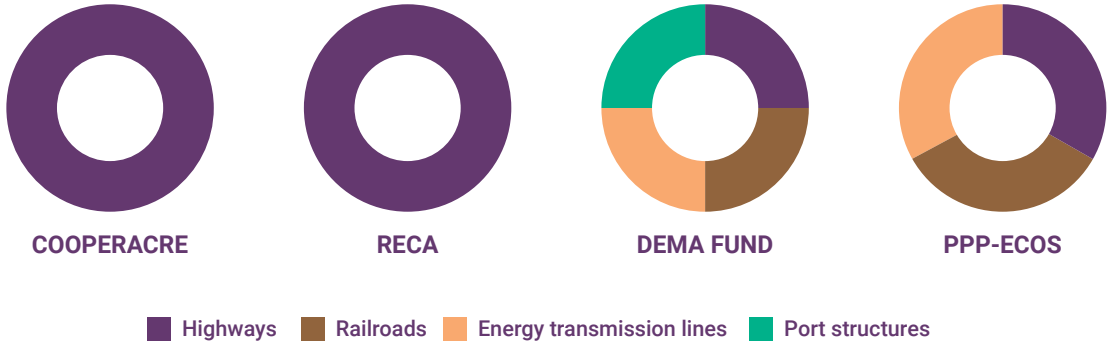
26. Available at: http://terrabrasilis.dpi.inpe.br/.

27. MARTINS, Pedro Sérgio Vieira Martins. Desmatamento em Unidades de Conservação da Amazônia Legal: uma Análise da Governança Ambiental e Climática a partir do PPPCDAm. Pará: Terra de Direitos, Mar. 2022. Available at:: https://terradedireitos.org.br/uploads/arquivos/Desmatamento-em-unidades-de-conservacao-da-Amazonia-Legal.pdf.

28. This dam is part of the Brazilian government's trajectory to implement major infrastructure works in the Amazon region.

29. Pará Railroad.

Figure 8: Infrastructure works present in the impact regions



Source: Own elaboration, based on the information collected during the field interviews.

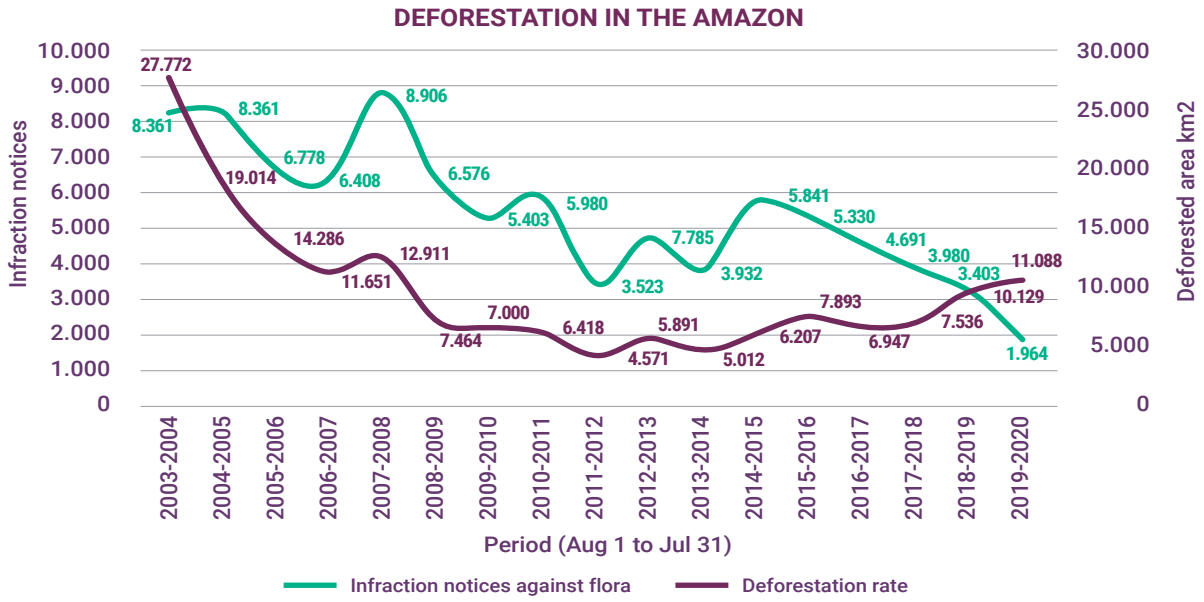
1.3.3. SOY, LIVESTOCK AND DEFORESTATION

The impact of soybean farming expansion can be observed in different regions with actions of the evaluated projects, such as in the north of Mato Grosso, around Santarém and in the east of Pará. In addition to the direct conversion of forest into soy, this crop has an important "indirect" impact: the advance of soybean on pastures plays a prominent role in boosting the conversion of forests into areas dedicated to extensive livestock. According to the reports of the beneficiaries during the interviews made for this evaluation, ranchers sell their land to soybean farmers in Mato Grosso and end up investing the resources acquired in the purchase of larger lots in Pará, or other border areas, where they establish new farms[30].

On the other hand, the decrease in the budget from 2018, established by the Annual Budget Law (LOA), had an impact on the Ministry of the Environment (MMA), the Brazilian Institute of the Environment and Renewable Natural Resources (Ibama) and the Chico Mendes Institute for Biodiversity Conservation (ICMBio), affecting the command and control actions of these institutions. Deforestation in the Amazon increased by 9.5% between 2019 and 2020, after an observed increase of 34% between 2018 and 2019. Not since 2008 has such a high rate of devastation been recorded: 10,100 km², an area equal to that of Jamaica. The new increase in deforestation coincides with a 42% drop in fines for infractions against flora in the same period, from August 2019 to July 2020 (Figure 10).

30. Check it out: https://amazoniareal.com.br/o-desmatamento-da-amazonia-brasileira-10-soja/.

Figure 9: Comparative intersection between the evolution of deforestation rates and the application of fines by federal inspection agencies.



Source: *Ibama and Inpe*

Source: Climate Observatory, 2021[31].

The initiatives supported by the four evaluated projects are distributed over a wide geographical spectrum and have a great diversity of supported groups. The subprojects supported by the projects that received resources from the Amazon Fund evaluated are, for the most part, located in the "new frontier" of the region known as the Areas under intense pressure for deforestation, in contrast to the old frontier, in the state of Mato Grosso and in the eastern portion of Pará.

Some of these regions of recent pressure are located north of Mato Grosso, south of Amazonas and northwest of Rondônia and originated new agricultural development projects. With the advent of the AMACRO sustainability project, which covers 32 municipalities in Amazonas, Acre and Rondônia, the intention is to open up sections of the territory for the establishment of an agribusiness expansion front.

31. WERNECK, Felipe; SORDi, Jaqueline; ARAÚJO, Suely; ANGELO, Claudio."PASSANDO A BOIADA". O segundo ano de desmonte ambiental sob Jair Bolsonaro. Obesrvatório do Clima, Jan. 2021. Available at: https://www.oc.eco.br/wp-content/uploads/2021/01/Passando-a-boiada-1.pdf.

Box 1 - AMACRO

Amacro (from the first letters of Amazonas, Acre and Rondônia) is a federal government project that aims to promote the development of the region based on traditional models aimed at the expansion of agribusiness, to encompass a set of actions and policies for the development of the region. The project began to be prepared by the agricultural sector in 2018 and gained support from the federal government in 2019. It covers 32 municipalities located in the south of the state of Amazonas, east of the state of Acre and northwest of Rondônia, whose total area is 454,220 km² and the estimated population is 1.7 million people. This region currently has some of the highest deforestation rates in the Brazilian Amazon.

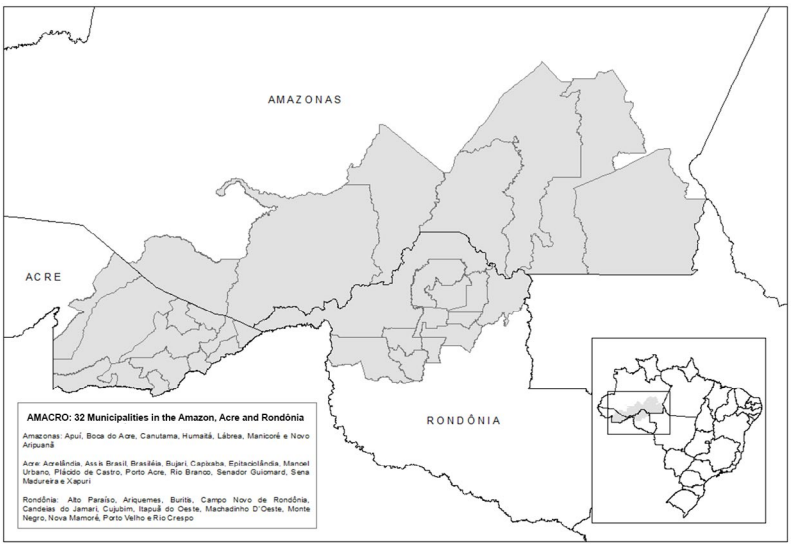
The following are part of Amacro:

In Amazonas: Apuí, Boca do Acre, Canutama, Humaitá, Lábrea, Manicoré and Novo Aripuanã.

In Acre: Acrelândia, Assis Brasil, Brasiléia, Bujari, Capixaba, Epitaciolândia, Manoel Urbano, Plácido de Castro, Porto Acre, Rio Branco, Senador Guiomard, Sena Madureira and Xapuri..

In Rondônia: Alto Paraíso, Ariquemes, Buritis, Campo Novo de Rondônia, Candeias do Jamari, Cujubim, Itapuã do Oeste, Machadinho D'Oeste, Monte Negro, Nova Mamoré, Porto Velho and Rio Crespo.

Figure I: Location of Amacro.



Source: Greenpeace Brasil, 2021[32].

The challenge of this thematic evaluation is therefore to understand how the support of the Amazon Fund has been able to offer alternatives to these established policies of land use and occupation in the Amazon, proposing sustainable production models that are compatible with the standing forest.

32. Available at: https://www.greenpeace.org/brasil/blog/uma-nova-e-arriscada-fronteira-do-desmatamento-na-amazonia/.

2. INTRODUCTION

The thematic effectiveness evaluations within the scope of the Amazon Fund/BNDES are analyses of the ability to achieve the objectives and expected results of each project (activities, products, effects and impacts), as well as compliance with the criteria observed by the Fund, in order to ensure adherence to national and international policies and programs (Cancun Safeguards, Criteria for evaluation of the Organization for Economic Cooperation and Development – OECD, etc.). The projects are evaluated, individually and overall, for several criteria, such as sustainability of the changes generated, characteristics of their impacts on the territory and alignment with the objectives of the Amazon Fund.

The performance of these evaluations has the following main purposes:

1. assist the Amazon Fund in reporting to its donors on the type of project supported and its effects;
2. enable the institutional learning of the Fund itself, contributing to improve the quality of projects and the prioritization of investments, thus subsidizing decision-making;
3. verify the compliance, by the supported projects, of the Cancun Safeguards agreed under the United Nations Framework Convention on Climate Change (UNFCCC) for Reducing Emissions from Deforestation and Forest Degradation (+ conservation of forest carbon stocks, sustainable forest management and increase of forest carbon stocks) REDD+; and
4. verify the alignment of the projects with the Plan for the Prevention and Control of Deforestation in the Brazilian Amazon (PPCDAm) and the state plans for the prevention and control of deforestation.

In a thematic evaluation, where there is an aggregation of several projects of the same Component, it is expected to generate significant and relevant inputs for the identification of common contributions to the achievement of the objectives of the Amazon Fund, as well as a broader reflection on the strategy to support the Component in the context of the Brazilian Amazon. In the case of this evaluation, the projects analyzed fall under Component 1: Sustainable Production, it is intended to provide a broad understanding of the different actions of the projects in their regions of operation, allowing for a territorialized understanding and greater alignment with the direct impact expected from Sustainable Production Activities (SPA) projects: "Activities that keep the forest standing are economically attractive".

Furthermore, it is important to mention that this evaluation also intends to understand the role that the modality of projects – agglutinating or public call – presents in the face of the capillarity of allocation of resources from the Amazon Fund and greater capacity to support basic institutions.

It is therefore expected to broaden the understanding of the contribution of projects to the overall results sought under the Sustainable Production Component, in addition to generating recommendations and lessons learned. The following are also included as specific objectives:

- Generate specific recommendations about the modalities of the projects that could strengthen the performance of the Amazon Fund;
- Analyze strengths and weaknesses of project intervention in the territories;
- Evaluate the effectiveness of the support of the Amazon Fund on the theme of sustainable production;
- Understand the impacts generated in the territory, especially when considering support for traditional peoples and communities and family farmers;
- Identify challenges and lessons learned that can even serve for national and international dissemination.

3. METHODOLOGY

The methodology used to carry out this thematic effectiveness evaluation of projects supported by the Amazon Fund is based on the document *Effectiveness Evaluation of Projects Supported by the Amazon Fund – Conceptual Framework*, prepared by the technical cooperation between *Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH* (GIZ) and the Amazon Fund/BNDES in 2016, and on the *Addendum to the Conceptual Framework*, prepared in 2020, which provides strategic guidelines for thematic evaluations of projects in overall form[33]. The effectiveness evaluation was guided by international criteria defined by the Organization for Economic Cooperation and Development (OECD): Relevance, Efficacy, Effectiveness, Impact and Sustainability[34].

The Amazon Fund also seeks to evaluate the projects supported regarding social and environmental performance, especially regarding the issue of non-deforestation and recovery of degraded areas. These criteria align with the international financial compensation efforts of developing countries for the results achieved from non-deforestation, in particular linked to REDD+ strategies, in alignment with the Cancun Safeguards (also known as the REDD+ Safeguards).

Finally, the projects are evaluated with regard to the insertion of the Transversal Criteria for Gender Equity and Poverty Reduction.

The evaluation of projects follows predefined steps:

1. the preparatory phase, in which the Design Report is carried out, guiding future work;
2. the implementation phase, the stage in which the evaluation itself takes place, when field visits, interviews, data collection, preparation of the preliminary report and the round of consultation with BNDES and project beneficiaries are carried out; and
3. the analysis and dissemination phase, in which the final report is delivered and the results achieved are disclosed.

In the preparatory phase of this evaluation, the first collections of secondary data and monitoring reports of the execution of the projects were carried out, namely: *Performance Reports* (red), which focus on annual monitoring, *Results Evaluation Reports* (RAR), made at the end of the projects, and *Effectiveness Evaluation Report* (RAE), which aims to analyze the sustainability of the effects of the project after its completion. Several of these documents are accessible to the general public on the Amazon Fund website[35].

Already at this stage, contacts were made to coordinate the field mission with the institutions implementing the projects, and field visits were planned to their headquarters

33. These and other documents are available on the Amazon Fund website: https://www.fundoamazonia.gov.br/pt/monitoramento-e-avaliacao/avaliacoes-externas/

34. In 1991, through its Development Assistance Committee (DAC), the OECD defined five criteria mentioned in order to guide the evaluation of international cooperation projects. For more information on the subject, see the document "Quality Standards for Development Evaluation". Available at: https://www.oecd.org/dac/evaluation/dcdndep/45464406.pdf.

35. Check out the individual pages of the projects at: https://www.fundoamazonia.gov.br/pt/home/.

and to the direct and indirect beneficiaries of the projects, in order to gain a better understanding of the actions carried out. Furthermore, interviews were conducted with experts on environmental and land use issues in the project areas. These materials supported the preparation of the Design Report, where the methodology to be used in the evaluation was defined, with the approval of the Amazon Fund/BNDES team.

In the implementation phase, the logical frameworks (Objectives Diagram)[36] agreed between the executing entities and the Amazon Fund at the beginning of the projects were observed. Based on this analysis, the Theory of Change of each project was elaborated and one for the set of projects (comparative matrix). These five theories of change will be described in greater detail in the next chapter (Overall Results).

The structure of a Theory of Change attempts to show, in a simplified and schematic way, the logical links between different levels of performance of the project(s), linking, for example, levels of products and services to impacts on the territory and populations served and to higher levels in the project hierarchy. As such, it is possible to define strategies for evaluating key indicators of each direct impact of the projects, as well as products and services, and to make practical comparisons that allow for an understanding of the overall contributions of the projects to the objectives of the Amazon Fund.

Thus, Theories of Change enable an analysis of equivalent metrics on the achievement of the goals stipulated for each of the project's action axes. Given the diversity of activities and contexts addressed by the projects, this pragmatic and simplifying approach facilitates the analysis and comparison of different production and conservation contexts.

For this evaluation, an analytical sectorization based on the Logical Framework of each project was proposed. When considering Direct Effect 2, related to the aggregation of value, it was decided to divide it into two analyses: one related to processing exclusively and the second related to the marketing of the benefited products. Thus, five fronts of approach were reached:

- Sustainable production/extraction;
- Processing and adding value;
- Marketing and access to markets;
- Management of community organizations and training of beneficiaries;
- Recovery of deforested areas.

Given the large territorial scope of the projects (covering the states of Acre, Amazonas, Maranhão, Mato Grosso, Pará and Rondônia) and the number of subprojects supported (more than 200), discussions were held between the evaluation team and the project coordination teams on priority areas for visits and interviews. Thus, in the implementation phase, interviews were conducted between January 23 and February 16 in Porto Velho/RO and in several municipalities of Acre, Maranhão and Pará. Accompanied by technicians from the executing agencies, project managers, beneficiaries, technicians, rural producers, residents of quilombola communities, among others, were interviewed.

36. Disponíveis nas páginas individuais dos projetos no site do Fundo Amazônia: https://www.fundoamazonia.gov.br/pt/home/.

In Appendices V and VI, it is possible to find, respectively, the guiding questions and the list of people interviewed.

In addition to the interviews, for the collection of primary data, online questionnaires were applied, an evaluation workshop was carried out with the application of the SWOT matrix (Strengths, Weaknesses, Opportunities and Threats) in person during the field mission and a complementary study on Poverty Reduction and Gender Equity.

Two questionnaires (one for each project evaluated) were also applied to collect information from the subprojects supported by the *Dema Fund*, the Federation of Agencies for Social and Educational Assistance (Fase) and the *Small Eco-Social Projects in the Amazon (PPP-Ecos in the Amazon)*, the Society, Population and Nature Institute (ISPN), which supported 112 and 88 subprojects respectively (total of 220). The questionnaires were sent by email to the coordination of all subprojects supported[37], obtaining 17 responses from subprojects supported by the PPP-Ecos *Amazônia* and 6 from those supported by the Dema Fund, totaling 19% and 5% respectively (11%, the two projects together).

The questionnaire applied addressed five thematic axes elaborated based on the direct effects of the projects as well as the transversal criteria proposed by the *Conceptual Framework of the Amazon Fund/BNDES*:

- Food and Nutrition Production and Security;
- Commercialization and Income;
- Training;
- Recovery of Degraded Areas;
- Transversal Themes.

During the visit to the Consortium and Densified Economic Reforestation Project (Reca) in the district of New California (Porto Velho/RO), a Participatory Results Evaluation Workshop was held, with the presence of managers, employees and members of Reca and other beneficiaries of the *Materialize* project, object of evaluation. Its realization aimed at optimizing the efforts of the field visit, stimulating a collective reflection on the results achieved and a greater understanding of the challenges and learnings during the execution of the project. The workshop brought together 17 participants and was held in the Reca auditorium on January 24, 2023.

Initially, a presentation was made about the workshop itself and then the participants were divided into three working groups, whose themes were proposed by the evaluators and the GIZ team. Each group applied the SWOT matrix, considering the Strengths, Opportunities, Weaknesses and Threats observed during the execution of the project. The thematic division was as follows: i. "Reca present and Reca future: where are we and where do I want to go?"; ii. "Agroforestry systems: we are agro-foresters!"; and iii. "Working in partnership: Cooperative and Associations". The results of this workshop can be found in item 4.2 of this report (Overall Results. Level of Beneficiaries) and, in more detail, in Appendix I, in the individual evaluation of the *Materialize* project.

37. Check out the questionnaire in Appendix II.

Due to the potential that projects of sustainable productive activities (APS) generally present in relation to the transversal criteria of Poverty Reduction and Gender Equity[38] and to the theme of benefit distribution and quality of life improvement, it was decided to carry out a complementary study on the "Socioeconomic Impacts". In view of the large volume of activities and projects, a specialized consultancy was hired to prepare this study, considering the questionnaire applied and the results of the projects. Results of this study will be discussed and evidenced throughout the evaluation and can be analyzed in the complementary study "Analysis and recommendations of socioeconomic impact from the perspective of the Transversal Criteria of Poverty Reduction and Gender Equity" (Annex I).

It is noteworthy that the possibility of carrying out a counterfactual analysis was evaluated, as recommended by the *Conceptual Framework*[39]. However, the diversity of the composition of the evaluated projects, such as the fact that many similar experiences have already been supported by the Amazon Fund, and the delay and/or absence of responses to attempts to contact these initiatives made it impossible to select projects that could generate relevant comparisons.

38. Similar studies analyzing compliance with transversal criteria have been conducted previously. In 2018, a gender study was carried out in projects of sustainable productive activities (Equality between men and women in projects of sustainable productive activities supported by the Amazon Fund) and, in 2019, a study on the distribution of benefits, together with the mid-term evaluation of the Amazon Fund/BNDES (Mid-term Effectiveness Evaluation Report of the Amazon Fund - Benefit Distribution Study of the Amazon Fund).

39. The Conceptual Framework defines counterfactual analysis as a comparative analysis of projects with other similar or comparable initiatives that have not received financial support from the Amazon Fund.

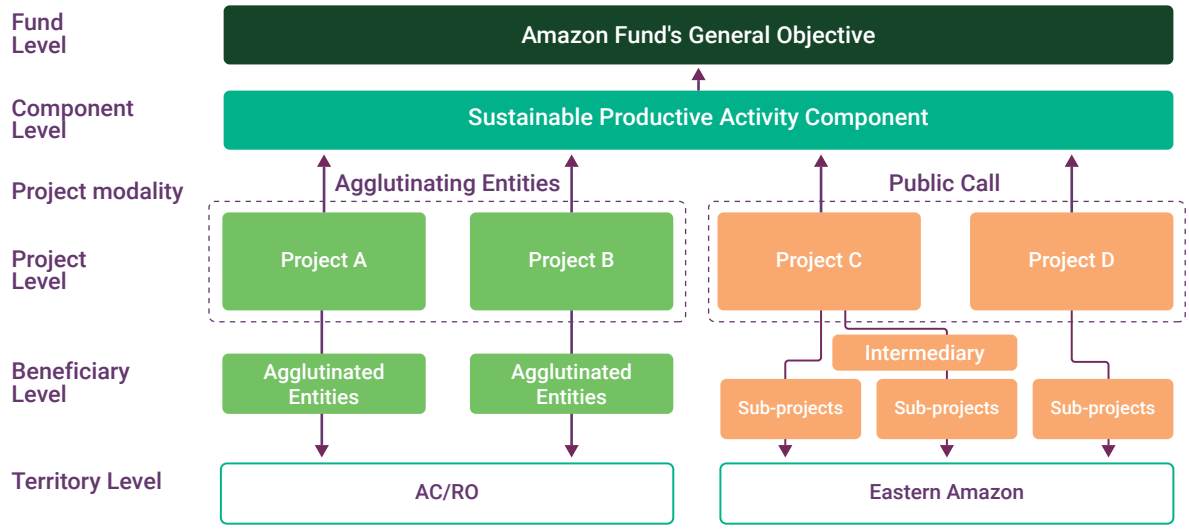
4. OVERALL RESULTS

4.1. EVALUATION ANALYSIS LEVELS

The methodology for analyzing projects supported by the Amazon Fund is provided for in the document *Effectiveness Evaluation of Projects Supported by the Amazon Fund – Conceptual Framework* and in its respective *Addendum to the Conceptual Framework* on thematic evaluations, in an effort to standardize the evaluation of projects[40]. These documents present evaluation methodologies that are based on a thematic intersection that considers: i. the different levels of performance of the projects (beneficiary, project, Component and Fund); and ii. the different inputs (products and activities) as provided for in each project.

To carry out this overall thematic evaluation of projects of sustainable productive activities (APS), an adjustment of this methodology was required. For this, two main considerations were made: one related to the similarities between the Logical Frameworks of the projects in[41] relation to their direct effects and another related to the addition of a level of analysis of the modalities of the projects (agglutinating and public call). Thus, it was possible to arrive at the adjusted design of the levels of analysis used (Figure 11).

Figure 10: Levels of analysis in the Thematic Evaluation of Sustainable Productive Chains under the agglutinating and public call modalities



Source: Own elaboration.

40. It is worth mentioning that this discussion is also inspired and guided by other previous thematic evaluations conducted by GIZ, such as the *Effectiveness Evaluation Report of Sustainable Production Chain Projects under the Amazon Fund/BNDES* and the Effectiveness *Evaluation of Scientific and Technological Development Projects of the Component of Science, Innovation and Economic Instruments Supported by the Amazon Fund/BNDES*". These and other external evaluations are available at: https://www.fundoamazonia.gov.br/pt/monitoramento-e-avaliacao/avaliacoes-externas/.

41. The project objectives diagrams can be found in the individual project evaluations, available in Appendix I.

Theory of Change

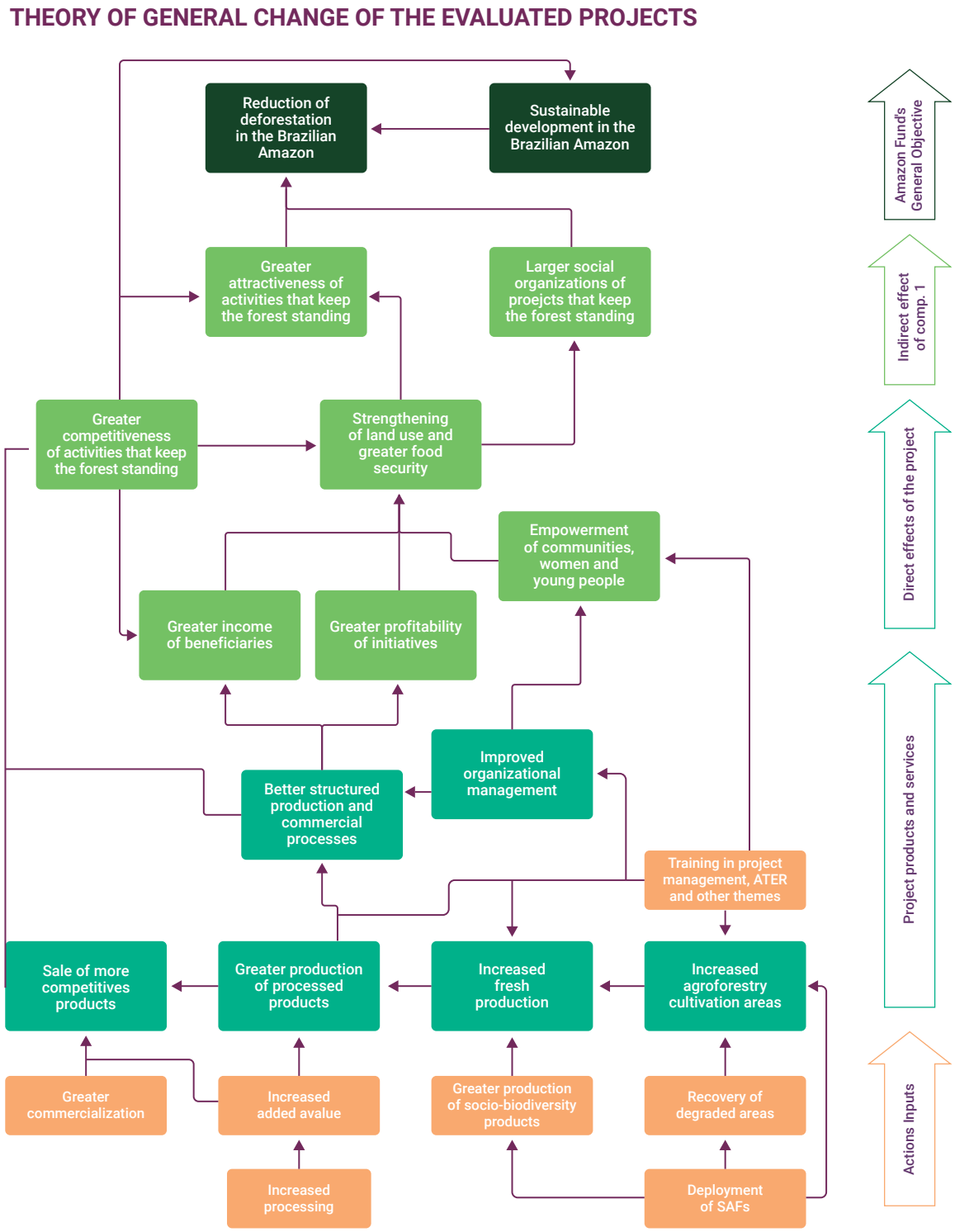
For this evaluation, two internal workshops were held to build the theories of change of each project and the General Theory of Change to understand the overall results flows. This intersection contributed to the overall visualization of challenges and impacts of the projects and the potential of the execution modalities. The proposed General Theory of Change fits both the structures of the logical frameworks of the individual projects and that of the Amazon Fund's Logical Framework, thereby meeting their flows (Figure 12).

To evaluate projects supported by the Amazon Fund that work with sustainable agroforestry production, the methodology produced by GIZ called "*Value Links*" was used[42]. This methodology is a reference to analyze actions related to the socio-biodiversity chains in America, considering the productive stages of the value chains.

In the General Theory of Change scheme of the evaluated projects, the main products and activities (in orange, in Figure 12) are presented, according to activities for the organization of value chains (*Value Links*), and the four structuring direct effects of the Sustainable Production Component: area 1 - production; area 2 - processing; area 3 – training; and area 4 - recovery of degraded areas. Then, the intervention logic, based on actions, has its consequences followed by impacts, which are the expected general effects and the general objective of the Amazon Fund.

42. For more information on the methodology, check out: https://valuelinks.org.

Figure 11: Theory of General Change of the evaluated projects



Source: Own elaboration, based on the Conceptual Framework and its Addendum (GIZ; BNDES, 2016, 2020)[43].

43. Available on the Amazon Fund website: https://www.fundoamazonia.gov.br/pt/monitoramento-e-avaliacao/avaliacoes-externas/

The General Theory of Change allows us to observe the following logical chains:

- All projects focus directly on increasing the production and/or extraction of different products, considering increased **fresh production**, improved value addition and commercialization.
- The agglutinated entities and supported subprojects had activities aimed at **training the beneficiaries**, focusing on activities such as organization management, accountability, financial autonomy, implementation of agroforestry systems (SAFs), among others.
- All projects carried out, to different degrees, activities aimed at the **recovery of degraded areas and conservation,** using, for example, the implementation of SAFs.
- The increase in production of fresh products and improvements related to processing led to an increase in **sales volume and the reach of new markets**, institutional purchases or not.
- The activities led the set of subprojects and the agglutinated entities supported to achieve greater profitability, competitiveness, **income generation** and strengthening of organizations, contributing to the conservation of territories and improvement of quality of life.
- The projects contributed to improving the **food security** of the groups supported, even if this theme was not defined in the logical frameworks of the projects.

It is also worth mentioning the following specificities, related to success characteristics and general challenges of the projects, territories and contexts supported, such as:

- Efficiency and capillarity to serve **various interest groups**, such as traditional peoples and communities, family farmers, quilombola communities, extractive communities, among others.
- Promotion of the **diversification of local productive arrangements (LPAs)** and measures to strengthen their governance, which strengthen the agroforestry-based economy.
- Wide **diversity of actions, social groups, production chains and geographical coverage**, which lead to a vast network of action to contain the advancing fronts of deforestation in the Brazilian Amazon.
- Commitment of projects and subprojects with access to **land and food security** and principles that strengthen an agroecological transition.
- Encouraging **access to public programs and policies** for social inclusion, institutional purchases, job and income generation and fair markets aimed at socio-biodiversity.
- **Development of sustainable production technologies** and strengthening and opening new green markets, promoting sustainability and conservation of the Amazon forest.

- Strengthening **opportunities for women and young people**, providing favorable conditions for the conservation of cultures and ways of life.

- Due to the territorial context they are in (distributed along the areas under intense pressure for deforestation), the projects are subject to **unfair pressures and competition regarding the illegal occupation of the land**, a limiting factor for the expansion and continuity of their activities.

- Encouraging the writing of Community Consultation Protocols regarding the prior, free and informed consent of exchanges and partnerships with other organizations, strengthening the **autonomy and sovereignty of vulnerable** social groups (indigenous, quilombolas, etc.).

4.2. LEVEL OF BENEFICIARIES

Participatory Workshop on Results Evaluation

From the Participatory Workshop on Results Evaluation, held on January 24, 2023 with the Consortium and Densified Economic Reforestation Project (Reca)[44], with the application of the SWOT matrix (Strengths, Weaknesses, Opportunities and Threats), it was observed that the Materialize project provided the acquisition of physical infrastructure, which, in addition to increasing and diversifying productive capacity, added quality and value to products and promoted improvements in the working conditions of cooperative members and associates.

Among the **opportunities** identified, the development of new products, the dissemination of Reca at fairs, access to new government programs and dissemination on social networks stand out. The identification of new credit lines, strengthening of new chains, geographic identification stamps and expansion of partnership production are identified positive points that are already underway (**strengths**).

Demands were identified for more effective technical assistance during the execution of the project and its permanence after closure, the creation of jobs for young people in the region and the need for more investment in training (**weaknesses**).

On the other hand, difficulties were observed regarding its geographical isolation and the resulting lack of road infrastructure, support for irrigation and difficulty in accessing markets that value socio-biodiversity. Other **threats** identified concern the increased incidence of diseases and pests, such as moniliasis, the attractiveness of other productive activities (soy and livestock), low available wages, the weakening of public policies and climate change that interfere with the flowering of key species such as cupuaçu, causing a decrease in production.

44. For more information, see item I of Appendix I.

Questionnaires

Although only a portion of the subprojects supported by the *Dema Fund* and *Small Eco-Social Projects in the Amazon (PPP-Ecos in the Amazon)* answered the questionnaire sent, the 23 responses received, which correspond to 10% of the 200 subprojects, represent several territories where PPP-Ecos and the Dema Fund operate and focus on various activities, allowing a relevant discussion of their impacts[45].

Subprojects reported having supported 1,246 families, with an average of 54 families per subproject. Here it is worth considering the subproject, supported by *PPP-Ecos in the Amazon*, "Bico do Papagaio Marketing Network" (TO), which benefited more than 200 families with workshops on health standards, advice on agroecological fairs, among others. In Maranhão, another project supported by *PPP-Ecos* also presented relevant figures, even supporting 500 people through the Fair of Solidarity Economic Enterprises of Family Agriculture.

Many projects allowed access to new markets, mostly through institutional public procurement programs, such as the Food Purchase Program (PAA) and the National School Feeding Program (PNAE), increasing their economic autonomy, engagement and associative structuring. Aid was also indicated for greater female participation in exclusive projects for this audience.

Among the subprojects that responded to the questionnaire, 78% indicated that they work with sustainable production, considering an extensive list of products, and many consider the support received as fundamental to increasing production. Productive diversity is shown in the goods produced, such as handicrafts, vegetables, açaí, babassu, free-range chickens, native seedlings, confectionery products, honey from African and Melipona bees, jams, fruit jams and dulce de leche, cassava and fruit pulps[46]. It was also pointed out that the project was fundamental for the "valorization of native products, including cultural initiatives", for the promotion of "production without pesticides or chemical inputs" and the encouragement of "change in eating habits"..

> *"PPP-Ecos has a super relevant importance for agroecology and in the Mearim region, it has supported many initiatives that generate autonomy for family farmers."*
>
> *Beneficiary of PPP-Ecos*

Most respondents said they work with the recovery of degraded areas using SAFs and raising seedlings in nurseries and nurseries, but few said they develop native seed exchange activities. They pointed out that the projects recover, together, 566 hectares with the implementation of SAFs, a number that represents an average of 22 hectares per respondent project.

45. For a more detailed analysis of the results of the analyses carried out, it is recommended to consult the individual evaluations of the projects, available in Appendix I..

46. The following products were mentioned in the survey: pumpkin, lettuce, peanuts, bananas, sweet potatoes, eggplant, chives, spring onions with parsley, coriander, cabbage, scarlet eggplant, corn, cucumber, okra, arugula and roselle, among others. With regard to pulps, the following were mentioned: pineapple, acerola, bacuri, cashew, cupuaçu, guava, passion fruit, watermelon and yellow mombin.

The enrichment of backyards from the insertion of forest, fruit, medicinal and vegetable species was carried out by 68% of the respondents[47]. Most of those who answered the questionnaire (97%) understood their activities as pertinent to forest conservation.

They reported suffering some kind of threat or environmental pressure from their environment - 88% of respondents - a fact that reinforces the importance of initiatives and public policies that help to structure them with a focus on income generation and institutional strengthening, aiming to stimulate autonomy and resilience. The greatest pressures mentioned were: deforestation for pasture insertion (63%), burning (54%), expansion of monocultures with pesticide insertion (54%) and loss of biodiversity (46%). Other impacts felt are land grabbing, invasion of loggers, overfishing, mining and large enterprises (highways, ports, transmission lines and mining). One specific subproject stated that it suffers from problems with the breeding of pigs and loose buffalo, which attack its crops.

Small projects allow for greater income generation and increased economic attractiveness, factors that have enabled a strengthening of food security and territorial governance in vulnerable regions, contributing to the Amazon Fund's deforestation reduction objectives. The scenario of financial and environmental vulnerability in which most of these initiatives are found is unequivocal.

It is understood, therefore, that strengthening the social organizations included in these territories is fundamental to protect them and strengthen the conservation of the Amazon. Above all, it is the key to better structuring marginalized social groups with great potential for organizing and generating income.

47. It is worth mentioning that the productive variety of the supported subprojects is enormous, especially when considering the geographical scope. For science, only one project mentioned having enriched backyards with 22 species, namely: pineapple, açaí, acerola, anani, andiroba, bacuri, banana, Brazil nut, cashew, cupuaçu, fação, inajá, ingá, jutaí, manga, miriti, pau mulato, piquiá, peach palm, ucuúba, tucumã and urucum.

4.3. AGGLUTINATING AND PUBLIC CALL MODALITIES: SIMILARITIES AND DIFFERENCES IN THE AMAZONIAN PRODUCTIVE CONTEXT

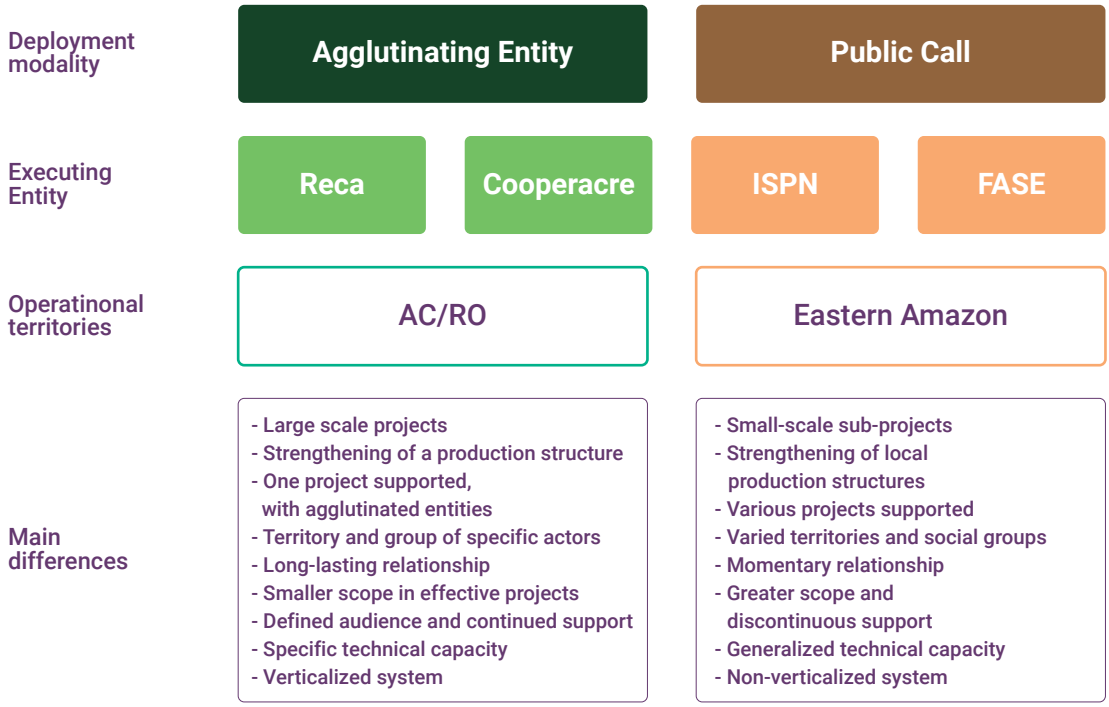
In the **agglutinating** modality[48], the institution responsible for the execution of the project before the Amazon Fund/BNDES coordinates an integrated arrangement of subprojects from other organizations, called agglutinated entities, aimed at the development of value chains based on the sustainable use of natural resources. In the context of this evaluation, the Central Cooperative of Extractive Marketing of Acre (Cooperacre) and the Consortium and Densified Economic Reforestation Project (Reca), which establish a regime of action in "partnerships", in which an active and participatory interaction between the agglutinating entity and the agglutinated entity is observed.

The Amazon Fund/BNDES also supports partner institutions to promote public calls for projects, as long as they prove experience, knowledge and operational capacity to provide quality and scale to public calls. In these terms, the Federation of Organs for Social and Educational Assistance (Fase) and the Society, Population and Nature Institute (ISPN) acted, which apply a model based on dialogue with institutions representing social groups and the opening of public calls that aim to provide resources to foster productive processes and social organization in a vast territory[49]. The comparative chart in Figure 13 presents the distinction between the embodiments.

48. As mentioned above, for the purposes of this evaluation, the following definition was adopted for agglomerating projects, i.e. those that "*receive support from the FA to act in partnership with organizations identified prior to the signing of the project*".

49. In this case, the project *"is an institution that releases a public notice to support community projects"*. They are referred to here as the public call modality.

Figure 12: Comparative scheme between the projects evaluated according to their support modality



Source: Own elaboration.

The projects under the agglutinating modality, as they are supported by cooperatives, function as an efficient instrument for organizing value chains, acting in a competitive market environment. This allows to increase production efficiency, diversification of activities and value addition[50].

Cooperacre and Reca, which conducted the *Strengthening the Forest Based Sustainable Economy* and *Materialize* projects, respectively, work together with other cooperatives and associations that cultivate and extract products from socio-biodiversity, with the objective of obtaining greater scale of production, processing and processing and better marketing conditions in a lasting way. This scenario enabled the strengthening of different value chains, making them central actors in the structuring of sustainable and forest-based local productive arrangements (LPAs)[51]. Both institutions had institutional and commercial capacity in view of the actions they performed, demonstrating competitiveness and addressing bottlenecks, such as the implementation of SAFs, improvement of productive capacity, training, among others.

Fase and ISPN work in a format of transfer of resources and provision of technical assistance in which the beneficiaries are defined through public calls. Under the *Dema Fund* (Fase) and *PPP-Ecos in the Amazon* (ISPN) projects, seven calls were launched

50. It is important to emphasize that some of the LPAs supported by the two organizations, such as Brazil nuts and natural rubber, have historically been dominated by middlemen in the Amazon, which has prevented bargaining practices for better prices and led to dependence on commercial relationships. The two cooperatives are now able to compete on the scale of production and price of their products with these commercial actors.

51. For more information on the products supported by these projects, see their individual evaluations.

between 2011 and 2014, in the total amount of R$3.1 million, benefiting 112 subprojects.

In this public call model, organizations submit projects according to their potential and needs and the approved entities do not necessarily have a previous relationship with the executing entity, and the disclosure of notices is fundamental for the execution of projects of this modality. After contracting the subprojects, a relationship is established between them and the executing entity, which supports them with resources, rural technical assistance (ATER) and project management training. Thus, Fase and ISPN served projects in several territories in Pará (*Dema Fund*) and Maranhão, Mato Grosso and Tocantins (*PPP-Ecos in the Amazon*). In addition to the productive increase of the supported institutions[52], there was a concern to strengthen transversal themes related to food security, the maintenance of their territories and institutional strengthening.

Thus, all projects, of both modalities, contributed to the construction of a fairer society, being organized around pillars such as environmental justice, strengthening ways of life, social inclusion and access to fair markets.

Both the agglutinating and the public call modality contribute in a complementary and synergistic way to the Amazon Fund's objectives, as: (i) they structured community-based and extractive cooperatives in regions of great socioeconomic pressures and deforestation, strengthening socio-biodiversity chains (Reca and Cooperacre); and (ii) they fostered the organization, improvement of quality of life and conservation of natural environments in a wide variety of territories and peoples, contributing to the creation of a more equitable, solidary, sustainable and inclusive development scenario.

In terms of effectiveness, the public call model opens up possibilities to meet specific demands of various interest groups in various geographical contexts. These projects have a high impact on the communities served, since their activities are defined and executed by the organizations themselves.

The agglutinating model, because it has a more delimited territory and group of agents, allows a close technical monitoring and the achievement of their objectives in a more assertive way, conferring a high effectiveness in the achievement of their productive goals, added value and profitability.

Thus, the four projects generated positive results regarding sustainable practices aligned with the forest-based, agroforestry and agroecological economy and can be considered replicable initiatives for the Amazon region in tackling deforestation. They have relevance and significant impact, especially because they adopt different models of action, combined with the promotion of sustainable socioeconomic development structures.

Most of the subprojects of the public call modality did not receive funds again, however the positive impacts continue to be felt in the territory[53], as demonstrated in the result of the questionnaire.

52. In both cases, not all projects fit into a productive scheme; many projects had other objectives, such as providing training, structuring rural schools, or even facilitating the strengthening of land security for social groups.

53. Both Fase and the ISPN received contributions from the Amazon Fund for its continuity: the ISPN via the *PPP-Ecos in the Amazon Phase 2* project and Fase via the "*Agroecological Amazon*" project.

4.4. OVERALL CONTRIBUTIONS TO THE ACHIEVEMENT OF THE OBJECTIVES OF THE AMAZON FUND

This section presents a summary of the scope and overall impact of the four projects evaluated according to each of the direct effects of the Amazon Fund's Logical Framework.

4.4.1. DIRECT EFFECT 1: "ECONOMIC ACTIVITIES OF FOREST USE AND BIODIVERSITY DEVELOPED"

Agglutinating Entities – Cooperatives

Cooperacre

Cooperacre acts as a developer of actions involving productive organization, training and ATER, supporting agro-extractivist families for the production and commercialization of socio-biodiversity products. The cooperative is currently the largest processor of Brazil nuts in the country. It has an efficient raw material acquisition system, implemented storage structure and four processing plants in operation.

In the case of rubber, the partnership with the French company Veja Fair Trade, the brand behind Vert Shoes[54], was pointed out as an important result achieved during the project's execution time. The partnership provides for the acquisition of forest-based rubber according to fair trade criteria for the production of the company's footwear. Purchases are made at prices higher than those practiced in the market for its associates and cooperative members.

The cooperative is also implementing a new fruit pulp processing unit, attached to the headquarters of its Brazil nut processing plant in Rio Branco. This new unit is linked to the intention of expanding production and guiding producers to work with tropical fruits, since the markets have proven to be interesting, as pointed out in the interviews.

The expansion and consolidation of the cooperative as a large-scale agro-extractivist business model in the state of Acre and the region shows its ability to occupy important spaces in the regional socio-economic scenario, even in unfair competition with the livestock model. Cooperacre exports and is the largest producer of Brazil nuts, and exports rubber, both products of extraction.

Reca

Reca is a unique experience in promoting the use of consortia of agricultural crops for the

54. For more information about the partnerships, check out: https://idesam.org/noticia/projeto-adiciona-compensacao-resex-chico-mendes.

production of fruits, such as cupuaçu and peach palm, of medium and long production cycle, with forest species with potential for the production of edible seeds, fruits, oils and plant resins. With the Materialize project, it invested in the implementation of SAFs and consolidation of the processing infrastructure, which together with its participatory management model and good soil conservation practices, reflected in the improvement of the quality of life of farmers. The project left an important legacy of generating internal capacities and capacity to benefit from socio-biodiversity products.

Most Reca technicians are children of rural producers, are responsible for technical monitoring, as well as for the preparation, monitoring and execution of projects. Each group supported by Reca has a technician in charge, who is usually also a partner. In addition to being present at the various management activities, the technician is responsible for supervising the management of the areas, taking care of fertilization, composting, pest control and improving the processes of each area, promoting improvements and increasing productivity.

Another important legacy of Reca's accumulated experience was the ability to process pulps, seeds and oils, from collectively articulated arrangements, and to put into practice the idea of productive forests, from various experiences.

Public Calls

Fase

The communities supported by the Fase project (family farmers, agro-extractivists, quilombolas and indigenous peoples) demonstrated that it is possible to combine agroecological, sustainable and diversified food production with the maintenance of standing forest, recovery of degraded areas and protection of permanent preservation areas, such as river banks, streams and water sources.

In the productive issue, the experience of the *Dema Fund's* support with communities has contributed to the constitution of a diversity of productive practices, especially those aimed at the adoption of new production technologies, soil management and pest control based on agroecology and to encourage collective activities and changes in the eating habits of families, promoting food and nutritional security.

The participatory governance structure of the *Dema Fund* and the involvement of the community in the decision-making processes help to generate long-term capacities aimed at developing solutions for local ownership.

ISPN

In the area of operation of the ISPN project, production chains were strengthened and consolidated, including products such as açaí, babassu, honey, fruit pulps, palm hearts, handicrafts, among others. With the *PPP-Ecos in the Amazon*, there was greater access to institutional procurement programs, such as PNAE and PAA, and greater organization

of supported initiatives by indigenous populations, quilombola communities, family farmers and settlers.

Concrete impacts can also be observed in the incidence on public policies and federal and municipal regulatory frameworks. The projects supported by *PPP-Ecos in the Amazon* present different strategies for income generation, ranging from fresh products to processed products, with different marketing strategies, covering direct sales to consumers, local fairs, institutional markets, supermarkets and others.

4.4.2. DIRECT EFFECT 2: "AGROFORESTRY AND BIODIVERSITY PRODUCT CHAINS WITH INCREASED ADDED VALUE"

The projects evaluated provided robust support values related to improving the conditions for benefiting from the supported experiences. Next, it is possible to analyze results for the two execution modalities.

Agglutinating Entities

In the case of the Cooperacre and Reca cooperatives, significant resources were earmarked for investments in equipment and infrastructure to improve the processing capacity of the products in their value chains (Chart 3).

Chart 3: Summary of investments in value addition by projects under the agglutinating modality.

Project	Investment in equipment
Cooperacre	2 fresh product storage structures,
	1,000 polypropylene boxes for fruit packaging,
	Purchase and installation of a briquetting machine at the Brazil nut processing plant in Rio Branco.
Reca	3 storage structures (cold chamber, freezing tunnel and others) of fresh and processed products.
	2 renovated or expanded processing units.
	Implementation of water distribution and supply system, sanitary sewage and use of rainwater.

Source: Own elaboration.

Figure 13: Process of mechanized selection of Brazil nuts on Cooperacre's premises.

Authorship: Image captured by Juliana Passos de Mello, during a field mission.

Figure 14: Peach palm cluster in SAF implemented by Reca.

Authorship: Image captured by Artur Sgambatti Monteiro during field mission.

Cooperacre has modernized two Brazil nut processing plants: the one in Xapuri has been equipped with four greenhouses for processing, and the one in Rio Branco has installed a briquetting machine that was previously used but recently shut down because it did not meet the quality requirements of the market.[55], The cooperative is working with the Brazilian Agricultural Research Corporation (Embrapa/AC) to develop solutions and reactivate the equipment.

The expansion of the areas for collecting Brazil nuts with organic certification also received investment, since it is the product that generates the most revenue for the cooperative. The goal was to certify seven agglutinated entities, in addition to renewing organic certification in seven other associations. This target was met by 100%, however, the certification expired on September 31, 2019 and has not been renewed. Cooperacre justifies the non-renewal by having decided to invest in ISO 22,000[56], which includes adequate food safety processes, meeting the demands of the market in which the cooperative operates.

Adding value to certified products has had direct and indirect positive effects on all links in the production chain. One example is access to more demanding markets that better reward products of certified origin and generate a medium- and long-term loyalty process for future purchase and sales contracts. In addition, Cooperacre has invested

55. The briquetting machine is capable of producing briquettes, a solid biofuel made from waste wood, coal and other raw materials. The equipment uses a waste compaction process, which has a high calorific content..

56. ISO 22000 is an international standard that defines the requirements of a food safety management system covering all organizations involved in the food chain, that is, all links from "harvest to the table", also known as "Farm to Fork". More information at: https://certificacaoiso.com.br/iso-22000/#o-que.

resources in commissioning market research to meet international food quality and safety standards and to develop new market opportunities.

Reca invested in improving infrastructure and machinery for processing. The expansion and modernization of agroindustry increased the production and processing capacity of cupuaçu, açaí and other fruits, with investments representing 33% of the total amount approved by the Amazon Fund.

There was an amendment incorporated into the initial contract of the Materialize project in 2015, due to the reconstruction of the processing unit for vegetable oils from Brazil nut, cupuaçu and andiroba seeds, due to a fire that occurred on the premises of the factory in the same year. The amount allocated for the execution of this reconstruction was R$1,516,414.00 and was completed in 2017.[57]

Public calls

In the public calls, the amounts to support the selected subprojects were up to R$30,000 for those of the *Dema Fund* and up to R$90,000 for those of the *PPP-Ecos in the Amazon*. The subprojects that received these funds served the interests of local organizations and communities by supporting the purchase of equipment, renovation of processing facilities, and training, among other things. During the field visit, it was observed that the construction and/or renovation of community kitchens to produce bread, cakes, biscuits and other products had an impact on the communities by adding value to the products and providing better working conditions. The accreditation to market the products of community organizations with the PNAE and the PAA of the federal government was also very relevant. In addition to the institutional market, many subprojects resorted to public fairs to market their products.

In the *PPP-Ecos in the Amazon*, the theme of beneficiation and commercialization covered the subprojects that invested in community kitchens and small agroindustries for processing babassu, peach palm, Brazil nut, guarana[58] and cumaru, as well as bakeries, flour mills and handicraft production, among others. Another activity developed by several subprojects was beekeeping, where investments were made in the production and commercial process, for the acquisition and multiplication of beehives, the structuring of processing units (honey houses) and the definition of marketing strategies, among other actions. The processing of pulps was also worked on in some subprojects supported by *PPP-Ecos*, with production, collection and processing of native fruits such as açaí, buriti, cupuaçu, cajá, murici and bacuri. The commercialization of these products has also been supported, looking for actions to improve the quality of products and their presentation, to improve production processes, to improve the management of enterprises and to expand access to markets.

Through its public calls, the *Dema Fund* has selected sub-projects drawn up by indigenous

57. See Appendix I for more details on the individual evaluation of the RECA project.

58. Subproject "Project to Support the Strengthening of Sustainable and Productive Actions in Guaraná", in the north of MT. More information is available at: https://ispn.org.br/site/wp-content/uploads/2019/05/portifolio-ppp-ecos-fundo-amazonia.pdf.

peoples, quilombola communities, agro-extractivists and family farmers. The increase in income-generating capacity was confirmed by the increase in production, with a focus on indigenous Amazonian products, especially fruits and seeds. The production value, calculated in November 2017, which was almost R$4 million. The main products of the supported subprojects were varied fruit pulps, andiroba oils, babassu, Brazil nuts, copaiba, cassava flour, babassu mesocarp and honey.

Regarding access to markets, about 60% of the productive initiatives have access to local markets, mainly municipal fairs, in some cases differentiated fairs of agroecological products, family farming, women's groups and organic products, or periodic participation in regional fairs. Regarding the inclusion in the PNAE and PAA programs, although 16 projects have access to these programs in their objectives and goals, only 5 regularly provide schools through public procurement in the regions where the project operated.

Both the *Dema Fund* and the *PPP-Ecos in the Amazon* had difficulty systematically monitoring the records of financial revenues and marketed quantities of all its supported subprojects. The two initiatives invested in different strategies to try to carry out this monitoring: the *Dema Fund* contracted an external evaluation and the *PPP-Ecos* applied a questionnaire to the participating associations.

The results showed significant increases in household incomes, particularly in the initiatives to establish mini fruit and cassava flour processing plants, açaí farming, fish farming, handicrafts, and community-based tourism. The very diversification of production and access to adequate equipment and more structured collective workspaces contributed to the improvement of working conditions.

Regarding income generation measured by projects that opened public calls, the following results are obtained:

- PPP-Ecos in the Amazon: average income of R$2,457.14 per year per family.
- Dema Fund: average income of R$2,000.00 per year per family in June 2017.

4.4.3. DIRECT EFFECT 3: "EXPANDED MANAGERIAL AND TECHNICAL CAPACITIES FOR THE DEVELOPMENT OF ECONOMIC ACTIVITIES FOR THE SUSTAINABLE USE OF FOREST AND BIODIVERSITY"

All projects carried out training actions that included the technical staff of the agglutinated entities and supported subprojects, as well as exchanges and events of other natures, depending on the reality of their territories of action and the groups supported. The joint projects have trained more than 11,000 people and provided opportunities for access and exchange of information and knowledge valorization, among other medium- and long-term benefits.

The investment made to strengthen community associations and rural producers who received support from the Amazon Fund, through the projects object of this evaluation, was made differently for those of the agglutinating modality and for those of public call. Due

to the disparate reality of the applied experiments, it was decided to present the results in greater detail by project, as shown below.

Agglutinating Entities – Cooperatives

Cooperacre works in a network with its members, acting as a developer agent of actions that involve various activities, especially with regard to the organization and coordination of production, training and ATER actions. It has the legal figure of its central cooperative, located in Rio Branco, where its office and the Brazil nut processing plant are located. It has six other industries processing Brazil nuts, fruit pulp, natural rubber and palm hearts, located in the municipalities of Xapuri, Sena Madureira, Senador Guiomar and Brasiléia. In total, 12 agglutinated associations were strengthened with the resources of the Amazon Fund destined to *the project Strengthening the Forest Based Sustainable Economy.* Cooperacre also invested in training 441 members in agroforestry management and administrative and financial management, more than doubling its initial goal.

Reca has its headquarters and industrial plant located in the District of New California, municipality of Porto Velho/RO. The organization adopts the SAFs model as its main productive activity. The 315 hectares of SAFs implemented are distributed in groups of producers located on several side roads that cross the BR-364 highway and are distributed in ten groups formed by partners and cooperative members of Associação Reca: Associação Baixa Verde (ABV), Associação dos Produtores Rurais do Município de Acrelândia (Aspromacre) and Cooper-Reca, namely: i. Pioneiros I; ii. Pioneers II; III. Pioneers III; iv. Baixa Verde; v. Cascalho; vi. BR; vii. Line 05; viii. Line 06; ix. Line 12; and x. Eletrônica. The *Materialize* project invested in the institutional strengthening and physical structuring of three of the four agglutinated entities: ABV, Aspromacre and Associação RECA.

The goal of training community leaders in project management, participatory governance, good production practices, storage of socio-biodiversity products and marketing strategies has as indicators: 50 community leaders trained in project management, participatory governance and marketing strategies; 20 women in Associação RECA and Cooper-Reca, 6 women in Aspromacre and 4 women in ABV holding coordination positions in Associação RECA, Cooper-RECA, ABV and Aspromacre; and 30 individuals holding coordination positions in these institutions. 443 people were trained for the implementation of SAFs, production and storage of socio-biodiversity products, extrapolating the target by 260%. Of these, 39% were women and 61% were men.

Public Calls

Fase opened seven public notices to support subprojects with resources from the Amazon Fund between 2011 and 2014 for the *Dema Fund*. The calls answered several social groups of indigenous people, quilombolas and the general public. In total, 112 projects were supported. One of the major challenges to comply with the notices was the rules for the eligibility of resources from the Amazon Fund, especially for the regularity of the

associations. As such, the Dema Fund provided 49 training events and seminars and the goal of the training indicator was exceeded, reaching 123%. The same happened with the number of people trained in the design, implementation and evaluation of socio-environmental projects by the participants of these workshops, which was 1,018 people who participated in the training events, 191% of the target.

ISPN's project worked in the same way, launching four public calls under the *PPP-Ecos in the Amazon*. 88 subprojects were selected, located in the central region of Maranhão, northern region of Tocantins and northern region of Mato Grosso. The component of strengthening community organizations managed to reach 163 associations assisted with training, exceeding the target by 163%. The goal of training in institutional and technical management for the implementation of eco-social projects with traditional populations provided 17 training workshops, well above the goal (213%), with the participation of 866 people (545% of the goal, almost five times more).

The various processes of training and generating local skills have contributed to improving the vulnerable situation of communities in the fight against deforestation and to consolidating sustainable productive activities capable of maintaining and sustaining themselves without external support. In its monitoring evaluations, *PPP-Ecos project in the Amazon* also highlights the training of leaders with strong representation of young people and women, contributing to the expansion and strengthening of protagonists in actions in defense of the standing forest. This happens, for example, through the commitment of several people who participated in the courses organized by the projects and who continue to work and participate in the processes of construction and implementation of public policies at the local and regional levels.

4.4.4. DIRECT EFFECT 4: "DEFORESTED AND RECLAIMED AREAS USED FOR ECONOMIC AND ECOLOGICAL CONSERVATION PURPOSES"

Dealing with the legacy of deforestation is a challenge for land-use planning and land use and occupation policies throughout the Amazon region, as well as in the project areas specifically evaluated. Land policy agencies, at the federal and state levels, have accumulated a historical liability for deforested areas and a high degree of degradation. The costs of recovering degraded areas are high and government agencies generally do not prioritize budgets for this activity. In this scenario, the Amazon Fund opened up the possibility of investing in sustainable production chains, while at the same time allowing the use of financial resources to reclaim degraded areas for productive purposes related to the daily lives of communities.

The four projects evaluated allocated resources to these activities aimed at increasing productive capacity, generating income and reducing the liabilities of degraded areas in communities located in quilombola territories, indigenous lands (ILs), agrarian reform settlements and conservation units (CUs) for sustainable use. The systems most used for this purpose were SAFs, which use the concept of agroecology, combining the consortium of short, medium and long term crops. In addition to soil recovery using nutrient cycling, they focus on productivity, crop diversification, seasonality in

production and financial return.

In the projects evaluated, ATER practices aimed at converting areas, such as pastures with low productivity rates (below one head of cattle per hectare), were successful in approaching family farmers with the consideration that one hectare of SAF can yield more than the same pasture area. Agroforestry production can generate income throughout the year on a continuous basis, and has demonstrated success in its application in the four projects evaluated differently. Thus, the use of SAFs to convert degraded areas has the potential to gain scale and attract new beneficiaries. Table 1 shows the goals and the total amount of degraded areas recovered per project.

Table 1: Targets for the recovery of degraded areas recovered per project (in ha).

Project	Goal (ha)	Recovered areas (ha)	Achievement of the goal (in %)
Materialize	300	315	130%
Strengthening the Forest Based Sustainable Economy	600	600	100%
PPP-Ecos in the Amazon	1000	2.999	300%
Dema Fund	-	869	-

Source: Own elaboration.

The projects by Reca (*Materialize*) and Cooperacre (*Strengthening the Forest Based Sustainable Economy*) met the goals of recovering degraded areas through the direct implementation of SAFs, whose purchase of production was practically guaranteed by the agglutinating entities. Both offered ATER and developed training and exchange processes between producers, in order to seek sustainability of the areas implemented over time.

On the other hand, both the *Dema Fund* and the *PPP-Ecos in the Amazon*, with their actions to strengthen the community and encourage the most different actions by the supported subprojects, strengthened land-use planning with the presence of more active traditional populations with greater capacity to raise funds and defend their territories – whether in settlement projects (PA), ILs or sustainable use CUs.

4.4.5. INDIRECT EFFECT: REDUCING DEFORESTATION WITH SUSTAINABLE DEVELOPMENT

Reducing deforestation was not the focus of any of the projects included in this evaluation, but the activities they developed may have contributed indirectly. The following is an analysis by project/executor.

Reca

Table 2 and the graph in Figure 15 below show the annual evolution of deforestation between 2014 and 2022, according to Prodes, and consolidates the total accumulated

in the municipalities targeted by the Materialize project, Porto Velho/RO and Acrelândia/AC. Although this is a relevant indirect effect of the project, these data were not included in the BNDES monitoring table after completion of the project, but were added for comparison purposes. Given the extent of the territory[59] and the localized performance of the project, it is not feasible to evaluate its performance on the deforestation rate of the municipalities. However, the analysis is important for territorial contextualization at the time of conducting the project.

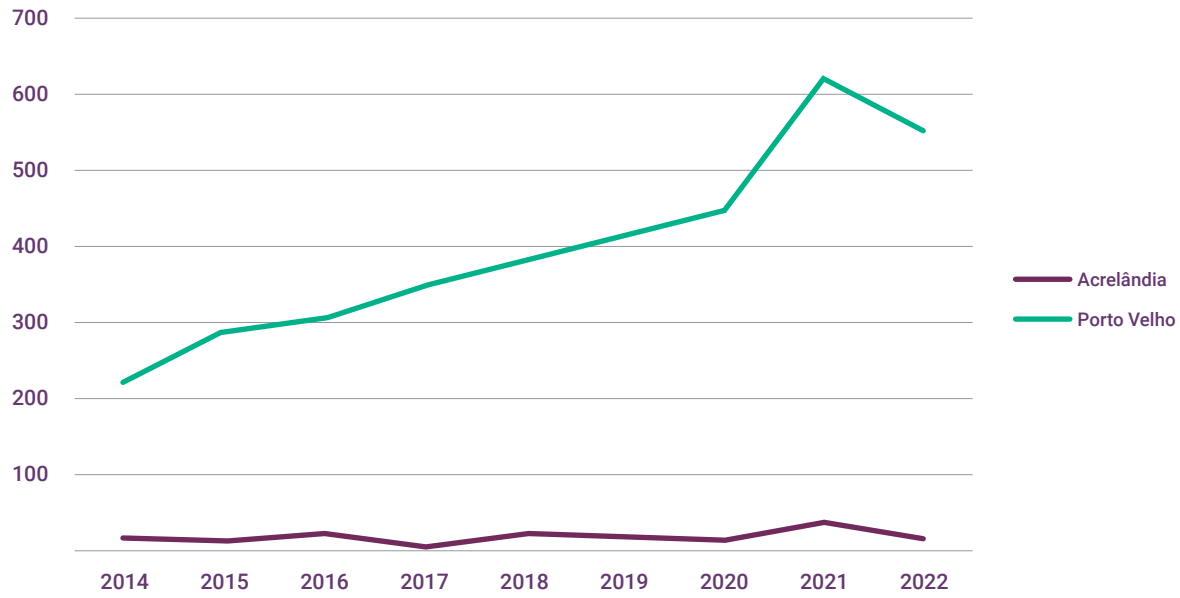
Table 2: Evolution of deforestation (in km²) in the municipalities where the Materialize project operates - Porto Velho (RO) and Acrelândia (AC).

Municipality	Area (km²)	Total deforested (km²)	(%)	2014	2015	2016	2017	2018	2019	2020	2021	2022
Acrelândia	1,812	174	10%	19	15	24	6	22	20	13	38	18
Porto Velho	34,091	3.570	10%	222	285	305	347	378	413	450	619	551

Source: Terra Brasilis/Prodes (Deforestation)/Inpe, 2023[60].

In pink: priority municipality in the fight against deforestation, according to the MMA

Figure 15: Evolution of deforestation in the municipalities where the Materialize project operates, Acrelândia (AC) and Porto Velho (RO).



Source: Terra Brasilis/Prodes (Deforestation)/Inpe. 2023[61].

Porto Velho/RO, due to its territorial extension, is the third municipality with the highest

59. In particular, the municipality of Porto Velho, which is among the largest municipalities in the country.

60. Data available at http://terrabrasilis.dpi.inpe.br/app/dashboard/deforestation/biomes/legal_amazon/increments.

61. Data available at: http://terrabrasilis.dpi.inpe.br/app/dashboard/deforestation/biomes/legal_amazon/increments

deforestation rates in Brazil in 2022, representing, alone, 4.3% of the total deforested in the Brazilian Amazon. In addition, when analyzing the period between 2014 and 2022, it is possible to observe a steady growth in deforestation in the municipality, with a peak in 2021. This behavior justifies the prominence given to the municipality when it was defined as one of the priority municipalities for actions to prevent, monitor and control deforestation in the Amazon, according to the Ministry of the Environment (MMA)[62]. In Acrelândia/AC, despite the variations, the deforestation rate is constant and considerably lower in the same period.

The entire region has been increasingly affected by deforestation at alarming rates due to the rapid conversion of land use, the introduction of soybeans in certain areas, and the spread of extensive livestock farming with the presence of large industries. This analysis corroborates the reports on deforestation pressure in the interviews conducted in this evaluation. Environmental imbalances are noticed in the project's crops: several producers reported the increase in the presence of wild animals in search of food in the SAFs, which generates losses; and winds knock down flowers reducing the volume of production.

Cooperacre

Table 3 shows the annual evolution of deforestation between 2014 and 2022 in the state of Acre, according to Prodes/Inpe, while Table 4 consolidates the total accumulated in the 14 municipalities targeted by the project. It should be noted that the municipalities of Acre still have relatively low deforestation rates compared to other states in the Brazilian Amazon. This is due both to the geographical location, which has caused the productive activities to reach the state later, and to the size of the municipalities, and it is not possible to make large rate increases in most of the municipalities observed. Although the reduction of deforestation was the main indirect effect of the project, such data were not included in its monitoring spreadsheet.

Table 3: Comparison of the evolution of deforestation in the state of Acre, in the period between 2014 and 2022.

	Area (km²)	Total deforested (km²)	(%)	2014	2015	2016	2017	2018	2019	2020	2021	2022
Acre	164,173	4,875	0	349	223	366	246	426	707	661	892	1,005
Amazônia Legal	5,015,068	79,100	0	5,100	6,100	7,300	7,000	7,100	10,900	10,500	12,400	12,700
Acre/AmL (%)	3%	6%	-	7%	4%	5%	4%	6%	6%	6%	7%	8%

Source: Terra Brasilis/Prodes (Deforestation)/Inpe, 2023[63].

62. Check it out at: http://combateaodesmatamento.mma.gov.br/municipios-prioritarios
63. Dados disponíveis em: http://terrabrasilis.dpi.inpe.br/app/dashboard/deforestation/biomes/legal_amazon/rates.

Table 4: Comparison of the evolution of deforestation in the 14 municipalities of the administrative regions of Upper and Lower Acre, in the period between 2014 and 2022

Municipality	Area (km²)	Total deforested (km²)	(%)	2014	2015	2016	2017	2018	2019	2020	2021	2022
Acrelândia	1,812	174	10%	19	15	24	6	22	20	13	38	18
Assis Brasil	4,979	96	2%	8	6	3	6	8	21	18	18	8
Brasiléia	3,928	308	8%	33	22	18	23	21	59	40	61	31
Bujari	3,035	164	5%	9	9	17	8	14	26	18	26	37
Capixaba	1,706	161	9%	10	6	16	11	10	28	19	29	32
Epitaciolândia	1,653	88	5%	9	10	7	6	8	11	8	19	11
Manoel Urbano	10,631	339	3%	18	19	27	17	46	31	53	41	88
Plácido de Castro	1,953	76	4%	7	5	8	5	12	9	8	15	6
Porto Acre	2,604	151	6%	10	8	15	9	12	23	19	32	23
Rio Branco	8,835	525	6%	33	30	52	26	33	80	56	98	118
Santa Rosa do Purus	6,156	33	1%	4	2	2	2	3	7	5	4	4
Sena Madureira	23,760	604	3%	52	42	56	35	48	80	73	111	106
Senador Guiomard	2,320	85	4%	4	5	9	5	8	7	10	20	17
Xapuri	5,351	347	6%	18	18	33	21	22	60	39	59	77

Source: Terra Brasilis/Prodes Project/Inpe and DETER System/Inpe, 2023.[64]
In pink: priority municipality in the fight against deforestation, according to the MMA

ISPN

t was not possible to observe a metric related to the indicator of deforestation reduction in the ISPN project, however it was possible to establish a relationship from the data on deforestation accumulated in the states covered by the *PPP-Ecos in the Amazon* project (Maranhão, Mato Grosso and Tocantins) over the last ten years. Due to the project not having acted in all areas of the states, it is not possible to directly relate changes in deforestation rates with project results. Nevertheless, it is considered important to present these data, as they serve as indicators of the reality and differentiation of the general scenario of the impact of deforestation in the different regions where the project operates.

64. Data available at::http://terrabrasilis.dpi.inpe.br/app/dashboard/deforestation/biomes/legal_amazon/increments.

When analyzing the data in Table 5 and the graph in Figure 16, there is a great disparity between the levels observed in each state, and Tocantins has smaller deforested areas in the Amazon biome than those observed in the other states. The states in which the project operated presented different orders of magnitude of deforestation. For example, considering the year 2022, Mato Grosso alone had 2,022 km² of deforested areas (16% of the total area observed in the Amazon in that year), while Maranhão and Tocantins had much lower rates of 299 km² (2%) and 31 km² (0.2%), respectively. This difference is observed throughout the period of historical analysis.

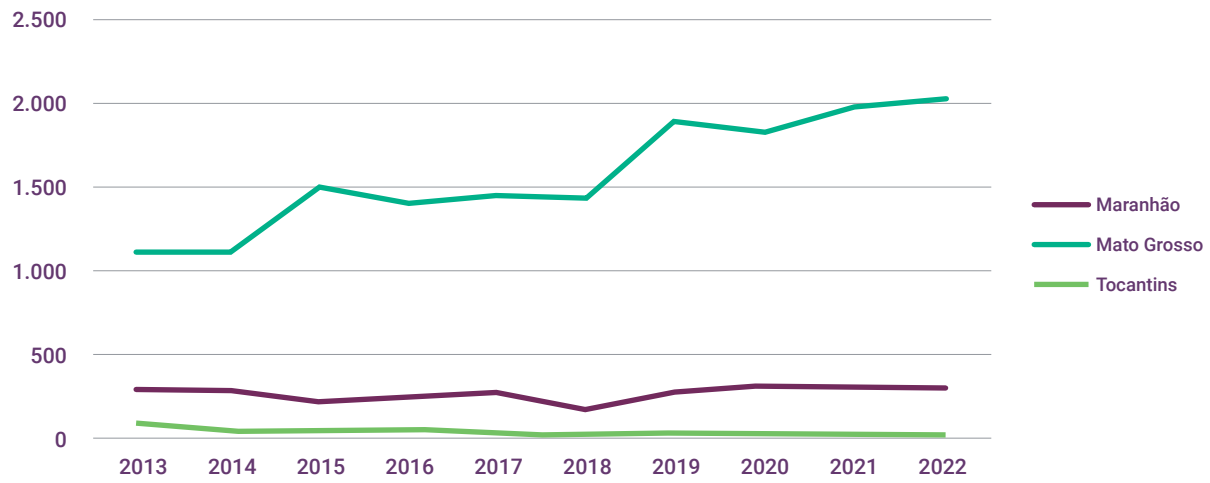
Table 5: Evolução do desmatamento nos estados de atuação do projeto Pequenos Projetos Ecossociais na Amazônia, MA, MT e TO

	Area (km²)	Total deforested (km²)	(%)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Maranhão	329.652	2.703	1%	295	286	217	247	273	183	273	315	316	299
Mato Grosso	903.207	15.709	2%	1,108	1,106	1,496	1,402	1,454	1,438	1,885	1,822	1,976	2,022
Tocantins	277.424	398	0,1%	77	45	55	53	28	23	28	25	32	31
Amazônia Legal	5.015.068	86.500	2%	5,400	5,100	6,100	7,00	7,000	7,100	10,900	12,500	12,400	12,700
MA/Total %	7%	3%		5%	6%	4%	3%	4%	3%	3%	3%	3%	2%
MT/Total %	18%	18%		21%	22%	25%	19%	21%	20%	17%	15%	16%	16%
TO/Total %	6%	0,5%		1%	1%	1%	1%	0,4%	0,3%	0,3%	0,2%	0,3%	0,2%

Source: Terra Brasilis/Prodes (Desmatamento)/Inpe, 2023[65]; Áreas territoriais, IBGE. 2023[66].

* Considerando o percentual de desmatamento em relação ao total observado na Amazônia Legal;

Figure 16: Evolution of deforestation in the states of operation of the Small Eco-Social Projects project in the Amazon, MA, MT and TO.



Source: Terra Brasilis/Prodes (Deforestation)/Inpe, 2023[67].

65. Data available at: http://terrabrasilis.dpi.inpe.br/app/dashboard/deforestation/biomes/legal_amazon/incements.
66. Data available at: https://www.ibge.gov.br/geociencias/organizacao-do-territorio/estrutura-territorial/15761-areas-dos-municipios.html?=&t=acesso-ao-produto.
67. Data available at: http://terrabrasilis.dpi.inpe.br/app/dashboard/deforestation/biomes/legal_amazon/increments.

Although the absolute level of deforestation is increasing in Mato Grosso, from 1,107.89 km² to 2,022 km² between 2013 and 2022 (an increase of 82%), the other states have rates lower than those of 2013. The state of Maranhão showed decreases and increases in deforestation between 2013 and 2022, fluctuating between 200 km² and 300 km², while Tocantins had a rate 60% lower than in 2013. It is also possible to observe a decrease in the proportion of deforestation in Mato Grosso compared to the total observed in the Brazilian Amazon: despite an 82% increase in the deforestation rate and representing 16% of the total deforestation in the region, this ratio was higher in 2013 (21%). This is due to the fact that, in 2019, there was a large explosion of deforestation in the Brazilian Amazon, especially in the states of Pará, Amazonas and Acre (Figure 16).

This analysis requires a longer-term understanding, especially about the state of Mato Grosso, which has historically demonstrated high rates of deforestation. Since the beginning of measurements in 1988, it has always been, with Pará, between the two states with the highest deforestation. In 2012, Mato Grosso alone was responsible for the deforestation of 11,814 km² of forest[68], and for the first time it was in third place, surpassed by Rondônia. In 2021 and 2022, the state of Amazonas started to demonstrate higher deforestation rates. This analysis suggests that the relatively constant rates of deforestation observed since 2019 in Mato Grosso are related to the consolidation of deforested areas and the depletion of native areas, especially considering the high rates of deforestation in the 1980s and 1990s.

Fase

The *Dema Fund* supported subprojects in 26 municipalities in Pará, a state that occupies the first position in deforested areas in the Brazilian Amazon according to the last update of Prodes/Inpe at the end of 2022. Deforestation rates in the municipalities are shown in Table 6 and, taking as an example the BR-163, which connects Santarém to Cuiabá, and its confluence area with the BR-230 (Trans-Amazonian Highway), deforestation rates are very high. It is a region where livestock farming is still a profitable activity, but which, little by little, is giving way to soybean cultivation, especially in the region of the Santarém plateau.

Table 6: Deforestation rates in the municipalities covered by the subprojects supported by the Dema Fund notices.

Municipality	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Altamira	250	229	297	294	308	409	224	430	575	798	765	626
Aveiro	35	16	14	30	16	13	31	21	45	35	56	53
Brasil Novo	39	9	32	9	11	7	28	19	26	27	20	9
Cachoeira do Piriá	24	3	5	11	13	9	21	19	22	27	15	11
Cametá	1	0	0	0	0	0	1	1	0	0	0	0
Capitão Poço	9	1	1	1	1	1	2	1	2	1	2	2
Concórdia do Pawrá	1	1	1	0	0	0	3	0	0	1	0	0

68. The year 2012 was the lowest deforestation in the historical analysis of Prodes/Inpe, with 4,571 km².

Gurupá	1	3	1	2	0	1	2	3	5	4	2	2
Irituia	5	0	1	0	2	2	1	0	0	1	1	0
Itaituba	89	95	188	100	90	130	80	96	169	273	356	348
Mocajuba	1	0	0	0		0	0	0	0	0	0	
Monte Alegre	11	15	10	15	11	24	31	12	26	33	38	37
Novo Progresso	53	74	164	115	170	141	61	192	201	364	414	262
Óbidos	16	10	15	23	13	10	18	22	35	42	30	32
Oriximiná	12	5	9	9	14	12	11	15	21	24	17	14
Placas	40	80	25	53	89	68	88	90	105	86	141	141
Porto de Moz	19	21	16	22	22	21	15	36	42	32	51	41
Rurópolis	41	41	19	35	31	28	43	50	109	99	170	118
Santa Luzia	4	1	1	1	2	5	4	1	4	6	4	2
Santa Izabel do Pará	0	0	1	0	0	1	2	0		0	1	0
Santa Luzia do Pará	0			1			0	0	0	1		0
Santarém	11	7	6	11	22	7	21	13	19	16	18	55
São Miguel do Guamá	1	1	1	0	2	1	2	1	0	1	1	0
Terra Nova do Norte	5	5	8	4	2	6	4	5	6	2	3	2
Trairão	50	42	43	44	25	41	81	56	112	82	120	114
Uruará	38	52	47	14	53	64	89	82	154	133	140	194
Viseu	4	1	1	3	4	2	11	4	9	9	4	2

Source: Terra Brasilis/Prodes/Inpe and IBGE Platform, data updated until 2022.
In pink: priority municipality in the fight against deforestation, according to the MMA.

Environmental protection areas and indigenous lands (ILs), which are located in this same area of influence, known as "Terra do Meio", suffer from illegal invasion, mining and logging processes. Several of the subprojects supported by the *Dema Fund* are included in this context. The Dema Fund acted on this disorderly scenario of land use supporting community organizations, in addition to being an active actor exposing the problem with the supervisory bodies and the government.

4.5. OECD EVALUATION CRITERIA, CANONICAL SAFEGUARDS AND TRANSVERSAL CRITERIA

The following is a summary of the extent to which the project evaluation criteria proposed by the Organization for Economic Cooperation and Development (OECD) have been met; the Cancún Safeguards, which relate to compliance with the criteria for Reducing Greenhouse Gas Emissions from Deforestation and Forest Degradation, taking into account the role of forest carbon stock conservation, sustainable forest management and increased forest carbon stocks (REDD+); and the Transversal Criteria for Poverty Reduction and Gender Equity, which guide the implementation of projects supported by the Amazon Fund.

4.5.1. OECD EVALUATION CRITERIA

Evidence	Evaluation
Relevance Criterion	
The *PPP-Ecos in the Amazon* and the *Dema Fund* projects are references in supporting community productive activities, combining biodiversity conservation and occupation and rational land use in the Amazon regions where they worked. They managed the subprojects/agglutinated entities in a participatory manner and committed to the various groups involved, respecting their ways of life, autonomy, gender equity and culture. Furthermore, they aligned their actions and activities with the needs of the supported groups and the conservation of the Amazon with the use of economic practices that keep the forest standing. These factors position them as central references in the disclosure of viable economic alternatives that opposed the logic of expanding deforestation, especially considering regions along the Areas under intense pressure for deforestation, where changes and impacts are of great proportion.	Very relevant
Efficacy Criterion	
The projects evaluated generated, in different regions of the Amazon, opportunities related to the sustainable and productive use of soil and forest. Through them, several populations accessed technologies and techniques for the implementation and management of SAFs according to the needs in the regional context. The projects under the agglutinating modality allocated a significant amount of financial resources for improvements in productive infrastructures and for the purchase and replacement of equipment, aiming to improve the quality of the benefited products and generating value addition and economic return of central importance to the organizations and their beneficiaries. As such, it is important to point out that they have exceeded the objectives set in many areas, especially in terms of strengthening the associations in their management practices, carrying out training in different contexts and needs of the beneficiaries, and recovering degraded areas and production. The projects exceeded the goals regarding the training of agro-extractivists, indigenous people and quilombolas in production, processing and marketing and invested in ATER techniques to meet the demands of the beneficiaries. The agglutinating model tends to be more effective in the mentioned questions, as the work is carried out with smaller member groups, with a very close relationship to the executing entity and with clearly defined interests and demands in terms of improving their production practices and relationship with the market.	They were effective
Efficiency Criterion	
In the public call modality, the projects managed to be more efficient by reaching a greater number of interest groups in their public notices and managed to expand their action in terms of territorial dimension, with different realities and needs for support. In this way, they have been able to accumulate several successful experiences, as well as numerous publications and studies summarizing experiences and lessons learned, which can help the Amazon Fund in its future support. It was observed that the four projects have good project management capacity and quality of the technical team, essential factors for a good execution of deadlines and goals.	Very efficient

Impact Criterion	
Strengthening the Forest Based Sustainable Economy: Cooperacre's capacity to expand and consolidate as a business model on the scale of agro-extractivism in the state of Acre and the region is solid. It has the capacity to occupy spaces of great relevance in the regional socio-economic scenario, proving its role in the generation of economic alternatives, even in the face of unfair competition with the agribusiness model. *Materialize:* Reca is a reference in the development and adaptation of consortia production systems, guiding rural producer families in the use of crop diversification in small production areas, without the need to deforest new areas. *PPP-Ecos in the Amazon:* It has leveraged the expansion of several production chains of different products, such as açaí, babassu, honey, fruit pulps, palm hearts, handicrafts, among others; access to institutional purchasing programs (PNAE, PAA, among others); and the organization of initiatives supported by indigenous peoples, quilombolas, family farmers and settlers. *Dema Fund:* its work model has contributed to the constitution of an extraordinary diversity of production practices, especially aimed at the adoption of new production technologies, soil management and pest control based on agroecology, and encouraging collective activities and changes in the eating habits of families, promoting food and nutritional security. Another strong impact of the four projects evaluated was the number of people trained in sustainable economic activities, which contributed to the accumulation of the Sustainable Production Component of the Amazon Fund by 2021 by a total of 25.23% and 18.62% of women. However, this percentage did not consider women trained by *PPP-Ecos*, a project that promoted many training programs, including with women, but which was not successful in collecting data from the subprojects related to this indicator. There were 18,390 individuals directly benefited by the supported activities, of which 15.17% were women. However, this rate is possibly higher, as there is no such data from *PPP-Ecos*. The indicator of areas recovered for economic purposes based on the four projects contributed 30.97% of the total up to 2021 of the Amazon Fund's Sustainable Production Component. It provided an opportunity for the environmental recovery of 4,785 hectares of degraded areas with agroecological-based activities and SAFs, expanding the productive base for income generation and food security; it contributed to the recovery of springs and PPAs and the water security of families. Dividing the number of hectares recovered by the total number of beneficiaries gives an average of 0.26 hectares recovered for economic and sustainable purposes. Both the agglutinating and the public call modality were able to aggregate scale in environments and realities of territories, as well as having replicability capacity in a larger scale of resource application.	They had an impact

Sustainability Criterion	
Today, the concept of bioeconomy stands out in the scenario of solutions for the future of Amazonian conservation, offering the four projects the possibility of consolidation as sustainable business models, biodiversity conservation and long-term economic growth. The work of these support organizations is fundamental to the protection and sustainable use of forests, helping to create opportunities for access to public policies aimed at the interests of communities in general, taking into account their demands and specific interests. Considering their positive impact on the areas in which they operate and their effectiveness in achieving most of the objectives, generating income for a large population, the projects proved to be consolidated in their areas of operation. The continuity of the results of the activities developed in the territory has been established over the years after the end of the project, consolidating its relevance and attesting to its sustainability over time. This differential was proven in the signing of new projects in partnership with the Amazon Fund by the projects under the public call modality.	They have sustainability

4.5.2. REDD+ SAFEGUARDS

Criteria	Evaluation	Interpretation
Actions complementary to or consistent with the objectives of national forest programs and other relevant international conventions and agreements.	Yes	The projects supported are aligned with the "Promotion of Sustainable Productive Activities" area, one of the three of the PPCDAm. They are also in line with Objective 7 of the 2016-2020 phase of the PPCDAm ("Promoting Sustainable Forest Management")[70], due to their direct and indirect effects and the activities of the projects evaluated, especially with regard to: i. valuation of environmental services for socio-biodiversity products; ii. support for sustainable productive inclusion projects for indigenous peoples, traditional extractive peoples and communities; iii. dissemination of materials recommending good practices for the management of native socio-biodiversity species; iv. strengthening extractive activities; and v. strengthening the management of community enterprises. The 2016-2020 stage of the PPCDAm does not provide for specific lines of action related to SAFs, but the theme aligns with other national regulations, such as the Forest Code and the National Plan for the Recovery of Native Vegetation (Planaveg), which provide for the implementation of SAFs as a way of restoring the Legal Reserve in the context of family farming (Law No. 12.651/2012, art. 66, § 3o), highlighting their contributions to food security and other social and economic benefits. The projects relate directly to the Convention on Biological Diversity and its Aichi Targets, in particular to target 7 ("By 2020 areas under agriculture, aquaculture and forestry are managed sustainably, ensuring conservation of biodiversity"), with the Sustainable Development Goals, in particular the objectives: 1. "No Poverty"; 2. "Zero Hunger and Sustainable Agriculture"; 10. "Reduced Inequalities"; and 13 "Climate Action".

69. Information available in the individual project reports, available in Appendix I.

70. This objective is divided into "timber production through Sustainable Forest Management" and "strengthening the socio-biodiversity production chain".

Transparent and effective national forest governance structures, with a view to national sovereignty and legislation.	N/A	The projects included in this evaluation did not present direct and specific contributions to governance structures at the national level or explicitly related to the strengthening of forest and land-use planning. Articulation actions between different social agents took place indirectly (for example, through support organizations in the case of *PPP-Ecos in the Amazon* and the *Dema Fund* and social and political action, as well as in the project's contribution to the approval of Law 03/2015 of the municipality of Peritoró/MA, which regulates free access to babassu forests).
Respect for the knowledge and rights of indigenous peoples and members of local communities, taking into account relevant international obligations, national circumstances and laws and noting that the UN General Assembly has adopted the United Nations Declaration on the Rights of Indigenous Peoples	Yes	There was no exclusive focus on indigenous peoples among the projects evaluated, however the *Dema Fund* and the *PPP-Ecos in the Amazon* supported indigenous communities. In both projects, the rite of the planned processes of consultation with the consent of the communities follows. The subprojects had support in different lines, including support for the writing and publication of consultation protocols, aiming to guide and defend their territories. The National Management Council (CGN)[71], of *PPP-Ecos* has members of the Articulation of Indigenous Peoples of Brazil (Apib) and, through the public notices, approved 11 projects with indigenous communities and many others with quilombola communities. The *Dema Fund* also has members of organizations representing indigenous peoples and quilombolas on its Management Council and it issued a specific call for proposals for indigenous communities, which approved four projects in this category, and two calls for proposals for quilombolas, which approved ten projects. Through support to other funds it maintains, the *Dema Fund* supported the Quilombola Mizizi Dudu Fund and the Indigenous Articulation.
Full and effective participation of stakeholders, in particular indigenous peoples and local communities, in the actions referred to in paragraphs 70 and 72 of Decision 1/CP 16.	Yes	The *Dema Fund* and *PPP-Ecos in the Amazon* projects have participation mechanisms aimed at different audiences that are supported. The CGN of *PPP-Ecos* includes members of Apib, the National Council of Extractivist Populations (CNS) and the Semiarid Region Articulation (ASA). The *Dema Fund* also has members of organizations representing indigenous peoples and quilombolas on its Management Council. The executors Reca and Cooperacre, even if they do not work with indigenous peoples, work in the territories of settlers and extractivists, respectively. They present an organization based on the cooperative and associative model, with community-based control and management mechanisms that count on the participation of the project beneficiaries. These participatory structures include smaller (agglutinated) organizations, which are part of the project. Thus, it can be said that there was social participation in different spheres and scales of the project.

71. The National Management Council (CGN) of PPP-Ecos is a deliberative and technical entity that aims to guide the Fund's actions in order to add adherence and representativeness to its actions. It is composed of representatives of government bodies, international bodies, civil society organizations and academia. For more information, visit: https://ispn.org.br/ppp-ecos-promocao-de-paisagens-produtivas-ecossociais/.

Actions consistent with the conservation of natural forests and biological diversity, ensuring that the measures referred to in paragraph 70 of Decision 1/CP 16 are not used for the conversion of natural forests, but rather to promote the protection and conservation of natural forests and their ecosystem services, and to enhance other social and environmental benefits.	Yes	All projects focused, in different ways, on promoting sustainability in the use of natural resources, recovering degraded areas for economic purposes, through SAFs, and maintaining standing forests. The *Materialize* project presented a good model for monitoring the SAFs implemented by the project, even designating the number of individuals of different species per producer. For other projects, there was no consistent monitoring of the maintenance and evolution of the implemented SAFs. In the case of *Strengthening the Forest-Based Economy*, 90% of the implemented SAFs were abandoned, while in the *Dema Fund and PPP-Ecos in the Amazon* there was no consistent control of the implemented SAFs and backyards, not allowing individualized monitoring. None of the actions of the projects involved the conversion of natural forests. There were no direct actions to expand or consolidate protected areas, but the incidence of projects in protected areas (sustainable use CUs and ILs) already existed.
Actions to address the risks of reversals in REDD+ results.	Partially	The affected regions are under pressure from deforestation, stimulated by the expansion of extensive livestock farming, logging and land exploitation. The projects did not adopt methodologies to deal with reversals related to the areas of SAFs implemented, or even the areas under sustainable management. However, there are partnerships in other areas, such as Reca's partnership with Natura, with the Carbon Project, which is an interesting example of monitoring a portion of degraded areas, helping to calculate the avoided emissions made possible by the project, and compensating production units that have reversed deforestation on their properties. The ISPN, within the scope of the *PPP-Ecos in the Amazon* project, carried out the study "*Estimation of avoided emissions and removals of carbon dioxide (CO2) in projects supported by PPP–Ecos in the Areas under intense pressure for deforestation*", but did not publish it, since it considered it to be intended for very specific audiences.
Actions to reduce the displacement of carbon emissions to other areas.	N/A	Not applicable.

4.5.3. TRANSVERSAL CRITERIA

The projects supported by the Amazon Fund that are part of this evaluation have effectively contributed to poverty reduction in regions with high deforestation pressure and have reached vulnerable and needy populations, as well as women's groups. The projects have trained more than 11,000 people, provided access to and exchange of information, and promoted the appreciation of traditional knowledge, among other medium- and long-term benefits. Three of the four projects contributed to gender equity, although no specific strategies were foreseen for this purpose. The projects showed sensitivity and sought to adapt to the demands of the Amazon Fund and the beneficiary women and their organizations.

Below is a breakdown of each transversal criterion. More information on the analyses carried out for this evaluation can be found in the complementary study "Analysis/ Recommendations of the socioeconomic impact from the perspective of the Transversal Criteria Poverty Reduction and Gender Equity", present in Annex I.

Poverty Reduction Criterion	Evaluation
- The projects were effective in strengthening community organizations because, in addition to the project implementers, the more than 200 organizations implementing the subprojects were strengthened with better management and performance in their production chains. These organizations have advanced in technical terms, local and regional articulation, gaining more empowerment, autonomy and access to other means of financing. *PPP-Ecos in the Amazon* and *Dema Fund* allowed small organizations to promote changes in families and communities, even through situations of prejudice on the part of banking institutions and local businesses. - More than 7,400 people are applying the knowledge acquired in the practice of sustainable economic activities. The four projects contributed to the training of 34.11% of the cumulative number of people trained until 2021 by all the projects of the Sustainable Production Component of the Amazon Fund. This indicator reinforces the role of projects in the dissemination of qualified and relevant information to the beneficiary public, beyond the borders of the territories, such as the technical publications of *PPP-Ecos*. ATER made a strong contribution to the beneficiaries through the four projects. - The indicators "revenue obtained from the commercialization of fresh products" and "revenue obtained from the commercialization of processed products" did not allow a safe analysis of the results (two projects did not present this information). - According to the methodology for evaluating the potential distribution of benefits for poverty reduction[72], which considers the impact indicators on the increase in income to reflect the inclusion of beneficiaries in market economies, all projects were effective in generating income and distributing benefits. Considering the parameters stipulated in this methodology, the *PPP-Ecos* and *Dema Fund* reached 87.5% of effectiveness and Cooperacre Reca's projects reached 100%. Cooperatives have a strong market bias and have been operating on a larger scale, seeking to guarantee the production and improvement of the quality of products to conquer and maintain themselves in the national and international market. On the other hand, ISPN and Fase sought to establish local marketing channels, through institutional purchases (PNAE and PAA), local and thematic fairs. The projects proved to be efficient in reaching markets, generating an average income per family per year during the project period of R$ 1,850.00 to R$ 2,400.00, obtained through the sustainable productive activities supported by the projects. This estimate is quite variable depending on seasonality, product and production volume. - Due to the intervention with SAFs and sustainable production systems, the projects provided food security, with emphasis on the period of the Covid-19 pandemic. - Community organizations of traditional peoples and communities, indigenous peoples, family farmers, quilombolas and women have been strengthened.	Meets the criteria

72. Methodology proposed in: VIERGEVER, Marcel; SANTOS, Priscila. Relatório de Meio Termo de Efetividade do Fundo Amazônia: Estudo de Distribuição de Benefícios do Fundo Amazônia. Brasília: Amazon Fund/BNDES; GIZ, 2019. Available at: https://www.fundoamazonia.gov.br/export/sites/default/pt/.galleries/documentos/monitoramento-avaliacao/5.avaliacoes-externas/FA-Relatorio-Distribuicao-de-Beneficios.pdf.

Gender Equity Criterion	Evaluation
- Indicators related to women (training and benefits) may be underestimated because the *PPP--Ecos in the Amazon* was not successful in collecting data with the beneficiaries. Approximately 1,390 women were trained in sustainable economic activities through the four projects, representing 18.62% of the total accumulated until 2021 by the Productive Activities Component of the Amazon Fund; and 2,791 women were benefited (of which 46% by the *Dema Fund*), representing 5.83% of the total accumulated until 2021 by the Sustainable Productive Activities Component of the Amazon Fund. - Although there is no previously defined strategy or plan to promote, benefit and empower women, the projects have implemented good practices aimed at gender equality. Collectively, the projects implemented 50% of the good practices identified by GIZ.[73]. There was no substantial difference between *PPP-Ecos* (61.5%), *Materialize* (61.5%) and *Dema Fund* (53.85%). - All projects mentioned comprehensive activity planning, considering needs and interests of the family as a whole, including those of the woman, but there is no information on whether the planning helped in reaching women to ensure or improve participation in project activities. - Support for the implementation of SAFs, agroecological gardens, agroecological backyards, among other sustainable production methods, including seed collection and seedling production, benefited women, as they are carried out in places where women work the most and, thus, favor their participation in activities. - The differentiated ATER was performed by all projects. ATER teams were established with members of both genders or even young people from the communities for greater acceptance of this benefit directly for women. This is a small change that does not require specific financial resources.	In part

73. Check out the 2019 Study of Equality between Men and Women in Sustainable Productive Activities Projects Supported by the Amazon Fund. Available at: https://www.fundoamazonia.gov.br/export/sites/default/pt/.galleries/documentos/biblioteca/GIZ-Estudo-genero.pdf.

5. CONCLUSIONS AND LESSONS LEARNED

The following are the conclusions and lessons learned from this evaluation of sustainable productive activities projects supported by the Amazon Fund.

- The four projects evaluated responded positively to the **diversity** of social groups, organizations and land use dynamics, creating efficient and effective solutions and responses, especially when considering the strengthening of agro-extractive production and the implementation of agroforestry systems (SAFs) in varied consortia. It is worth reiterating some structuring local productive arrangements (APLs) that have been strengthened, such as babassu, in Maranhão, açaí, in Pará (mainly), rubber, in Acre, and Amazon nuts and fruit pulps, in various locations.

- The projects went beyond the consolidation of their priority production chains by contemplating actions and activities that boosted other **income-generating activities**, such as beekeeping, production of handicrafts based on vegetable fibers, fish farming and production of bio jewelry, among others.

- The subprojects supported by the public call projects (*Dema Fund and PPP-Ecos in the Amazon*) addressed issues that went beyond sustainable productive activities (APS), promoting education, training and structuring of rural houses, among other benefits, thus contributing to local development as a whole.

- The organizations implementing the four projects count on members of **rural and traditional communities in their councils and/or directorates**, which allows for a more assertive approach to the real needs of the supported groups and, therefore, to the implementation of the projects.

- The design of the public call modality projects (*Dema Fund and PPP-Ecos in the Amazon*) was fundamental to contemplate the small organizations that, due to the volume of contribution, their own resources and managerial capacity, would not have access to the resources of the Amazon Fund otherwise.

- The **structuring and strengthening of the value chains** supported has led to increased production and productivity, generating income in the territories, and thus to the establishment (or **empowerment) of rural and traditional populations** in the territories, leading to a potential reduction in deforestation pressure and contributing to the general objective of the Amazon Fund.

- The institutions evaluated were able to manage their projects and make an impact with varying degrees of frequency. Both the agglutinating and the public call modality have shown to play a fundamental role in the expansion and strengthening of APS in the Amazon and in the consolidation of viable economic alternatives. Supporting projects of both modalities is essential because they involve different groups and strengthen the socio-biodiversity bioeconomy in a broad way[74].

74. The agglutinating and public call modalities, as explored, have distinct intervention logics. The agglutinating entities made a great impact at a localized level, structuring the chains for access to new markets, nationally and internationally (it is worth remembering that Cooperacre is the largest Brazil nut producer in the country). On the other hand, the projects that promoted public calls supported hundreds of small organizations in structuring and improving working conditions, achieving results with a wide territorial coverage.

- The activities developed to strengthen the production chains (investments in production technology, development of new products and packaging, management and control systems, research on access to new markets and incentive to organic certifications) provided **greater productive and commercial autonomy**, reducing the dependence on middlemen in various situations[75].

- The projects supported associations, cooperatives and other less structured social groups whose actions in the territory play a **transformative social role**.

- Organizations under the agglutinating modality provided follow-ups and training with their members, who qualified and deepened with investments from the Amazon Fund. Thus, they enhanced the **dissemination of knowledge, learning and training**.

- Despite the efforts of the projects, the scale of the deforestation rates means that **recovery of degraded areas** would need to be more extensive to have an impact in the face of ongoing deforestation.

- The projects supported the structuring of the supported territories, meeting the environmental and land regularization criteria of the agglutinating organizations (Reca and Cooperacre) and supporting Indigenous Lands (ILs) and quilombolas (Fase and ISPN).

- Due to the results achieved and capillarity, the Amazon Fund provided **new support** to the *Dema Fund* and the *PPP-Ecos in the Amazon*, with higher values.

- Although the various activities carried out by the public call projects have effectively promoted a better structuring of the initiatives supported and strengthened the different value chains over a vast territory, it can be said that **access to higher value markets has been limited**.

- It was found that the attractiveness of productive activities for communities is linked to **economic issues and monetary income**, but other factors related to the improvement of quality of life, food and territorial security, and cultural appreciation are also relevant.

75. An interesting case is that of babassu, which has a huge range of products, such as babassu "coffee", cakes, biscuits, mesocarp flour, charcoal husk, oils (for food and cosmetic purposes).

6. RECOMMENDATIONS

This chapter presents recommendations for the organizations implementing the evaluated projects, public agents, the Amazon Fund/BNDES and donors. These recommendations are suggestive, therefore, there is no obligation of the agents involved to implement them.

#	Recommendations	Executors	Public Agents	FA/ BNDES	Donors
1	Make the Amazon Fund a State policy, develop governance structures that guarantee its institutionalization and continuity, avoiding incidents of discontinuity in transfers and investments.		x		
2	Establish mechanisms related to the discontinuity of projects (phasing out) so that they are not abruptly interrupted, thereby improving the sustainability of their impacts.			x	x
3	Establishment of technical safeguards to ensure the continuity of the implementation of agroforestry systems (SAFs) - including technical assistance and rural extension (ATER) and consortia - so that they are not weakened or reversed after the project ends.	x			
4	Establishment of indicators and objectives for the creation of technical-scientific partnerships to strengthen production chains (production, marketing, etc.).	x		x	x
5	Expansion of REDD+ resource transfer mechanisms to strengthen initiatives, partnerships and programs that maintain the forest and its attractiveness (Payment for Environmental Services - PSA).		x	x	x
6	Expand support for small-scale APS projects in the Amazon, especially in critical (deforestation hotspots) and impoverished regions, to strengthen territorial and traditional communities.			x	
7	Create projects that mix the agglutinative and public call modalities, allowing the structuring of national lines of action of great impact and that allow a capillarity to the Amazon Fund and support to organizations with different lines of action.			x	x
8	Hold regular discussion forums, technical visits, and encourage exchanges between projects to disseminate social technologies, practices, and results.	x		x	

9	Structuring of a technical-scientific chamber to carry out strategic studies (impact of projects on territories, continuous and thematic evaluation, income generation, socioeconomic, gender, youth, etc.).		x	x	
10	Promote agro-extractive productive projects that are regional references, as well as rural family schools that can be knowledge radiating poles.	x		x	x
11	Strengthen communication tools and campaigns to increase the visibility of projects related to the conservation agenda and sustainable use of forests, and to better communicate their role at the local and regional levels.			x	
12	Incorporation of specific gender and youth strategies in the design and implementation of projects, such as mapping gender-sensitive chains, creating working groups (WGs) of women and youth, hiring female technicians, ensuring equitable representation of men and women in project management, etc.	x	x	x	
13	Carry out awareness-raising work with environmental authorities to comply with legal requirements, especially the release of Degraded Areas Recovery Plans (Prad) and Rural Environmental Registry (CAR) records, so as not to jeopardize the project implementation schedule[76].	x	x		
14	Support projects that involve a circular economy[77], as they can generate innovations, solutions and new products from the use of production waste.	x		x	
15	Standardize activities and products within and across project logical frameworks to facilitate the overall systematization of impacts.	x		x	

76. The Environmental Regularization Program (PRA) and the Project of Recovery of Degraded and/or Altered Areas (Prad) are a set of actions or initiatives to be developed by rural landowners and informal settlers to adapt and promote environmental regularization in order to comply with the provisions of Chapter XIII of Law No. 12.651 of 2012, and the registration of rural property in the Rural Environmental Registry (CAR) is a mandatory condition FOR adherence to the PRA. Check it out at:: https://www.planalto.gov.br/ccivil_03/_ato2011-2014/2012/lei/l12651.htm.

77. The circular economy is a concept that combines economic development with the best use of natural resources, using innovative business models and optimizing manufacturing processes with less dependence on raw materials, prioritizing more durable, recyclable and renewable materials.

APPENDIX I – INDIVIDUAL PROJECT EVALUATION

A. MATERIALIZE PROJECT

PROJECT SHEET

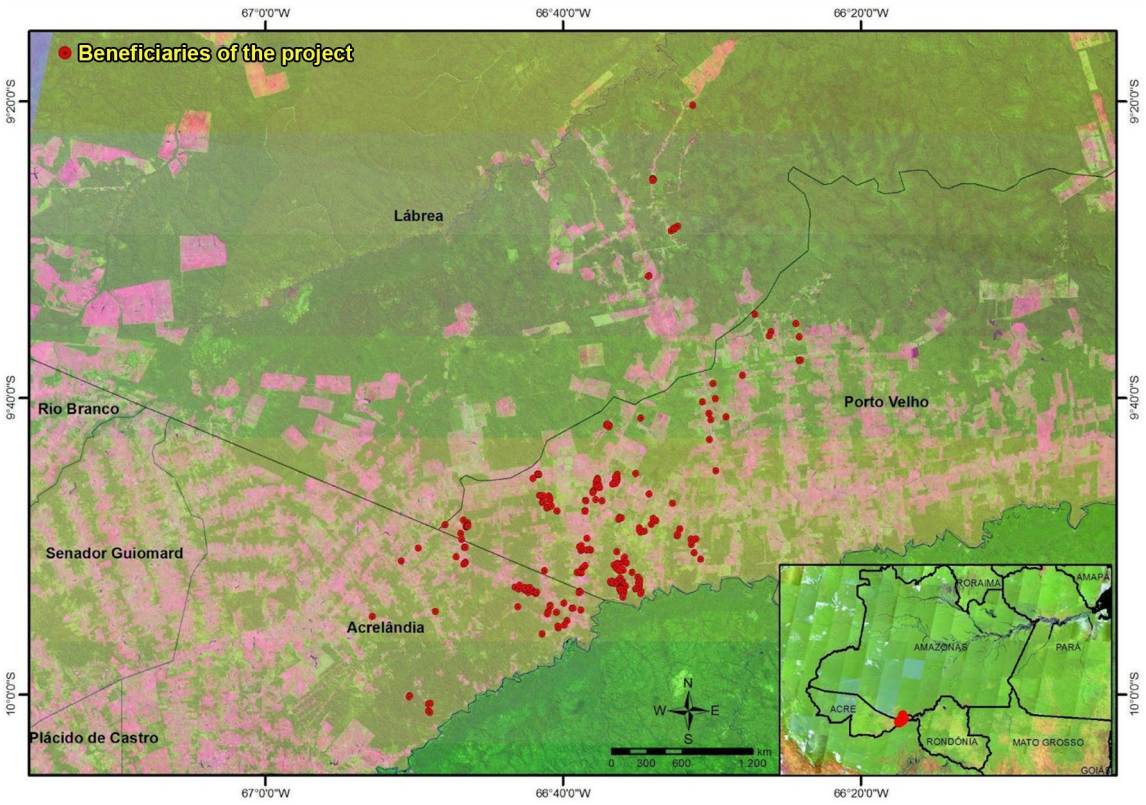
Project title:	**Materialize**
Responsible entity:	Consortium and Densified Economic Reforestation Project (Reca)
Project period:	Q1 2015 - Q4 2020
Territorial scope:	Ponta do Abunã – Porto Velho (RO) and Acrelândia (AC)
Beneficiaries:	Families of agro-extractivists associated with Reca and the beneficiary associations of pulp and oil processing plants.
Objective:	Strengthen the production chain of cupuaçu, açaí, vegetable oils and peach palm, through agroforestry systems (SAFs), the expansion and modernization of processing units and the restructuring of the Brazil nut and seed storage warehouse.
Classification in the Amazon Fund via:	Public Call for Sustainable Productive Projects of the Amazon Fund (2012)
Land Category	Settlements
Component:	Sustainable Production
Total value of the project:	R$ 7,126,393.21
Value of the support from the Amazon Fund:	R$ 6,422,748.00

Source: Form prepared based on the information from the Amazon Fund/BNDES website.

1. PROJECT SUMMARY

The *Materialize* project, developed by the Consortium and Densified Economic Reforestation Project (Reca), supported the strengthening of different biodiversity production chains (mainly cupuaçu, açaí, andiroba, heart of palm and peach palm seeds) in the Ponta do Abunã region through agroforestry systems (SAFs) (Figure I). The direct beneficiaries of the project were family farmers who have occupied, for decades, plots of the National Institute of Colonization and Agrarian Reform (Incra) in the region. The activities developed were: (a) implementation of SAFs; (b) technical monitoring and rural extension (ATER), holding exchange events for training in SAFs and project management; (c) modernization of the fruit and vegetable oil pulp processing units and the storage shed (there was a contractual addendum for the implementation of a fire prevention and fighting system); and (d) construction of the headquarters of the Associação da Baixa Verde (ABV) and the Associação dos Produtores Rurais do Município de Acrelândia (Aspromacre).

Figure I: Location of beneficiaries supported by the *Materialize* project (AC and RO).



Source: Own elaboration, based on the QGIS Desktop software version 3.22.8.

Governance Structure

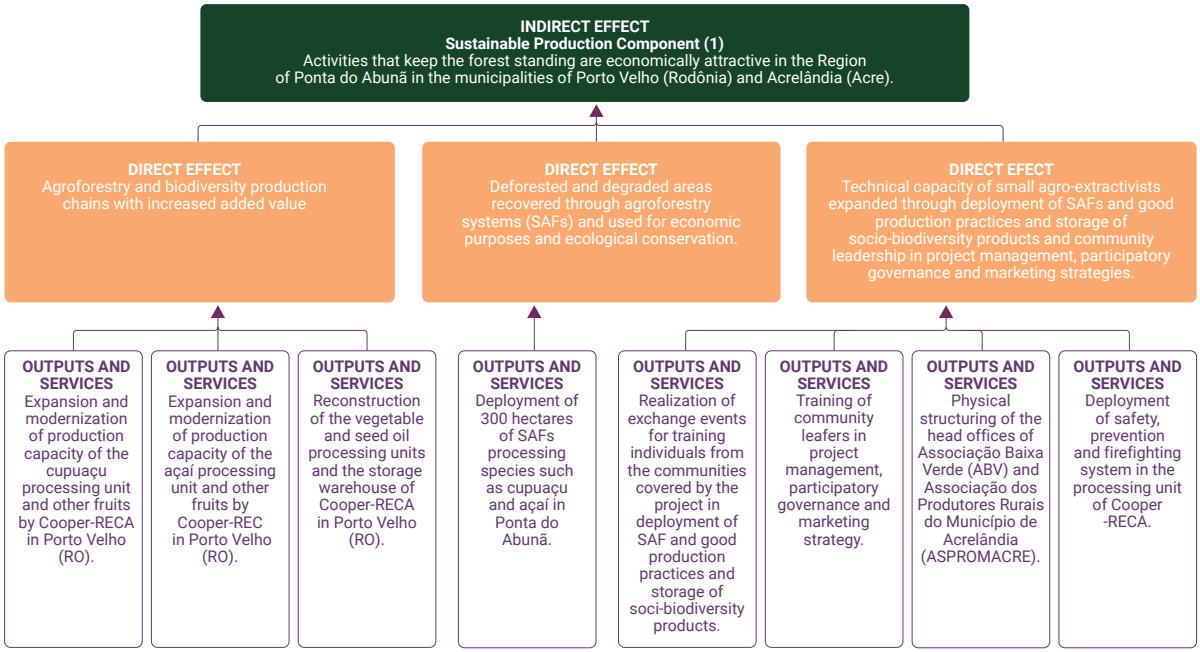
The governance structure of Reca, the entity responsible for the *Materialize* project, is composed of an association of agro-extractivist rural workers that concentrates more than 300 families in the Ponta do Abunã region. Reca also has the legal figure of a cooperative – Cooper-Reca – to market production. Cooper-Reca is divided into ten groups of members, organized according to territorial proximity, which maintain their own but interdependent organizational structure and whose members participate in the collegial decisions of the Association and the Cooperative. These groups are formed by members and cooperators of Associação Reca, ABV, Aspromacre and Cooper-Reca, and are called: i. Pioneiros I, ii. Pioneiros II, III. Pioneiros III, iv. Baixa Verde, v. Gravel, VI. BR, vii. Linha 05, viii. Linha 06, ix. Linha 12 and x. Eletrônica[78].

2. INTERVENTION LOGIC

According to the procedures in force in the Amazon Fund during the implementation of the project, a Logical Framework was agreed for the *Materialize* project aligned with the structure of the Amazon Fund's Logical Framework (Figure II).

78. Throughout the project, the Eletrônica group now has less than seven participants, however, the RECA statute establishes a minimum number of ten participants. Therefore, the group will have to disband and the participants will have to join other groups

Figure II: Logical Framework of the Materialize project agreed with the Amazon Fund

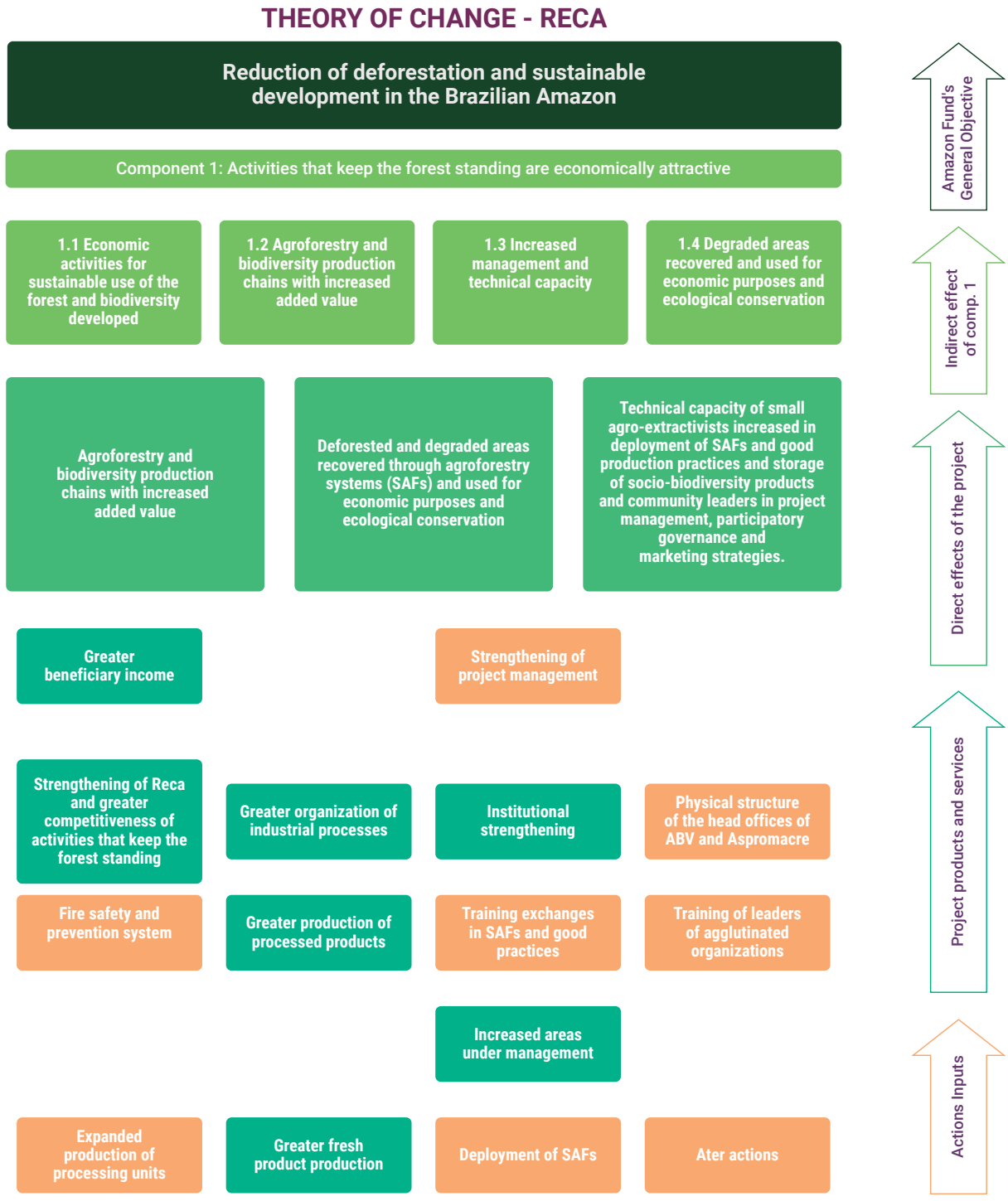


Source: Amazon Fund.

3. THEORY OF CHANGE

The schematic framework representative of the theory of change of the *Materialize* project was built considering the specific objectives of the Amazon Fund and the indirect effects of the projects. In addition to these key concepts, elements, results and impacts considered fundamental in the analysis and understanding of the project were added. The chart illustrates the relationship between the main results of the project and the impact (or indirect impact) of Component 1 (activities that keep the forest standing are economically attractive) and, at a higher level, the general objectives of the Amazon Fund (Figure III).

Figure III: Schematic representation of the *Materialize* project's Theory of Change



Source: Own elaboration

4. SPECIFIC METHODOLOGY

The general methodological steps defined for this evaluation were followed, including the stages of exploratory interviews, analysis of secondary data and project reports, field mission focused on project visit and interviews with project managers, technicians and beneficiaries, and a participatory results evaluation workshop.

4.1 PARTICIPATORY RESULTS EVALUATION WORKSHOP

The Participatory Results Evaluation Workshop was attended by managers, employees, members and beneficiaries of the *Materialize* project. It brought together 17 participants from different groups supported by the project and was held in the Reca auditorium on January 24, 2023.

First, a presentation was given on the logic of the workshop, and then the participants were randomly divided into three working groups. The proposal of the themes was previously made by the evaluation team. Each group applied the SWOT matrix, which considers the strengths, opportunities, weaknesses and threats observed during the execution of the project. The proposed thematic division took place as described below:

- **Group 1:** ***RECA Present and RECA Future: Where are we and where do we want to go?***
  Encourage discussion and reflection on the situation of the project after the application of resources from the Amazon Fund and future prospects for the coming years.

- **Group 2:** ***Agroforestry Systems: we are agroforestry farmers!***
  Encourage discussion of the results and implications for the production process, marketing, and member learning.

- **Group 3:** ***Working in partnership: Cooperative and Associations***
  Measure the level of relationship, synergy and coexistence between Cooper-Reca and the various associations supported during the project.

With the application of the SWOT matrix, it was possible to read the specificities of the historical evolution of the project's execution and to learn about the main challenges and learnings identified by the agglutinating entity (Reca) and the agglutinated entities (ABV, Aspromacre and Cooper-Reca), which is of great value for the composition of recommendations for future support from the Amazon Fund. The results are reflected in chapter 4 of the main report of this evaluation.

The participants recognized, as strengths of Reca, that it is a major producer of both fresh and processed products and a promoter of sustainable development, through organic certification, implementation of SAFs and training of members. Among the weaknesses identified were the need for more technical assistance, the creation of more attractive jobs for young people in the region, and more investment in training for young people. There are difficulties related to the geographical isolation of Reca and the resulting lack of road infrastructure for the

transport of products, the lack of support for irrigation of SAFs of members and the difficulty of access to structured organic markets that value socio-biodiversity products.

Among the opportunities, the groups participating in the Workshop highlighted the development of new products, with the dissemination of Reca at various fairs, access to new government programs and dissemination on social networks. The identification of new credit lines, the strengthening of new chains, geographical identification seals and the expansion of partnership production were also identified as opportunities that are already being developed. The external threats identified are the increased incidence of diseases and pests such as moniliasis, the attractiveness of other productive activities (soy and livestock), low wages in the field, the weakening of public policies, and climate change, which has made harvests more uncertain and difficult to predict.

5. EVALUATION OF RESULTS

Indirect Effect: *In the region of Ponta do Abunã, in the municipalities of Porto Velho (Rondônia) and Acrelândia (Acre), activities that keep the forest standing are economically attractive.*

Indicator: *Annual deforestation in the municipalities of the Ponta do Abunã region in the municipalities of Porto Velho (Rondônia) and Acrelândia (Acre).*

Table I and Figure IV show the annual evolution of deforestation between 2014 and 2022, according to the Project for Monitoring Deforestation in the Brazilian Amazon by Satellite (PRODES), consolidating the total accumulated in the municipalities targeted by the project, Porto Velho (RO) and Acrelândia (AC). Even though it was a relevant indirect effect of the project, these data were not included in the BNDES monitoring spreadsheet, they were added to the evaluation for comparison purposes. Given the extent of the territory[79] and the localized performance of the *Materialize* project, it is not feasible to evaluate its performance on the deforestation rate of the municipalities. However, the analysis is important for territorial contextualization at the time of conducting the project.

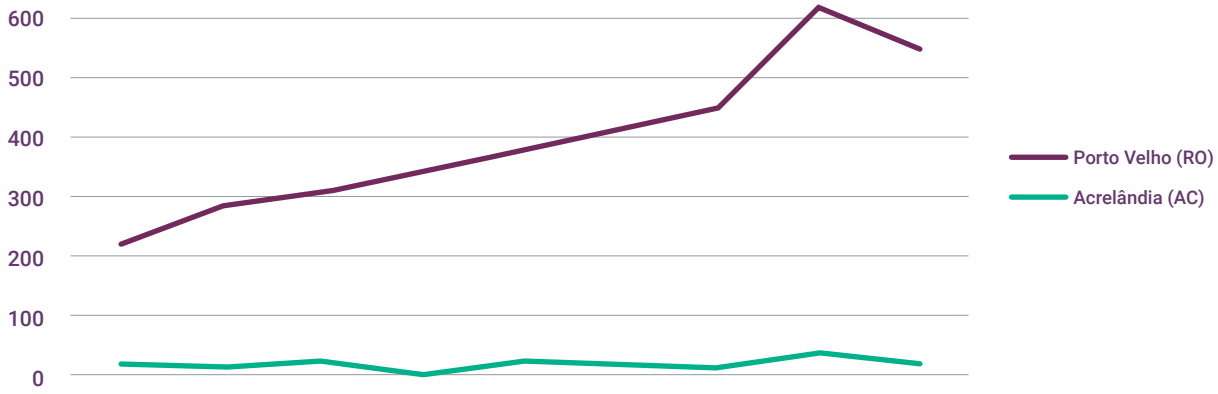
Table I: Evolution of deforestation (in km²) in the municipalities where the Materialize project operates - Porto Velho (RO) and Acrelândia (AC).

	Area (km²)	Total deforested (km²)	(%)	2014	2015	2016	2017	2018	2019	2020	2021	2022
Porto Velho (RO)	34,090	4,833.14	14.2%	223	285	305	347	378	413	450	619	551
Acrelândia (AC)	1,812	252.07	13.9%	19	15	24	6	22	20	13	38	19

Source: Terra Brasilis/Prodes (Deforestation)/Inpe, 2023.[80].

79. In particular, the municipality of Porto Velho, which is among the largest municipalities in the country.
80. Data available at: http://terrabrasilis.dpi.inpe.br/app/dashboard/deforestation/biomes/legal_amazon/increments

Figure IV: Graph of the evolution of deforestation in the municipalities where the Materialize project operates, Porto Velho (RO) and Acrelândia (AC).



Source: Terra Brasilis/Prodes (Deforestation)/Inpe, 2023.[81] .

Due to its territorial extension, Porto Velho (RO) is the third municipality with the highest deforestation rate in Brazil in 2022, accounting for 4.5% of the total deforestation in the Brazilian Amazon. Furthermore, when analyzing the period between 2014 and 2022, it is possible to observe a steady growth of deforestation in the municipality, with a peak in 2021. In Acrelândia (AC), despite the variations, the deforestation rate is constant and considerably lower in the same period.

The target region of the *Materialize* project has been increasingly affected by deforestation at alarming levels due to the rapid conversion of land use, insertion of soybeans in specific locations and the spread of extensive livestock farming, with the presence of large industries. This analysis corroborates the reports on deforestation pressure in the interviews. Environmental imbalances are noticed in the crops under the Materialize project. Several producers reported the increase in the presence of wild animals in search of food in SAFs, which generates losses. Another climate change observed is the occurrence of winds, which knock down flowers, reducing the volume of production.

Direct Effect/Specific Objective 1: *Agroforestry and biodiversity product chains with added and expanded value.*

The revenue obtained by Reca from economic activities exceeded the expected target (0.43% above), generating a revenue of more than R$4.4 million. This result was achieved mainly by the great diversity of products covered by the project and by the construction of the Reca product store on the edge of BR-364. The results of all Direct Effect/Specific Objective 1 indicators are presented in Chart I.

81. Data available at:: http://terrabrasilis.dpi.inpe.br/app/dashboard/deforestation/biomes/legal_amazon/increments

Chart I: Indicators of the Direct Effect/Specific Objective 1 of the Materialize project

Indicator	Goal	2018	Variation %
Revenue obtained by Cooper-RECA from the economic activities of sustainable use supported by the project (broken down by product)	Cupuaçu: R$ 2,660,000.00 Açaí: R$ 1,800,000.00 Other fruits: R$143,000.00 Vegetable oils: R$535,695.76 Peach Palm Seed: R$886,867.50 Brazil nut: Not defined Total: R$4,405,563.26	Cupuaçu R$1,259,466.88 Açaí R$631,561.86 Other fruits: R$ 148,072.32 Vegetable Oils R$1,454,421.40 Peach Palm Seed: R$341,333.84 Brazil nut: R$589,690.00 Total: R$4,424,546.30	100%
Revenue received by Cooper-RECA with the sustainable use economic activity supported by the project, generated exclusively through commercialization through government purchases or subsidies (broken down by product).	Cupuaçu: R$50,000.00 Açaí: R$20,000.00 Other fruits: R$100,000.00 Total: R$170,000.00	Cupuaçu: R$49,402.08 Açaí: R$12,950.40 Other Fruits: R$87,352.97 Total: R$149,705.45	88%
Volume of fresh products from the extractive chains supported by the project benefited or industrialized by the proponent, broken down by product (tons or other unit of measurement).	Cupuaçu: 2,500 tons Açaí: 750 ton Other fruits: 66 ton Andiroba: 4.5 ton Peach palm: 37.8 ton Brazil nut: 1.3 ton	Cupuaçu: 1,463 ton Açaí: 300,842 ton Passion Fruit: 16.982 ton Acerola: 2.686 ton Pineapple: 0.291 ton Andiroba: 8.392 ton Brazil nut: 47,544 ton Passion Fruit Seed: 0.350 kg Peach Palm Seed: 14.853 ton	N/A
Volume of pulp produced by the proponent from the fresh product broken down by product (tons or other unit of measurement)	Cupuaçu: 760 ton Açaí: 300 ton Other fruits: 31 ton	Cupuaçu: 384.213 ton Açaí: 124.435 ton Passion Fruit: 5.775 ton Acerola: 1.516 ton Pineapple: 0.243 ton Andiroba: 1.278 ton Passion Fruit Seed: 0.037 ton Peach Palm Seed: 14.853 ton	N/A
Average annual amount received by agro-extractivist as a result of the sale of cupuaçu, açaí and other fruits to Cooper-RECA	Cupuaçu: R$13,528.00/producer Açaí: R$9,800.00/producer Other pulps: R$8,190.00/producer Andiroba: R$789.00 Peach palm: R$10,109.00 Brazil nut: R$ 1,107.00. Total: R$43,523.00	Cupuaçu: R$9,669.56/producer Açaí: R$2,693.50/producer Other pulps: R$ 3,991.8/producer Andiroba: R$419.80/producer Brazil nut: R$1,615.00 Peach palm: R$3,593.46/producer Total: R$21,913.12	50,3%

Source: Control spreadsheet of the Logical Framework and Monitoring Plan agreed between the Amazon Fund and the executing entity.

The production of cupuaçu and açaí was lower than expected (51% and 42% of the target, respectively), having been impacted by climate change. Brazil nut and andiroba production was responsible for the positive results achieved in this indicator, exceeding the initial target by 3,000% and 44% respectively. It was contacted that the higher production of Brazil nut is due to the natural annual variations to the culture and the acquisition in Brazil nut trees neighboring Reca.

In terms of sales to government purchasing programs, the target was achieved by 88%, mainly due to lower sales of açaí and other fruit pulps that did not meet the original production, processing and destination targets.

It is worth noting that the production of passion fruit oil was a new element that was not initially foreseen, with a production of 37 kg in 2018. Still, when analyzing the volume of fresh processed product (pulps, oils and seeds) at the end of the project, it is observed that the pulps were below the initially stipulated target, and in this case, the açaí production was the most impacted, being 58% below the target.

On the other hand, the average annual amount allocated to the agro-extractivists of Reca, due to the lower production and consequently lower sales of fruit pulps, led to the fulfillment of the income generation objective by 50.3% (R$ 21,000 per producer per year, compared to the R$ 43,000 expected). Factors such as interest in other activities were indicated as causing this difference.

Among the activities and products related to the *Materialize* project, we highlight the acquisition of equipment (dryers, motors, etc.) and the construction of facilities, such as a new pulp and vegetable oil processing plant (rebuilt after the fire and destruction of the old Cooper-RECA plant)[82] The production of cupuaçu and açaí was lower than expected (51% and 42% of the target, respectively), having been impacted by climate change. Brazil nut and andiroba production was responsible for the positive results achieved in this indicator, exceeding the initial target by 3,000% and 44% respectively. It was contacted that the higher production of Brazil nut is due to the natural annual variations to the culture and the acquisition in Brazil nut trees neighboring Reca.

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On the other hand, the average annual amount allocated to the agro-extractivists of Reca, due to the lower production and consequently lower sales of fruit pulps, led to the fulfillment of the income generation objective by 50.3% (R$ 21,000 per producer per year,

82. In May 2015, there was a fire in the facilities for processing and storage of Brazil nut and andiroba oils, cupuaçu butter and peach palm seeds. There were material losses, which affected about 350 families in the region, who sell their production through Cooper-RECA.

compared to the R$ 43,000 expected). Factors such as interest in other activities were indicated as causing this difference.

Among the activities and products related to the Materialize project, we highlight the acquisition of equipment (dryers, motors, etc.) and the construction of facilities, such as a new pulp and vegetable oil processing plant (rebuilt after the fire and destruction of the old Cooper-RECA plant)

Figure V: Oil processing plant rebuilt with additions to original project after fire in 2015

Source: Image captured by Artur Sgambatti Monteiro during a visit to the unit in January 2023.

Figure VI: Cooper-RECA cupuaçu and other fruit processing unit in operation

Source: Image captured by Artur Sgambatti Monteiro during a visit to the unit in January 2023.

Direct Effect 2: *Deforested and degraded areas recovered through agroforestry systems (SAFs) and used for economic and ecological conservation purposes.*

There was an initial forecast of recovering 3,230 hectares distributed among the agglutinated entities of the project. This goal was reached years before the end of the project, and was eventually exceeded by 213%. This figure refers to the sum of the areas reclaimed by the members of the three associations - Reca, ABV and Aspromacre, as well as Cooper-RECA - which was higher than originally planned. (Chart II)

Chart II: Indicators of Direct Effect 2 of the *Materialize* project

Indicator	Goal	2018	Variation %
Area of forest directly managed as a result of the supported project (hectares)	ABV: 245.5 ha Aspromacre: 57 ha Cooper-RECA: 812.5 ha Assoc. RECA: 2,115 ha Total: 3,230 ha	ABV: 1189.80 ha Aspromacre: 439.02 ha. Cooper-RECA: 1666.91 ha Assoc. RECA: 3571.60 ha Total: 6,867 ha	213%

Source: Control spreadsheet of the Logical Framework and Monitoring Plan agreed between the Amazon Fund and the executing entity.

Regarding the implementation of SAFs, there was an initial goal of 300 hectares, which was achieved in 2015 and exceeded by 30% in the last months of the project, with the additional installation of 15.24 hectares of SAFs among Reca members. The amount allocated for the execution of this goal was R$1,260,000.00 (17.6% of the project value), including ATER, purchase of seedlings, inputs and planting, among others. The consortia were defined with the producers and included 38 species (18 fruit trees and 20 forest essences).

Direct Effect 3: *Cechnical capacity of small agro-extractivists expanded in the implementation of SAFs and good practices for the production and storage of socio-biodiversity products and community leaders in project management, participatory governance and marketing strategies.*

The results of all Direct Effect 3 indicators are presented in Chart III..

Chart III: Indicators of Direct Effect 3 of the *Materialize* project

Indicator	Goal	2018	Variation %
Number of individuals trained to implement agroforestry systems and good practices for the production and storage of socio-biodiversity products effectively using the techniques and knowledge acquired specified by gender	150 men 50 women Total: 200	70 men and 50 women Total: 120	60%

Number of community leaders trained in project management, participatory governance, and marketing strategies who effectively use the knowledge gained, disaggregated by gender.	35 men 15 women Total: 50	44 Men 20 Women Total: 64	128%
No. of community organizations strengthened	2	2	100%
Number of partner entities supported by the Associação RECA with resources from the Amazon Fund in the APS public call	3	3	100%
Number of members participating in meetings convened by: Associação RECA, Cooper-RECA, ABV and Aspromacre (annual period)	Ass RECA 3,350 Cooper- RECA 230 Aspromacre 480 ABV 385 Total: 4,445	128 Cooperative Members and 98 Associates Total: 226	5%

Source: Control spreadsheet of the Logical Framework and Monitoring Plan agreed between the Amazon Fund and the executing entity.

A The goal of the Materialize project was to train 170 people (120 men and 50 women) in the implementation of agroforestry systems, project management, participatory governance, good product production and storage practices, and good marketing practices and techniques. Due to Reca's ability to mobilize rural producers, the project promoted 49 training event[83], which were attended by 443 people, 270 men and 173 women (39%). Thus, it was possible to exceed the target by 260%.

Of the total number of training sessions held, six were for managers and focused on management and markets (business strategy analysis, financial management, etc.). 64 leaders were trained (28% above the initial goal), 44 men and 20 women.

With regard to the support provided exclusively to the project's partner organizations, the initial objective of strengthening two community organizations was achieved (100%). The agglutinated entities ABV and Aspromacre were supported in the construction of physical facilities and the purchase of materials and equipment, among others.

100% of the goal of supporting three partner entities of the Reca project was also met. In addition to ABV and Aspromacre, the Association of Small Farmers of the Reca Project benefited from some of the project activities and objectives.

The indicator on the number of members and cooperators attending meetings reached 5% of the target (236 out of 4,445 expected). As with other indicators related to the counting of participants, this metric was modified due to the counting methodology, as the project design referred to the number of members attending meetings rather than the number of members.

83. The events were divided into field days, workshops, launch of materials, exchanges, training, technical meetings, courses, lectures, seminars and training.

Established Partnerships

In addition to the activities and products planned for the *Materialize* project, partnerships were established on a wide range of topics, including soil research and AFS models; research on the fruit borer *Conotrachelus humeropictus*; Agroforestry Residency project; research on peach palm production; production of vegetable proteins based on Brazil nuts and cupuaçu; and a project to reduce the carbon emission of producers linked to Reca.

There was a partnership with the Executive Committee of the Cocoa Farming Plan (Ceplac/PA), for the development of research on fruit borer *Conotrachelus humeropictus*, which is one of Reca's main products. This partnership allowed improvements in the pulp processing plant, better economic exploitation of the crop and support for enrichment and management of SAFs and ATER.

An institutional partnership was developed, aimed at conducting agroforestry residences, with the Federal University of Rondônia (UNIR) and ten other institutions in Rondônia that work with indigenous peoples and quilombola communities. For the initiative, 20 residents, who studied and lived in the projects, collaborated according to the criteria of the pedagogy of alternation, which provided for long periods of permanence and rotation between the school and the field where they applied their knowledge.

Finally, a partnership was established with the *Carbon* project, developed in partnership with the company Natura, which consists of a Payment for Environmental Services (PSA) system aimed at not emitting greenhouse gases. This project is long term (26 years) and provides for payment for avoided deforestation, having already shown that the organizations participating in the project have less than half the deforestation and greenhouse gas emissions of the surrounding areas.

6. OVERALL EVALUATION

Positive Aspects

- **Installation of productive structures**, anticipating the future growth of production.
- Greater professionalization, diversification and quality of products, allowing **greater production, value addition and income alternatives to the beneficiaries of the project.**
- ABV, Cooper-Reca and Associação Reca were strengthened. However, limitations were observed in Aspromacre, which had its number of members reduced due to factors external to the project.
- The truck and the four motorcycles acquired with project resources contributed to the achievement of the project's goals and to other Reca work.
- **The events, exchanges and training conducted by the project to train beneficiaries in different areas** contributed to greater adherence and continuity of activities after the closure of the project, to community strengthening and to the training of leaders.

- **The hiring of professionals to conduct the project's work with BNDES, planning** and ATER, which supported the subprojects and qualified the processing of agroforestry products.

- **The reconstruction of the vegetable oil processing plant and the resumption of production** guaranteed greater income to the beneficiaries of the project.

- The **installation of fire prevention and firefighting systems and the training of a volunteer brigade** generated more safety for work in agribusinesses.

- **The recovery of 315 hectares with the implementation of SAFs** and the delivery of 138 mowers **improved working and production conditions in the field.**

- The quality of the products and the ability to establish diverse partnerships highlights the role of Reca as a reference in the production and processing of agroforestry products in the Amazon.

- The quality of Reca's management, technical and administrative staff, attested by meeting most of the goals stipulated and agreed with the Amazon Fund. It is worth mentioning that most are from the region, from a family of farmers and started their work at a young age.

Challenges

- The production values of açaí, cupuaçu and other fruit pulps reached only 69% of the stipulated target due to variations in local conditions and lower harvests than initially forecast.

- Difficulty in **obtaining the necessary licenses and documentation** for the production and processing of different products, as well as carrying out tests and **adapting the machinery of the production plants.**

- **Better adaptation to climate change**, which interferes with the production of crops of central importance to the project, such as cupuaçu.

- **Need for market adaptations and fluctuations in the values of different products.** The need to plan and anticipate production obstacles that may lead associated producers to opt for other crops with greater environmental impact, such as cattle ranching, which has shown attractive yields in recent years.

- Land pressure and deforestation in Ponta do Abunã. Values presented in agricultural production often do not attract young people to stay in the field, a fact that deserves attention.

7. CONCLUSIONS AND LESSONS LEARNED

The Ponta do Abunã region is a growing focus of deforestation, a reality intensified by the Amacro project, which aims to transform the region into a new producer of agricultural commodities.

Reca is an important promoter of income generation and recovery of degraded areas through agroforestry production, processing and commercialization of socio-biodiversity products.

Throughout the execution of the *Materialize* project, there were challenges related to the delay in the delivery of equipment, the fire at Cooper-RECA's former nut processing plant (in 2015) and the productivity of key products, such as cupuaçu and açaí.

However, despite the relevance of the production model based on historical cooperatives and the adaptability in the face of setbacks, Reca's creativity and organizational resilience made it possible to carry out the project well, with productive expansion, institutional strengthening and improvement of the quality of life of rural producers.

The development of sophisticated strategies for sustainable production (conventional and organic) and added value, based on diversified value chains, is creating a dynamic territory and a major employment hub.

It is possible to point to Reca as a reference in the generation of sustainable forest-based and agro-extractive incomes in the Amazon context, which has the potential to inspire other initiatives through training courses and technical exchanges with other projects supported by the Amazon Fund.

8. ANALYSIS OF THE OECD EVALUATION CRITERIA

Evidence	**Evaluation**
Relevance Criterion	
The Reca project is a historical reference in the implementation of SAFs in the Amazon and in the management of cooperative models for the production of forest products (fruit pulps, nuts, vegetable oils, among others). Located in a region of intense land conflicts and increasing rates of deforestation in both Rondônia and Acre, the project is designed as an alternative for income generation combined with conservation of the Amazon. The Reca model is understood as relevant to the work of the Amazon Fund for: (i) allowing the recovery of degraded areas with the implementation of SAFs; (ii) strengthening different forest product chains in an economic, social and environmental sustainable way; (iii) strengthening the local community; (iv) generating knowledge related to agroforestry production in the Amazon context; and (v) ensuring food and territorial security for its beneficiaries, by allowing them to improve their income.	Very Relevant

Efficacy Criterion	
The project achieved most of its objectives, especially those related to the installation of systems (water treatment and fire fighting), the construction of treatment plants, and the purchase of equipment and materials. Some production targets have not been achieved in their entirety. However, Reca was able to adapt and be creative in cultural and productive treatment, since different products (such as Brazil nuts) were responsible for filling gaps that arose from smaller crops of products, such as cupuaçu and açaí, allowing there to be no major impact on the effectiveness of the project. The goals related to social participation, training of beneficiaries and women's participation are subject to reservations as they did not meet the original goals.	Efficient with reservations
Efficiency Criterion	
Measures were taken to optimize resources that led to the expansion of products and services offered by Reca, as well as to productive diversity based on adaptability to changes in scenario (fire, for example) and market, allowing income generation, even with changes in the harvest and change in productive interest. It is worth mentioning the record harvests of some products, the implementation of SAFs, the recovery of degraded areas and the institutional strengthening of the project's agglutinated entities.	Very Efficient
Impact Criterion	
The project was the first major initiative of Reca supported by the Amazon Fund and allowed an increase in the scale of production of the cooperative, access to new markets, training of leaders, institutional strengthening of agglutinating and agglutinated entities, recovery of degraded areas and establishment of various institutional partnerships. Reca is a local and national reference in income generation, combining production, nature conservation and social empowerment. Due to the historical characteristics of the creation of Reca, it is not possible to say whether it would be scalable, both in terms of obtaining a larger area of activity and in terms of inspiring the creation of similar initiatives. However, it is believed that its historical experience in building a business model combined with the rehabilitation of degraded areas is unique and deserves training processes aimed at inspiring models that promote the replication of successful experiences such as this.	Relevant positive impacts
Sustainability Criterion	
The characteristics of Reca (e.g. results, commitment and income generation), combined with greater organizational and technical capacity, are key factors for its continuity in a solid way. The overall data from the 2020 Effectiveness Report attest to the growth in production, processing and marketing, when compared to 2018. The need to consolidate the processes of creation and revision of production models is emphasized. This aspect is fundamental when considering climate, social and market changes that impact the region. It is interesting to point out the partnerships that have been established (e.g. with Ceplac/PA and Natura), which provide answers to problems such as pests and propose PES systems. It is believed, therefore, that the project gave greater sustainability to Reca and its works.	Moderate sustainability

9. ANALYSIS OF THE CANCUN SAFEGUARDS

Criteria	Complies	Notes
Actions complementary to or consistent with the objectives of national forest programs and other relevant international conventions and agreements.	Yes	The projects of the Sustainable Productive Activities Component of the Amazon Fund align with Objective 7 of the 2016 to 2020 phase of the PPCDAm (*"Promoting Sustainable Forest Management"*). The project is linked to Results 7.2 (*"Strengthening the socio-biodiversity production chain"*), with emphasis on Action Lines 7.2.2. (*"Support sustainable productive inclusion projects for indigenous, traditional and extractive peoples and communities"*), 7.2.5. ("*Strengthen extractive activities"*) and 7.2.6. (*"Strengthen the management of community enterprises"*).
Transparent and effective national forest governance structures, with a view to national sovereignty and legislation.	No	There were no contributions from the project to governance structures at the national level.
Respect for the knowledge and rights of indigenous peoples and members of local communities, taking into account relevant international obligations, national circumstances and laws and noting that the UN General Assembly has adopted the United Nations Declaration on the Rights of Indigenous Peoples	Yes	The project had no direct involvement with indigenous, quilombola or riverine peoples. However, it is suitable to guarantee the right to land and access to land in Ponta do Abunã, especially because of the history of the occupation of the region, which is linked to family farming carried out by social groups whose presence was only allowed by INCRA's colonization projects. Regarding the participation of traditional groups and their representation in the decision-making bodies of Reca, the project is based on the principles of cooperatives and associations, which is a precept in the constitution of the work led by the cooperative. All work was carried out in Incra settlement areas. The production units supported are inserted in different settlement projects, namely: (i) in Rondônia, the Alto Madeira Land Project, partially titled; (ii) in Acre, the Porto Dias Extractive Settlement Project; and (iii) in Amazonas, the Gedeão Settlement Project.
Full and effective participation of stakeholders, in particular indigenous peoples and local communities, in the actions referred to in paragraphs 70 and 72 of Decision 1/CP 16.	Yes	The nature of Reca presupposes social participation and service to the interests of local peoples, formed mostly by settlers from other regions of Brazil. During project implementation, mechanisms for agreement building, decision-making, accountability and community empowerment were invested. The formally established leaders in each context and the legal rites for approving agreements and decisions were respected. Due to the localized scale and the historical performance of Reca, the project had as its central action the strengthening of social participation through training courses, the promotion of participation in meetings and activities of the cooperative and the construction of community spaces that contributed to the strengthening and social participation in the decision-making areas of the project, giving greater horizontality.

Actions consistent with the conservation of natural forests and biological diversity, ensuring that the measures referred to in paragraph 70 of Decision 1/CP 16 are not used for the conversion of natural forests, but rather to promote the protection and conservation of natural forests and their ecosystem services, and to enhance other social and environmental benefits.	Yes	There were no direct actions to expand or consolidate protected areas, but the strengthening of economic models based on the maintenance of the forest and local productive arrangements that promote the strengthening of the territory by the population, contributing to its protection. Considering Reca's working format, based on broad social participation, mutual support between project beneficiaries and implementation of SAFs and ATER services, it is possible to say that an important aspect of the project is the recovery of degraded areas. The project led to the recovery of 315 hectares of degraded areas. More than 115 combinations of SAFs were applied, with a wide deployment of native species, whether fruit trees or forest essences.
Actions to address the risks of reversals in REDD+ results.	Partially	The project did not adopt methodologies to treat reversals related to implemented SAF areas, or even areas under sustainable management. However, partnerships established in other areas, such as the Carbon Project in partnership with Natura, are examples of monitoring a portion of degraded areas.
Actions to reduce the displacement of carbon emissions to other areas.	N/A	Not applicable.

10. ANALYSIS OF TRANSVERSAL CRITERIA

Poverty Reduction Criterion	**Evaluation**
Through the implementation of 315 hectares of SAFs, the project strengthened the productive base in 135 properties of the producing families; supported the reform and/ or expansion of the infrastructure for the processing of socio-biodiversity products, adding value and expanding the capacity to offer products that make up the agro-extractivist 'basket' (435 families in the region were able to process their products at RECA); and encouraged the establishment of local businesses for the production of seedlings.	Yes
Gender Equity Criterion	**Evaluation**
There is an indicator on the participation of women in the management of organizations, but it is not clear what action/strategy has been implemented to achieve results. The project carried out specific actions, treating gender in isolation in the training and with the beneficiaries adhering to the SAF. 456 women were trained to practice sustainable economic activities and 227 were directly benefited. The project allowed women to have their own income through their plantations (it was found that women benefited more from the sale of cupuaçu and açaí); supported the organization of women to restructure the sales center for artisanal and industrial products; benefited women with their own production sheet in the cooperative; and contributed to the increase in the participation of women in the coordination of the association (of the 64 coordination positions of the agglutinated entities, 41 were occupied by men and 20 by women, with emphasis on ABV, which has 5 women on the association's fiscal and administrative council).	In part

B. STRENGTHENING THE FOREST BASED SUSTAINABLE ECONOMY

PROJECT SHEET

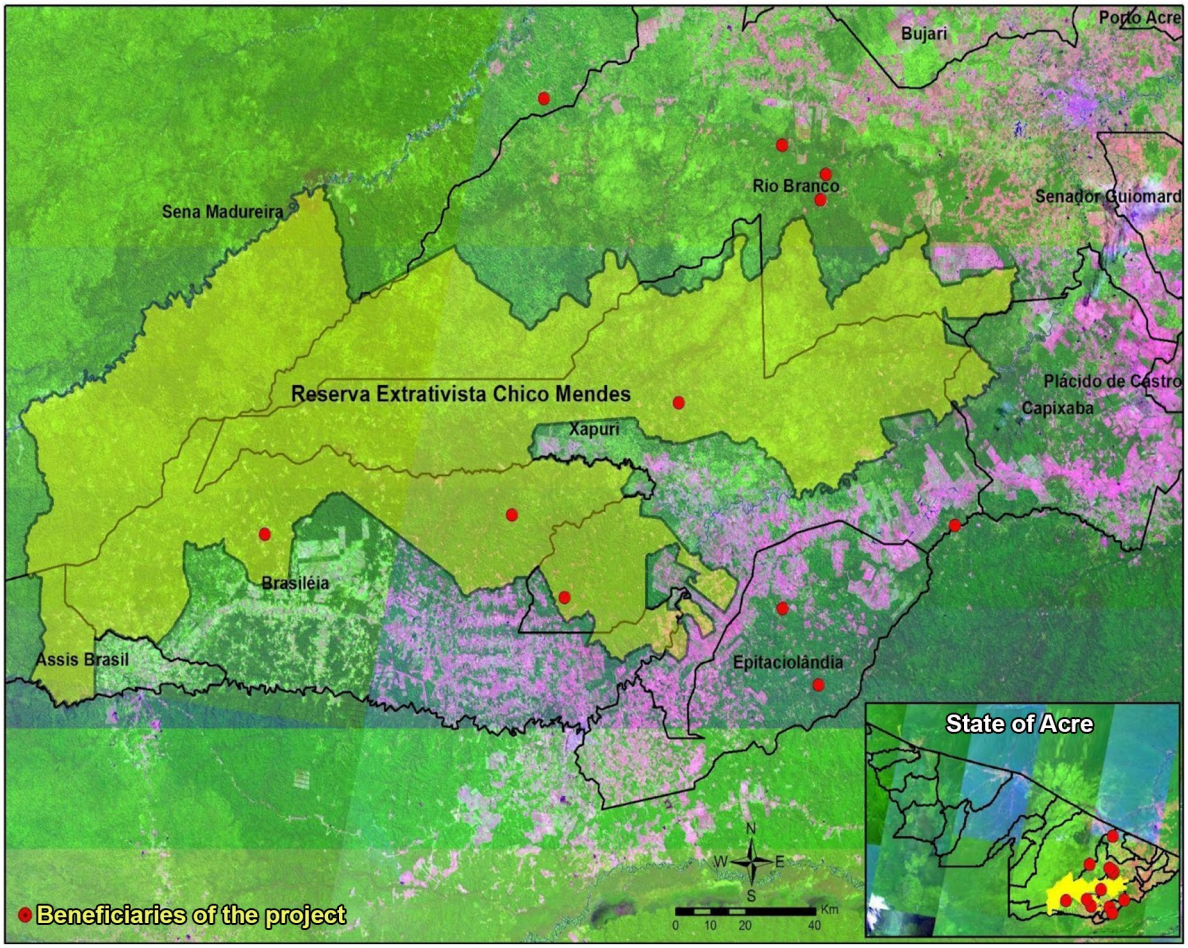
Project title:	Strengthening the Forest Based Sustainable Economy
Responsible entity:	Central Cooperative for Extractive Marketing of Acre (Cooperacre)
Project period:	11/24/2014 to 03/31/2022
Territorial scope:	14 municipalities in the administrative regions of Alto Acre, Baixo Acre and Purus.
Beneficiaries:	Family and extractive smallholder farms in the Administrative Regions of Purus, Baixo Acre and Alto Acre.
Objective:	Contribute to the strengthening of the Brazil nut and fruit pulp chains in the state of Acre by: (i) recovering degraded and/or altered areas located in small farms or family rural possessions; (ii) optimizing the logistics of storage of Brazil nuts and fruit transportation; (iii) improving the processing process of Brazil nuts; (iv) adding value and diversifying products; (v) improving the marketing strategy of products; and (vi) training the affiliate network.
Classification in the Amazon Fund via:	Public Call for Sustainable Productive Projects of the Amazon Fund (2012).
Land Category:	Extractivists and rural producers
Component:	Sustainable Production
Total value of the project:	R$ 5,190,901.39
Value of the support from the Amazon Fund:	R$ 4,981,614.66

Source: Form prepared based on the information from the Amazon Fund/BNDES website.

1. PROJECT SUMMARY

The *Strengthening the Forest Based Sustainable Economy* project was selected under the Public Call for Sustainable Production Activities (APS) of the Amazon Fund and aimed to strengthen the production chains of Brazil nuts and fruit pulp in Acre. The project was implemented through direct and indirect support actions to its agglutinated entities: associations and cooperatives affiliated to Cooperacre (Figure I)

Figure I: Location of initiatives benefited by Cooperacre (AC)



Source: Own elaboration using the QGIS Desktop software 3.22.8.

With regard to direct support actions, the following were carried out:

1. installation of two community warehouses and acquisition of 1,000 polypropylene boxes to improve the sanitary and physical conditions of fruit transport;

2. expansion of the number of cooperatives and agglutinated associations with organic certification of nut production;

3. recovery of degraded and/or altered areas on small family farms or rural possessions.

The transversal actions included:

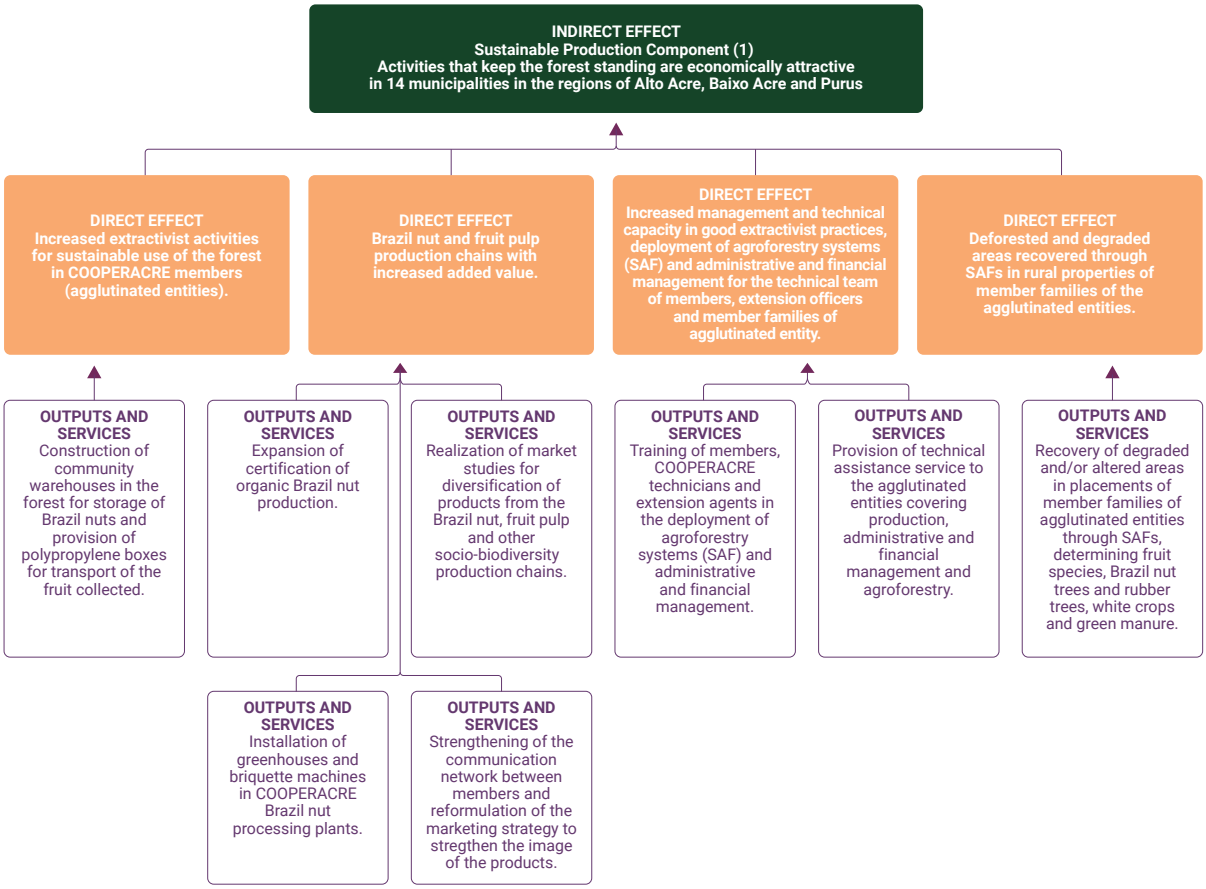
4. provision of technical monitoring and rural extension services (ATER);
5. optimization of Cooperacre's processing structure, through the installation of two new drying ovens and the installation of briquetting machines[84];
6. development of feasibility studies and field research on product diversification;
7. training of representatives of the agglutinated organizations, Cooperacre technicians and the ATER team;
8. investment in communication and marketing.

2. INTERVENTION LOGIC

In accordance with the procedures of the Amazonian Fund in force at the time of implementation, a logical framework was agreed for *Strengthening the Forest Based Sustainable Economy* project, aligned with the structure of the Amazonian Fund's logical framework (Figure II).

84. Equipment that transforms the residual shell of Brazil nuts into high calorific value compacted biomass..

Figure II: Logical Framework of the Strengthening the Forest Based Sustainable Economy project

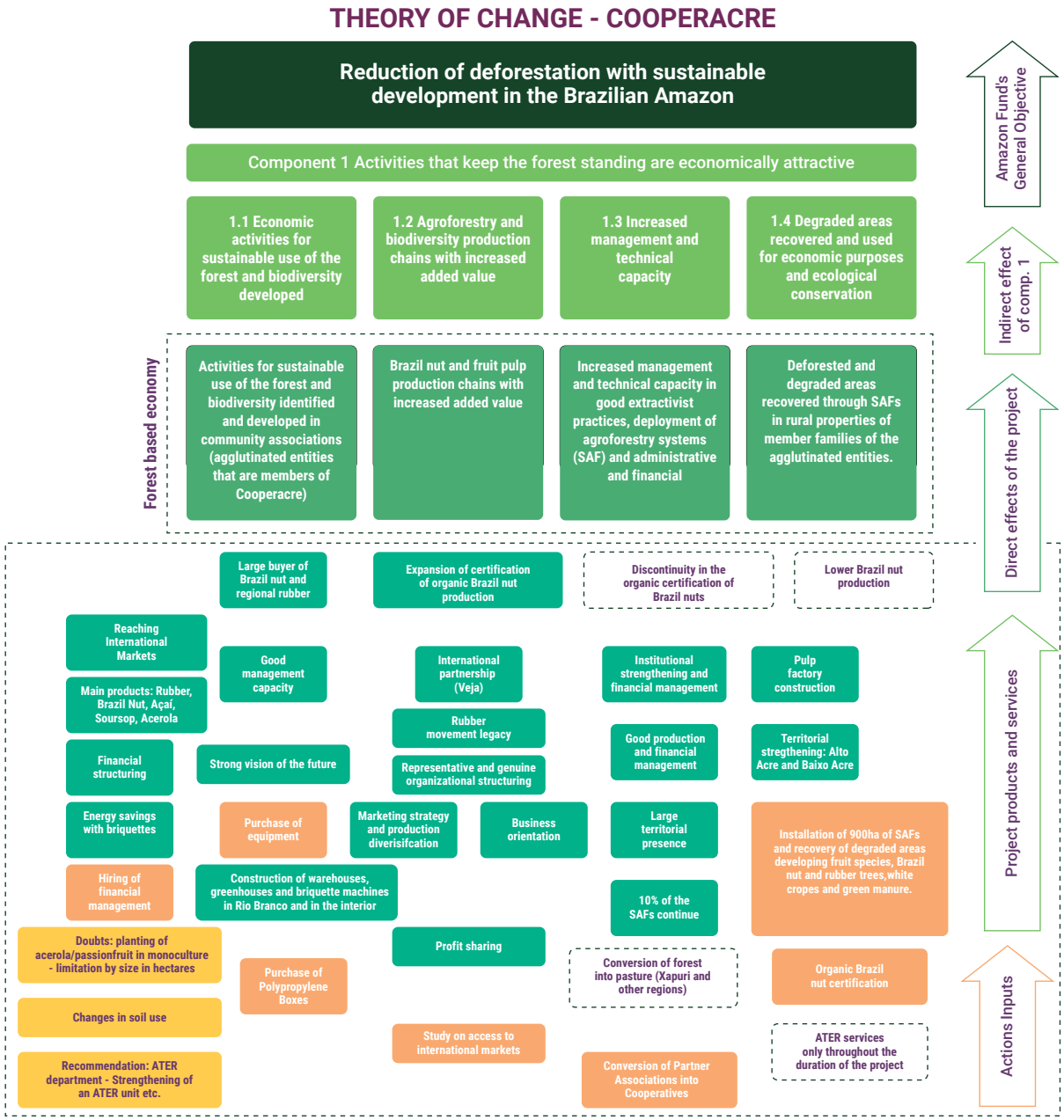


Source: Project page Strengthening the Forest Based Sustainable Economy on the Amazon Fund/BNDES website. (2023)

3. THEORY OF CHANGE

The schematic framework that represents the Theory of Change for the Cooperacre project has been constructed taking into account the specific objectives of the Amazon Fund and the direct and indirect impacts of the project. In addition to these key concepts, elements, results and impacts considered fundamental in the analysis and understanding of the project were added. The chart illustrates the relationship between the main results of the project and the impacts at the level of the impacts (or indirect impacts) of the component and, to a greater extent, of the general objectives of the Amazon Fund (Figure III).

Figure III: Schematic representation of Cooperacre's project Theory of Change.



Source: Own elaboration.

4. SPECIFIC METHODOLOGY

For the evaluation of the *Cooperacre* project, exploratory interviews, analysis of secondary data and field mission were carried out. Face-to-face interviews were conducted with managers, technicians and beneficiaries of the *Strengthening the Forest Based Sustainable Economy* project.

Field visits were also carried out to the agroindustry, the storage warehouse and the areas of agroforestry systems (SAFs) implemented. The guiding questions are in Appendix VI.

Organizational context of Cooperacre

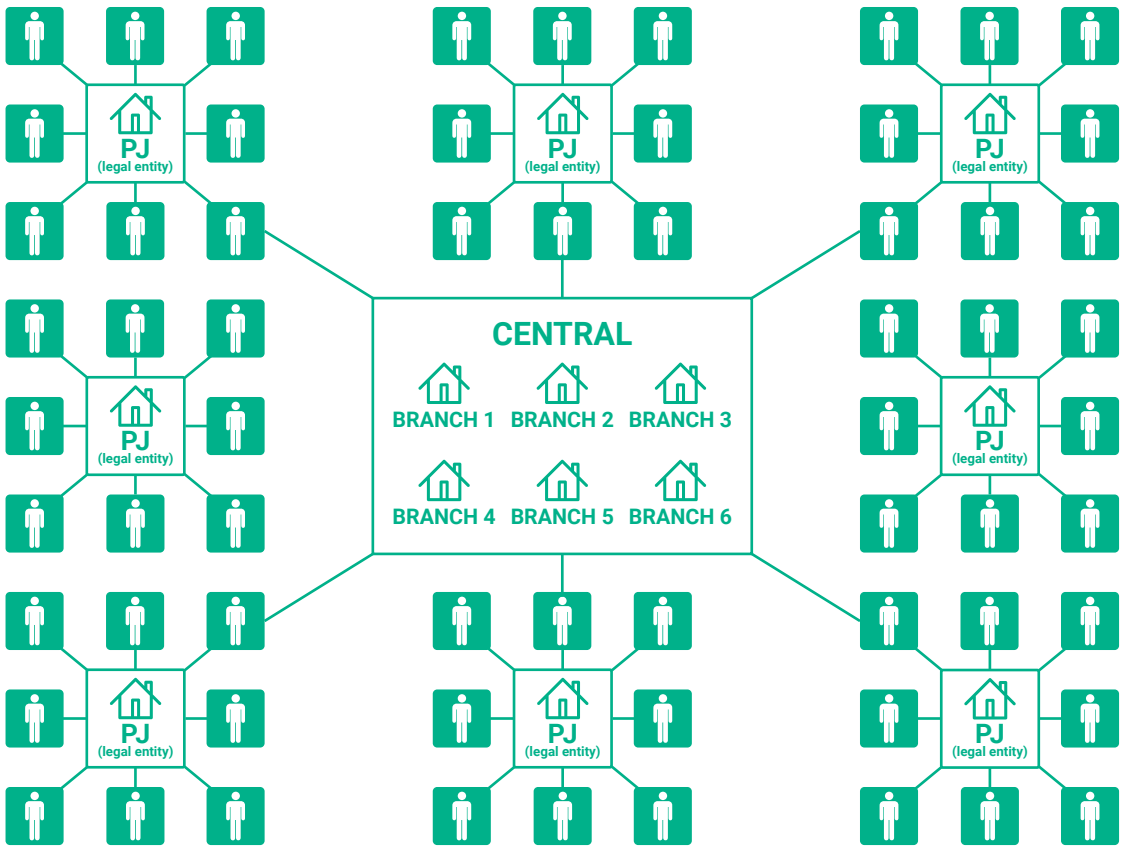
Founded in 2001, the main activities of the Central Cooperative for Extractive Marketing of Acre (Cooperacre) are the commercialization and processing of Brazil nuts and the production of latex, mainly from native rubber plantations in the state of Acre. Over time, it also incorporated the marketing and processing of fruit pulp and, more recently, took over the management of a peach palm heart factory in partnership with the government of the state of Acre.

Cooperacre is headquartered in Rio Branco/AC and is affiliated with six other cooperatives located in Xapuri, Senador Guiomard, Brasiléia and Sena Madureira. There are seven processing complexes and two commercial points of sale of products, one in Xapuri and the other in Rio Branco. Apart from the processing plants, Cooperacre also works with dozens of associations, working indirectly, with approximately 2,500 families.

The cooperative coordinates the activities of producers, providing training and ATER and buying production, which benefits and sells in the consumer and institutional markets. Cooperacre also provides administrative and accounting support to the agglutinated entities. The four local productive arrangements (APLs) in which the cooperative works complement the objectives and results achieved through the project.

By acting in a network, the cooperative is directly related to the agglutinated associations, which organize the modes of production, transportation and sale to the processing units under the management of the central cooperative. The scheme in Figure IV details the management model of the cooperative, its members and the relationship with agro-extractivist families.

Figure IV: Cooperacre's management structure.



Source: Cooperacre.
Abbreviations: PJ (legal entity); Branch (processing units); Central (Cooperacre's head office).

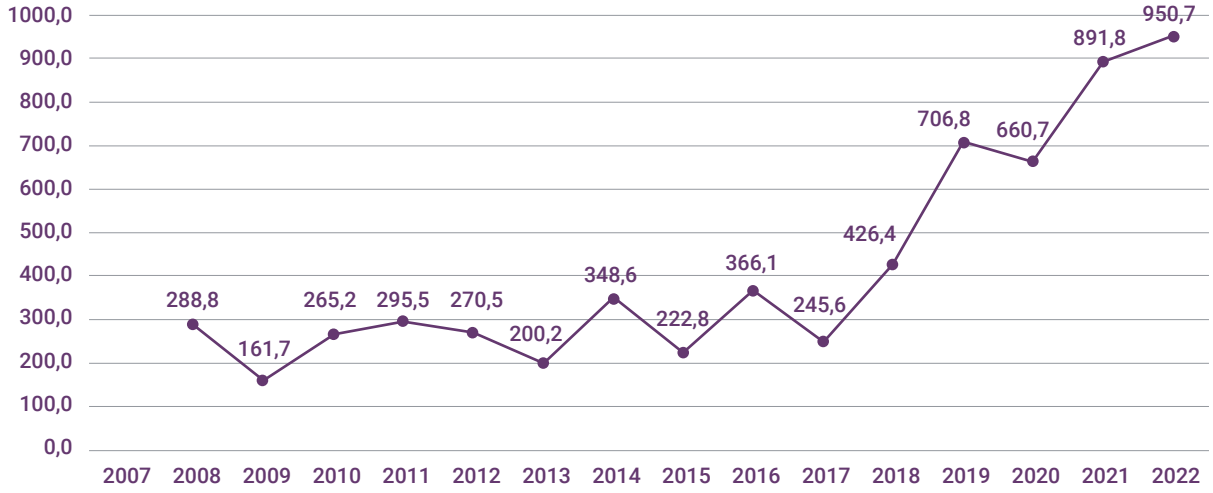
5. EVALUATION OF RESULTS

Indirect Effect/General Objective: *Activities that keep the forest standing have economic attractiveness in 14 municipalities in the administrative regions of Alto Acre and Baixo Acre.*

Indicator: *Annual deforestation in the municipalities of the administrative regions of Upper and Lower Acre).*

In the state of Acre, deforestation rates over the last ten years have been rising. In 2014, the year when the project Strengthening the Forest Based Sustainable Economy project began, the state obtained an increase of 348.6 km² of deforested areas. In 2022, the increase was 950.7 km², that is, the annual increase in deforestation was 2.7 times greater, compared to 2014 (Figure V).

Figure V: History of deforestation in the state of Acre (data in km²)



Source: Terrabrasilis/Inpe/Prodes, 2022.[85]

Direct Effect 1: *Construction of community warehouses in the forest for the storage of Brazil nuts and provision of polypropylene boxes for the transportation of the collected fruits.*

The *Strengthening the Forest Based Sustainable Economy* project achieved results beyond expectations, benefiting, through sustainable productive activities and value addition, on average 500 producers (area recovery, organic certification). In accordance with the work plan, the project has built two community warehouses, which are of great importance in the production chain, since they allow the storage of the production during the harvest, for later transport and commercialization. The 1,000 polypropylene boxes purchased are being used for transport (associations x Cooperacre) and fruit packaging. During the field visits, the two storage structures were also identified, as established in the project goals. According to Cooperacre technicians, there are currently 17 of these structures in use by the agglutinated entities. (Table I).

Table I: Indicators of the Direct Effect 1 of the project Strengthening the Forest Based Sustainable Economy project

Indicators	Goal	Value at the end of the project	Current value
1.1 Number of fresh product storage structures built.	02	02	17
1.2 No. of polypropylene boxes purchased	1,000	1,000	1,000

Source: Effectiveness Evaluation Report (RAE) presented to the Amazon Fund in December 2021.

After the completion of the project, the revenue obtained from the commercialization of Brazil nuts and processed fruits reached the result of R$34.9 million. Although no goal

85. Data available at: http://terrabrasilis.dpi.inpe.br/app/dashboard/deforestation/biomes/legal_amazon/rates.

has been set for this result, it is considered an excellent commercial performance, as reported by the cooperative's directors during the field interviews.

Direct Effect 2: *Expansion of certification of organic production of Brazil nuts*

In addition to valuing the product, the nut certification process, expanded based on the *Strengthening the Forest Based Sustainable Economy* project, was seen as a representation of the ideals pursued by Cooperacre based on sustainable, economically viable, socially fair and environmentally correct development. (Figure VI)

Figure VI: Brazil nuts being processed at Cooperacre's headquarters (Rio Branco-AC)

Foto: Image captured by Juliana Mello during field mission.

The evaluated project promoted the expansion of the number of certified cooperatives and associations from 7 to 17, also increasing the volume of certified Brazil nuts. In addition, workshops were held for the proper disposal of waste and possible contaminants in the communities.[86]

Direct Effect 3: *Technical capacity of small agro-extractivists expanded in the implementation of SAFs and good practices for the production and storage of socio-biodiversity products and community leaders in project management, participatory governance and marketing strategies.*

According to Cooperacre's management, through newsletters, banners and billboards, extractivists were better informed and updated. T*he Strengthening the Forest Based Sustainable Economy* project also promoted the training and qualification of technicians

86. Confira em: https://www.cooperacre.com/noticia/2-fortalecimento-da-certificacao-organica.

and representatives of associations/cooperatives. In this way, the representatives of the associations/cooperatives will be able to carry out their administrative functions with greater clarity and understanding, always based on the principles of cooperatives. (Chart I)

Chart I: Indicators of Direct Effect 3 of the *Strengthening the Forest Based Sustainable Economy* project

Indicators	Goal	Value at the end of the project	Current value
2.4 Number of bulletins, folders, booklets and other communication products developed broken down by species and circulation (quantity).	Bulletins: 9,000 Folders: 10,000 Packaging: 4,500 Posters of good practices: 3,000 Billboards: 08 (Units)	Bulletins 9,000 Folders: 10,000 Packaging 4,500 Posters of good practices: 3,000 Billboards: 08 (Units)	Bulletins 9,000 Folders: 10,000 Packaging 4,500 Posters of good practices: 3,000 Billboards: 08 (Units)
3.1 Number of individuals trained in agroforestry and administrative and financial management.	180	293	293
3.1.2 No. of individuals participating in appropriate waste disposal workshops for organic production certification purposes	115	115	115
3.2 Number of rural families (properties) benefited from technical assistance and rural or agroforestry extension	291	291	291
4.1 Area (ha) of SAFs deployed.	600	602,5	602,5
4.2 No. of properties with SAFs deployed.	291	291	291

Source: Effectiveness Evaluation Report (RAE) presented to the Amazon Fund in December/2021.

602.5 hectares were implemented in the form of SAFs. Consortium plantations of fruit species, Brazil nut and rubber trees, white crop and green manure were made. In total, 291 producers were benefited, distributed in 16 communities (associations). (Figure VII)

Figure VII: SAF implemented in the placement of Mr. Sebastião Aquino, member of CooperXapuri, an agglutinated entity of Cooperacre, Resex Chico Mendes – AC

Photo: Image captured by Artur Sgambatti Monteiro during field mission.

The implementation of SAFs in already deforested areas concentrates agro-extractivist production, increasing production efficiency. Thus, the family can increase income by 2.5 harvests per year, with the sale of products from extractivism and fruits. According to Cooperacre's technical assistance team, increasing the profitability of agro-extractivism reduces the producer's interest in opening up new areas for livestock production. The implementation of SAFs in extractive reserves also strengthens the family structure, as young people are more present on the property to take care of production and are rewarded at the harvest of the product.

6. OVERALL EVALUATION

Regional Scenario

In the 14 municipalities where Cooperacre operates, the situation of deforestation pressure, in the internal evaluation of the cooperative, is one of the major obstacles in relation to the management of APS. The Chico Mendes Extractive Reserve (Resex) is a focal point of the cooperative's activity, being the fifth most deforested conservation unit (CU) currently in the Amazon and which has been taken over by pastures in the last ten years (Figure VIII).

Figure VIII: Increases in accumulated deforestation of the ten CUs located in the Brazilian Amazon

	Area km²	%
TRIUNFO DO XINGU ENVIRONMENTAL PROTECTION AREA	4,069.92	35.1
JAMANXIM NATIONAL FOREST	1,134.62	9.8
JACI-PARANÁ EXTRACTIVE RESERVE	1,075.78	9.3
TAPAJÓS ENVIRONMENTAL PROTECTION AREA	626.75	5.4
CHICO MENDES EXTRACTIVE RESERVE	469.84	4.1
ALTAMIRA NATIONAL FOREST	302.77	2.6
TUCURI LAKE ENVIRONMENTAL PROTECTION AREA	291.13	2.5
GUARAJARÁ-MIRIM STATE PARK	202.28	1.7
TERRA DO MEIO ECOLOGICAL STATION	178.87	1.5
MARANHÃO LOWLANDS ENVIRONMENTAL PROTECTION AREA	154.28	1.3

Source: Terrabrasilis/Prodes/Inpe[87]

The lack of support from governments and the weakening of public policies to encourage the maintenance of the standing forest and inspection have systematically modified the landscape in this CU. Although small-scale livestock farming is allowed by the unit's management rules, some families go beyond these limits, attracted by the profitability of the activity to the detriment of practices for the sustainable use of forest resources. Renting pastures within the CU became a profitable alternative for many residents, pressured by cattle ranchers around the reserve. Cooperacre maintains its operations within the reserve, with ATER actions and incentive to the extraction of Brazil nuts, extraction of natural rubber and agroforestry production.

Positive Aspects

- Qualification and profitability for all links in the chains supported by Cooperacre with its members;
- Generation of more than 300 direct jobs and more than 1,500 indirect jobs;
- Guarantee of purchase of extractive products, such as Brazil nuts, rubber and açaí, as well as agricultural products, such as fruits for the production of industrialized pulps;

87. Data available at: http://terrabrasilis.dpi.inpe.br/app/dashboard/deforestation/biomes/legal_amazon/increments

- The partnership between the cooperative and its members creates a direct commercial relationship, without intermediaries, with fairer prices and, consequently, an improvement in the income of the APLs operated by the organization.

- The cooperative's organizational structure has the management capacity to receive and apply resources from financiers such as the Amazon Fund.

Challenges

- The expansion of fruit pulp production, with the construction of a plant attached to the nut processing industry in Rio Branco, will open space for the expansion of its operations and promote the increase of fruit plantation areas in its region of operation. Cooperacre's challenge is to prioritize the use of already anthropized areas used by its members, without converting forested areas for the cultivation of fruit trees.

- Some species of interest for the productive front of fruit pulp (passion fruit and acerola) do not fit the designs of SAFs and will have to be planted in open areas, in monocultures, more demanding of nutrients and irrigation.

- The demobilization of the ATER team after the end of the project left about 300 families without technical monitoring. It is recommended that the cooperative evaluates the maintenance of the ATER team, raising funds from other sources or even through its own revenues.

- Competition with livestock activity in the state must be subject to permanent strategic evaluation of the cooperative, so that there is no loss of revenue from the disincentive of members, especially in the expansion and maintenance of SAFs.

- Invest in valuing gender equity, participation and empowerment of women in the management model.

7. CONCLUSIONS AND LESSONS LEARNED

The *Strengthening the Forest Based Sustainable Economy* project was successful in implementing the funds raised from the Amazon Fund. During the field evaluation, the responsible organization - Cooperacre - proved to have the organizational structure and maturity to manage its production units and even expand its operations to regional and national levels.

Cooperacre works proactively, establishing partnerships with commercial actors such as the French company Veja/Vert, partnerships with the state government and federal agencies such as Companhia Nacional de Abastecimento (Conab), Empresa Brasileira de Pesquisa Agropecuária (Embrapa) and Universidade Federal do Acre (UFAC), in addition to having experience in obtaining loans from banks such as BNDES and Banco da Amazônia.

The cooperative has extensive experience in managing socio-biodiversity chains, such as Brazil nuts and latex extraction. However, it needs to improve its experience with

the fruit pulp production chain, a very competitive market that is on the rise in Brazil. Furthermore, care should be taken to encourage monocultures of fruit species that do not fit into AFS arrangements, so that there is no pressure to this end on forested areas.

Even with capillarity among the various actors involved in the conversion of degraded areas to AFS systems, it is possible to improve the performance in attracting and expanding producers interested in investing in this production system. To do this, Cooperacre must maintain its ability to provide a trained ATER system capable of meeting current and future needs. Although this goal was achieved in the *Strengthening the Forest Based Sustainable Economy* project, this represents little in terms of territorial extension in the face of the advance of deforestation in the region.

Cooperacre can play a bolder and more influential role as a key player in the broader promotion of the forest-based economy. Even try to recover part of this protagonism, lost by the Government of the State of Acre due to the last state and federal administrations. As an organization with a history of fighting for land tenure and forest conservation initiated by Chico Mendes, the cooperative needs to include this proactivity in its future vision and can achieve broader results.

The current scenario of loss of forest areas converted to livestock should be a continuous target of the cooperative. Through its performance, Cooperacre can play a fundamental role in demonstrating to governments, donors and investors that productive activities that keep the forest standing should be prioritized, and that the forest-based economy is sustainable, profitable and capable of providing a real quality of life for present and future generations.

8. ANALYSIS OF THE OECD EVALUATION CRITERIA

Evidence	Evaluation
Relevance Criterion	
The project promoted the verticalization of production chains and reduced barriers such as transport logistics, storage, processing and marketing of agro-extractivist production. It has also invested in training and administrative management of affiliated organizations, technical assistance and narrowing between partners working with teaching, research and quality control.	Great Relevance
Efficacy Criterion	
The project met all its goals, according to the indicator chart presented to the Amazon Fund. There was a justification for not serving one of the cooperative's areas of operation - the Purús region - citing logistical problems in accessing producers.	Effective
Efficiency Criterion	
Cooperacre is now the largest processor of Brazil nuts in the country. It has an efficient raw material acquisition system, with four processing plants in operation and a storage structure in place. In the case of rubber, the partnership with the French company Veja/Vert offers the extractivists the guarantee of selling at a higher price than the market. A new fruit pulp processing unit is being implemented, attached to the headquarters of its Brazil nut processing plant in Rio Branco. The cooperative is managing to access the demanding international market, adapting to the required sanitary standards.	Good efficiency

Impact Criterion	
The rate of expansion and consolidation of Cooperacre, as a business model on the scale of agro-extractivism in the State of Acre and the region, shows the ability to occupy spaces in the regional socio-economic scenario, even in unfair competition with the livestock model.	Moderate to strong effect
Sustainability Criterion	
The new aspect of incorporating the concept of the bioeconomy into the scenario of solutions for the future conservation of the Amazon offers Cooperacrea the possibility of consolidation as a sustainable business model, even at the scale that the cooperative is operating today and intends to achieve in the future with its new pulp processing plant. The cooperative must continue to act in governance purposes, either from an environmental point of view or from the point of view of social control, equality and gender inclusion.	Medium to high sustainability

9. ANALYSIS OF THE CANCUN SAFEGUARDS

Criteria	Complies	Notes
Actions complementary to or consistent with the objectives of national forest programs and other relevant international conventions and agreements.	Yes	Acre has 22 municipalities, and Cooperacre operates in 14 of them, promoting agro-extractivist production in a considerable territorial extension. The model is aligned with the Plan for the Prevention and Control of Deforestation in the Brazilian Amazon (PPCDAm) at the federal and state levels. The cooperative invests with its members in organic certification and a fair market, reaffirming its commitment to socio-environmental and economic practices that are balanced and consistent with a development model that does not degrade forests and balances the climate at regional and global levels.
Transparent and effective national forest governance structures, with a view to national sovereignty and legislation.	Yes	Cooperacre, together with its agglutinated entities, has partnerships with teaching and research agencies, aiming to improve its SAFs recovery programs, the quality of processing of its products and the reuse of the nut shell for energy purposes, which it maintains with Embrian. It also acts as an intermediary, with government agencies, for the environmental regularization of its members regarding the Rural Environmental Registry (CAR) records and obtaining the granting of wells for use in irrigation for fruit production projects.
Respect for the knowledge and rights of indigenous peoples and members of local communities, considering relevant international obligations, national circumstances and laws, and noting that the United Nations General Assembly has adopted the United Nations Declaration on the Rights of Indigenous Peoples.	Yes	Cooperacre strengthens forest production chains, in addition to stimulating the recovery of degraded areas through the implementation of SAFs, also benefiting family farming. Works in settlement projects and conservation units, promoting the conservation of native vegetation cover. It also promotes good land use practices in areas that have already suffered deforestation within the limits established by Brazilian environmental legislation.

Full and effective participation of stakeholders, in particular indigenous peoples and local communities, in the actions referred to in paragraphs 70 and 72 of Decision 1/CP 16.	Yes, but it could be more effective in impact/result monitoring actions.	The relations of negotiation of agro-extractivist production, between Cooperacre and residents' associations, are being of network cooperation, without intermediaries, which is already a sign of a more balanced and fair relationship model. No models of support or centralization of action in decision making were identified. However, the management system of this entire network lacks investment or improvement in the component of monitoring results and impacts. No people or instruments were identified within this network focused on storing, analyzing and using the results to improve the current management model.
Actions consistent with the conservation of natural forests and biological diversity, ensuring that the measures referred to in paragraph 70 of Decision 1/CP 16 are not used for the conversion of natural forests, but rather to promote the protection and conservation of natural forests and their ecosystem services, and to enhance other social and environmental benefits.	Yes, but it could be more effective in conservation actions	Cooperacre acted in the recovery of environmental liabilities in the areas of its members, through the implementation of SAFs. It also worked, together with partner institutions, to strengthen the chains of Brazil nut, rubber and fruit pulp, generating income and better quality of life for extractivists. The cooperative operates within Resex Chico Mendes, which is under strong pressure from deforestation. Despite encouraging conservation within the area, absorbing the production of Brazil nuts and latex, it could be active with the government to try to unbridle this process of forest degradation within the CU.
Actions to address the risks of reversals in REDD + results.	N/A	N/A
Actions to reduce the displacement of carbon emissions to other areas.	Yes	600 hectares were recovered through the implementation of SAFs.

10. ANALYSIS OF TRANSVERSAL CRITERIA

Poverty Reduction	**Evaluation**
The project promoted an increase of 2.5 harvests per year per family, increasing income with the sale of products from extractivism and fruits. As the profitability of agro-extractivism increases, the producer's interest in opening new areas for livestock activity decreases. 2,000 families benefited directly and 1,000 indirectly, as well as a series of 25 producer associations and cooperatives, strengthening the network of actors in the extractive and family farming sectors. Cooperacre generated more than 300 direct jobs and more than 1,500 indirect jobs, benefiting extractive communities by guaranteeing the purchase of extractive products, paying a fair price for production. There was an environmental improvement as a result of SAFs, increasing the quality of ecosystem services that provide a basis for people's well-being. The implementation of, on average, 2 hectares per SAF per producer strengthened the family structure and stimulated the paid work of young people in production, obtained by harvesting the products.	Yes
Gender Equity	**Evaluation**
There was little integration of gender issues in the project, with actions aimed at families (which include women), but no specific strategy for women and their performance with the product chains being worked on.	Partially

C. SMALL ECOSOCIAL PROJECTS IN THE AMAZON – PPP-ECOS IN THE AMAZON

PROJECT SHEET

Project title:	Small Eco-social Projects in the Amazon – PPP-Ecos in the Amazon
Responsible entity:	Society, Population and Nature Institute (ISPN)
Project period:	2012 to 2020 (99 months)
Territorial scope:	Areas of the Amazon biome in the states of Maranhão (north, center and west of Maranhão), Mato Grosso (northeast, north and southwest of Mato Grosso) and Tocantins (west of Tocantins).
Beneficiaries:	Traditional peoples and communities, family farmers, distributed in the states of Maranhão, Mato Grosso and Tocantins.
Objective:	Launch of four public calls with the purpose of selecting and financing socio-environmental projects of small value aimed at family farmers, traditional peoples and communities in areas of the Amazon biome in the states of Mato Grosso, Tocantins and Maranhão.
Classification in the Amazon Fund via:	Spontaneous demand
Land Category	Settlements, Indigenous and Quilombola Territories and Conservation Units.
Component:	Sustainable Production
Total value of the project:	R$ 17,796,525.00
Value of the support from the Amazon Fund:	**R$**12,814,691.38

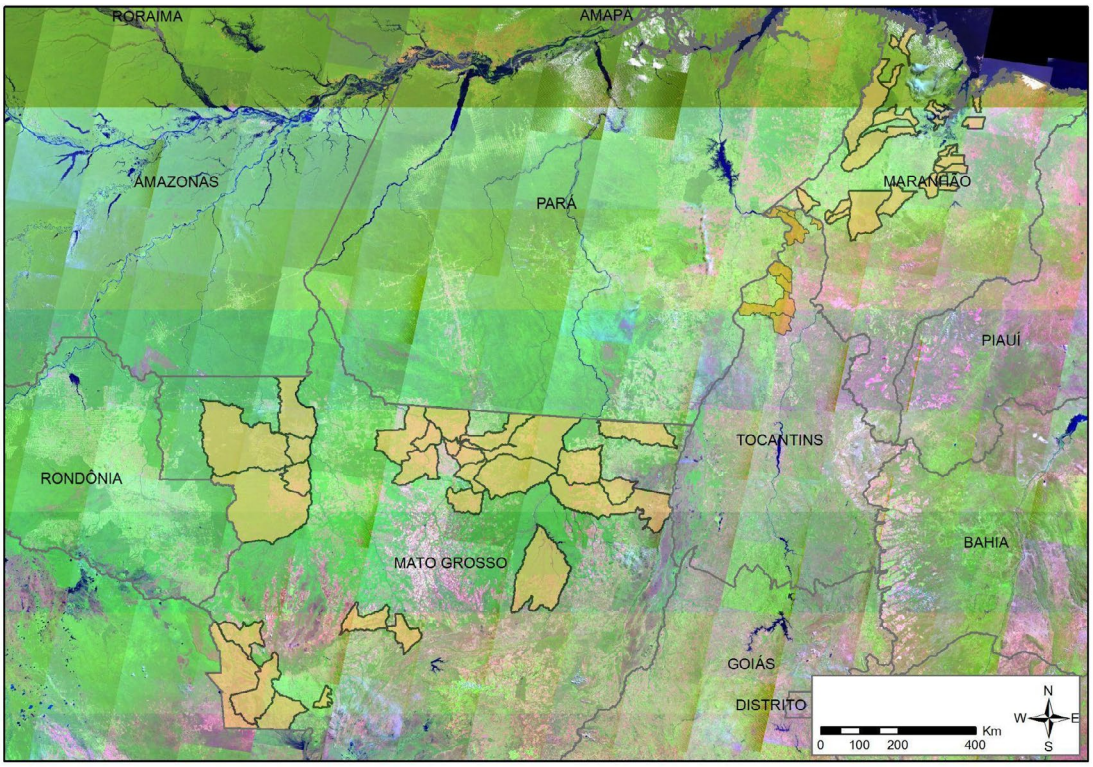
Source: Form prepared based on the information from the Amazon Fund/BNDES website.

1. PROJECT SUMMARY

The *Small Eco-social Projects - PPP-Ecos* project began in 1994, when the Society, Population and Nature Institute (ISPN) was selected to coordinate the Brazilian session of the Small Grants Project (SGP), implemented by the United Nations Development Program (UNDP). The ISPN was thus financed by the SGP with resources from the Global Environment Facility (GEF). *The PPP-Ecos* had an exclusive focus on the Cerrado biome for almost 20 years until, in 2013, it expanded its operations to the Caatinga biome, with support from the GEF, and to the Amazon, with support from the Amazon Fund[88].

The *PPP-Ecos* in the Amazon supported projects focused on the conservation of natural environments, through the sustainable use of natural resources and the strengthening of community organizations. The project's areas of activity are located in the Areas under intense pressure for deforestation in the states of Maranhão, Mato Grosso and Tocantins (Figure I), where it was sought to strengthen different social groups, such as indigenous communities, quilombolas, family farmers, agrarian reform settlers, women's groups and rural youth.

Figure I: Location of municipalities with projects supported by PPP-Ecos in the Amazon (MA, MT and TO)



Source: Own elaboration from the QGIS Desktop software.

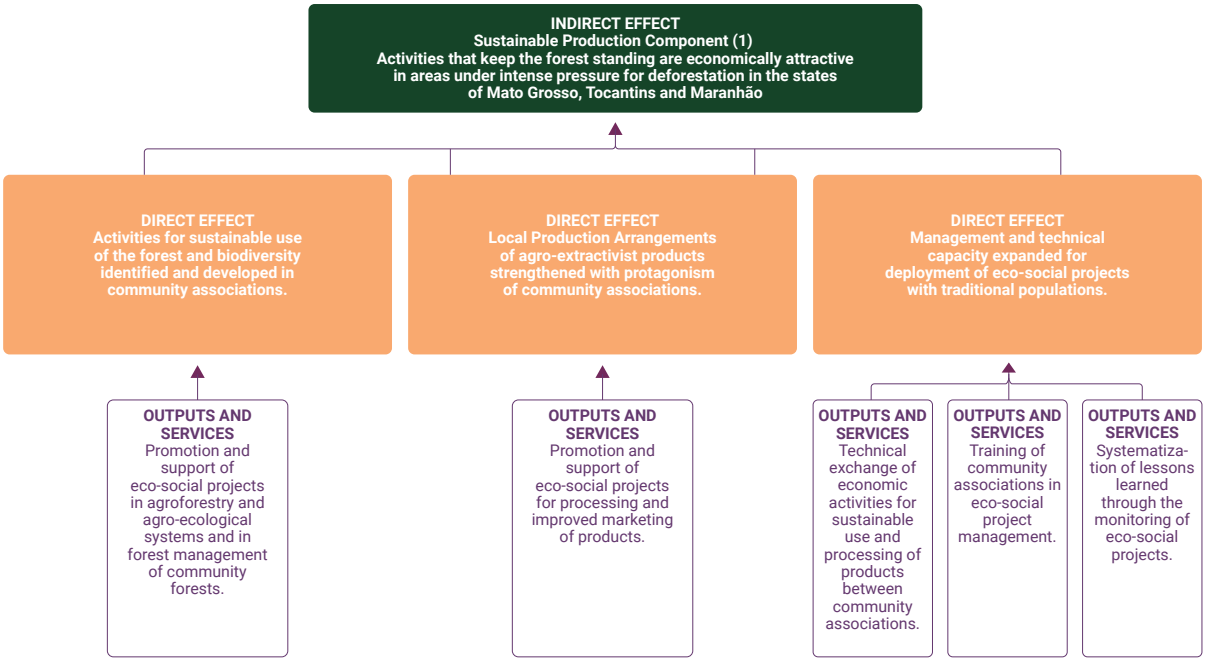
88. The program currently has a diverse portfolio of funders, including the United States Agency for International Development (USAID), the European Union, and the German Federal Ministry for the Environment (BMU). Information available on its website: https://ispn.org.br/editais-ppp-ecos/.

The project held four public calls, two in 2013, one in 2014 and one in 2017. Eighteen workshops were held to present the notices in different states and inserts were made in the radio program Natureza Viva, of Empresa Brasil de Comunicações (EBC), presenting the experiences of the project in other regions. In addition, workshops on project preparation, planning and management were offered, as well as events to share experiences and lessons learned.

2. INTERVENTION LOGIC

In accordance with the procedures in force in the Amazon Fund during the implementation of the project, a Logical Framework for the *PPP-Ecos in the Amazon* project was agreed, aligned with the structure of the Amazon Fund's Logical Framework. (Figure II)

Figure II: Logical Framework of the *PPP-Ecos in the Amazon* project agreed with the Amazon Fund

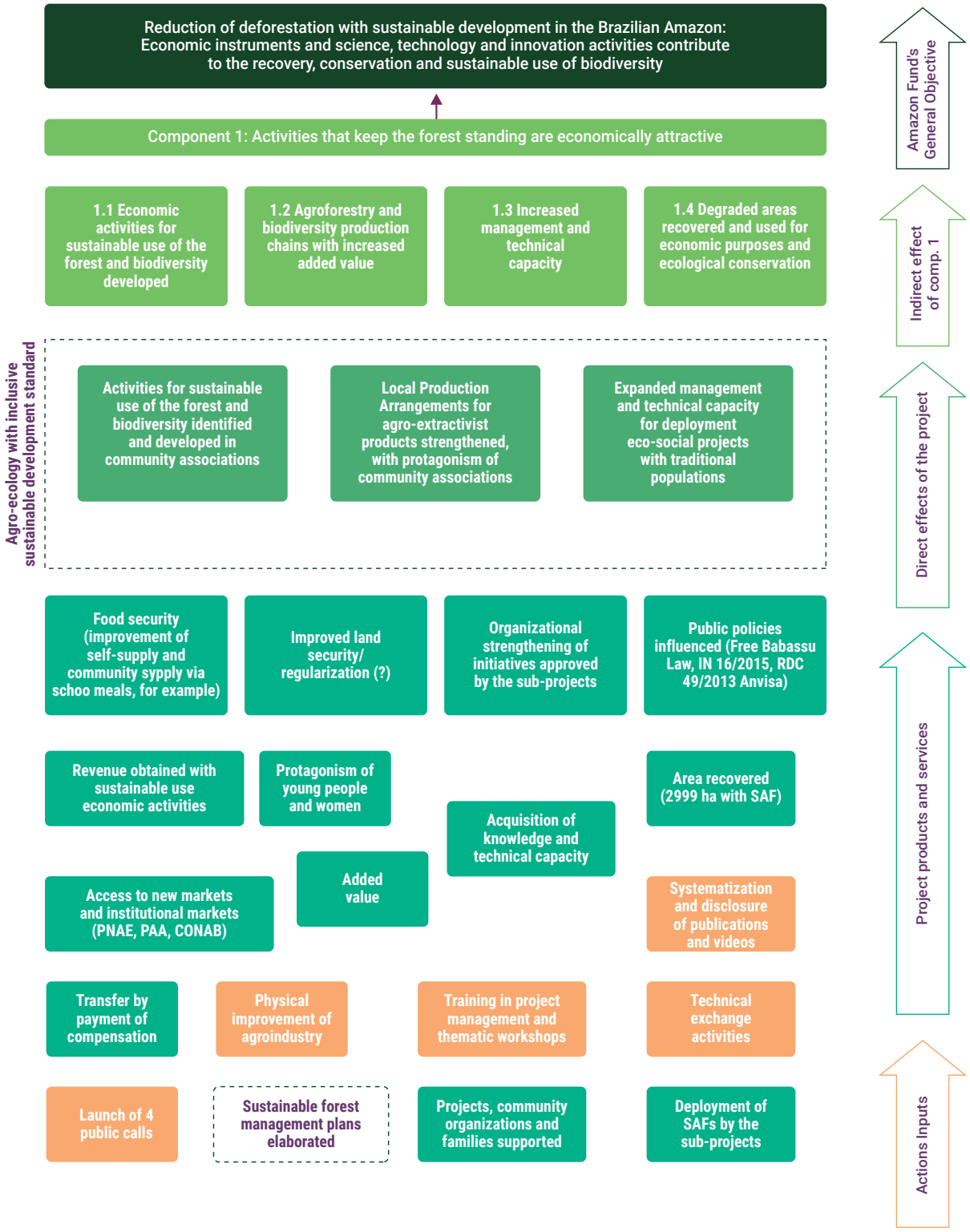


Source: Amazon Fund.

3. THEORY OF CHANGE

The schematic framework representative of the theory of change of the PPP-Ecos in the Amazon project was constructed considering the specific objectives of the Amazon Fund and the indirect effects of the projects. In addition to these key concepts, elements, results and impacts considered fundamental in the analysis and understanding of the project were added. The chart illustrates the main results of the project and effects at the level of impacts (or indirect effects) of the component, and in a higher scope, of the general objectives of the Amazon Fund (Figure III).

Figure III: Schematic representation of the Theory of Change of the PPP-Ecos in the Amazon project



Source: Authors' own elaboration.

4. SPECIFIC METHODOLOGY

For the evaluation of the PPP-Ecos in the Amazon project, exploratory interviews, analysis of secondary data, field mission to interview project managers and beneficiaries and application of a questionnaire for beneficiaries were carried out and sent by email.[89] The guiding questions that guided the interviews as well as the list of people interviewed are found in Appendix V and Appendix VI, respectively.

5. EVALUATION OF RESULTS

Direct Effect 1 and 2: *"Activities of sustainable use of the forest and biodiversity identified and developed in community associations" and "Local Productive Arrangements of agro-extractivist products strengthened, with the protagonism of community associations".*[90]

By analyzing the indicators of Direct Effects 1 and 2, it is possible to observe compliance and overcoming in several cases. (Table I and Table II)

Table I: Indicators of Direct Effects 1 and 2 of the PPP-Ecos in the Amazon project

Direct Effects Indicator 1 and 2	Goal	2013	2014	2016	2020	Variation %
Revenue obtained from economic activities of sustainable use (R$/year per family)	R$1,500.00	N/A	414	750[91]	2,400	160%
No. of community organizations strengthened	40[92]	N/A	44	157	163	163%
No. of sustainable forest management plans prepared	15.00	N/A	N/A	N/A	0	0%

Source: Amazon Fund

89. Check out the questionnaire in Appendix II.

90. Due to the similarities between these two direct effects and their complementary form of action, a series of complementary indicators and products were defined between BNDES and ISPN that could be used in both cases.

91. Only 23 projects have reported income so far. The amount informed was divided by the number of beneficiaries of each project. Therefore, it is an approximate value of the income obtained and very variable, as there are projects with greater added value, such as the honey, palm heart and pulp chains, while others are organizing their value chain and adapting to the markets.

92. This goal provided for the recruitment of an average of 40 supported associations/public notices, as well as a total of 100 by the end of the project, taking into account the possibility of more than one support to the same association.

Table II: Product indicators of the *PPP-Ecos in the Amazon* project

Product indicator	Goal	2013	2014	2016	2020[93]	Variation %
Number of notices issued	4	1	3	4	4	100%
Number of projects supported under the PPP-Ecos in the Amazon	160	22	59	88	88	55%
Degraded areas that have been reclaimed from PPP-ECOS project initiatives	1,000	N/A	1,275	2,418	2,999	300%
Number and location of municipalities benefiting from PPP-ECOS projects	100	0	50	72	72	72%
Number of families benefited by the projects	1,500	381	2,252	3,425	3,046	203%

Source: Amazon Fund.

in terms of income generation from sustainable economic activities, a value of R$2,400.00 per family was achieved, much higher than the expected R$1,500.00. The increase in income of families and organizations occurred in several ways, depending on the production chains and regional specificities, such as the sale of processed, managed, collected products, etc. and through access to public institutional purchasing programs, such as the National School Feeding Program (PNAE) and the Food Purchase Program (PAA).

Many more community organizations were also served than planned, totaling 163, with a forecast of 40). This goal was surpassed by including indirectly supported organizations (through the subprojects) in the results.

The indicator for the preparation of Sustainable Forest Management Plans (PMFS) fell short of the initial target, due to the fact that no PMFS was produced. This was due to the absence of requests of this nature from the subprojects.

Regarding the planned notices, four public calls were launched throughout the project, as initially planned, two in 2013, one in 2014 and one in 2015. However, the indicators regarding the number of projects supported and the number of municipalities supported fall short of the initial target of 55% and 72%, respectively. The reason for this is that the ISPN established two different values for the category of small projects (maximum support of R$60 thousand) and consolidation projects (maximum support of R$90 thousand). As the calculation of the target was carried out considering partial support values, and few projects opted for values lower than the available ceiling, the total number of supported projects and municipalities where *PPP-Ecos in the Amazon* was

93. Data taken from the Effectiveness Evaluation Report generated by ISPN in 2020.

present was lower than initially expected.

There was a 300% achievement of the initial target of recovered areas, since, among the 88 subprojects supported, it was possible to observe a wide variety of recovery alternatives through community gardens, agroforestry systems (SAFs), among others. There were more than 22 thousand hectares under sustainable use, related to the sum of the areas (indigenous lands – ILs, settlement projects and quilombola territories) where the projects were implemented. Although they are not the direct result of the project activities, it is considered that these areas have benefited from the strengthening of management.

The target number of families benefited was exceeded by 103%, with more than 3,000 families directly assisted. This was due to the success in disseminating the results of the project's activities, such as training, exchanges, and the consideration of indirectly benefited organizations.

Dona Raimunda at the head of the supported processing unit

Source: Image captured by Artur Monteiro during the field mission for this evaluation, 2023.

Mrs. Raimunda of the "Association of Women Sowing Resistance" in front of the beneficiation unit whose work was supported by the *PPP-Ecos in the Amazon* project. Dona Raimunda and other members point out that the project has been fundamental in helping them gain more respect in the region and more support from the men in the community. They are now able to produce, in joint efforts, cakes, breads and biscuits for different government programs (PNAE and PAA) and guarantee additional resources for their families.

Direct Effect 3: *Expanded managerial and technical capacity for the implementation of eco-social projects with traditional populations*

Regarding Direct Effect 3, the PPP-Ecos project had an initial goal of training 200 people, which was exceeded more than 25 times, with the project training 5,072 individuals. This result is due to the large amount of training and workshops carried out by ISPN and the subprojects. (Table III)

Table III: Indicators of the Direct Effect 3 of the *PPP-Ecos* project

Direct Effect Indicator 3	Goal	2013	2014	2016	2020	Variation %
Number of individuals trained effectively using the knowledge acquired	200	N/A	560	3.756	5.072	2.536%

Source: Amazon Fund

Output 3.1: *Training of community associations in the management of eco-social projects*[94]

Seventeen training workshops were held on the management of eco-social projects, six of which were regional, with the support of local organizations, and focused on project preparation; another six management workshops focused on initiatives approved through public calls for proposals; and five thematic workshops responding to specific regional needs.

For both indicators, the project exceeded its target by 213% for the number of workshops held and 541% for the number of participants. This was mainly because there was a demand for specific workshops under regional demands[95] and because the subprojects stipulated several training activities with ISPN.

Table IV: Output Indicators 3.1 of *PPP-Ecos in the Amazon*

Output indicator 3.1.	Goal	2013	2014	2016	2020	Variation %
Number of training workshops in eco-social project management	8[96]	3	5	1597	17	213%
Number of people participating in capacity building events	160	145	217	381	866	541%

Source: Amazon Fund.

Output 3.2: *Technical exchange of economic activities for sustainable use and processing of products between community associations*

94. This product specifically does not consider several training processes carried out by the organizations benefiting from the project itself. If such training were considered, we would have an increase of 264 workshops and 5,072 participants, without considering exchange events.

95. The five thematic workshops held were: "Health Standards for Family Production" (TO); "Honey Production and Environmental Conservation" (DF); "Community Agroindustry of Fruit Pulp" (MA). Two meetings on experiences and learnings from PPP-Ecos in the Amazon (DF and MT).

96. This goal initially included four planning workshops plus four improvement workshops.

97. Considering six initial training workshops (232 participants), three thematic workshops (162 participants) and six regional project development workshops (199 participants).

As for the technical exchanges carried out by the subprojects, there was the dissemination of successful practices for horizontal training. 103 exchanges were carried out[98], twice as many as the 50 initially planned, with the participation of 1,355 project representatives. The number of participants in the exchange activities was 562% of that foreseen in the initial goal, which was 120 (Table V).

Table V: Output Indicators 3.2 of *PPP-Ecos in the Amazon*

Indicator	Goal	2013	2014	2016	2020	Variation %
Number of projects visited by the beneficiaries of the notices in technical exchange activities	50	N/A	11	47	103	208%
Number of beneficiaries of eco-social projects participating in capacity building activities through technical exchange	120	N/A	80	674	1.355	562%

Source: Amazon Fund.

Output 3.3: *Systematization of lessons learned through the monitoring of eco-social projects*

The third product of Direct Effect 3, systematization of information and generation of technical content, generated studies published in printed and/or digital format. In all, nine studies were printed and two videos were produced, adding up to 12 materials produced on different topics: Guide for the Elaboration of Community Agroindustry Projects, Manual of Good Management Practices for Sustainable Extractivism of Buriti, Technological Manual for the Full Use of the Products of Native Stingless Bees and the documentaries: Babassu – forest of life[99] and Documentary on PPP-Ecos[100,101].

The indicator of "public policies influenced", although it does not have a specific target, has had three important experiences: the Resolution of the Collegiate Council (RDC 49/2013) and the Normative Instruction (IN 05/2017), both from Anvisa, which deal with phytosanitary regulations that govern the work of micro-entrepreneurs in agroindustry, and the Municipal Law 03/2015 of the Municipality of Peritoró/MA, which has had a positive impact on the region by allowing access to babassu forests. (Table VI)

Table VI: Indicators for Product 3.2 of PPP-Ecos in the Amazon

Indicator	Goal	2013	2014	2016	2020	Variation %
Number of publications on lessons learned and impacts of supported projects	5	N/A	N/A	1*	12	240%
Number of public policies influenced or under debate	-	1	2	3**	3	N/A

Source: The Amazon Fund..

98. 35 exchanges were carried out with the direct support of the ISPN, directly benefiting 518 people. 68 exchanges were carried out for the projects with resources from the PPP-Ecos in the Amazon and with the participation of 837 people.

99. Available at: https://youtu.be/w7MCqdwR8w4.

100. Available at: https://youtu.be/4_DO208b7T4.

101. The study *Estimation of avoided emissions and removals of carbon dioxide (CO2) in projects supported by PPP–Ecos in the Areas under intense pressure for deforestation*, which was not published due to the complexity of the topic addressed.

Box 1 – Free Babassu Law

Banner with poetry by Cora Coralina in the babassu derivatives agribusiness of Clube de Mães Quilombolas Lar de Maria (Itapecuru-Mirim/MA).

Source: Image by Ester Pons during the field mission for this assessment, 2023.

The struggle for access to babassu trees is one of the main objectives of the groups and movements of babassu coconut breakers. Over the years, this struggle has led to many conflicts because the farmers do not allow access to the babassu trees, threatening and often attacking the breakers. Due to the precarious reality of land regularization, as the breakers often do not own or collectively occupy the land, many of them need access to babassu reserves to develop their way of life.

The Free Babassu Law is an achievement of babassu breakers campaigns in their municipalities. These laws guarantee free access to the babassu reserves for the collection of coconuts, including on private property, to the breakers in a family economic regime; prohibit the poisoning, felling and burning of palm trees, cutting of bunches, burning of whole coconuts; among other measures that protect babassu and support the breakers[102].

There have already been three different federal bills that provided for the community use of babassu forests and even prohibited their overthrow. However, no project was approved. Although none of these attempts were successful, a state law was approved in Tocantins and there are several municipalities (in Maranhão, Tocantins and Pará) that have already won the approval of laws related to free babassu. These approvals are very important achievements for the communities and deserve to be highlighted in their history of struggle.

102. Information taken from the document Babassu coconut breakers: reflections and learnings, from ISPN. Available at: https://ispn.org.br/.

Tocantins State Law No. 1.959/08 provides for the prohibition of burning, felling and predatory use of babassu coconut palms. In addition, in areas "exploration is subject to the conclusion of an agreement between the associations" of coconut breakers and their respective owners". Maranhão does not have a state law, but several of its municipalities do, and Peritoró Municipal Law No. 03/2015 is one of the most recent and the result of processes led by communities supported by *PPP-Ecos in the Amazon*.

6. OVERALL EVALUATION

Positive Aspects

- It is possible to affirm that, through the **success achieved in different income generation indicators**, training workshops, recovered areas, supported projects and people positively impacted, the *PPP-Ecos in the Amazon* project consolidates an ISPN reference position in the Amazon.

- The activities of installing productive infrastructure and improving agroindustry allowed **the development of production chains of sustainable activities combined with the increase in average family** income observed in several projects.

- The 88 subprojects supported through the four PPP-Ecos in the Amazon public notices supported by the Amazon Fund/BNDES allowed the **direct and indirect strengthening of more than 160 community organizations**, demonstrating the capillarity and horizontality of the knowledge generated and acquired throughout the project.

- In addition to the community organizations supported by the project, **3,046 families benefited directly or indirectly from the socioeconomic and training actions of the project**.

- The sustainable productive activities developed by the subprojects led to the r**ecovery of 2,999 hectares of degraded areas from the implementation of SAFs and direct planting of seedlings**. Furthermore, the project's activities led to the strengthening of more than 22,573 hectares of sustainable use in the region.

- The project **held dozens of training, qualification and exchange events, forming 5,072 beneficiaries.** This effort led to the dissemination of the knowledge generated and acquired, strengthening the continuous application and sustainability of positive impacts.

- There was also the **systematization of the information generated throughout the project in two videos and ten studies on various topics**, ensuring the return to the communities assisted by the project and the transfer of this information generated beyond its territory of operation.

- The work carried out by the subprojects, combined with the recognition acquired from the public spheres, demonstrated a **direct influence on municipal public policies**, such as Municipal Law No. 03/2015 of Peritoró/MA, which guarantees free access to babassu forests located in private territories.

Challenges

- Throughout the duration of the project, **no sustainable forest management plan was produced by the subprojects** with support from ISPN. It should be noted the knowledge of organizations on the subject and the need for training on the subject to guide the need.

- Despite supporting 88 small eco-social projects in the states of Maranhão, Mato Grosso and Tocantins, the **initial expectation of *PPP-Ecos in the Amazon* was to assist 160 subprojects (80% more)**. This discrepancy is due to the fact that most initiatives have chosen to try to access resources through the upper limit of the available values, and it is recommended to choose higher values for the next supports.

- This also applies to the number of supported municipalities (72) that remained below the initial target of 100 municipalities. With higher support values, fewer projects were contemplated.

7. CONCLUSIONS AND LESSONS LEARNED

- Due to the large territorial extension of the project, the need for a variety of responses to combat deforestation is evident. Solutions based on improving the quality of life in rural areas are manifested and refined locally. Therefore, the response capacity provided by *PPP-Ecos in the Amazon* is considered to be of central importance. The execution of projects such as *PPP-Ecos* proves the key role played by funds that can offer capillarity of investments aimed at democratizing access to resources for investment in socio-environmental actions of community-based, traditional, indigenous and quilombola organizations in the Amazon

- ISPN improved its internal management through management systems and the installation of an intranet, supported 88 subprojects along the Areas under intense pressure for deforestation region, strengthened communities and associations, promoted dozens of training courses and trained thousands of people on various topics, in addition to generating content for the dissemination of learning. With the installation of agroindustry, it has been possible to observe a technical increase in the supported communities, as well as greater access to public policies and other notices, leading to an improvement in the quality of life in the communities, combined with the conservation of forests[103]. The continuity and expansion of *PPP-Ecos in the Amazon*, including new support from the Amazon Fund, proves the recognition of the project's effectiveness and its alignment with national and international priorities for environmental conservation and combating climate change.

103. See also the Theory of Change proposed for the project.

8. ANALYSIS OF OECD EVALUATION CRITERIA

Evidence	Evaluation
Relevance	
PPP-Ecos in the Amazon was relevant to the general objective of the Amazon Fund by directly supporting 88 small projects, from 77 organizations, in various regions of the Areas under intense pressure for deforestation. It was possible to observe the strengthening of grassroots organizations combined with a greater structuring of value chains, thus ensuring access and incidence on public policies and greater capacity to access public notices, programs and support projects. Support for such initiatives and for various traditional peoples and communities, as well as for family farmers, is considered essential to enable and promote the sustainability of the countryside and the creation of income alternatives linked to the conservation of the environment.	Very relevant
Efficacy	
In terms of achieving the proposed objectives, the project was effective in all expected impacts. The work carried out by the project led to the improvement of the infrastructure of the supported organizations, the better structuring of value chains, the expansion of the attractiveness of products and the strengthening of organizations. The only indicators below target (projects supported, municipalities with projects and management plans) are due to changes in the intervention logic and the selection of projects with higher transfer value, reducing the number of expected projects. Regarding the Sustainable Forest Management Plans (PMFC), the indicator was not met because this product was not required by the subprojects from the executing agency.	Effective
Efficiency	
Resource optimization measures were taken to expand the goods and services offered by the project, institutional strengthening (of the supported projects and of ISPN itself), and a much larger number of organizations and people positively impacted by the project and its various activities.	Very efficient
Impact	
Several production chains were expanded (açaí, babassu, honey, fruit pulps, palm hearts, handicrafts, among others). There has been greater access to institutional purchasing programs (PNAE and PAA, among others) and greater organization of the initiatives supported by indigenous quilombolas, family farmers and settlers. Concrete impacts can also be observed by the incidence on federal and municipal public policies.	Relevant positive impacts
Sustainability	
The project has been fundamental in leveraging the work of a myriad of small organizations that have begun to access other resources and projects and acquire other knowledge that is being applied locally. The physical structures, built and installed in the region, continue to be used by beneficiaries. ISPN is implementing another project with funds from the Amazon Fund, which is of greater value in supporting sub-projects in the same area of occurrence. It is also reaching out to other funders to support grassroots organizations in the region.	High sustainability

9. ANALYSIS OF THE CANCUN SAFEGUARDS

Criteria	Complies	Notes
Actions complementary to or consistent with the objectives of national forest programs and other relevant international conventions and agreements.	Yes	The projects of the Sustainable Production Component of the Amazon Fund align with Objective 7 of the 2016 to 2020 phase of the Plan for the Prevention and Control of Deforestation in the Brazilian Amazon (PPCDAm) – *"Promoting Sustainable Forest Management"*. The project is directly associated with Results 7.2 – *"Strengthening the Productive Chain of Sociobiodiversity"*, with emphasis on: i. support for sustainable productive inclusion projects; ii. dissemination of recommendation materials and good practices; iii. strengthening of extractive activities; and iv. strengthening the management of community enterprises.
Transparent and effective national forest governance structures, with a view to national sovereignty and legislation.	N/A	There were no contributions from the project to governance structures at the national level.
Respect for the knowledge and rights of indigenous peoples and members of local communities, considering relevant international obligations, national circumstances and laws, and noting that the United Nations General Assembly has adopted the United Nations Declaration on the Rights of Indigenous Peoples.	Yes	The project followed planned processes of consultation with the participating communities and offered courses and workshops on project preparation. Because the projects were community-driven, their socio-cultural systems and traditional knowledge were respected. Permits were required from the National Indian Foundation (FUNAI), the Brazilian Institute for the Environment and Renewable Natural Resources (Ibama), and the Chico Mendes Institute for Biodiversity Conservation (ICMBio) for the installation of agroindustry and other activities. The cultural appreciation of the indigenous, traditional and quilombola origin of production took place in a varied way in the territory, requiring greater visibility of these practices.
Full and effective participation of stakeholders, in particular indigenous peoples and local communities, in the actions referred to in paragraphs 70 and 72 of Decision 1/CP 16.	Yes	Throughout the project, there was participation of collegiate and representative entities of indigenous peoples and other traditional populations in the National Management Council (CGN), which is responsible for guiding the work of *PPP-Ecos*. These organizations are: Articulation of Indigenous Peoples (APIB), National Council of Extractive Populations (CNS) and Semiarid Articulation (ASA). There was also articulation with intermediate entities between ISPN and the subprojects, ensuring greater engagement of the populations served by the project. The prioritization of proposals for selection and the establishment of general guidelines for the *PPP-Ecos* has the support of the CGN, composed of representatives of government agencies, international organizations, civil society organizations and academics.

Actions consistent with the conservation of natural forests and biological diversity, ensuring that the measures referred to in paragraph 70 of Decision 1/CP 16 are not used for the conversion of natural forests, but rather to promote the protection and conservation of natural forests and their ecosystem services, and to enhance other social and environmental benefits.	Yes	The consolidation of value chains, linked to the strengthening of traditional communities in different quilombola, indigenous, traditional and settlement territories, requires the conservation of forests and the strengthening of communities. In addition to community gardens and SAFs, there were no project actions that involved the conversion of natural forests into planting areas. In many cases, SAFs were implemented and land-use planning was strengthened due to the greater knowledge acquired by the community members. There were no direct actions to expand or consolidate protected areas, but several actions contributed to their forest and land-use planning.
Actions to address the risks of reversals in REDD+ results.	N/A	Not applicable.
Actions to reduce the displacement of carbon emissions to other areas.	N/A	Not applicable.

10. ANALYSIS OF TRANSVERSAL CRITERIA

Poverty Reduction	**Evaluation**
The valorization of the forest occurred by strengthening the product chains of socio-biodiversity and family farming, expanding the production, processing and marketing of food, seeds, fibers and oils that make up the "basket of products" of traditional peoples and communities (PCTs) and family farmers. The implementation of SAFs, agro-yards and agroecological backyards and the enrichment of permanent preservation areas (PPAs) and Legal Reserve (LR) with natives, promoted the cultivation and extraction of species of economic interest and for self-supply through the recovery of 2,999 hectares, corresponding to an average of 0.98 hectares recovered per family with species of economic/food value. The average income/year/family was estimated at R$2,421.00, exceeding the established goal by 60%. The beneficiary organizations were strengthened, gained new partnerships and accessed resources from new projects. (i) social inclusion was promoted: in a universe of 60 subprojects, 58% indicated the participation of young people and 70% of women in the activities carried out; (ii) productive inclusion: the *PPP-Ecos in the Amazon* supported the construction and/or reform of 27 equipped community agribusinesses; access to information on good practices and articulated partners and public agencies for participatory dialogue; (iii) political incidence: the projects were present in an average of 65 networks and social movements; they worked in 131 spaces for the incidence of public policies within the three governmental spheres (municipal, state and federal) and accessed an average of 48 public policies; (iv) human capital: 5,072 individuals were trained and used the knowledge acquired; and (v) improvement in living conditions: the improvement of environmental conditions with the recovery of 2,999 ha of degraded areas promoted the improvement of ecosystem services provided in the medium and long term, such as water and water security by the recovery of springs and areas of permanent preservation.	Yes

Gender Equity	Avaliação
The project worked to strengthen institutions and sustainable production chains, and to broaden and qualify the discussion on gender and agroecology, one of the main themes of the training. 27% of the projects promoted actions on women's rights. During the pandemic, ISPN formed a working group (WG) to directly address the needs of women. Of the 88 projects supported by PPP-Ecos, more than 10 were implemented by women's groups (17 women's organizations were counted in the Small Projects Portfolio 2013-1017). The participation of women is evidenced in 70% of the projects, with 32% of them coordinated by women. Meanwhile, 43% of the projects had a majority of women in their execution and 27% promoted actions involving women's rights.	Yes

D. DEMA FUND PROJECT

PROJECT SHEET

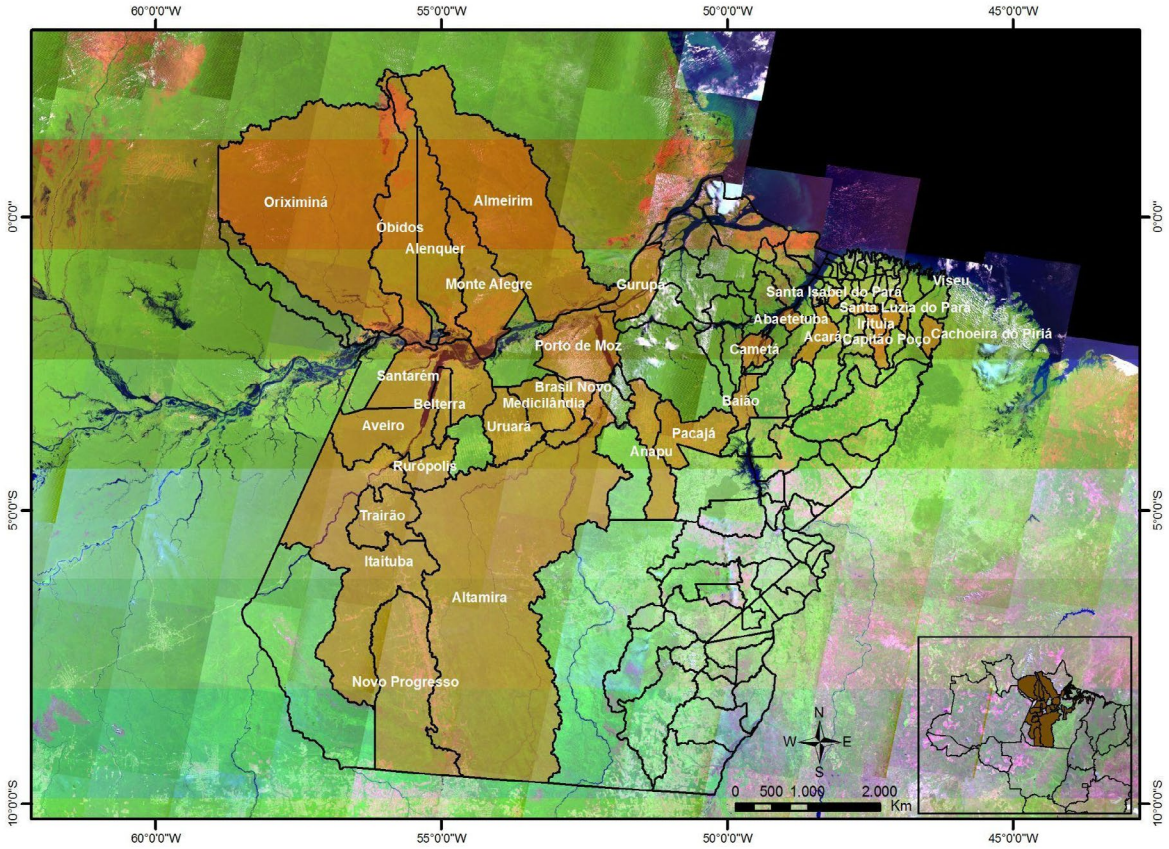
Project title:	Dema Fund
Responsible entity:	Federation of Agencies for Social and Educational Assistance – Fase
Project period:	06/14/2011 to 12/31/2021
Territorial scope:	Traditional communities in the state of Pará, focusing on the area of influence of the Trans-Amazonian Highway and BR-163 highways and the Baixo Amazonas region
Beneficiaries:	Traditional Amazonian communities: small rural, quilombola and indigenous producers.
Objective:	Support socio-environmental projects of small value, through eight public calls, to be launched over three years, with traditional Amazonian communities (small producers, quilombolas and indigenous people) as beneficiaries, located in the state of Pará, focusing on the area of influence of the Trans-Amazonian Highway and BR-163 highways and in the Lower Amazon region.
Classification in the Amazon Fund via:	Public Call for Sustainable Productive Projects of the Amazon Fund (2012).
Land Category	Settlements, Indigenous and Quilombola Territories and Conservation Units.
Component:	Sustainable Production
Total value of the project:	R$ 7,499,641.00
Value of the support from the Amazon Fund:	R$ 6,601,699.07

Source: Form prepared based on the information from the Amazon Fund/BNDES website.

1. PROJECT SUMMARY

The *Dema Fund* project, whose responsible entity is the Federation of Agencies for Social and Educational Assistance (Fase), aimed to support, through public calls launched over three years, the selection of socio-environmental subprojects of small value, having as beneficiaries traditional Amazonian communities (small producers, quilombolas and indigenous people) located in the state of Pará, focusing on the area of influence of the Trans-Amazonian Highway and BR-163 highways and in the Lower Amazon region (Figure I).

Figure I: Location of municipalities with projects supported by the *Dema Fund (PA)*.



Source: Own elaboration using the QGIS Desktop *software* 3.22.8.

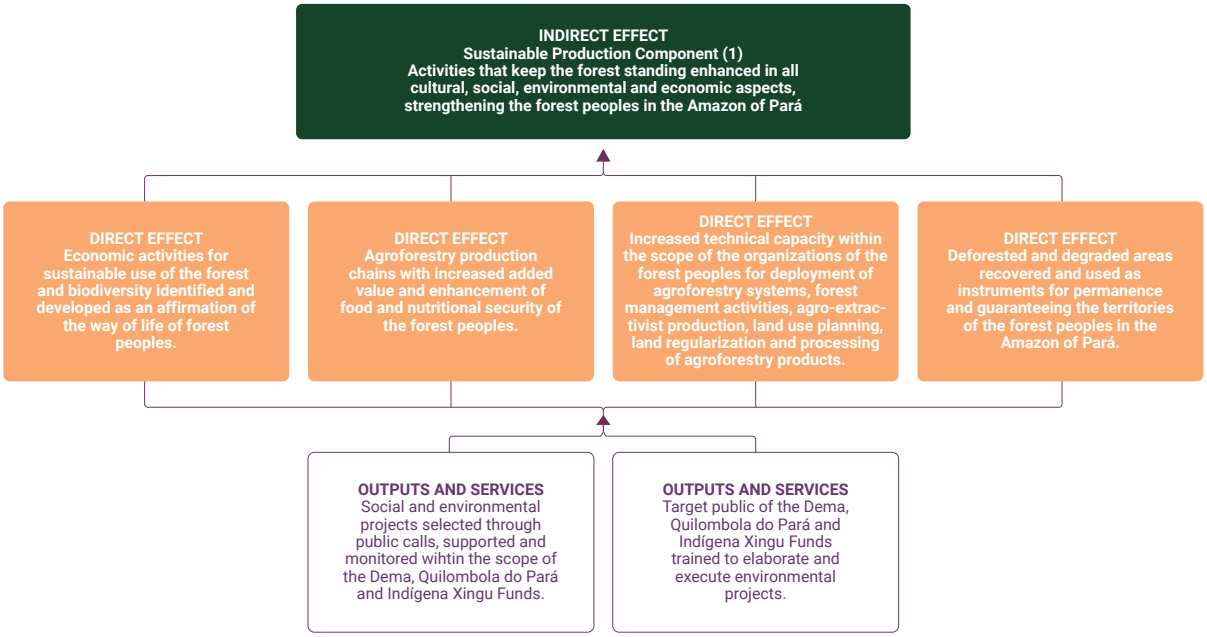
The sub-projects were classified in at least one of the following thematic areas: i. sustainable community forest management; ii. economic activities developed from sustainable forest use; iii. conservation and sustainable use of biodiversity; and iv. recovery of degraded areas.

The *Dema Fund* had as a differential the capacity to promote capillarity in the distribution of resources and their benefits in a vast territory in Pará, reaching economically vulnerable populations dedicated to sustainable productive activities of the Amazonian socio-biodiversity.

2. INTERVENTION LOGIC

In accordance with the procedures of the Amazon Fund in force at the time of implementation, a logical framework was agreed for the *Dema Fund project*: *Sustainable Use in the Amazon of Pará,* in line with the structure of the Amazon Fund's Logical Framework (Figure II).

Figure II: Logical Framework of the Dema Fund project

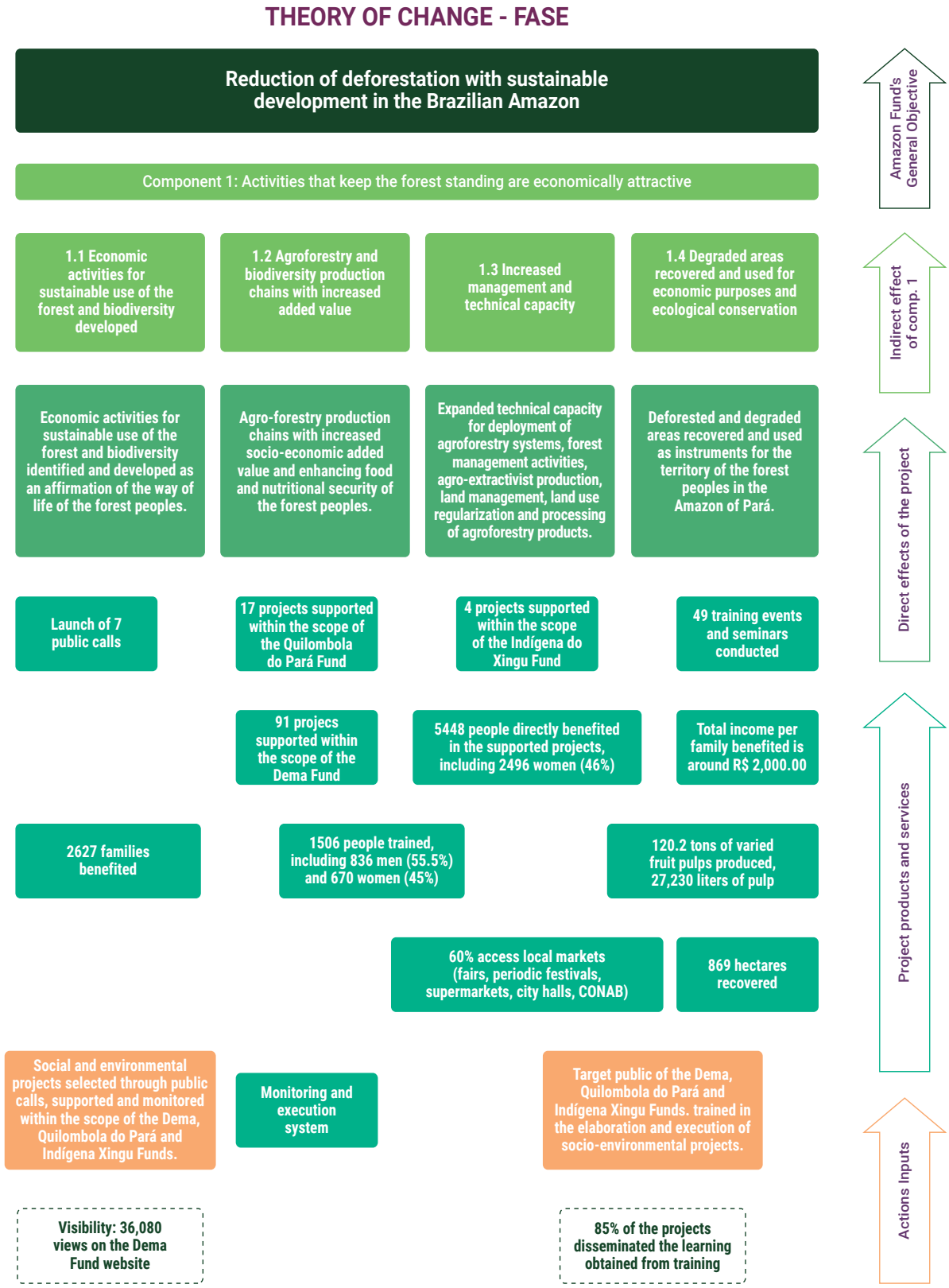


Source: Project page on the Amazon Fund website. (2023)

3. THEORY OF CHANGE

The schematic framework, which represents the theory of change of the Dema Fund project, was constructed taking into account the specific objectives of the Amazon Fund and the direct and indirect impacts of the project. In addition to these key concepts, elements, results and impacts considered fundamental in the analysis and understanding of the project were added. The chart in Figure III illustrates the main results of the project and effects at the level of impacts (or indirect effects) of the component and, to a greater extent, of the general objectives of the Amazon Fund.

Figure III: Schematic representation of the Theory of Change of the *Dema Fund* project.



Source: Own elaboration.

4. SPECIFIC METHODOLOGY

The methodology adopted for this evaluation of the *Dema Fund* project was exploratory interviews, analysis of secondary data, field mission for interviews and application of a virtual questionnaire for beneficiaries.[104]– The guiding questions that guided the interviews, as well as the list of interviewees, can be found in Appendix V and Appendix VI, respectively.

During the field mission, a meeting was held with the technical team of the *Dema Fund* in Belém, at the Fase headquarters, and interviews were conducted with representatives of some subprojects:

- in the Lower Tocantins region of Pará, in the municipality of Abaetetuba (Quilombola Association of Lower Caeté Africa and Laranjituba) (Figure IV);
- in the western region of Pará, on the Santarém plateau (Rural Family House, located in the Eixo Forte Extractive Settlement Project); and
- in the Lago Grande Agro-extractivist Settlement Project (PAE), on the banks of the Arapiuns River (Association of Artisans Association of Artisans of the communities of Nova Pedreira, Vista Alegre and Coroca do Rio Arapiuns – Aarta and the Association of Aproscipesq fishermen, in the Community of Coroca) (Figure V and Figure VI).

Figure IV: Roundtable discussion with the team of evaluators at the Quilombola Association of Lower Caeté Laranjituba and Africa, Abaetetuba-PA.

Source: Image captured by Juliana Passos de Mello during field mission in February 2023

104. Check out the questionnaire in Appendix II - Beneficiary Level Evaluation Questionnaire

Figure V: Galeria Aripó, point of sale of handicrafts manufactured by residents of different regions of the Arapiuns River, Santarém/PA

Authorship: Image captured by Artur Sgambatti Monteiro, during a field mission.

Figure VI: Tracajás and Amazonian Turtles hatchlings in a breeding site in the Coroca community, Arapiuns River, Santarém/PA.

Authorship: Image captured by Artur Sgambatti Monteiro during the field mission.

* After receiving turtle chicks from apprehension in the region, the community creates them as a tourist attraction.

5. EVALUATION OF RESULTS

Organizational Context

Created in 2003, the *Dema Fund* supports collective projects with traditional populations (indigenous, quilombolas, agro-extractivists, river dwellers, family farmers), with the aim of promoting socio-environmental appreciation, the protagonism of these populations

and the protection of the Amazon biome. The *Dema Fund* is based on respect for socio-biodiversity, the guarantee of human, economic, social, cultural and environmental rights, in order to ensure food and nutritional sovereignty, gender equity and respect for self-identity and cultural and religious diversity of peoples. The Federation of Agencies for Social and Educational Assistance (Fase) is part of a collective of social organizations that make up the Steering Committee in dialogue with public authorities and is the legal and administrative responsibility of the *Dema Fund*.

From a political point of view, the *Dema Fund* is part of several local, regional and national networks and articulations, such as the Xingu Vivo Para Sempre Movement, the Carta de Belém Group, the Permanent Campaign against Pesticides and for Life, the Brazilian Environmental Justice Network, the National Council of Extractive Populations (CNS) and the National Articulation of Agroecology (Ana), among others. In addition to being managed by a management committee, other instances are articulated by the *Dema Fund*, such as the formalization process of the Quilombola Mizizi Dudu Fund, the restructuring of the Xingu Indigenous Fund (FIX), and the creation of the Luzia Dorothy do Espírito Santo Autonomous Fund for Rural Women of the Amazon.

For the evaluation of the *Dema Fund: Sustainable Use in the Pará Amazon of Pará* project, presented below, the consolidated indicators were used in the project monitoring plan, agreed between the executors and the Amazon Fund team.

Indirect Effect: *Activities that keep the forest standing valued in its cultural, social, environmental and economic aspects, strengthening the forest peoples in the Amazon of Pará.*

The *Dema Fund* supported subprojects in 26 municipalities in Pará, a state that ranks first in deforested areas in the Brazilian Amazon, according to the latest update from Prodes/Inpe at the end of 2022. Taking as an example the BR-163, which connects Santarém to Cuiabá, and its confluence area with the BR-230 (Trans-Amazonian Highway), the region has high deforestation rates (Chart I). It is a region where livestock farming is still a lucrative activity, but which, little by little, is giving way to soybean cultivation, especially in the region of the Santarém plateau.

Chart I: Deforestation rates in the municipalities covered by the subprojects supported by the Dema Fund notices.

Municipality	State	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Altamira	PA	257,3	279,1	292,9	268,7	354,5	334,3	186,7	456,5	442,3	607,3	674,4	517,5
Novo Progresso	PA	51,8	65,3	164,4	108,5	215,4	126,0	46,3	221,9	184,2	388,2	342,8	212,1
Itaituba	PA	98,9	103,7	195,4	104,3	96,4	131,7	71,8	100,9	145,1	267,0	337,8	353,1
Uruará	PA	46,4	67,4	52,1	15,3	63,7	66,8	108,8	90,3	152,3	114,6	127,4	200,0
Placas	PA	44,4	99,7	23,5	55,4	102,9	67,1	102,0	103,7	103,7	82,2	132,8	144,7
Trairão	PA	49,3	42,9	44,6	44,4	26,2	38,9	83,5	59,2	108,7	75,0	115,4	114,3
Rurópolis	PA	42,2	42,0	18,7	36,9	33,8	27,9	45,9	53,7	101,8	83,7	155,3	119,4
Aveiro	PA	35,6	15,8	14,2	29,8	17,9	13,0	32,4	21,3	42,4	32,3	51,1	53,7
Porto de Moz	PA	19,8	20,4	15,8	20,6	22,9	20,9	15,0	35,7	37,7	28,6	47,8	41,5
Óbidos	PA	16,0	10,2	15,5	23,1	15,9	10,2	19,4	23,4	35,0	41,9	28,5	31,3
Monte Alegre	PA	10,9	15,1	9,3	15,5	13,7	23,8	36,8	12,4	24,7	31,8	36,9	37,9
Santarém	PA	11,1	7,2	5,9	11,4	24,1	6,9	28,1	14,7	20,3	15,4	15,7	83,4
Brasil Novo	PA	39,8	9,7	32,8	9,5	14,0	6,7	30,1	20,1	25,8	25,8	20,1	9,3
Oriximiná	PA	12,5	5,0	10,6	10,6	18,8	12,9	13,0	15,8	21,0	23,3	16,4	10,9
Cachoeira do Piriá	PA	24,6	3,1	4,6	10,3	13,4	9,3	21,0	18,8	22,1	24,7	13,3	
Viseu	PA	4,0	0,9	0,9	3,1	4,2	2,4	11,4	4,8	9,3	8,8	4,0	
Gurupá	PA	0,6	3,4	0,6	1,9	0,2	1,2	2,2	2,8	4,4	3,5	2,0	2,5
Capitão Poço	PA	9,5	0,6	1,1	1,2	1,2	1,1	1,9	1,5	1,6	1,0	2,3	
Irituia	PA	4,9	0,2	0,9	0,1	1,8	1,9	1,0	0,3	0,1	0,5	0,8	0,5
São Miguel do Guamá	PA	1,4	1,2	0,9	0,2	1,5	1,2	1,7	0,7	0,2	0,7	0,9	0,4
Concórdia do Pará	PA	0,7	0,6	0,6	0,3	0,5	0,2	3,3	0,5	0,3	0,8	0,4	0,3
Cametá	PA	1,5	0,5	0,4	0,3	0,3	0,4	1,3	1,0	0,1	0,5	0,3	0,4
Santa Izabel do Pará	PA	0,4	0,1	1,0	0,1	0,5	0,8	1,7	0,5		0,4	0,5	0,2
Mocajuba	PA	0,6	0,3	0,2	0,2		0,3	0,3	0,4	0,2	0,1	0,1	
Santa Luzia do Pará	PA	0,4			0,7			0,4	0,2	0,1	0,6		

Source: Terra Brasilis/Prodes/Inpe platform, data updated until 2022.

The environmental protection areas (APAs) and indigenous lands (ILs) that are located in this same area of influence, known as "Terra do Meio", suffer from illegal invasion, mining and logging processes. Several of the subprojects supported by the *Dema Fund* with the resources obtained from the Amazon Fund are inserted in this context. The *Dema Fund* acted in this disorderly scenario of land use supporting community organizations, in addition to being an active actor in exposing the problem with the supervisory bodies and the government.

Direct Effect 1 and 2: *"Economic activities of sustainable use of the forest and biodiversity identified and developed as an affirmation of the way of life of forest peoples" and "Chains of agroforestry products with socioeconomic added value, expanding and enhancing the food and nutritional security of forest peoples."*

- *In relation to the average income of families, the data available from the Dema Fund indicate that the production of the 1,031 families benefited generated, until June 2017, a total revenue of R$2,062,717.00. Based on the data collected on the value of production, the total income per beneficiary family was about R$2,000.00.*[105]

- *In relation to the revenue obtained, an amount of R$3,891,919.00 (calculation of November 2017) was recorded.*

- *Regarding production, 120.2 tons of various fruit pulps were produced (acai, acerola, pineapple, bana-*

105. External Evaluation Report/Dema Fund – Sustainable Use in the Amazon of Pará - 2011-2017.

na, buriti, cocoa, cupuaçu, soursop, mango, passion fruit, muruci), 27,230 liters of specific açaí pulp; 1,600 liters of andiroba, babassu, and Pará nut oils; more than 1,600 liters of copaiba; 1 ton of babassu mesocarp flour; 61.5 tons of fresh fruits, including 15.5 tons of Brazil nuts; 92,000 liters of cassava flour; 1.1 tons of bee honey and 9,784 liters of Melipona bee honey. (Figure VII)

- *Regarding insertion in the local market, among the projects that produce food, about 60% access local markets (fairs, periodic festivals, supermarkets, city halls, Companhia Nacional de Abastecimento – Conab).*

Figure VII: Demonstration area for the diffusion of beekeeping. Community of Coroca, Arapiuns River - Santarém-PA.

Source: Image captured by Juliana Passos de Mello during a field mission in February 2023.

Direct Effect 3: *Increased technical capacity for the implementation of agroforestry systems, forest management activities, agro-extractive production, territorial management, land regularization and processing of agroforestry products.*

- Throughout the project, 112 "small projects" aimed at the implementation of agroforestry systems; forest management; agro-extractive production; land management; land regularization and processing of agroforestry products were supported.

- Throughout the project, 3,981 trained people were registered, 2,211 men and 1,770 women. Of these, 71.3% of the trained people applied their knowledge. The dissemination of training learning to other families in the community occurred in 85% of the projects and, in 50%, this dissemination reached families in other surrounding communities. [106]

106. External Evaluation Report/Dema Fund – Sustainable Use in the Amazon of Pará - 2011-2017..

Direct Effect 4: *Deforested and degraded areas recovered and used as instruments of permanence and guarantee of the territories of the Forest peoples in the Amazon of Pará.*

- 869 hectares were recovered.

Indirect and Direct Effects

Socio-environmental projects selected through public calls, supported and monitored under the Dema Fund, the Quilombola Mizizi Dudu Fund of Pará and the Xingu Indigenous Fund. (Table I)

Table I: Relational indicators to projects selected through public calls

Indicator	Goal	Result	Achievement
Number of public calls launched	8	7	88%
Number of projects supported under the Dema Fund	156	91	58%
Number of families benefited by the projects	1,105	2,627	238%
Number of publications on lessons learned and impacts of supported projects	1	1	100%

Source: Own elaboration.

Target audience of the Dema Fund, Fundo Quilombola Mizizi Dudu do Pará and Fundo Indígena Xingu trained for the preparation and execution of socio-environmental projects (Table II)

Table II: Relational indicators to the target audience trained for the elaboration and execution of socio-environmental projects

Indicator	Goal	Result	Achievement
Number of training events and seminars held	40	49	123%
Number of people participating in capacity building events	533	1,018	191%

Source: Own elaboration.

6. OVERALL EVALUATION

Positive Aspects

- The *Dema Fund* supported local communities to organize and participate in events such as hearings, debates and protests. This helps communities engage directly in local and national decision-making, rather than getting the *Dema Fund* or other actors to speak on their behalf. It also plays a strategic role, funding projects that build capacity to develop long-term local solutions in communities.

- For social movement-based projects like the *Dema Fund,* articulating the value of flexible and holistic approaches when reporting results to donors is a challenge. The *Dema Fund* proved to be an effecti-ve aggregation project as it was an intermediary between large donors with high reporting standards

and small geographically remote groups in communities with no management experience.

- This successful experience can serve as a model for the various donor groups in other regions of the Amazon where there are institutional gaps, both in supporting the strengthening of community organizations and in the implementation and management of small-scale projects.

Challenges

- Difficulty in regularizing associations to comply with the rules of access to resources of the Amazon Fund. The communities supported by the *Dema Fund* have limited experience in articulating their priorities in a project format or in managing projects in a way that meets donor requirements on issues such as procurement.

- Volunteers from social movements help communities develop projects, support them in administration, and report through semi-annual accountability workshops. Finding capable volunteers is a critical challenge when the *Dema Fund* expands to new municipalities.

- As previously reported, the *Dema Fund* is incorporated into the administrative structure of the Fase. After 20 years of experience in project management, perhaps it would be interesting to reflect internally on making the *Dema Fund* an independent structure.

7. CONCLUSIONS AND LESSONS LEARNED

The *Dema Fund* supported 112 community projects, from seven public calls, benefiting 337 communities of family farmers, agro-extractivists, quilombolas and indigenous peoples from the regions of the Trans-Amazonian Highway/Xingu, BR 163, Baixo Amazonas and Northeast Pará. R$3.1 million was transferred to the organizations. The communities have responded to the themes of the public call and have shown that it is possible to carry out projects prepared together with the families involved, in accordance with their needs and interests, and with their protagonism in the actions and in the monitoring of the evolution of the projects.

The project was allied with partnerships to solve some technical difficulties with partnerships between community organizations, municipal public institutions, academia and managers of sustainable use conservation units benefited by the project.

8. ANALYSIS OF THE OECD EVALUATION CRITERIA

Evidence	Evaluation
Relevance Criterion	
The *Dema Fund*, using an external evaluation, was able to map several dimensions in terms of measuring the relevance of the project: i. the initiatives supported are concrete responses to the demands, needs and priorities of the forest peoples, contributing to an effective rooting of the Amazon Fund; ii. taken together, the initiatives demonstrate that food and nutritional awareness of populations is a strategic vector for environmental conservation; iii. small projects activated regional socioeconomic dynamics, increasing their sustainability and enhancing their socio-environmental effects; iv. full alignment of the project with the objectives of the Amazon Fund: the initiatives supported are directly aimed at preventing and combating deforestation and promoting the conservation and sustainable use of the forest.[107]	High relevance
Efficacy Criterion	
Increase in the average income of families benefiting from small projects with economic activities of sustainable use: R$2 thousand per family. Revenue obtained by families benefiting from small projects with economic activities of sustainable use: R$3.9 million. Insertion in the local market of agroforestry products resulting from small projects: 63% of production. Number of individuals trained in SAFs, forest management, agro-extractivist production, territory management, land regularization and processing of agroforestry products: 2,842. Areas recovered from the "small projects" supported by the *Dema Fund*: 886 hectares	Efficient
Efficiency Criterion	
The strengthening of ecological agriculture in the forest (agroecology), articulated with food and nutrition security, is being imposed in the Amazon as a counterpoint to deforestation. The *Dema Fund*, represented by the organizations that make up its Steering Committee, adhered to the conception of agroecology as a fundamental model of production and consumption developed by the Brazilian agroecological movement through the National Articulation of Agroecology (Ana). As such, it has been incorporating, in all notices and project calls, criteria to streamline the agroecological transition in the regions.	Demonstrated efficiency
Impact Criterion	
In the area of production, the experience of the *Dema Fund*'s support to communities has contributed to the constitution of a great diversity of productive practices, especially aimed at the adoption of new production technologies, soil care and pest control based on agroecology. At the same time, organizations have promoted the construction of new forms of commercialization of production with participation in fairs (community, municipal, regional) and participation in national event spaces. However, there is a need to expand the scale of this work, both through exchanges of experiences, strengthening the mechanisms that facilitate the commercialization of products and training of municipal managers, as well as in the formation of more dynamic articulations in the struggle for access to government policies and programs, such as the Food Purchase Program (PAA) and the National School Meals Program (PNAE), in addition to maintenance of roads and improvement in transport, which incorporate the production of communities.	Generated impact

107. External Evaluation/Dema Fund – Sustainable Use in the Amazon of Pará 2011-2017. November/2017..

Sustainability Criterion	
The results of the series of collective and community projects supported, with the participation of families and workers' organizations and public institutions, show the way of strengthening traditional peoples and communities, confirming their capacity to carry out activities in their own time and in the time of nature, and to provide adequate accounts of the projects supported by the Dema Fund. Indigenous peoples, quilombola communities, agro-extractivists, family farmers living around the forest, when encouraged to diversify their crops and develop new activities, or to recover ancestral practices on the sites, taking into account their specific interests and needs, respond with diversified production, with sustainable use of local resources. According to the general objective of the project, it is considered to be on the way to achieving the empowerment of the forest peoples through the conservation of the standing forest.	Demonstrates Sustainability

9. ANALYSIS OF THE CANCUN SAFEGUARDS

Criteria	Complies	Comments
Actions complementary to or consistent with the objectives of national forest programs and other relevant international conventions and agreements.	Yes	The communities supported (family farmers, agro-extractivists, quilombolas and indigenous peoples) have demonstrated that it is possible to combine sustainable and diversified agroecological food production with the conservation of standing forests, the recovery of degraded areas and the protection of permanent conservation areas such as river banks, streams and water sources.
Transparent and effective national forest governance structures, with a view to national sovereignty and legislation.	Yes	The supported initiatives contributed to Ibama's fire prevention program, with donations of hundreds of tree seedlings of native forest species from the Amazon. The project provided access to programs that enhance family farming, such as PAA and PNAE. Of the 112 projects supported, mainly in sustainable use conservation units such as extractive reserves, indigenous lands and quilombola communities, 28 initiatives involved the Chico Mendes Institute for Biodiversity Conservation (ICMBio), which was cited as a partner in 19 projects, and the Brazilian Institute for the Environment and Renewable Natural Resources (Ibama), which was cited as a partner in 9 projects. The project also supported the registration of small areas in the Rural Environmental Registry (CAR), which resulted in the registration of 327 properties in the BR-163 region and in the Baixo Amazonas Mesoregion.

Respect for the knowledge and rights of indigenous peoples and members of local communities, considering relevant international obligations, national circumstances and laws, and noting that the United Nations General Assembly has adopted the United Nations Declaration on the Rights of Indigenous Peoples.	Yes	The project falls within the framework of public policy development that empowers forest peoples based on agro-ecological principles and practices (including ancient traditional knowledge), in which their food and nutritional security is guaranteed through the production and commercialization of family agriculture, organic coexistence with forest life, and protection of the territory.
Full and effective participation of stakeholders, in particular indigenous peoples and local communities, in the actions referred to in paragraphs 70 and 72 of Decision 1/CP 16.	Yes	The expected results were achieved with the support of 112 community projects, from seven public calls, benefiting 337 communities of family farmers, agro-extractivists, quilombolas and indigenous peoples from the regions of Trans-Amazonian Highway/Xingu, BR 163, Baixo Amazonas and Northeast Pará with quilombola communities. The *Dema Fund* has improved its report archiving system, indicator system, communication plan and database, facilitating the systematization and dissemination of the results of the supported initiatives.
Actions consistent with the conservation of natural forests and biological diversity, ensuring that the measures referred to in paragraph 70 of Decision 1/CP 16 are not used for the conversion of natural forests, but rather to promote the protection and conservation of natural forests and their ecosystem services, and to enhance other social and environmental benefits.	Yes	At the end of the project, 662 hectares of degraded areas, springs and riverbanks were recovered with the implementation of agroforestry systems and the enrichment of backyards with the planting of more than 500,000 trees of diversified species of forest and fruit essences. As such, it has contributed to the maintenance of the standing forest, ensuring the strengthening of community organizations.
Actions to address the risks of reversals in REDD+ results.	N/A	N/A
Actions to reduce the displacement of carbon emissions to other areas.	N/A	N/A

10. ANALYSIS OF TRANSVERSAL CRITERIA

Poverty Reduction	**Evaluation**
The project strengthened food production through the recovery of degraded areas, forest management, forest and backyard enrichment. Income generation capacity followed the quantity produced, which showed gains mainly after the completion of the projects, with emphasis on native products, especially fruits and seeds. The project contributed to establishing good sustainable production practices with actions to prevent and combat fire. 44 projects (73.3%) produced food; of these, 64% (28 projects) market production in local markets. Services and other products, such as community-based tourism and small animal husbandry, among others, represented 21.7% (13 projects), of which 61.5% (8 projects) accessed local markets. In partnership with the public agencies responsible for the use, occupation and protection of the territories, such as ICMBio, Ibama and SEMA-PA, an agreement was reached on the licensing process for each type of territory and the cooperation of the agencies in the transmission of management plans. Six projects made management plans for native açaí groves and two projects focused on the use of fallen wood for furniture. In addition to the management plans, projects were supported to develop use plans and community fishing agreements in agro-extractivist settlements, in a sustainable development reserve (RDS) and in three quilombola communities.	Yes
Gender Equity	**Evaluation**
From the point of view of reducing gender inequalities, it is evident that, in the set of 112 initiatives supported, the participation of women was fundamental. They were in charge of most projects, coordinating activities and mobilizing the community. Of the total 5,448 people directly benefited in the projects supported, 46% were women (2,496 women). Globally, support was given to small agroecological food production projects. The theme 'agroecology' was a foundation for the gender approach. Support was given to activities carried out mainly by women, such as backyards enriched with SAFs, vegetable gardens and small animal husbandry. Women accounted for 46% of the total beneficiaries. There was support for the constitution of a Women's Fund within the *Dema Fund* itself, involving women's organizations from 19 different municipalities. Women participated in training and, using the agroecology approach, their role in reforestation, recovery and sustainable management activities was emphasized.	Yes

APPENDIX II - BENEFICIARY LEVEL EVALUATION QUESTIONNAIRE

THEMATIC AREA I - PRODUCTION AND FOOD AND NUTRITIONAL SECURITY

1. Which of the following activities were performed (multiple choice)?

a. Productive activities

b. Training

c. Institutional strengthening

d. Access to water

2. Please list the five (05) main products supported by the project (fresh or processed, including food, oils and resins, animal products and handicrafts).

3. As for the quality of the products, what are their main characteristics (multiple choice)?

a. Production without pesticides or chemical inputs

b. Appreciation of native products, especially fruits, including through cultural initiatives

c. Recovery of "disappearing" varieties

d. Changing eating habits

THEMATIC AREA II - MARKETING AND INCOME

4. How is the supported products and services marketed (multiple choice)?

a. Free fairs

b. Public procurement (PNAE and PAB/Former PAA)

c. Local markets

d. State markets

e. Domestic markets

f. International markets

g. Others

5. Were investments made in equipment and improvements?

a. Yes

b. No

6. If yes, please describe the main equipment and improvements purchased and/or modernized.

7. Were social technologies (such as community solidarity funds) introduced and/or used? * ***Social Technology** is the concept that describes the technological experiences carried out in interaction with the community and that aim, mainly, to seek solutions to social problems, as well as development and social inclusion.*

a. Yes

b. No

8. If yes, please describe the main social technologies introduced and/or used.

THEMATIC AREA III – TRAINING

9. Were training activities developed?

a. Yes

b. No

10. If so, how many?

11. How many people were trained?

12. Among the total number of trained people, how many were women?

13. Was there an exchange of learning from training with other families and/or individuals from other communities?

a. Yes

b. No

14. What were the topics covered in the training? (more than one answer is allowed)

a. Production (e.g. good management practices for açaí and other products, bee management, good irrigation practices)

b. Commercialization (e.g. public purchases, open market, sales applications, baskets)

c. Processing (e.g. good practices, use of equipment, health standards)

d. Recovery of degraded areas (e.g. agroforestry systems and production of native seedlings)

e. Services (e.g. workshops on community tourism, food handling)

f. Community organization (e.g. formation of associations and cooperatives)

g. Business management (e.g. community-based business management and project design and management)

h. Project management (e.g. project design and management, accountability and monitoring)

i. Others

THEMATIC AREA IV - RECOVERY OF DEGRADED AREAS

15. Which of the activities below were carried out aiming at the recovery of degraded areas?

a. Implementation of nurseries and nurseries for seedlings

b. Collection of native seeds

c. Seed exchange and maintenance of seed banks

d. Deployment of SAFs

e. Reforestation of PPA and LR (Permanent Preservation Areas and Legal Reserve)

16. How many hectares were recovered?

17. Was there enrichment of backyards?

a. Yes

b. No

18. If yes, what were the main species used (indicate medicinal, food and/or forest species)?

19. Do you consider that these activities supported forest conservation and protection?

a. Yes

b. No

20. If so, how did these activities support forest conservation and protection?

21. Do you consider suffering any type of environmental threat or pressure from your neighborhood/surroundings?

a. Yes

b. No

22. If so, what would be the main pressures suffered (multiple choice)?

a. Logging raids

b. Expansion of monocultures and dispersion of pesticides

c. Land grabbing

d. Overfishing

e. Deforestation for pasture

f. Burns

g. Large enterprises (mining, hydroelectric, ports and railways)

h. Mining

i. Biodiversity loss

j. Others

THEMATIC AREA V - TRANSVERSAL THEMES

23. How, in your opinion, did the project contribute to reducing poverty, social inclusion and improving the quality of life of beneficiaries?

24. Did the project bring scientific and technological development?

a. Yes

b. No

25. If so, how did it contribute to the construction of adequate development in the region?

26. How, in your opinion, was the participation of young people promoted and made possible in the activities of the project?

27. How, in your opinion, was the participation of women strengthened and made possible in the project activities (Examples: adequate schedules for women, places close to their homes, caregivers of children during training)?

28. Did women benefit from the project?

a. Yes

b. No

29. Could you please describe how women benefited from the project? (e.g. more and better access to ATER, financing, participation in training...)

30. Were women empowered throughout the project?

31. If they were empowered, what actions were taken considering their social environment?

FINAL COMMENTS

32. Do you have any comments about the project that have not been addressed so far? If yes, please comment below.

APPENDIX III - SUMMARY OF THE EVALUATION OF THE QUESTIONNAIRES APPLIED

From the two questionnaires fired for the subprojects supported by the *Dema Fund*, from the Federation of Agencies for Social and Educational Assistance (Fase) and *Small Eco-Social Projects in the Amazon – PPP-Ecos in the Amazon*, from the Society, Population and Nature Institute (ISPN), in February 2023, it was possible to receive 17 responses from the *PPP-Ecos* subprojects and 6 responses from the subprojects supported by the *Dema Fund*, totaling 19% and 5% of the total subprojects, respectively (or 10% of the 200 subprojects, considering the two initiatives together).

It is worth mentioning that the subprojects supported by both organizations are small projects, which received funds of up to R$90 thousand. Although only a portion of the subprojects answered the questionnaire, they represent practically all the areas of operation of the *PPP-Ecos* and the *Dema Fund* and focus on various activities, which enable a rich discussion on the impacts of the projects on the territories. The only region that was not represented in the questionnaire responses was BR-163. Chart I shows the number of projects by region where they are located..

Chart I: Subprojects supported by PPP-Ecos in the Amazon and Dema Fund participating in the survey questionnaire

Project	Region	Subprojects
Dema Fund	Lower Amazonas	3
	BR-163	0
	Northeast Pará	2
	Trans-Amazonian	1
PPP-Ecos	Maranhão	8
	Mato Grosso	5
	Tocantins	4

Source: Own elaboration

The 23 subprojects that answered the questionnaire were approved at different times and calls, representing the four calls by *PPP-Ecos in the Amazon* and three by the *Dema Fund*. The subprojects reported serving 1,246 families, with an average of 54 families per subproject. In particular, the sub-project "Bico do Papagaio Marketing Network" (TO), supported by PPP-Ecos, has benefited more than 200 families through various activities, such as a workshop on hygiene standards for handmade food products, meetings at local markets, advice on organizing agro-ecological fairs, advice on marketing, etc. 2,203 people

benefited from the subprojects, an average of 99 per project subproject. Another subproject supported by *PPP-Ecos* in Maranhão also presented relevant figures, reaching 500 people with a series of seminars and events on various productive activities and support for the holding a Family Farming Solidarity Economic Enterprises Fair.

1.THEMATIC AREA I - PRODUCTION AND FOOD AND NUTRITIONAL SECURITY

When discussing the nature of the activities conducted over the years of small projects, 18 of them (78%) said they had worked with productive issues, 21 (91%) with training, 17 (74%) with institutional strengthening activities and only 3 (13%) with water access projects. Within this context, the intervention logic of the subprojects is possible to mention some activities, such as:

- Improvement of production capacity through works for the physical improvement of agribusinesses and the purchase of equipment;
- Increased production and extraction of fresh productive inputs, fruits, honey, vegetables, etc.;
- Training in improvements in the processing of agro-extractivist products, health standards, processing, financial management, project writing, among others;
- Rural technical monitoring;
- Offering technical exchanges to exchange experiences;
- Production of seedlings for planting in agroforestry systems (SAFs) and recovery/strengthening of community gardens;
- Work aimed at land regularization;
- School reform for training young people from the countryside;
- Others.

As evidenced, 78% of the subprojects that answered the questionnaire said they work with sustainable production, contemplating in their activities an extensive list of products, and many of them consider the support received as fundamental for increasing production. The following are some products that had their chains impacted: miscellaneous handicrafts (various bio jewelry, handbags, wallets, etc.); garden products, such as various vegetables[108]; açaí and derived products (pulp, sweets, etc.); babassu and derived products (olive oil, ice cream, biscuit, mesocarp powder and flake); free-range chickens and eggs;

108. The following were mentioned in the survey: pumpkin, lettuce, peanuts, bananas, sweet potatoes, eggplant, chives, spring onions with parsley, coriander, cabbage, scarlet eggplant, corn, cucumber, okra, arugula and roselle, among others.

native seedlings; confectionery products (breads, cakes and biscuits); honey from African and Melipona bees and derived products (wax, pollen and propolis); jellies, jams and compotes; cassava and fruit pulp[109].

When asked about the main characteristics related to product quality, most respondents (77%) pointed to the *"appreciation of native products, including cultural initiatives" as their main attribute, followed by "production without pesticides or chemical inputs"* (69%) and the role that projects had in their own *"change in eating habits"* (58%). Only 38% of the projects considered that their activities influenced the *"recovery of varieties that were disappearing"*. Analyzing such data reveals a perception of the value of their cultural practices associated with native and organic products, as well as the fact that such practices are associated with the improvement in the beneficiaries' food relationship.

2. THEMATIC AREA II - MARKETING AND INCOME

To better understand the nature of commercialization, it is important to map possible production flow and sales routes. Six different categories were proposed: open markets, public procurement, local markets, state markets, national markets, international markets and festival sales. In addition to these, other categories were proposed by the respondents in order to fill gaps in the questionnaire. Among all the categories present in the answers, three were present for more than the target of the subprojects: 77% said they sell their products at open markets; 73% at local markets; and 50% for institutional procurement programs, such as the Food Purchase Program (PAA) and the National School Feeding Program (PNAE). Although few in number (with one or two answers), it was interesting to note that the subprojects proposed categories not initially present that show creative and decentralized mechanisms of commercialization. Categories such as: *"door-to-door"*, "social networks and orders", *"in the quilombo and neighboring communities"*, *"direct to the consumer" and "self-consumption"*.

When analyzing the respondent subprojects, 64% said they had received investments to acquire equipment and carry out works to improve their productive capacity, while 36% carried out activities of other natures. Among the main activities carried out in this context, it is important to mention some specific ones such as: the acquisition of various equipment for the production, processing and commercialization of products, implementation of irrigation and solar energy generation systems, vehicles, reforms in agribusinesses, among others.

Finally, it is worth mentioning that 76% of the subprojects supported said they had not developed social technologies in their projects. Those who recognize these practices in their work relate them to some specific activities, such as the use of collective labor for the construction of certain equipment and the management of backyards and SAFs, traditional production systems without the use of pesticides, and participatory systems to ensure organic compliance.

109. These fruits were mentioned in the survey: pineapple, acerola, bacuri, cashew, cupuaçu, guava, passion fruit, watermelon and yellow mombin.

3. THEMATIC AREA III - TRAINING

Only one institution said it had not included training activities in its subproject, and the others included quite varied actions (exchanges, workshops, seminars, among others) on key topics for organizations, such as community management, management of SAFs, marketing and processing. It is important to note that there was significant female participation in the training, with women representing 43% of the 1,451 people trained, as reported in the questionnaires (a total of 632 women). This means an average of 58 people trained per project in different subjects, 25 of whom were women. Here it is important to consider one of the projects supported by the Dema Fund, which had activities aimed at the regularization of land tenure through the Rural Environmental Registry (CAR) and pointed out that it had trained 410 people, 64 of them women (15%).

Finally, only 3 of the 26 initiatives (11%) reported that they had not engaged in technical exchanges with other similarly performing experiences. This point is important because it highlights the fact that several activities include the need for exchange of experiences, not only to learn, but also to share information learned throughout the project. The themes that were most recurrent in the training were related to production and management, improvement of good practices, recovery of degraded areas and implementation and management of SAFs. Only 4 (16%) said they had promoted training on management issues and project management.

> *The **PPP-Ecos has a super relevant importance for agroecology and in the Mearim region**, it has supported many initiatives that generate autonomy for family farmers.*
> *Beneficiary of PPP-Ecos*

4. THEMATIC AREA IV - RECOVERY OF DEGRADED AREAS

When analyzing the recovery of degraded areas in consortium with forest conservation, 13 subprojects (52%) said they worked with the implementation of SAFs while another 12 (48%) developed seedling breeding work in nurseries and nurseries. Despite being a much smaller number, 3 projects (12%) developed activities to exchange native seeds, showing concern for the socio-environmental and productive diversity of their products. It is interesting to note how the project practices combined production with the recovery of degraded areas in order to seek reforestation techniques with SAFs and enrichment with native species.

The projects indicated that they had jointly recovered 566 hectares with the implementation of SAFs, a number that represents an average of 22 hectares per project that answered the questionnaire. When considering that the maximum transfer value of both the Dema Fund and PPP-Ecos in the Amazon was R$90,000, this number gains importance, as it shows a great efficiency on the part of the subprojects. When considering that all projects have accessed the notices for the maximum amount (R$90 thousand) and that all resources have been allocated exclusively for the implementation

of SAFs, the amount of R$4 thousand per hectare would be reached[110]. As much as this indicator is subjective, it is interesting to note the efficiency and trend of low values related to the recovery of degraded areas by the supported subprojects.

Among the answers given, 68% of the subprojects (17) said that they had also enriched backyards with the support of the projects through the insertion of different species, both forest and fruit, medicinal and vegetable. It is worth mentioning that the productive diversity of the supported subprojects is enormous, especially when considering their geographical scope. As an example, only one project mentioned having enriched backyards with 22 species, namely: pineapple, açaí, acerola, anani, andiroba, bacuri, banana, Brazil nut, cashew, cupuaçu, façade, inajá, ingá, jutaí, mango, miriti, pau mulato, piquiá, peach palm, ucuuba, tucumã and urucum.

Of all 26 projects that responded to the survey, only 1 (3%) did not consider that their activities supported the conservation and protection of forests. This specific project developed agroforestry implementation activities in Mato Grosso with enrichment of backyards and intercropping with exotic and native fruit trees (cashew, guava, orange, lemon, Xingu pequi and others). All production was destined for self-consumption. The other projects (97%), all understood their activities as pertinent to forest conservation and point out some factors as of central importance, among them:

- Good management practices associated with reforestation with native species and soil protection ensure a good ecological functioning of the environment, diversify food and generate income for family farmers.
- Recovery of degraded areas near communities ensures income generation and promotes changes in community relations
- Training practices have strengthened the understanding of the importance of keeping the forest standing, both for its income-generating potential and for its role in ecological structuring.
- The improvement in rural producers' income linked to AFS products led to greater adherence to abandoned plantations and crops, helping to enrich the landscape and increase diversity.
- The recovery of degraded areas also helps to combat potential fires.
- The implementation of apiaries contributed positively to the pollination of native plant species, contributing to the maintenance and conservation of these species by promoting the increase of local socio-biodiversity.

Of the participating sub-projects, 88% (21) indicated that they suffer from some kind of threat or environmental pressure from their environment, which highlights and reinforces the importance of projects, initiatives and public policies that contribute to

110. According to Embrapa, the cost to implement one hectare of SAF in Acre was estimated at R$8,000. The value may vary, according to the model adopted and the region, depending on the need for services and inputs and the prices practiced in the different states (Agroforestry consortium increases income in extractive communities (canalrural.com.br).

their better structuring, income generation and institutional strengthening, aiming at greater autonomy and resilience of the organizations benefiting from the projects. The main pressures identified by the sub-projects are: deforestation for pasture (63%), slash-and-burn (54%), expansion of monocultures associated with the spread of pesticides (54%), and loss of biodiversity (46%). Other impacts felt are land grabbing, invasion of loggers, overfishing, mining and large enterprises (highways, ports, transmission lines and mining). One particular subproject stated that it suffers from problems with rearing pigs and loose buffalo.

Finally, it is important to mention that several sub-projects make up the contribution granted, which has been fundamental in better structuring the work of the associations and cooperatives supported. Some point to the need for continuity and an increase in the support given by the executing institution to the work developed, pointing to some problems related to the discontinuity of the project. Since these are small organizations with limited access to resources, continued support can be an important factor until they are able to reach a scale that allows for greater social and financial organization aimed at their emancipation from support systems. Many organizations acknowledge that resources have been limited and that their role has been to structure rather than solve problems, but they point to the need for new investment to continue and deepen the work. Many projects are aimed exclusively at the female audience, and the origin is often the only resource that these women have. Thinking of them as a potential factor of social emancipation is an important key to understanding their potential to improve the living conditions of these populations, as well as the sense of dignity and belonging that they receive when they are continuously supported. It was also pointed out the need for greater monitoring by licensing and inspection bodies, as many organizations cannot sell pulps and other products due to lack of environmental and sanitary licensing (as in the case of the Federal Inspection Seal).

As shown by the results of the questionnaire, the activities of the small projects allow a greater generation of income and increase the economic attractiveness of the activities developed, factors that allow the strengthening of food security and territorial governance in vulnerable regions, thus contributing to the objectives of reducing deforestation of the Amazon Fund. Therefore, the scenario of fragility and financial vulnerability that several of these communities and initiatives find themselves in is evident. As pointed out, environmental pressures are diverse in their territories, threatening the very continuity of their subsistence activities. It is therefore understood that the continuity of support through small projects to the social bases included in these territories is fundamental to protect the territories and strengthen the conservation of the Amazon and its vastness, but above all, it is key to allow a better structuring of marginalized social groups with great organizational and income-generating potential.

APPENDIX IV - GUIDING QUESTIONS

Interview script for Effectiveness Evaluation of four projects focusing on APS (Sustainable Production Activities) - Guiding Questions

Actors to be interviewed

- **Reca:** Leaders of the cooperative, leaders of the associations and/or members of the cooperative benefited and members of the Reca board.
- **Cooperacre:** Leaders of the cooperative, leaders of the associations and/or members of the cooperative benefited and professor at UFAC.
- **Fase:** Technical team of the Fase, technical team of the *Dema Fund*, leaders of the benefited associations, Union of Rural Workers, Farmers and Family Farmers of Santarém (STTR STM), beneficiaries in general, Malungu and Management Committee of the Dema Fund.
- **ISPN:** ISPN technical team, leaders of the benefited associations, Tijupá Agroecological Association and *PPP-Ecos* Steering Committee.

Objectives of the interviews

- Based on the specified criteria of the Organization for Economic Cooperation and Development (OECD), verify to what extent the projects were relevant, efficient, effective, sustainable and generated impacts.
- Identify the project's impact on Poverty Reduction and Gender Equity.
- Verification of compliance with the Cancún Safeguards agreed under the United Nations Framework Convention on Climate Change (UNFCCC) for Reducing Emissions from Deforestation and Forest Degradation (+ Conservation of forest carbon stocks, sustainable forest management and enhancement of forest carbon stocks) - REDD+.
- Analyze the strengths and weaknesses of project intervention, as well as identify challenges and lessons learned and generate recommendations.
- Identify, systematize and disseminate best practices for valuing the environmental asset and protecting the forest, identifying mechanisms for the sustainability of supported projects and subprojects.
- Check how the projects contributed to improving income and avoiding deforestation, as well as the actions that need to be improved to achieve this goal.

AREA 01 – Project Management (Agglutinating Entities)

a) What are the **strengths and weaknesses** of the project led by the agglutinating entity?

b) The main **difficulties and obstacles**, whether management or otherwise?

c) Were the **deadlines** stipulated for the execution of the project met? If not, why?

d) Were there **external factors that negatively influence** or hindered the execution of the project? What and how do they influence?

e) Was there good **capacity to manage** and execute project resources and activities?

f) In addition to the agglutinating entity, were the supported subprojects involved in management decisions and were they able **to monitor the use of resources**?

g) Did the project **reach men and women in a balanced way?** Was there a metric to measure impact by gender?

h) Was there a **delay in performing the actions?**

i) Were the actions, both of the project and its subprojects, well **planned and participatory**?

j) Is it possible to measure the success of the project in **recovered and/or protected areas (hectares)?**

k) How many people and **families were impacted** by the project?

l) How many **cooperatives were structured** with the support of agglutinating entity?

m) Are there **suggestions for improvements** in management, project monitoring and accountability to the Amazon Fund?

n) How many **professionals were trained?** Were women also empowered? In what proportion?

o) With the support of the Amazon Fund, what **studies were conducted?** Did women participate in these studies? With what responsibilities and activities?

p) Was there a direct impact on **indigenous people and quilombolas** specifically?

q) Was there **an improvement in the family income** of the populations impacted by the project? How was this measured?

r) Did the project work **satisfactorily?**

AREA 02 – Selection of agglutinated entities / subprojects

a) What are the **criteria used to select beneficiaries** of projects implemented?

b) Are there any **gender criteria for project selection?** What is the ratio of men to women selected?

c) Are there any **income criteria** for the selection of projects?

d) What are the **payoffs of the beneficiaries?** Was there a difference in the counterpart between men and women?

e) Was there a **mapping of** the **beneficiaries**' properties? Were differences found between male and female properties?

AREA 03 – Project Management (Agglutinated Entities and Subprojects)

a) Were the **deadlines stipulated** for the execution of the project met? If not, what reasons?

b) What is **the organization's capacity to manage and execute project resources?** Was there **participation of the supported groups** in the management of the projects and monitoring of the use of resources?

c) How did the **communication and agreements with the beneficiary** occur?

d) What mechanisms or instruments were used for the t**ransparency of the management and use of resources?**

e) What are the **production chains promoted with greater intensity?** Are ATER services provided?

f) What is the **participation of women in these chains** and in access to ATER (both receiving and offering)?

g) Was there **monitoring of cultural treatments?**

h) Is it possible **to scale changes between men and women in access** to policies, management practices and income with the implementation of SAFs?

i) Any criticisms or **suggestions for the implementation of SAFs?**

j) How many **structured cooperatives are in operation?** How is the participation of women?

k) Were **new cooperatives** created with the advent of the project?

l) What is the **participation of women in cooperatives?** Were there women's cooperatives? Did women have decision-making power?

m) Was there **a difference in support for men and women?**

n) What **improved in the cooperatives with the support of the project?** Was there a difference in the perception of improvement related to gender issues?

o) Were the **beneficiaries of the projects monitored regarding the implementation of the projects?** Were gender aspects considered in the monitoring? What about the criteria?

p) Was **deforestation on the property been monitored?** Was there a difference in deforestation between male and female properties?

q) Are there **suggestions for improvement for future actions to support cooperatives?** How can gender issues be considered in these improvements?

APPENDIX V - EVALUATION CRITERIA

The *Evaluation of Effectiveness of Projects of Sustainable Production Activities (APS) Supported through the Agglutinated/Agglutinating Entity and Public Call Modalities* followed the general guidelines provided for in *the document Conceptual Evaluation of Effectiveness of Projects Supported by the Amazon Fund* and in its said *Addendum to the Conceptual Framework for Thematic Evaluations* based on the following criteria:

- Criteria on the effectiveness of projects established by the Organization for Economic Cooperation and Development (OECD);
- Cancún Safeguards (REDD+); and
- Transversal for Poverty Reduction and Gender Equity.

The aforementioned guiding documents offer a framework of guiding questions for both individual projects (present in the *Conceptual Framework*) and some complementary questions on the overall impacts of projects (*Addendum to the Conceptual Framework*). Both the criteria and their guiding questions are presented systematized in an integrated way by criteria in the table below.

1. GUIDING QUESTIONS - OECD CRITERIA

The following are the OECD evaluation criteria on project effectiveness, as well as guiding questions. For these criteria, the *Conceptual Framework* and its *Addendum* present different and complementary questions that can be checked below.

Criteria	Guiding questions
Relevance	Definition: Evaluates the coherence of project objectives according to the demands of beneficiaries and the political priorities of target groups, the recipient and donors.
Effectiveness of overall impacts (Addendum)	• Did the projects contribute jointly and overall to the achievement of the Amazon Fund's objectives?
Effectiveness by project (Conceptual framework)	• To what extent are the project objectives still valid at the time of their completion? • Are the activities and immediate results of the project consistent with the achievement of the objectives defined for the project? • Are the activities and immediate results of the project consistent with the expected effects and impacts?
Effectiveness	Definition: Evaluates the extent to which direct project objectives have been achieved or are expected to be achieved and what factors were important.

Effectiveness of overall impacts (Addendum)	• What overall direct effects were met?
Effectiveness by project (Conceptual framework)	• Were the direct (specific) objectives of the project met or will they be met? • What are the main factors that influence compliance or noncompliance with direct (specific) objectives?
Efficiency	Definition: Measures the cost-benefit of results. Whether the financial resource was invested more economically and whether the results were achieved satisfactorily.
Effectiveness of overall impacts (Addendum)	• Does the cost-effectiveness of project activities maintain coherence between them?
Effectiveness by project (Conceptual framework)	• What is the cost-benefit ratio of the activities carried out? • The applied means are in a reasonable relationship with the results obtained? • Were the objectives achieved on time? • There are alternative ways to get the same results with less costs/ means?
Impact	Definition: Evaluates positive and negative changes arising from the project, directly or indirectly, intentional or involuntary.
Effectiveness of overall impacts (Addendum)	• What were the main overall effects of the projects? Were there overall impacts? Did they demonstrate scalability in the territory?
Effectiveness by project (Conceptual framework)	• What were the main changes generated as a result of the project? Describe and indicate the causes of the observed positive or negative effects, whether intentional or not. • What are the main effects achieved that contributed to achieving the goal? • What actions or events external to the project contributed to the achievement of the changes observed? • Did the project make any difference to the beneficiaries? • Does the project have scale in the region or influence other initiatives?
Sustainability ("Sustainability")	Definition: Evaluates whether the benefits of the project continue to occur after its term, with emphasis on social, economic and environmental aspects.
Effectiveness of overall impacts (Addendum)	• Are the overall effects achieved by projects lasting? Was sustainability achieved?
Effectiveness by project (Conceptual framework)	• To what extent do the benefits of the project last after the end of the financing of the Amazon Fund? • What were the main factors that influenced the scope or not of the project's sustainability? • What risks should be monitored to ensure sustainability is achieved?

2. GUIDING QUESTIONS - CANCUN SAFEGUARDS

The following lists the Cancun Safeguards as well as your guiding questions.

1. Actions complementary to or consistent with the objectives of national forest programs and other relevant international conventions and agreements.	• Have the projects been aligned with the Plan for the Prevention and Control of Deforestation in the Brazilian Amazon (PPCDAm) and the state plans for the prevention and control of deforestation? • What other federal public policies or international agreements have the projects demonstrated alignment? In which aspects? • Did the projects contribute or have the potential to contribute directly or indirectly to reducing emissions from deforestation and forest degradation? In what way?
2. Transparent and effective national forest governance structures, with a view to national sovereignty and legislation.	• To what extent did the projects promote articulation between various actors (public sector, private sector, third sector or local communities)? Was the use of shared governance facilities made? Which ones? • To what extent have the projects contributed to strengthening public instruments and forest and land-use planning processes?
3. Respect for the knowledge and rights of indigenous peoples and members of local communities, considering relevant international obligations, national circumstances and laws, and noting that the United Nations General Assembly has adopted the United Nations Declaration on the Rights of Indigenous Peoples.	To what extent did the projects influence the constitutional rights associated with the formal possession and destination of land in their area of operation? • To what extent did the projects influence the sustainable use of natural resources in their area of operation? • If the projects were directly benefited by indigenous peoples, traditional communities or family farmers: were their socio-cultural systems and traditional knowledge considered and respected throughout the projects? • Are there effects that interfere with the traditional way of life of these groups? What kind of effects: on social, economic organization or the use of available spaces and resources? How do they interfere: positively, negatively, or both?
4. Full and effective participation of stakeholders, in particular indigenous peoples and local communities, in the actions referred to in paragraphs 70 and 72 of Decision 1/CP 16.	• How did the projects ensure prior, free and informed consent, and the local or traditional way of choosing the representatives of their beneficiaries (especially indigenous peoples and traditional communities)? • What participatory planning and management instruments did the projects apply during decision making? • In the case of projects with economic purposes: were any benefits arising from the projects accessed in a fair, transparent and equitable manner by the beneficiaries, avoiding a concentration of resources? • To what extent did the projects provide the public in general and their beneficiaries with free access and easy understanding of information related to project actions? • Were the projects able to put together a good system for monitoring results and impacts? Did the projects systematically monitor and disseminate the results achieved and their effects?

5. Actions consistent with the conservation of natural forests and biological diversity, ensuring that the measures referred to in paragraph 70 of Decision 1/CP 16 are not used for the conversion of natural forests, but rather to promote the protection and conservation of natural forests and their ecosystem services, and to enhance other social and environmental benefits.	• How did the projects contribute to the expansion or consolidation of protected areas? • How did they contribute to the recovery of deforested or degraded areas? • In case of restoration and reforestation activities of areas, did the methodologies used prioritize native species? • To what extent did the projects contribute to establishing recovery models with emphasis on economic use?
6. Actions to address the risks of reversals in REDD+ results	• What factors pose risks to the permanence of REDD+ results? How did the projects approach them? • Is there a continuous monitoring strategy for these results?
7. Actions to reduce the displacement of carbon emissions to other areas.	• Was there a displacement of emissions avoided by project actions to other areas?

3. GUIDING QUESTIONS - TRANSVERSAL CRITERIA

The following are the transversal criteria as well as their guiding questions.

Criterion	**Guiding questions**
Poverty reduction	Definition: Evaluates the coherence of project objectives according to the demands of beneficiaries and the political priorities of target groups, the recipient and donors.
Effectiveness of overall impacts (Addendum)	• In what ways did the projects have an overall influence on poverty reduction, social inclusion and improvement in the living conditions of the beneficiaries living in their areas of activity?

Effectiveness by project (Conceptual framework)	• To what extent did the project effectively contribute to economic alternatives that value the standing forest and the sustainable use of natural resources? • To what extent did the project positively influence poverty reduction, social inclusion and improvement of the living conditions of beneficiaries (mainly: traditional communities, settlers and family farmers) living in your area of activity? • Was the project able to promote and increase the production in value chains of timber and non-timber forest products, originated in sustainable management? • In the case of a project with a scientific and technological development component, did it contribute to the construction of a development model appropriate to the region?
Gender equity	Definition: Evaluates the extent to which direct project objectives have been achieved or are expected to be achieved and what factors were important.
Effectiveness of overall impacts (Addendum)	• Did the project produce overall results and impacts on gender issues? How and what overall results can be observed?
Effectiveness by project (Conceptual framework)	• Was the project able to integrate gender issues into its strategies and interventions or did it address the issue in isolation? How? • Was there gender separation in data collection for project planning and monitoring? • How did the project contribute to gender equity?

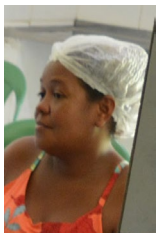
APPENDIX VI – LIST OF PEOPLE INTERVIEWED

RECA – Materialize Project					
Photo	**Nome**	**Organization**	**Title**	**Date**	**Location**
	Taysa Macedo	Reca	Technical Sector Coordinator	01/23 to 01/25/2023	Porto Velho, Nova Califórnia/ RO
	Hamilton Condack de Oliveira	Reca	President	**01/24/2023**	Porto Velho, Nova Califórnia/ RO
	Gicarlos Souza de Lima	Reca	Commercial Manager	**01/24/2023**	Porto Velho, Nova Califórnia/ RO
	Silvana de Souza Lopes	Reca	Member Farmer	**01/23/2023**	Porto Velho, Nova Califórnia/ RO
	Marcelo Santana Machado	Reca	Member Farmer	01/25/2023	Porto Velho, Nova Califórnia/ RO

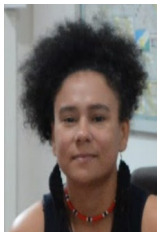
	Janiele Berkembok	Reca	Member Farmer	01/25/2023	Porto Velho, Nova Califórnia/ RO
Sem foto	Sérgio Roberto Lopes	Reca	Board Member	02/03/2023	On-line

Cooperacre – Strengthening the Forest Based Sustainable Economy					
Photo	**Name**	**Organization**	**Title**	**Date**	**Location**
	Raimundo da Silva	Cooperacre	Vice President	**01/26/2023**	Rio Branco/AC
	Francisco Weverton Oliveira	Cooperacre	Technical Coordinator	01/26 to 01/28/2023	Rio Branco, Epitaciolândia e Xapuri/AC
	Severino da Silva Brito (apelido Silvio)	Associação Wilson Pinheiro	Former President	**01/27/2023**	Epitaciolândia/AC
	Sebastião	Cooperacre and Cooperxapuri	Member of Cooperacre's board of directors and President of Cooperxapuri	**01/27/2023**	Xapuri/AC
No photo	Prof. Marco Amaro	Federal University of Acre	Professor	**02/07/2023**	On-line

ISPN – PPP-Ecos in the Amazon Project					
Photo	**Name**	**Organization**	**Cargo**	**Data**	**Local**
No photo	Rodrigo Noleto	ISPN	Coordinator	**02/16/2023**	On-line

	Juliana Napolitano	ISPN	Technical Advisor	02/08 to 02/10/2023	Several municipalities in MA
	Fábio Pierre Sourcele Pacheco	Tijupá	Coordination	02/08/2023	São Luís/MA
	Martha Cristina Conde de A. Costa		Technical Advisor	02/08/2023	São Luís/MA
	Maria José Boa Vida Silva	Associação de Mulheres Plantando Resistência	President	**02/09/2023**	Rosário/MA
	Luciana Sousa Gomes	Associação de Mulheres Plantando Resistência	Member	**02/09/2023**	Rosário/MA
	Raimunda	Associação de Mulheres Plantando Resistência	Member	**02/09/2023**	Rosário/MA

	Eide Maria Martins	Cooperativa do Quilombo de São Miguel	Former President	**02/09/2023**	Rosário/MA
	Cafuso	Cooperativa do Quilombo de São Miguel	President	**02/09/2023**	Rosário/MA
	Roselia de Jesus Licar Corrêa	Pedrinhas Clube de Mães	Former President	**02/10/2023**	Itapecuru-Mirim/ MA
	Heloisa dos Santos Matos	Pedrinhas Clube de Mães	Treasurer	**02/10/2023**	Itapecuru-Mirim/ MA
	João da Cruz dos Santos	Quilombo Cantagalo	President	**02/10/2023**	Itapecuru-Mirim/ MA
	Maria do Livramento	Quilombo Cantagalo	Member	**02/10/2023**	Itapecuru-Mirim/ MA

Fase – Dema Fund Project					
Photo	**Name**	**Organization**	**Title**	**Date**	**Location**
	Lourenço Bezerra Lima	Fase	Educator	02/13/2023	Abaetetuba/PA
	Leocádia de Oliveira	AQUIBAC – Associação Quilombola Laranjituba e África	President	02/13/2023	Abaetetuba/PA
	José Maria do Carmo	AQUIBAC – Associação Quilombola Laranjituba e África	Secretary	02/13/2023	Abaetetuba/PA
	Salomão da Costa Gomes	Malungo	Secretary	02/13/2023	Abaetetuba/PA
	Maria da Graça Costa	Fase	Member of the management committee of the Dema Fund	02/14/2023	Belém/PA
	Vânia Regina Vieira de Carvalho	Fase	Educator of the Dema Fund	02/14/2023	Belém/PA
	Simy de Almeida Corrêa	Fase	Executive Coordinator of the Dema Fund	02/14/2023	Belém/PA

	Jaime Luiz da Cunha Mendes	Fase	Educator	02/14 and 02/15/2023	Santarém/PA
	Maria José F. Alves	Casa Familiar Rural de Santarém	Pedagogical Coordinator	02/14/2023	Santarém/PA
	Luzenira Carvalho Vascon-celos	Casa Familiar Rural de Santarém	Educator	02/14/2023	Santarém/PA
	Maria Nilda Guimarães Pereira	APRUCIPESC and AARTA	General Director	02/15/2023	Rio Arapiuns, Santarém/PA
	Odenildo Guimarães Pereira	APRUCIPESC	President	02/15/2023	Rio Arapiuns, Santarém/PA
	Luziete da Silva Corrêa	APRUCIPESC	2nd President	02/15/2023	Rio Arapiuns, Santarém/PA

APPENDIX VII – TERMS OF REFERENCE (TOR)

Project:	Cooperation with the Amazon Fund/BNDES
PN:	15.2132.7-002.00
Output + activity:	3 + 3.5
Technician responsible:	Ester Gomila
Objective:	Evaluate the effectiveness of four projects focused on Sustainable Production Activities (APS) supported through the agglutinating modalities and public calls carried out with partners under the Amazon Fund/BNDES

Effectiveness evaluation of four projects focused on Sustainable Production Activities (APS) supported through the agglutinating modalities and public calls carried out with partners under the Amazon Fund/BNDES

INTRODUCTION

Within the scope of the cooperation project between Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH (GIZ) and the National Bank for Economic and Social Development (BNDES)/Amazon Fund, one of the actions supported by GIZ is the evaluation of the ex-post effectiveness of the projects, with the objective of giving visibility to the results and lessons learned from these projects, in addition to promoting the institutional learning of the Amazon Fund itself (FA). Furthermore, the evaluation of closed projects is a demand by donors and international cooperation actors for monitoring and evaluation actions, through an external and independent evaluation.

To date, evaluations have been carried out on 28 completed projects whose results are publicly available on the Amazon Fund's website[111]. Furthermore, in 2019, a mid-term evaluation of the effectiveness of the Amazon Fund was carried out, covering the period from 2008 to 2018. The evaluation was carried out by a team of independent consultants, with the technical coordination of the United Nations Economic Commission for Latin America and the Caribbean (ECLAC). Concomitant to the evaluation, two complementary thematic studies were prepared, which served as subsidies for the evaluation, being one study dedicated to the distribution of benefits from the Amazon Fund and another, dedicated to the Rural Environmental Registry (CAR) projects supported by the Amazon Fund.

111. Available at: http://www.fundoamazonia.gov.br/pt/monitoramento-e-avaliacao/avaliacoes-externas/

The next projects to be evaluated, under these Terms of Reference (ToR), fall under the "Sustainable Production" component (1) of the Amazon Fund's Logical Framework[112]. This will be the second thematic evaluation focused on Sustainable Production Activities (APS)[113], and will exclusively cover projects supported in the agglutinating modalities and public calls carried out with partners under the Amazon Fund/BNDES.

In the agglutinating modality, the institution responsible to the Amazon Fund/BNDES for the implementation of the project coordinates an integrated arrangement of subprojects from other organizations, called agglutinated entities, aimed at the development of value chains based on the sustainable use of natural resources.

The Amazon Fund/BNDES also supports partner institutions to promote public calls for projects, as long as they prove experience, knowledge and operational capacity to provide quality and scale to public calls.

The four projects to be evaluated are:

- Strengthening the Forest Based Sustainable Economy - Cooperacre;
- Dema Fund - FASE;
- Small Eco-Social Projects in the Amazon - ISPN;
- Materialize - RECA.

The objective of these ToR is to evaluate the effectiveness of these projects supported in these two modalities that instrumentalize the indirect support of the Amazon Fund/BNDES, that is, of projects that in turn supported proposals related to the APS theme implemented by other organizations.

The four projects will be evaluated jointly and thematically in order to increase the efficiency of the evaluation, broaden the understanding of the results and impacts achieved, especially the overall impact of the projects, and generate recommendations and lessons learned from the actors involved in the scope of the APS projects that aim to promote the expansion of the scale of support of the Amazon Fund, the capillarization of access to its resources by smaller institutions, and the promotion of synergies between the various actors operating in the socio-biodiversity value chains.

112. In 2021, a first thematic evaluation of five projects that fell under component 1 – Sustainable Production (APS 1) was carried out. The report of this evaluation is available here. The results of the APS 1 evaluation will be considered in this evaluation (APS 2) with regard to the observances and learnings in relation to component 1..

113. Available at: http://www.fundoamazonia.gov.br/pt/monitoramento-e-avaliacao/avaliacoes-externas/

1.1 CONTEXT OF THE PROJECTS

Sustainable production chains in the Brazilian Amazon have gained increasing relevance with the growth in terms of volume and value of their products in the market (especially for the bioeconomy) and in terms of importance for the traditional communities that produce them, but they also still face barriers to their integration into the formal economy.

These barriers include the great distances between producers and the main consumer markets, high transportation costs, poor storage infrastructure, lack of understanding of the regulations and laws that govern production and marketing in these chains, difficulty in accessing initial capital and efficient administrative management, lack of human resource skills, and lack of access to technologies and information to improve planting techniques, management, processing, storage, quality control, among others. These difficulties are compounded by the environmental pressures of deforestation that affect the region, making it even more important to develop activities that preserve the forest.

Therefore, different approaches have been developed to support projects that strengthen the sustainable production chain that keeps the forest standing, being the subject of these ToR the modalities of agglutating projects and partners that promote public calls, in which the project supported - in this case by the Amazon Fund/BNDES - in turn supports smaller projects, organizations, associations or cooperatives, either through direct actions or through the transfer of resources and/or goods.

Of the four projects supported and object of this evaluation, two are agglutinative projects (RECA and Cooperacre), that is, projects that supported the agglutinated associations or cooperatives with direct actions, such as equipment acquisition, logistical support, processing and marketing, and the other two (FASE and ISPN), which through public calls in turn selected organizations that were granted support predominantly in the form of funds. Therefore, it was expected that by supporting one project, it would be possible to reach a much larger number of smaller projects that, because of their smaller size, would not be able to meet the requirements to receive direct support from the Fund, but are just as important as the larger ones in contributing to the achievement of the Amazon Fund's objectives.

Thus, analyzing these projects, it is expected, in the evaluation, to realize that the strengthening of sustainable productive activities through third sector institutions and with this type of approach contributed to the general objective of the Amazon Fund, to reduce deforestation through the sustainable development of the Brazilian Amazon.

1.2 SUMMARY OF THE PROJECTS

Project title	Implementing institution	Period	Value of support from the Amazon Fund	Objective
Strengthening the Forest Based Sustainable Economy	Central Cooperative for Extractive Marketing of Acre (Cooperacre)	2014 to 2022	R$ 4.981.614,66	Contribute to the strengthening of the Brazil nut and fruit pulp chains in the state of Acre by: (i) recovering degraded and/ or altered areas located in small farms or family farms; (ii) optimizing the logistics of storage of Brazil nuts and fruit transport; (iii) improving the processing process of Brazil nuts; (iv) adding value and diversifying products; (v) improving the marketing strategy of products; and (vi) training the affiliate network.
Dema Fund	Federation of Agencies for Social and Educational Assistance (FASE)	2011 to 2021	R$ 6.601.699,07	Support socio-environmental projects of small value, located in the state of Pará, focusing on the area of influence of the Trans-Amazonian Highway and BR-163 highways and in the Baixo Amazonas region, through public calls.
Small Eco-Social Projects in the Amazon	Society, Population and Nature Institute (ISPN)	2012 to 2020	R$ 12.814.691,38	Launch of four public tenders for the selection and financing of small-scale socio-environmental projects for family farmers, traditional peoples and communities in areas of the Amazon biome in the states of Mato Grosso, Tocantins and Maranhão.
Materialize	Association of Small Agro-farmers in the Reca Project (RECA)	2014 - 2020	R$ 6.422.748,00	Strengthening the production chain of cupuaçu, açaí, vegetable oils and peach palm through the implementation of agroforestry systems (SAFs), the expansion and modernization of the production capacity of the pulp processing units and the restructuring of the vegetable oil processing unit and the nut and seed storage shed in the traditional communities of Ponta do Abunã, in order to provide a sustainable economic alternative to deforestation.

1.3 MAIN RESULTS OF THE PROJECTS

Project	Results
Strengthening the Forest Based Sustainable Economy - Cooperacre	• Revenue obtained from the sale of Brazil nuts and fresh fruits. Result: R$20.1 million; • Revenue obtained from the sale of Brazil nuts and processed fruits. Result: R$34.9 million; • number of fresh product storage structures built. Goal: 2 - Result: 2; • number of individuals trained in sustainable management and production techniques. Goal: 180 - Result: 293; • number of individuals trained in sustainable management and production techniques effectively using the knowledge acquired. Result: 219; • number of new communities certified in organic production of Brazil nuts. Goal: 7 - Result: 7; • number of communities with renewed certification in organic production of Brazil nuts. Goal: 7 - Result: 7; • area (ha) of SAFs deployed. Goal: 600 ha - Result: 602.5 ha; • number of properties with SAFs implemented. Goal: 291 - Result: 291; • Acquisition of various pieces of equipment; • Construction of two community warehouses with capacity to store 15 tons of Brazil nuts in Epitaciolândia and Xapuri; • Strengthening the organic certification of Brazil nuts; • Carrying out a foreign market study that brought the necessary inputs for Cooperacre to export its products; • Conducting 30 training courses in administrative and financial management (15) and agroforestry training (15); • Conducting six agroforestry exchanges; • Implementation of 602 hectares of agroforestry systems (SAFs).
Dema Fund - Fase	• Average income of families benefited by small projects with economic activities of sustainable uses. Result: R$2,000 per family; • Revenue obtained by families benefited by small projects with economic activities of sustainable uses. Result: R$3.9 million. • Insertion in the local market of agroforestry products resulting from small projects. Result: 63% of production. • Number of individuals trained in SAFs, forest management, agro-extractivist production, territory management, land regularization and processing of agroforestry products. Result: 2,842. • Areas recovered from the "small projects" supported by the Dema Fund. Result: 886 hectares.

Small Eco-Social Projects in the Amazon - ISPN	• Revenue obtained from economic activities of sustainable use. Goal: R$1,500/year per family - Result: R$2,400/year per family. • Number of projects supported under the PPP-Ecos in the Amazon. Goal: 160 - Result: 88. • Recovered area in use for economic purposes. Goal: 1,000 hectares - Result: 1,981. • Area recovered for environmental conservation and/or environmental regularization purposes - regeneration in progress. Goal: not define - Result: 1,018. • Number of families benefited by the projects. Goal: 1,500 families - Result: 3,046 families. • Number of training workshops in eco-social project management. Goal: 8 - Result: 17. • Number of individuals trained effectively using the knowledge acquired. Goal: 200 - Result: 5,072.
Materialize - Reca	• Revenue obtained by COOPER-RECA from the economic activities of sustainable use supported by the project, broken down by product. • Vegetable oils: R$1.5 MM. • Cupuaçu: R$1.3 MM. • Açaí: R$632 thousand. • Peach palm: R$341 thousand. • Brazil nuts: R$589 thousand. • Number of storage structures for fresh and processed products implemented. Goal: 3 - Result: 3. • Number of renovated or expanded beneficiation structures. Goal: 3 - Result achieved: 2. • Number of individuals trained to implement SAFs and adopt good practices for the production and storage of socio-biodiversity products specified by gender. Goal: 120 men and 50 women - Result: 353 men and 90 women. • Number of leaders trained in project management, participatory governance and marketing strategies specified by gender. Goal: 35 men and 15 women - Result achieved: 74 men and 44 women. • Area of SAFs implemented. Goal: 300 ha - Result achieved: 315.2 ha. • Area of forest directly managed as a result of the project. Goal: 3,230 ha - Result achieved: 6,867 ha.

2. EVALUATION OBJECTIVES

The main objective of this thematic effectiveness evaluation is to measure the results and impacts achieved by the projects and their effects, considering the relevance, efficiency, effectiveness and sustainability of the changes generated by the four APS projects under the Amazon Fund/BNDES.

All projects supported by the Amazon Fund follow an individualized logical framework in which results (products and services to be delivered or outputs), direct effects of the intervention (specific objectives or outcomes) and indirect effects (general objectives or impacts) to be achieved are defined. This is the project's intervention logic, also called theory of change, because it represents a model of thinking that explains how the project is expected to bring about a desired change. The logical frameworks of the projects can

be viewed in topic 3.2 or on the Amazon Fund website.

The specific objectives of this evaluation are to:

- Assist the Amazon Fund in reporting to its donors on the type of project supported and its effects, especially with regard to its impacts after the completion of the project;
- Enable the institutional learning of the Fund itself, contributing to improve the quality of projects and prioritization of investments, thus subsidizing decision-making;
- Verify compliance, by projects supported by the Amazon Fund, with the Cancun Safeguards agreed under the UNFCCC for Reducing Emissions from Deforestation and Forest Degradation (REDD+), as well as with the Transversal Criteria of Poverty Reduction and Gender Equity;
- Analyze the strengths and weaknesses of project intervention;
- To verify to what extent the project is relevant, efficient, effective, sustainable and generates impacts (OECD criteria);
- Evaluate the effectiveness of support from the Amazon Fund in relation to support for sustainable productive activities projects;
- Identify challenges and lessons learned, as well as generate recommendations, which can even serve for national and international dissemination.

2.1 TASK DESCRIPTION: OBJECT AND FOCUS OF THE EVALUATION

To achieve the objectives identified in the previous topic, the target projects of this evaluation, implemented between 2011 and 2022, will be observed, focusing on the intervention areas of the projects and on the observation of their direct and indirect effects presented in the objectives diagrams in topic 3.2.

Thus, the following overall results should be observed:

- Contributions to the implementation and strengthening of sustainable production chains for the standing forest;
- Implementation of agroforestry systems (SAF);
- Recovery of degraded areas with economic attractiveness (in ha);
- Value addition and income generation with the objective of conservation and maintenance of the standing forest;
- Overall impacts on beneficiaries;
- Development of capacities for sustainable production actions with appreciation of the forest;

- Coordination and articulation of relevant partnerships to strengthen sustainable production chains as well as in the formation of producer networks.

In addition, it is fundamental and key to consider the following:

- Analysis of the different models of binders /binders in APS;
- Overall impacts generated based on the agglutinating model.

2.2 INTERVENTION LOGIC

The logical frameworks of the projects to be evaluated and their respective objectives diagrams, which present the indirect, direct effects and products and services of each one, facilitating visualization for monitoring and evaluation. The objectives diagram of the projects to be evaluated are shown below.

Logical Framework of the evaluated projects:

Figure 17 - "Strengthening the Forest Based Sustainable Economy" Project Objectives Diagram - Cooperacre

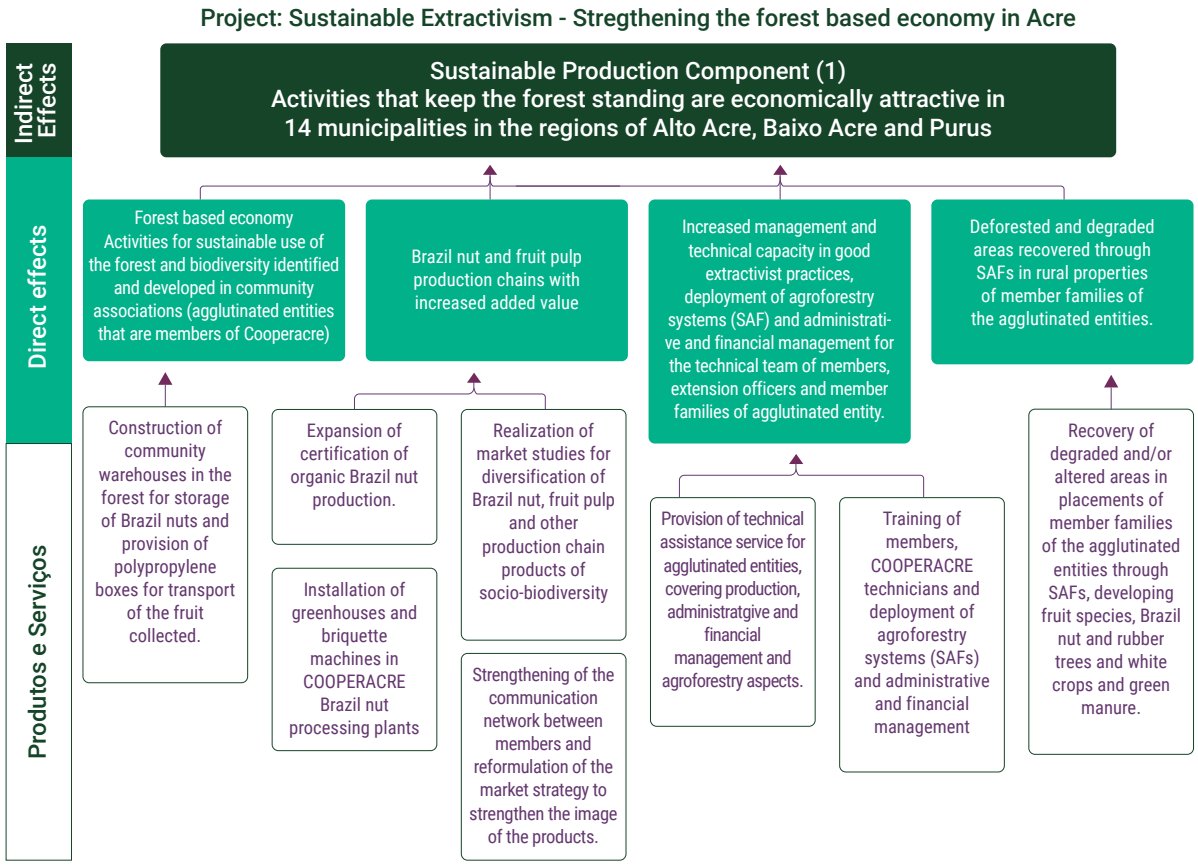


Figure 18 - “Dema Fund” Project Objectives Diagram - FASE

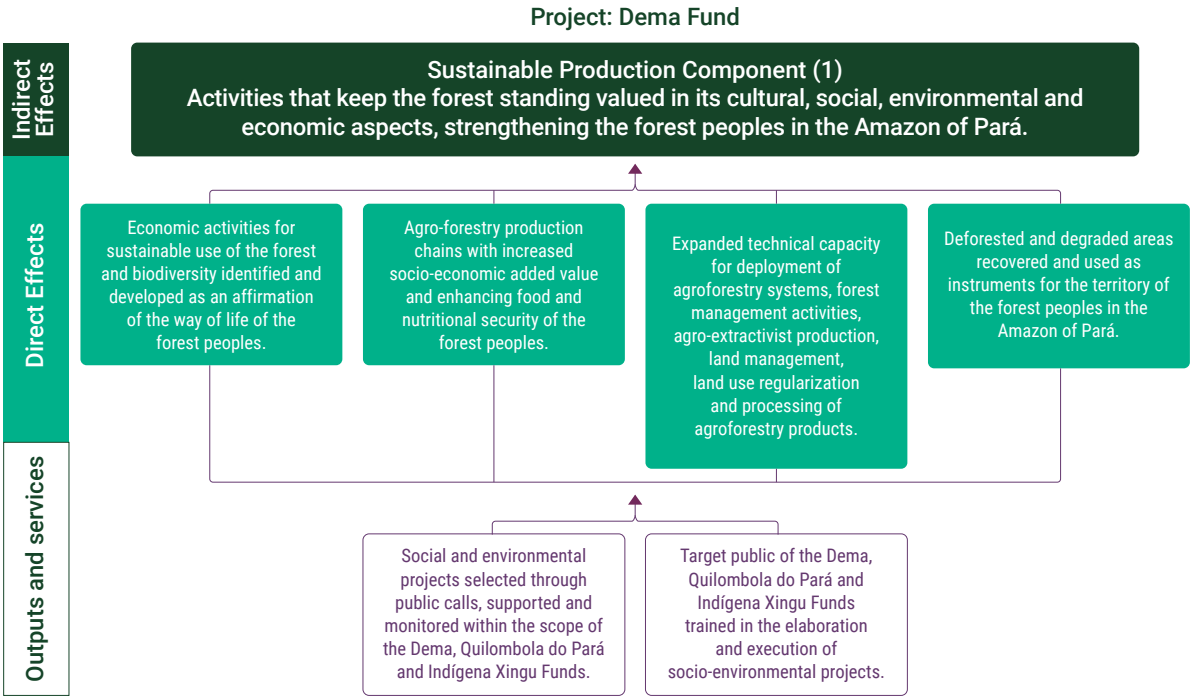


Figure 19 - “Small Eco-projects” Project Objectives Diagram - ISPN

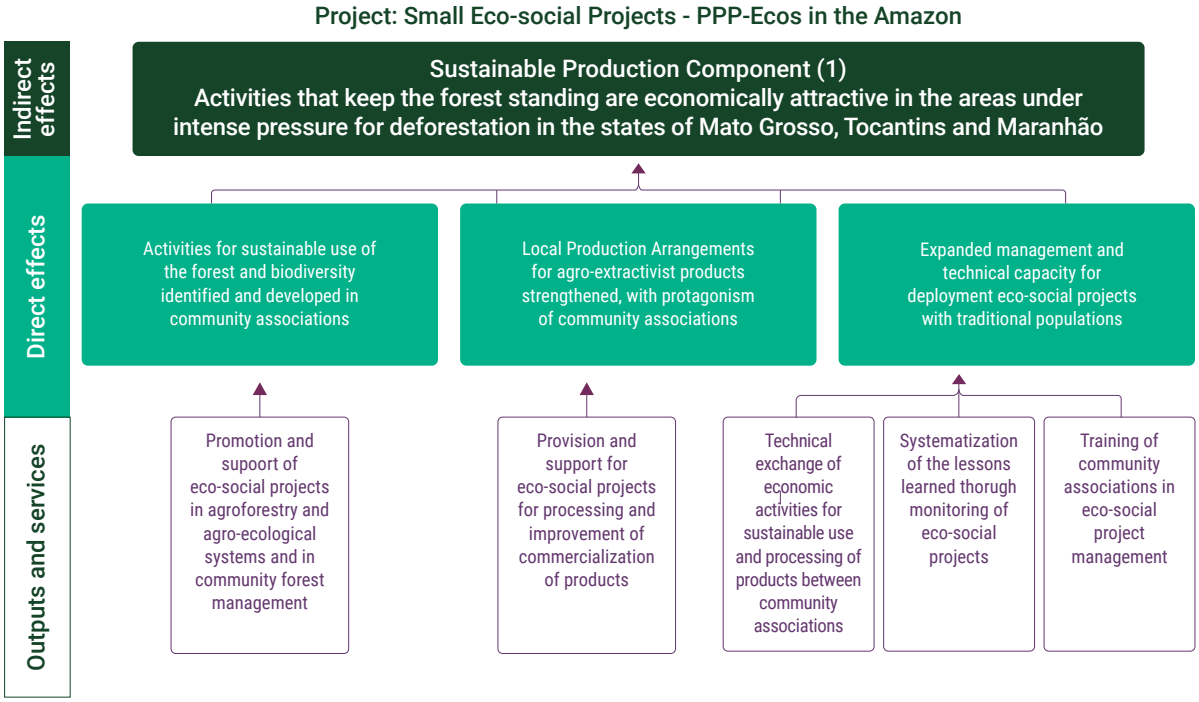
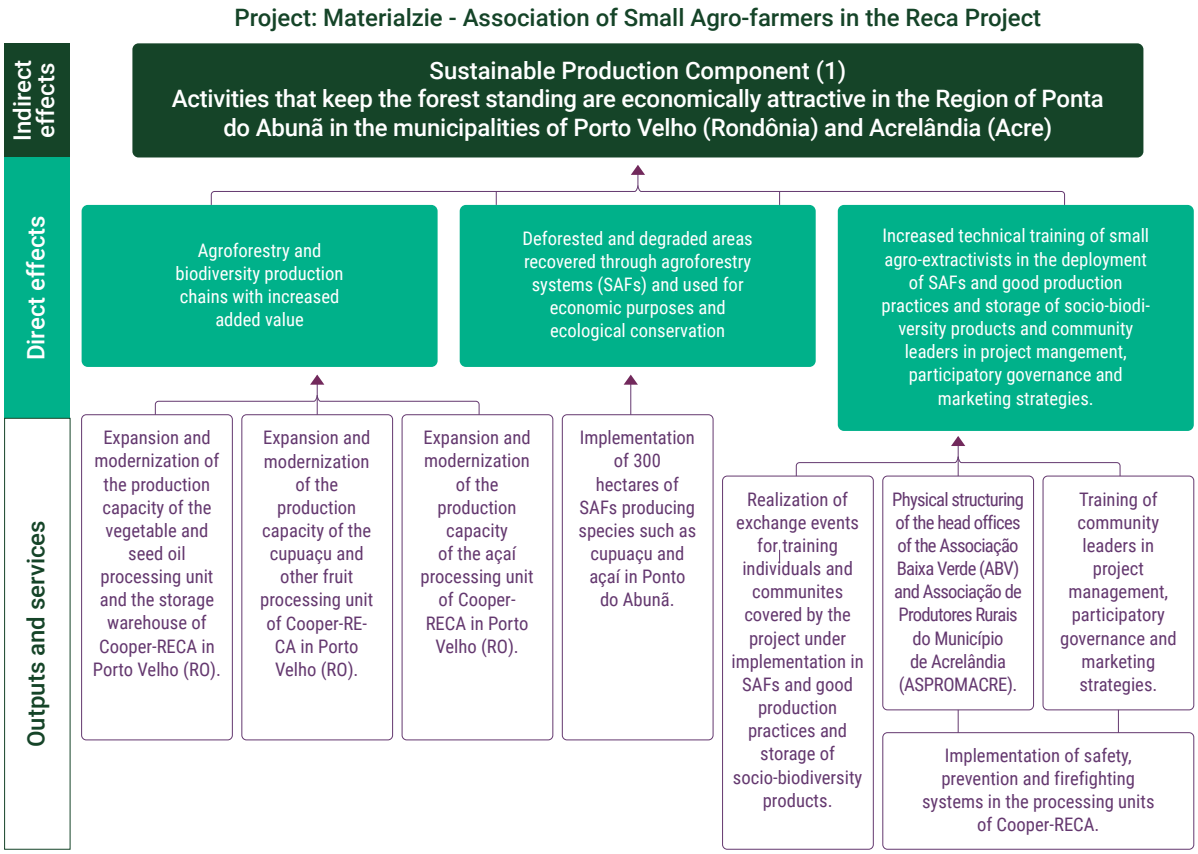


Figure 20 - "Materialize" Project Objectives Diagram - RECA



2.3 KEY QUESTIONS AND EVALUATION CRITERIA

The thematic effectiveness evaluation of the four APS projects will comply with the guidelines and criteria specified in the document Effectiveness Evaluation of Projects Supported by the Amazon Fund - Conceptual Framework and its respective addendum.

These criteria are based on the Organization for Economic Co-operation and Development (OECD) and Reducing Emissions from Deforestation and Forest Degradation (REDD+) safeguards, which were defined by the Framework Convention (in Annex I of Decision 1/CP 1641 and the guidelines of Decision 12/CP 17), and on the selected transversal criteria. Each criterion adopts a basic roadmap of guiding questions to be applied and answered in the evaluation of the projects and which should be complemented in the Effectiveness Evaluation Design Report, as the evaluation team deems necessary. In this evaluation, the guiding questions that make sense according to the objectives of each of the projects will be selected, which can be complemented by specific questions, if necessary.

Below is the summary table of criteria and respective guiding questions:

2.4 OECD CRITERIA, TRANSVERSAL THEMES AND EVALUATION ISSUES

Criteria	Guiding questions
Relevance	Did the projects contribute jointly and overall to the achievement of the Amazon Fund's objectives?
Efficacy	Were the overall direct effects been achieved?
Efficiency	Is the cost-effectiveness of project activities consistent with each other?
Impact	What were the main overall effects of the projects? Were there overall impacts? Did they demonstrate scalability in the territory?
Sustainability	Are the overall effects achieved by projects lasting? Was sustainability achieved?
Transversal Criteria	
Poverty Reduction	In what ways did the projects have an overall influence on poverty reduction, social inclusion and improvement in the living conditions of the beneficiaries living in their areas of activity?
Gender Equity	Did the projects integrate overall gender issues in the planning and implementation of their activities? How and what results can be observed?

2.5 REDD+ SAFEGUARDS AND EVALUATION ISSUES

Criteria	Guiding questions
1. Actions complementary to or consistent with the objectives of national forestry programs and other relevant international conventions and agreements.	Did the projects demonstrate alignment with the Plan for the Prevention and Control of Deforestation in the Brazilian Amazon (PPCDAm) and the state plans for the prevention and control of deforestation? What other federal policies or international agreements are the projects aligned with? In which aspects? Did the project contribute or have the potential to contribute directly or indirectly to reducing emissions from deforestation and forest degradation? In what way?
2. Transparent and effective national forest governance structures in view of national sovereignty and legislation.	To what extent did the projects promote articulation between various actors (public sector, private sector, third sector or local communities)? Were shared governance bodies used? Which ones? To what extent did the projects contribute to strengthening public instruments and forest and land-use planning processes?
3. Respect for the knowledge and rights of indigenous peoples and members of local communities, considering relevant international obligations, national circumstances and laws and noting that the UN General Assembly has adopted the United Nations Declaration on the Rights of Indigenous Peoples.	To what extent did the projects influence the constitutional rights associated with the possession and formal destination of land in their area of activity? To what extent did the projects influence the sustainable use of natural resources in their area of activity? If the projects had as direct beneficiaries indigenous peoples, traditional communities or family farmers: were their sociocultural systems and traditional knowledge considered and respected throughout the projects? Are there effects that interfere with the traditional way of life of these groups? What kind of effects: on social, economic organization or the use of available spaces and resources? How do they interfere: positively, negatively, or both?

4. Full and effective participation of stakeholders, in particular indigenous peoples and local communities, in the actions referred to in paragraphs 70 and 72 of Decision 1/CP 16.	How did the projects ensure prior, free and informed consent, and the local or traditional way of choosing the representatives of their beneficiaries (especially indigenous peoples and traditional communities)? What participatory management tools did the projects apply during decision making? In case of projects with economic purposes: were any benefits arising from the projects accessed in a fair, transparent and equitable manner by the beneficiaries, avoiding a concentration of resources? To what extent did the projects provide the general public and its beneficiaries with free access and easy understanding of information related to project actions? Were the projects able to put together a good system for monitoring results and impacts? Did the projects systematically monitor and disseminate the results achieved and their effects?
5. Actions consistent with the conservation of natural forests and biological diversity, ensuring that the actions referred to in paragraph 70, Decision 1/CP 16[114] 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 enhance other social and environmental benefits.	How did the projects contribute to the expansion or consolidation of protected areas? How did the project contribute to the conservation of natural forests and biodiversity? Were the investments in income generation projects proportional to the increase in areas under management and, effectively, contributed to avoiding deforestation? Did the projects contribute to the recovery of deforested or degraded areas? In the case of restoration and reforestation activities, did the methodologies used prioritize native species? To what extent did the projects contribute to establishing recovery models with an emphasis on economic use?
6. Actions to address the risks of reversals in REDD+ results.	What factors pose risks to the permanence of REDD+ results? How did the projects approach them? Is there a continuous monitoring strategy for these results?
7. Actions to reduce the displacement of carbon emissions to other areas.	Was there a shift of emissions avoided by project actions to other areas?

114. Decision 1/CP 16: Reduction of emissions from deforestation; reduction of emissions from forest degradation; conservation of forest carbon stocks; sustainable management of forests and increase of carbon stocks.

3. METHODOLOGY

The methodology applied in the evaluation should be based on the criteria and objectives contained in the document "Effectiveness Evaluation of Projects Supported by the Amazon Fund - Conceptual Framework" and its respective addendum, already mentioned in topic 2.3.

The following products are expected to be generated: *the Evaluation Design Report and the Effectiveness Evaluation Report of APS Binder Projects* and, in an intermediate stage, a *Preliminary Effectiveness Evaluation Report*, a product to be used in the Consultation Round. .

Below is the methodology proposed for each phase and its respective stages:

3.1 PREPARATION PHASE

In this phase, the objectives are defined and the project evaluation plan is developed. After the preparation of the ToR and the hiring of the team of evaluators, the key documents of the evaluation must be organized. To this end, the documents, data and reports that will be used in the evaluation must be identified with BNDES and the organization responsible for the execution of each project. The evaluation team will systematically collect data from secondary sources in order to compose a *memorandum* that will serve as a reference source, leveling and help-memory of all information related to the evaluated projects.

Subsequently, a methodological proposal for the joint evaluation of the four projects should be further developed. The methodology must be based on the document "Effectiveness Evaluation of Projects Supported by the Amazon Fund - Conceptual Framework" and its respective addendum, including survey methods that contribute to the understanding of the effectiveness of the projects according to the reality of each one of them, indications of options of the best places for field missions (considering the places with the highest and lowest effectiveness), prior analysis of the dialogue and risks between indicators of effectiveness of the projects and list of key people to be interviewed. All these methodological elements should be detailed in the Effectiveness Evaluation Design Report, described in the next topic (3.2).

3.2 IMPLEMENTATION PHASE

Evaluation design and tools. The Effectiveness Evaluation Design Report to be prepared by the team of evaluators must present the evaluation work script, the detailed methodology, the choice of field areas to be visited and the tools that will be used during the evaluation. This report shall have the following roadmap:

a) Basic details of the projects;

b) Introduction;

c) Analysis of the ToR;

d) Division of tasks, work plan and logistics;

e) Design/Methodology. In this regard, it is necessary to consider the peculiarities of the geographical areas in which the projects operate, since they are located in different parts of the Brazilian Amazon, as well as the ethnic diversity of the populations served, respecting the customs and values of each population.

f) Annexes. The specificities of the projects should be taken into account, possibly with guiding questions and specific survey methods.

3.2.1 DATA COLLECTION AND ANALYSIS.

The methodology to be developed must have a diversified format, using three forms of data collection:

- **i) Non-reactive** (secondary sources: project documentation, public and scientific data available in the area of operation of the projects, in addition to the key documents already organized in the preparation phase);
- **ii) Poll** (field research: application of standardized quantitative/qualitative questionnaires, conducting qualitative interviews with individuals or groups, use of situational analysis tools); and
- **iii) Observation** (during visits, participatory or individual; a counterfactual approach may be used, i.e. comparing with similar cases outside the projects).

This is the first phase of data analysis, whose objective is to analyze the intervention logic, the products and services performed by the projects and the results achieved. In this stage, it is important to raise the doubts and questions that need to be answered by the executors and beneficiaries and that will serve as input for the next stage, the field mission.

For the counterfactual analysis, whose need to be carried out should be decided by the evaluation team, the observation of areas that did not have the support of the Fund and that did not undergo interventions or support from other initiatives should be considered. With this analysis it is expected to determine the differences between similar cases outside the projects. The decision on whether to carry out the counterfactual analysis will be presented in the Design Report.

3.2.2 FIELD MISSION (OR VIRTUAL DATA COLLECTION).

Its objective is to collect part of the data, in person, from a representative sample of the projects' universe, by visiting the region where they operate and surroundings. The mission will take place through field visits, by the evaluation team, for the time deemed necessary (should be detailed in the Effectiveness Evaluation Design Report), up to the limit of 24

days. During these visits, in addition to observing the results and physical benefits of the projects, technicians who worked directly with the projects in the evaluation reference period may also be interviewed. If necessary, a team or local consultant may be hired to carry out field visits in the areas of operation of the evaluated projects and verification of any *on-site* results.

3.2.3 PRELIMINARY REPORT.

After the information collection, the evaluation team should complement the analysis of the collected data. As such, the *Preliminary Effectiveness Evaluation Report* of the projects must be prepared. This report should also include an analysis of the results achieved, in addition to the overall impacts achieved by the four projects, in order to generate recommendations. The division of duties and tasks of each member of the evaluation team shall be detailed in the Effectiveness Evaluation Design Report.

3.2.4 CONSULTATION ROUND.

At this stage, a workshop (virtual or face-to-face) will be held, with the participation of the team of evaluators, the team of the Amazon Fund/BNDES, representatives of the Ministry of the Environment, key people of the projects and representatives of the evaluated institutions, in addition to some peers, who are the specialists who hold responsibilities under themes related to those of the evaluated projects. The workshop methodology should be described in the Effectiveness Evaluation Design Report.

3.3 ANALYSIS AND DISSEMINATION PHASE

Consolidation of the data analysis. Along with the complementary inputs of the Consultation Round, there will be a new analysis based on the comments and justifications presented by the participants..

Final report. The methodology and composition of the Effectiveness Evaluation Report are specified in the document "Effectiveness Evaluation of Projects Supported by the Amazon Fund - Conceptual Framework" and its respective addendum. The report must contain, in the main part, up to 35 pages (without considering the cover, summary, indexes of figures and tables, list of abbreviations and acronyms, executive summary and annexes).

Disclosure of results. Presentation of the results and the final report to the beneficiaries of the projects. The Effectiveness Evaluation Report of the projects and its executive summary will be published on the ***website*** of the Amazon Fund.

4. ACTIVITIES, OUTPUTS AND DEADLINES

The following schedule presents the basic roadmap for conducting the evaluation. The table contains the activities, services and deadlines of the process in general.

The products to be delivered by the consultancy as well as their format and delivery time are included in Annex 1, item 3 of these ToR.

	Activities	Responsibility	Working days	Deadlines	Outputs
1	Disclose ToR.	GIZ (responsible for hiring)	15	23/09/2022	
2	Receive and organize proposals from consultants, hire selected consultants and form an evaluation team (consultants + GIZ).	GIZ	31	23/11/2022	Contracted consultants and trained team.
3	• Prepare initial meeting of the team with the Amazon Fund; • Contact the institutions responsible for the projects to be evaluated; • Analyze relevant documents; • Consolidate evaluation methodology prepared and proposed by external consultants; • Consolidate the proposal for the Effectiveness Evaluation Design Report; • Deliver the Effectiveness Evaluation Design Report to BNDES; • Presentation of the Report to the BNDES.	GIZ	20	13/12/2022	Proposal for an Effectiveness Evaluation Design Report.
4	Comment on the proposal for the Effectiveness Evaluation Design Report.	GERAV/BNDES DEFAM/BNDES	3	16/12/2022	Proposal for an Effectiveness Evaluation Design Report with comments.
5	Review Effectiveness Evaluation Design Report.	Evaluation team	3	19/12/2022	Reviewed Effectiveness Evaluation Design Report.
6	Approve revised report.	GERAV/BNDES DEFAM/BNDES	3	22/12/2022	Effectiveness Evaluation Design Report (final).
7	Implement evaluation: - Collect and analyze secondary data; and - Carry out field mission.	Evaluation team	55	15/02/2023	Project data collected and analyzed.
8	Prepare and deliver Preliminary Effectiveness Evaluation Report.	Evaluation team	10	25/02/2023	Preliminary Effectiveness Evaluation Report.

9	Present results (Query Round).	Evaluation team	1	26/02/2023	Preliminary Effectiveness Evaluation Report with considerations reported in the Consultation Round.
10	Comment on the Preliminary Effectiveness Evaluation Report.	GERAV/BNDES DEFAM/BNDES Organizations responsible for each project	5	03/03/2023	Preliminary Effectiveness Evaluation Report with comments sent after the Consultation Round.
11	Prepare final evaluation report	Evaluation team	5	08/03/2023	Effectiveness Evaluation Report.
12	Incorporate the complementary presentation, preface and final review contents into the Effectiveness Evaluation Report	Evaluation team	3	11/03/2023	Effectiveness Evaluation Report (final).
13	Deliver Final Effectiveness Evaluation Report.	Evaluation team	1	12/03/2023	Effectiveness Evaluation Report
14	Diagram and translate the Final Effectiveness Evaluation Report and its annexes (version 1: Portuguese; version 2: English).	Designer/ Translator/ Evaluation Team	15	27/03/2023	Effectiveness Evaluation Report diagrammed in format for dissemination (Portuguese and English).
15	Disseminate and distribute the Effectiveness Evaluation Report.	Amazon Fund Team	-	-	Upload on the website of the Amazon Fund/ BNDES

5. EVALUATION TEAM

The evaluation will be carried out by a team composed of two (2) external consultants to be hired by GIZ after a hiring call published on the Brazilian Monitoring and Evaluation Network and on GIZ Brasil's LinkedIn. channel. Furthermore, there will be the monitoring of at least 2 (two) technical advisors of GIZ to verify the adherence of the evaluation to that defined in the ToR and in the other published documents that govern the effectiveness evaluations of the Amazon Fund's projects..

External consultants should have the following profile:

- One (1) senior or full consultant, with knowledge of national and state public policies in the environmental context and sustainable development in the Brazilian Amazon,
    - Experience in support arrangements and project management and with experience in monitoring and evaluating policies in projects or programs; and
- One (1) senior or full consultant with knowledge of socio-environmental, indigenous and traditional community policies,
    - Experience in the theme of sustainable production in the Amazon, in the elaboration and implementation of questionnaires and data analysis for monitoring and evaluation of public policies.

The qualifications of the team of assessors include the following requirements:

- **Technical knowledge.** In a multidisciplinary way, he should have experience with works developed with small projects and projects that bring together sustainable productive activities, implementation of SAFs and recovery of degraded areas, and in general, with environmental and sustainability policies in the context of the Brazilian Amazon, as well as having experience in monitoring and evaluating these policies and projects on the topics addressed.
- **Methodological knowledge.** Knowledge in the methodologies that will be used to evaluate the projects, in particular, those related to the collection and analysis of data, the measurement of the achievement of results and qualification of the effects achieved with the project managers. Furthermore, it is important to know instruments that allow the combination of methods to triangulate data collection, in order to increase the reliability of the results.
- **Regional knowledge.** Experience with the implementation of **projects related to the themes dealt with in this evaluation, it is desirable that it be in the Amazon.**

The consultants hired cannot have any previous involvement or particular link with the projects to be evaluated. The evaluation team will work without external interference, will have access to the data of the projects to be evaluated and will obtain support to collect all the necessary information. GIZ experts and consultants must treat all documentation of the Amazon Fund and the projects to be evaluated with confidentiality and secrecy, except for the information that must be included in the Effectiveness Evaluation Report..

6. REPORTING, COORDINATION AND RESPONSIBILITIES

Two reports will be produced during the evaluation process: the Evaluation Design Report and the Project Effectiveness Evaluation Report. The content of these reports will follow the provisions of topic 8.1.7 in the document "Effectiveness Evaluation of Projects Supported by the Amazon Fund - Conceptual Framework" and its respective addendum.

The effectiveness evaluation of the projects will be accompanied by a reference group of the projects, with the following composition:

a) Representatives of the Monitoring and Evaluation Management of the BNDES Planning Area;

b) Representatives of the BNDES's Amazon Fund Management Department;

c) GIZ representatives, within the framework of the cooperation project in force;

d) Representatives of the projects and partners, responsible for the execution of the projects to be evaluated; and

e) Members of the evaluation team.

The coordination of the evaluation work will be carried out by GIZ. The responsibilities of each party that make up the reference group are defined in topic 5.1 in the document "Effectiveness Evaluation of Projects Supported by the Amazon Fund - Conceptual Framework" and its respective addendum.

7. FINAL CONSIDERATIONS

a) Copyright

All information and materials produced from the works object of this contract will have the copyright reverted to GIZ. The total or partial reproduction requires express authorization, recognizing the intellectual property. Due credits will be given for the authorship of maps, photos, films and other records that may be used to provide information about the study, at the discretion of the contracting institution.

For the publication and production of bibliographic materials in the form of articles, academic works, for congresses and scientific events, among others, produced from information subject to contracting by the consultancy and its technical team, prior authorization must be requested for GIZ.

b) Code of Conduct

The GIZ internal management aims to promote equity of opportunity and perspectives, regardless of gender identity, sexual orientation, ethnicity, health condition, social origin, religion or age. The diversity of its people, as well as a corporate environment governed by mutual respect and appreciation, represents a sign of success and excellence in its work for GIZ. GIZ prioritizes the appointment of women, LGBTI (Lesbian, Gay, Bisexual, Transsexual and Transvestite, Intersex), black and indigenous people, and people with

disabilities for talks, representations, interviews and even job vacancies.

Thus, the consultant or selected company must respect the diversity of gender, sexual orientation, ethnicity, health condition, social class, religion and age and assume attitudes that, with multiplier effect, will help to promote equality between the various actors involved in the consulting of these ToR, adopting the following positions:

Personal demeanor

- Listen and give credit to ideas of your and your co-workers, regardless of gender, sexual orientation, ethnicity, health condition, social origin, religion or age, keep attention to situations of vulnerability, respect your speaking opportunity and support the ideas of your co-workers;
- Talk about gender-related issues, listen and empathize with those who are harmed by inequalities – especially women, read about the topic and encourage this discussion in the spaces that circulate, whether in the company, organization, meetings or lectures;
- Question and combat sexual harassment, be an example of respect for women and do not be silent in the face of denunciation or testimony to a harassment;
- Question the idea that there are men's activities and women's activities, avoid attributing certain activities only to women, simply because they are considered “women's activities”;
- Respect the culture, uses and customs of indigenous peoples.

When providing the service

- Be an example of respect for the rights of women, LGBTI, black and indigenous people, people with disabilities and the elderly for co-workers. Avoid jokes that degrade such groups.
- Always try to be informed about policies to promote gender equity in your work environment, try to disseminate and respect them. The implementation of gender equity promotion strategies aims at an internal culture transformation and can also impact externally;

Corporate guidelines

- Support initiatives for access and permanence of women, LGBTI, black and indigenous people, and people with disabilities in the field of sustainable development, who encounter numerous obstacles to occupy decision-making and power spaces in our society..

8. ANNEXES

The ToR include an annex regarding the hiring of a consultant for evaluation:

- Annex 1 – Individual Consultancy – Consultant 1

Rio de Janeiro, November 08, 2022

Christian Lauerhass

Project Director
Cooperation with the Amazon Fund/BNDES
Biodiversity, Forests and Climate Program
Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

ANNEX 1 – CONSULTANT 1: INDIVIDUAL CONSULTANCY TERMS OF REFERENCE

Call for contracts related to the ToR for Effectiveness Evaluation of the four projects with a focus on Sustainable Production Activities (APS) supported through agglutinating modalities and public calls made with partners under the Amazon Fund/BNDES

OBJECTIVE

Hiring one (1) senior or full consultant, with knowledge of national and state public policies in the environmental context and sustainable development in the Brazilian Amazon, Experience in support arrangements and project management and with experience in monitoring and evaluating policies in projects or programs; and

ACTIVITIES OF CONSULTANT 1

The consultant must be part of the evaluation team of the projects in question, with the following activities:

Activity	Description
Design Report	Together with the team of evaluators, contribute to the design report, consolidating the wording according to the Terms of Reference.
Data collection and analysis	Collect, analyze and interpret data on the results, effects and impacts of projects on topics related to environmental policy and sustainability and, in particular, in the area of Socioeconomic and Environmental Impact Measurement, as well as environmental legislation
Interviews	Conduct field interviews to evaluate the projects and, if possible a SWOT analysis workshops (Strengths, Weaknesses, Opportunities and Threats), together with the team of evaluators.
Preliminary Report	Prepare the preliminary report with the support of the team of evaluators, consolidating the wording according to the Terms of Reference. This includes the chapters related to the topics under their responsibility.
Consultation round	Support the organization and participate in the consultation round to present the Preliminary Effectiveness Evaluation Report.
Indigenous Projects Effectiveness Evaluation Report	Contribute to the final version of the report together with the team of evaluators

CONSULTANT 'S DEADLINES AND DELIVERABLES 1

The activities must be carried out between 11/23/2022 and 05/12/2023. In this interval, the contracted consultancy must have 55 effective days dedicated to the execution of the work.

Outputs	Working days	Deadline	Formats/technical specifications
Product 1 – Effectiveness Evaluation Design Report of APS Agglutinating Projects.	10	To 12/13/2022	Word document, Font Arial 12, 1.5 spacing and in digital format.
Product 2 – Preliminary Effectiveness Evaluation Report of APS Agglutinating Projects.	40	To 25/02/2023	Word document, Font Arial 12, 1.5 spacing and in digital format.
Product 3 – Effectiveness Evaluation Report of APS Agglutinating Projects.	05	To 12/03/2023	Word document, Font Arial 12, 1.5 spacing and in digital format.
TOTAL	**55 days**		

WORKPLACE AND TRAVEL

The work will be take place in Rio de Janeiro, Brasília and cities of the supported projects (Rio Branco, Santarém, Belém, Sinop, and other municipalities in the states of Acre, Pará, Maranhão, Mato Grosso and Tocantins). To this end, the following are planned:

Destination	Forecast date	Travel days	Accommodation days (overnight stays)	Meal allowance
Rio Branco (AC)	From the month of December	5	4	5
Santarém (PA)		4	3	4
Belém (PA)		3	2	3
Sinop (MT)		2	1	2
Brasília	From the month of November	4	3	4
Rio de Janeiro		2	1	2
TOTAL		**20**	**14**	**20**

Therefore, up to six (6) trips will be required, for a total of up to 20 days, as specified above.

CONDITIONS FOR THE PROVISION OF SERVICES

The consultant hired must comply with the following conditions:

- Signature of confidentiality of the data arranged for contractual analysis;
- Acceptance of the commitment agreement not to publish information about the object of analysis;

- Access and reception of prior material made available by the responsible sector;
- Development and monitoring of the work in coordination with GIZ and Amazon Fund, including with regard to the approval or request for rectification of outputs.

QUALIFICATION OF THE PROFESSIONAL

- 10 years or more of experience in the monitoring and evaluation of projects and/or public policies;
- Work experience with the theme of Sustainable Production Activities (APS), with emphasis on strengthening the biodiversity chain;
- Experiences in monitoring and evaluating socio-environmental programs and projects, preferably in the Brazilian Amazon region;
- Experiences with agglutinating project models (agglutinating/agglutinated type execution arrangement), public calls or suchlike;
- Knowledge about public policies in the area of sustainable development, climate change and the environment; and
- Knowledge about the regional issues of the Amazon that are dealt with within the scope of the projects supported by the Amazon Fund.
- Desirable knowledge about plant recovery, SAFs and APL in the Amazon.

PAYMENT

Payments will be made after signing the contract, approval of the outputs and presentation of the Bill or Invoice.

Travel costs will be reimbursed against the presentation of proof of expenses, according to GIZ guidelines to be informed in the contract.

The technical review and approval process of the outputs includes the evaluation of the GIZ technical advisor. The final approval of the products and authorization for payment are the responsibility of the AV/DV of the project.

ANNEX 2 – CONSULTANT 2: INDIVIDUAL CONSULTANCY TERMS OF REFERENCE

Call for contracts related to the ToR for Effectiveness Evaluation of the four projects with a focus on Sustainable Production Activities (APS) supported through agglutinating modalities and public calls made with partners under the Amazon Fund/BNDES

OBJECTIVE

Hiring one (1) senior or full consultant, with knowledge in socio-environmental policies and environmental management, with experience in the theme of sustainable production in the Amazon, in the elaboration and implementation of questionnaires and data analysis for monitoring and evaluation of public policies..

ACTIVITIES OF CONSULTANT 2

The consultant must be part of the evaluation team of the projects in question, with the following activities:

Activity	Description
Design Report	With the support of the team of evaluators, prepare the design report, consolidating the wording according to the Terms of Reference.
Data collection and analysis	Collect, analyze and interpret data on the results, effects and impacts of projects on topics related to environmental policy and sustainability and, in particular, in the area of Socioeconomic and Environmental Impact Measurement, as well as environmental legislation
Interviews	Conduct field interviews to evaluate the projects and, if possible a SWOT analysis workshops (Strengths, Weaknesses, Opportunities and Threats), together with the team of evaluators.
Preliminary Report	Contribute to the preparation of the report as a whole, including chapters related to the topics under its responsibility.
Consultation round	Support the organization and participate in the consultation round to present the Preliminary Effectiveness Evaluation Report.
Indigenous Projects Effectiveness Evaluation Report	Consolidate the final version of the report together with the team of evaluators.

PERIOD OF WORK

The activities must be carried out between 11/23/2022 and 05/12/2023. In this interval, the contracted consultancy must have 55 effective days dedicated to the execution of the work.

Outputs	Working days	Deadline	Formats/technical specifications
Product 1 – Effectiveness Evaluation Design Report of APS Agglutinating Projects.	10	To 12/13/2022	Word document, Font Arial 12, 1.5 spacing and in digital format.
Product 2 – Preliminary Effectiveness Evaluation Report of APS Agglutinating Projects.	40	To 25/02/2023	Word document, Font Arial 12, 1.5 spacing and in digital format.
Product 3 – Effectiveness Evaluation Report of APS Agglutinating Projects.	05	To 12/03/2023	Word document, Font Arial 12, 1.5 spacing and in digital format.
TOTAL	**55 days**		

WORKPLACE AND TRAVEL

The work will be take place in Rio de Janeiro, Brasília and cities of the supported projects (Rio Branco, Santarém, Belém, Sinop, and other municipalities in the states of Acre, Pará, Maranhão, Mato Grosso and Tocantins). To this end, the following are planned:

Destination	Forecast date	Travel days	Accommodation days (overnight stays)	Meal allowance
Rio Branco (AC)	From the month of December	5	4	5
Santarém (PA)		4	3	4
Belém (PA)		3	2	3
Sinop (MT)		2	1	2
Brasília	From the month of November	4	3	4
Rio de Janeiro		2	1	2
TOTAL		**20**	**14**	**20**

Therefore, up to six (6) trips will be required, for a total of up to 20 days, as specified above.

CONDITIONS FOR THE PROVISION OF SERVICES

The consultant hired shall comply with the following conditions:

- Signature of confidentiality of the data arranged for contractual analysis;
- Acceptance of the commitment agreement not to publish information about the object of analysis;
- Access and reception of prior material made available by the responsible sector;
- Development and monitoring of the work in coordination with GIZ and Amazon Fund, including with regard to the approval or request for rectification of outputs.

QUALIFICATION OF THE PROFESSIONAL

- 10 years or more of experience working with quantitative data collection;
- Experience in monitoring and evaluating public policies;
- Experience in monitoring and evaluating socio-environmental, indigenous and traditional community programs and projects in the Brazilian Amazon region;
- Knowledge about public policies in the area of sustainable development, climate change and the environment; and
- Knowledge about the regional issues of the Amazon that are dealt with within the scope of the projects supported by the Amazon Fund.

PAYMENT

Payments will be made after signing the contract, approval of the outputs and presentation of the Bill or Invoice.

Travel costs will be reimbursed against the presentation of proof of expenses, according to GIZ guidelines to be informed in the contract.

The technical review and approval process of the outputs includes the evaluation of the GIZ technical advisor. The final approval of the products and authorization for payment are the responsibility of the AV/DV of the project.

ANNEX I - COMPLEMENTARY STUDY ON POVERTY REDUCTION AND GENDER EQUITY

Analysis and recommendations of socioeconomic impact from the perspective of Transversal Criteria of Poverty Reduction and Gender Equity

Elaboration: Okearô Socio-environmental Solutions – Verena Almeida

Rio de Janeiro, March 2023

1. OBJECTIVE

To verify the socioeconomic impacts on poverty reduction and gender equity promoted by the four projects object of the Evaluation of Effectiveness of Sustainable Production Activities Projects (APS) supported through the Agglutinated/Agglutinating Entity and Public Call modalities:

- *Materialize* by the Consortium and Densified Economic Reforestation Project (Reca), in the agglutinating modality;
- *Strengthening the Forest Based Sustainable Economy* by Central Cooperative for Extractive Marketing of Acre (Cooperacre), in the agglutinating modality;
- *Dema Fund,* of the Federation of Agencies for Social and Educational Assistance (Fase), in the form of a public call;
- *Small Eco-social Projects in the Amazon – PPP-Ecos in the Amazon* by the Society, Population and Nature Institute (ISPN), in the form of a public call.

2. METHODOLOGY

The study was conducted in three stages:

Step 1: reading available documents; systematization of data and information; selection of indicators related to poverty reduction and gender equity in projects; systematization of 21 project documents.

Step 2: analysis of the overall impacts of the four projects in relation to poverty reduction and gender equity, considering a selection of indicators of effectiveness and effectiveness of the sustainable productive activities of Component 1 of the Amazon Fund; application of the methodology to evaluate the potential for distribution of benefits for poverty reduction[115]; use of the results of these analyses to meet the Transversal Criteria (poverty reduction and gender equity) of the *Conceptual Framework for Effectiveness Evaluation*

115. Methodology proposed in: VIERGEVER, Marcel; SANTOS, Priscila. Relatório de Meio Termo de Efetividade do Fundo Amazônia: Estudo de Distribuição de Benefícios do Fundo Amazônia. Brasília: Fundo Amazônia/BNDES; GIZ, 2019. Disponível em: https://www.fundoamazonia.gov.br/export/sites/default/pt/.galleries/documentos/monitoramento-avaliacao/5.avaliacoes-externas/FA-Relatorio-Distribuicao-de-Beneficios.pdf.

of Projects Supported by the Amazon Fund (2016) and the Addendum to the *Conceptual Framework* (2020); presentation of the individual results of the projects and answers to the questions of the *Conceptual Framework* (2016).

Step 3: elaboration of recommendations for better results on poverty reduction and gender equity in projects.

In addition to the quantitative information, qualitative information of the projects was added, such as the beneficiary public, political insertion and social participation, governance, among others, which indicate results achieved in other dimensions, not necessarily quantifiable.

2.1 TRANSVERSAL CRITERIA: POVERTYREDUCTION AND GENDER EQUITY

The transversal criteria poverty reduction and gender equity are "horizontal" and multidimensional themes, which must be addressed in an integrated manner during the execution of projects. Gender equality is considered a dimension of poverty reduction.

For the Amazon Fund, poverty reduction evaluates the extent to which the project contributed to alternatives worthy of work and income in the Amazon, with environmental and social sustainability. Gender equity guides project activities to meet different gender needs and to promote gender equality, in which men and women have the same rights and benefits.

3. OVERALL ANALYSIS

Poverty reduction - How did the projects influence poverty reduction, social inclusion and improvement in the living conditions of the people benefited?

Overall, the projects were efficient in **strengthening community organizations**, with an impact of 57.6% in relation to the percentage of the total accumulated institutional strengthening of the Amazon Fund, which is 507 community organizations strengthened by 2021, according to the *Amazon Fund Activity Report – Monitoring and Evaluation of Results*[116] (RAFA, 2021).

The strengthening of 292 community organizations was promoted, with better management and performance along the production chains. At different stages of maturity, community organizations of traditional peoples and communities, indigenous peoples, family farmers, quilombolas and women were able to advance in technical terms and local and regional articulation and gained empowerment and autonomy.

116. The analysis of the transversal criteria 'Poverty reduction' and 'Gender equity' was based on Indicators of the component "Promotion of sustainable productive activities" – accumulated values to indicate the overall contribution of the projects analyzed in relation to the total accumulated until 2021, the reference year of the last Monitoring and Evaluation report published by the Amazon Fund. Check it out: Amazon Fund. 2020 Activity Report. Rio de Janeiro: BNDES, 2021. p. 50. Available at: https://www.fundoamazonia.gov.br/export/sites/default/pt/.galleries/documentos/rafa/RAFA_2020_port.pdf.

Of the four projects evaluated, the projects *PPP-Ecos in the Amazon* and *Dema Fund* stood out, which distributed resources to small organizations and, thus, promoted changes in families and communities that even went through situations of prejudice by banking institutions at the time of opening accounts and local commerce when requested budgets and/or acquisitions related to the implementation of the project activities. Beneficiary organizations have improved, integrated acquired knowledge and advanced in fundraising and partners.

Another strong impact of the projects was in relation to the indicator of **total trained individuals** to practice sustainable economic activities, which contributed to the accumulated total of the Amazon Fund until 2021 (43,870 trained individuals), with 11,067 trained people, corresponding to 25.23% of the total. The monitoring and evaluation of the *Amazon Fund Activities Report* (RAFA, 2021) also brings this indicator with a specific focus on women, with a **total of 7,487 women trained** by 2021, in which the projects contributed 18.62% (1,394) of this total overall. However, this indicator did not include women trained by the PPP-Ecos in the Amazon, which, despite having promoted many training courses, was not successful in collecting data from the subprojects related to this indicator, and it can then be assumed that the contribution was greater than that expressed.

Of the **207,345 individuals directly benefited** by the activities supported until 2021 by the Amazon Fund (RAFA, 2021), 18,390 are due to the grouped projects analyzed, corresponding to 8.87% of the total. Considering the gender profile, by 2021, the Amazon Fund had directly benefited 47,835 women, of which 5.83% of the **women directly benefited** were supported by the evaluated projects. As with the previous indicator (total trained women), there was a lack of information from the *PPP-Ecos*, whose contribution was not included in the final indicator.

More than 7,400 people are **applying the knowledge gained** in the practice of sustainable economic activities. The projects contributed 34.11% overall, compared to the accumulated until 2021 (21,745 people). This indicator reinforced the role of projects in the dissemination of qualified and relevant information to the beneficiary public, which generally does not have access to training. Like the *PPP-Ecos* technical publications, made available on the internet for public access, the information was also disseminated beyond the territories. There was a strong contribution from rural technical assistance (ATER) provided to beneficiaries by the four projects. The themes worked were adapted to the reality of the public (agroecology, agroforestry systems – SAFs, agroecological backyards, among others), resulting in great adherence and, consequently, application. The training, workshops, courses, exchanges and other informative and participatory events provided new knowledge and techniques consistent with livelihoods, while providing new references about the production and marketing of family farming products and socio-biodiversity, contributing to individual and community development. This contribution of knowledge for participation stimulated political incidence and generated a positive effect on the beneficiaries of the projects, such as dealing with fair gender and agroecology relations, in addition to unforeseen actions, such as the Collective of Rural

Women Workers of the State of Maranhão – CMTR (*PPP-Ecos)*, which promoted the discussion and promulgation of the Municipal Free Babassu Law in the municipality of Peritoró/MA on March 8, 2016.

The **area recovered for economic purposes** indicator had a contribution of 30.97% by the projects overall in relation to the accumulated total (15,452 hectares) until 2021 of Component 1 of the Amazon Fund (RAFA, 2021). As impacts, it enabled the environmental recovery of 4,785 hectares of degraded areas with agroecological-based activities and SAFs, expanded the productive base for income generation and food security, contributed to the recovery of springs and permanent protection areas (PPA) and the water security of families. The division of the amount of area recovered by the total number of beneficiaries resulted in an average of 0.26 hectares recovered for economic and sustainable purposes.

The indicators related to the **revenue obtained from** the commercialization of **fresh products** and revenue obtained from the commercialization of **processed products** did not allow a safe analysis. Two projects did not present information and the values presented by the other two projects have inconsistencies. The *Materialize* project included oils (processed products) in the value obtained from the sale of fresh products (R$6,126,484.8); the *Dema Fund* indicated that the value presented (R$3,891,919.0) was estimated based on 60 projects, extrapolating to the 112 projects. The sum of these two projects corresponded to 6,693% of the total obtained by the Amazon Fund until 2021.

The methodology for evaluating the potential **distribution of benefits** for poverty reduction was adopted[117]. This methodology considers the impact on income growth based on four criteria, namely i. economic scope; ii. effectiveness of actions with the productive sector; iii. potential for distribution of benefits; iv. continuity/scalability. Thus, the beneficiaries of the projects were included in market economies without the dependence on third parties and with the incorporation of alternatives to production without deforestation.

The analysis indicated that all projects were effective in generating income and distributing benefits. The *PPP-Ecos in the Amazon and the Dema Fund* reached 87.5% and the *Strengthening the Forest Based Sustainable Economy* and *Materialize* projects are 100% in compliance with the criteria. Cooperatives have a strong market bias and have been operating on a larger scale, seeking to guarantee production and improve the quality of products to conquer and remain in the market on national and international scales: Cooperacre, for example, invested resources in production certification, aiming at export. On the other hand, the ISPN and Fase agglutinating entities sought to establish local marketing channels, such as institutional purchases (National School Meals Program – PNAE and Food Purchase Program – PAA) and local and thematic fairs. Even with the difference in scale and scope between the two modalities, the projects proved to be efficient in reaching markets, reflecting the generation of income achieved

117. Methodology proposed in: VIERGEVER, Marcel; SANTOS, Priscila. Relatório de Meio Termo de Efetividade do Fundo Amazônia: Estudo de Distribuição de Benefícios do Fundo Amazônia. Brasília: Amazon Fund/BNDES; GIZ, 2019. Available at: https://www.fundoamazonia.gov.br/export/sites/default/pt/.galleries/documentos/monitoramento-avaliacao/5.avaliacoes-externas/FA-Relatorio-Distribuicao-de-Beneficios.pdf.

with sustainable productive activities (APS) supported by the projects that obtained an average per family per year (between R$1,850.00 and R$2,400.00). This estimate is quite variable and, depending on seasonality, product and production volume, the average income may have reached higher values.

Due to the intervention with **SAFs** and sustainable production systems, there was an improvement in food quality and, consequently, food security. As an example, a group of 14 women sell approximately R$6,000.00 per year per family in food for school meals, harvested from their agro-extractivist backyards. Thus, the group contributes to the provision of healthy food to children in the municipality, which has one of the lowest human development indexes (HDI) in Brazil, and the initiative paved the way for the operationalization of PNAE and PAA in the municipality of Viana, since it was the women of the group and their partners who helped and pressured public managers (National Institute of Professional Support – Inap, Viana/MA, supported by *PPP-Ecos*).

Gender equity - *Did the project produce overall results and impacts on gender issues? How and what overall results can be observed?*

There are two indicators that specifically address women who have been monitored and evaluated and are included in the Amazon Fund Evaluation Report (RAFA, 2021): **Individuals trained to practice sustainable economic activities and Individuals directly benefited by the supported activities.**

The projects analyzed trained about 1,390 women to practice sustainable economic activities, corresponding to 18.62% in relation to the accumulated by the supported projects inserted in the Productive Activities Component of the Amazon Fund until 2021 (7,487 women) until 2021[118]; and 2,791 were directly benefited (46% of this total by the *Dema Fund*), totaling 5.83% of the accumulated total (47,835 women). However, both indicators may be underestimated due to the difficulties in collecting information from the subprojects supported by *PPP-Ecos in the Amazon*, which carried out activities specifically for women and directly supported organizations managed by them, as well as the lack of the *Strengthening the Forest Based Sustainable Economy* project indicator.

Although there is no strategy or planning previously defined to subsidize the integration of women, benefit them and empower them, the projects carried out good practices aimed at gender equity. Grouped together, they performed most of the good practices indicated in GIZ (2019a, p. 25-26)[119]. The following are some examples: of activity to **reach** women, analyze the typical productive activities of men and women within the context of the family and the community; of activity to **benefit** women, provide differentiated technical assistance, working with both men and women in the project activities; of activity to

118. Amazon Fund. 2020 Activity Report. Rio de Janeiro: BNDES, 2021. p.53. Available at:: https://www.fundoamazonia.gov.br/export/sites/default/pt/.galleries/documentos/rafa/RAFA_2020_port.pdf.

119. VIERGEVER, Marcel; SANTOS, Priscila. *Relatório de Meio Termo de Efetividade do Fundo Amazônia:* Estudo de Distribuição de Benefícios do Fundo Amazônia. Brasília: Amazon Fund/BNDES; GIZ, 2019. Available at: https://www.fundoamazonia.gov.br/export/sites/default/pt/.galleries/documentos/monitoramento-avaliacao/5.avaliacoes-externas/FA-Relatorio-Distribuicao-de-Beneficios.pdf

empower women, promote integration between beneficiaries, through activities and events that provided the exchange of experiences.

All projects mentioned comprehensive activity planning, such as meetings with families of cooperative members (Cooperacre) and agroecological production planning considering the needs and interests of the family as a whole, including those of women, but there is a lack of information on whether the planning reached women to ensure or improve their participation in project activities. Support for the implementation of SAFs, agro-ecological gardens, agro-ecological backyards and other sustainable production methods, including seed collection and seedling production, will naturally benefit women, as they will be implemented in places where women work most, thus facilitating their participation in the activities.

The **differentiated ATER** was performed by all projects. ATER teams were established with members of both genders, or even young people from the communities, for greater acceptance of this benefit directly for women. This is a small change that does not require the contribution of specific financial resources, but rather the preparation of team members, but which should: improve to support the development of productive activities (agricultural and non-agricultural) that generate income for women, stimulating diversification, integration, use of local inputs and non-dependence on inputs external to the Family Agricultural Production Unit (UFPA); support the development of agroecological production systems and the adoption of sustainable practices for the use and management of natural resources; stimulate and support the organization of productive groups of women; and enable women's access to the National Register of Family Agriculture (CAF), productive credit policies, especially Pronaf[120] Mulher, development policies, and marketing policies, such as PAA and PNAE.

4. CONCLUSION

The four projects supported by the Amazon Fund evaluated herein contributed to the reduction of poverty, in several dimensions, in regions with high deforestation pressure. They reached vulnerable and underprivileged populations, as well as women's groups. They trained more than 11 thousand people and provided access and exchange of information and the valorization of knowledge, among other benefits generated in the medium and long term, such as improved water security.

The projects supported contributed to the income generation of the beneficiaries, either by improving the quality of production, processing and marketing on a larger scale, or by entering the public procurement markets and/or local fairs for smaller productive scale.

The strengthening of the beneficiary associations linked to the *PPP-Ecos in the Amazon and the Dema Fund* found broader results in the organizations of women, indigenous people and quilombolas, who advanced in improving living conditions with the application of new learning and skills discovered throughout the educational process of subproject

120. National Program for Strengthening Family Farming.

management, in addition to specializing in good practices along the production chains, generating income and giving prominence, as opposed to the previous marginal condition.

Three of the four projects contributed most visibly (*PPP-Ecos in the Amazon, Dema Fund and Materialize*) to gender equity. Although a strategy aimed at this focus was not foreseen, as it was not a requirement on the part of the Amazon Fund/BNDES at the open counter, the *PPP-Ecos in the Amazon and the Dema Fund* showed sensitivity and sought to adapt to the demand of the Amazon Fund and the beneficiary women and their organizations. *Materialize* performed well, mainly due to restoration activities, with the implementation of SAFs.

Even without a well-defined strategy, the process triggered by the projects leveraged new women leaders in the communities and opened opportunities for their influence on decision-making. As in the case of a 19-year-old, quilombola and single young woman who was unemployed in Quilombo and had no opportunity to study, since she had finished high school – "on the verge of depression", according to her. During the execution of the "Quilomboeco" subproject of *PPP-Ecos*, structuring the Ecopolpas fruit pulp factory, she was involved in the factory management group, participated in several management and good practice courses at the Brazilian Micro and Small Business Support Service (Sebrae) and currently coordinates the commercial department, emerging as a leader of the process recognized by the community. This transformation allowed her to become a leader, assuming responsibilities with the most important community venture for Quilombo. It is noteworthy that this "place" is commonly intended for men by the community, since the very unfavorable position in relation to gender equality is evident. Thus, this case is influencing the community to reflect on gender and, thus, Ecopolpas is expected to contribute to the improvement of gender relations and generations with this quilombola community.

The provision of ATER with young people from the communities and techniques was a differential in the projects to benefit women. SAFs, agroecological backyards, vegetable gardens and small animal production occur around homes, where women are more involved with the work of production chains.

Cooperacre's *Strengthening the Forest-Based Economy* project did not include gender in its focus, but it has potential for impact. The cooperative operates within the family and can generate several benefits, recognizing and integrating women throughout the production chains. The strategy of summoning the family to the meetings in the cooperative can be a gateway to deepen the theme.

Regarding gender equity, from the indicators presented, there is a tendency, albeit incipient, towards increased participation of women in the activities of the projects, even with data that may be underestimated due to the difficulty of collection with the agglutinated entities. In cooperative environments, this issue is less worked on than in the small agglomerated associations of traditional peoples and communities and family farmers. It is necessary to go deeper to achieve more efficient results.

5. RECOMMENDATIONS

To projects

- Carry out planning activities at the beginning of the projects, considering everyone in the family, especially the needs and desires of women, aiming to reach them. Working groups (WGs) of women can be provoked to discuss their needs and priorities.

- Encourage the creation of seed collection groups, especially in places around fully protected conservation units, in order to foster the restoration chain and generate income for women and young people.

- Stimulate new technologies for the development of products with added value, considering the waste from production for the manufacture of composites, fabrics, among others. It is important to seek partnerships with the National Industrial Learning Service (Senai), Financier of Studies and Projects (FINEP) and other entities that enable the access and development of new technologies. As well as with universities, for extension and exchange of knowledge.

- Actions to reduce the waste generated in the processing and expand the offer of new products, such as briquettes and composites that can reduce the use of plastic in various types of utensils and packaging by up to 30%.

- Carry out the mapping of gender-sensitive chains in order to take women out of invisibility and understand which gender restrictions contribute to the low participation of women in the different links.

- Invest in actions to combat fire and forest fires, to avoid losses and losses in view of the increase in deforestation and fires in recent years and increased environmental vulnerability.

- Information processes, through training, courses, workshops, exchanges, among others, are fundamental and must occur permanently, to spread the culture of income generation and improvement of living conditions with sustainable use.

- For small projects, improve methods for recording data together with the agglutinated entities.

- Promote activities to reflect on gender roles, such as meetings with the family or spouses to discuss the tasks performed by the genders, dedicated time, access to remuneration and other benefits, decision-making by both parties, raising awareness of equity actions inside and outside the residence.

To the Amazon Fund

- Review the unit of measurement of average income (average monthly value per family or average annual value per family), considering the seasonality of the products that make up the 'basket' of the producer or extractivist, and review the intelligible formulation to guide the production records with the beneficiary public. As a suggestion, adopt and train for the use of the agroecological booklet or easy and simple language registration procedure.

- In addition to the indicator 'forest management plans', consider other elements, such as use agreements and fisheries agreements, among the ways to indicate sustainable management from source.

- Support activities to strengthen the governance of value chains. In the next steps of the Amazon Fund, support the facilitation of the value chain, aiming to develop communication, cooperation and articulation of links, from production to commercialization.

- Support projects that involve a circular economy, as they can innovate with solutions and new products from the use of production waste.

- Support actions aimed at the forest restoration chain and exchange with Atlantic Forest restoration centers and seed networks from other biomes. Brazil has 12 million hectares deforested, indicating a demand that can be met with new activities and generating jobs.

- Request, from Component 1 projects, the mapping of the chain with a focus on gender and generation, as a selection criterion or mandatory activity.

- Support projects in the agglutinated model, as they worked with the bottom-up approach, meeting the needs and peculiarities of each project and organization. This aspect contributed to the adherence and participation of people in project activities.

- Create gender-based indicators: strengthened community organizations; women working in the forest restoration chain (considering SAFs, seed collections and nurseries); women's participation in production, processing and marketing (an indicator for each stage of the production chain); women who access ATER.

6. INDIVIDUAL PROJECT EVALUATION

Project: SMALL ECO-SOCIAL PROJECTS IN THE AMAZON – PPP-ECOS IN THE AMAZON
Organization responsible for execution: Society, Population and Nature Institute (ISPN)
Beneficiary audience: family farmers, traditional peoples and communities
Deadline: September 2012 to October 2020
Place of implementation: 74 municipalities in the states of Maranhão, Mato Grosso and Tocantins, in the Amazon biome

Project summary: Through public calls, it financed 88 low-value socio-environmental projects from 77 non-profit associations and community-based cooperatives in two categories of support: (i) small projects, up to R$60,000.00 each, to support community-based organizations, including those with little experience in project management; and (ii) consolidation projects, up to R$90,000.00 each, to support experienced organizations or for project continuity, expansion and replication with positive results and impacts. It contributed to the strengthening of the chains of Brazil nuts, babassu, peach palm, various fruit pulps, honey and other bee products and handicrafts in the states of Maranhão, Mato Grosso and Tocantins.

The project was framed by the Amazon Fund due to the spontaneous demand modality. Contrary to the proposals in the public call modality, which included gender and youth as a selection criterion (weight 3), these proposals were not required to present a gender strategy.

It is important to highlight the sensitivity of the agglutinating entity with the gender theme. The project valued the work of women, reinforcing their participation from the perspective of building equality and improving family life. In its portfolio (2013-2017), it presents thematic texts, among which it highlights seven subprojects that sought protagonism or encouraged young rural women: three involving the processing of babassu coconut and the others involving agro-industrialization, with the construction of flour houses, community kitchens and honey production. In the same publication, she presented an article on the importance of working on the theme of gender in rural areas, from the perspective of women's inequality.

		Complies	Note
Poverty reduction	To what extent did the project effectively contribute to economic alternatives that value the standing forest and the sustainable use of natural resources?	Yes	The valorization of the forest occurred by strengthening the product chains of socio-biodiversity and family farming, expanding the production, processing and marketing of food, seeds, fibers and oils that make up the "basket of products" of traditional peoples and communities (PCTs) and family farmers. The implementation of SAFs, agro-yards and agroecological backyards and the enrichment of Permanent Preservation Areas (APPs) and Legal Reserve (LR) with native people promoted the cultivation and extraction of species of economic interest and for self-supply from 2,999 hectares recovery, corresponding to an average of 0.98 hectares recovered per family with species of economic/food value.

Redução da pobreza	To what extent did the project positively influence poverty reduction, social inclusion and improvement in the living conditions of beneficiaries (mainly: traditional communities, settlers and family farmers) living in its area of operation?	Yes	The average annual income per family was estimated at R$2,421.00, exceeding the established goal by 60%. The beneficiary organizations were strengthened after the completion of the project with ISPN, gained new partnerships and accessed resources from new projects. The following were promoted: (i) social inclusion (from a total of 60 subprojects, 58% indicated the participation of young people and 70% of women in the activities carried out); (ii) productive inclusion (the PPP-Ecos boosted the beneficiary organizations in institutional, productive and commercial terms; supported the construction and/or reform of 27 equipped community agribusinesses and exchanges and access to information on good practices; and articulated partners and public agencies for participatory dialogue and the search for joint solutions); (iii) political advocacy (the projects were present in an average of 65 networks and social movements, worked in 131 public policy advocacy spaces within the three governmental spheres – municipal, state and federal – and accessed an average of 48 public policies); (iv) human capital (5,072 individuals were trained and used the knowledge acquired and leadership skills were developed and/or improved in the execution of the projects); and (v) improvement in living conditions (the improvement of environmental conditions, with the recovery of 2,999 hectares of degraded areas, promoted the improvement of services ecosystem of provision in the medium and long term, such as water and water security due to the recovery of springs and PPAs. The implementation of SAFs and agroecological backyards, among other productive activities, in addition to generating income for families, expanded food security beyond the place of production.
	Was the project able to promote and increase the production in value chains of timber and non-timber forest products, originated in sustainable management?	Yes	However, few projects have developed and/or implemented sustainable management plans. The agglutinating entity identified that the indicator 'Number of sustainable forest management plans prepared' was not efficient for monitoring and evaluation.
	In the case of a project with a scientific and technological development component, did it contribute to the construction of a development model appropriate to the region?	Yes	Nine publications were printed, as well as two documentary videos about PPP-Ecos and its action in the territories. Highlighted publications are: Guide for the Preparation of Community Agroindustry Projects (1st and 2nd edition); Publication of Small Eco-social Projects of Babassu Coconut Breakers: reflections and learning; Manual of Good Management Practices for Sustainable Buriti Extractivism (2nd edition); Technological Manual for the Full Use of Buriti Fruit and Leaf (2nd edition); Publication: Lessons learned - I Meeting of Experiences and Learning by PPP-Ecos in the Amazon; Technological Manual for the Integral Use of the Products of Native Stingless Bees (2nd edition). Two documentary videos were also produced: Babassu – forest of life and on the PPP-Ecos.

Gender equity	Was the project able to integrate gender issues into its strategies and interventions or did it address the issue in isolation? How?	Yes	Together with organizations managed by women, the project worked to strengthen institutions and sustainable production chains, in addition to expanding and qualifying the discussion on gender and agroecology, one of the main topics addressed in the training. Promoted actions on women's rights 27% of the projects. Research was applied to the subprojects in which 'income' and 'gender and agroecology' were addressed. During the period of the Covid-19 pandemic, ISPN formed a WG to directly address the needs of women.
	Was there gender separation in data collection for project planning and monitoring?	In part	Data collection with the agglutinated entities was not efficient, so there is no information in the indicators.
	How did the project contribute to gender equity?	Yes	In terms of the 88 projects supported by *PPP-Ecos*, more than ten were implemented by women's groups (17 women's organizations were counted in the Small Projects Portfolio 2013-1017). They showed the participation of women 70% of the projects, and of these, 32% were coordinated by them. Most of them had women in their execution, 43% of the projects, and 27% promoted actions involving women's rights.

Project: STRENGTHENING THE FOREST BASED SUSTAINABLE ECONOMY
Organization responsible for execution: Central Cooperative for Extractive Marketing of Acre (Cooperacre)
Beneficiary audience: small family farmers and extractivists
Deadline: November 2014 to March 2022
Place of implementation: 14 municipalities of Acre, the administrative regions of Alto Acre, Baixo Acre and Purus
Project summary: Selected under the Public Call for Sustainable Production Projects of the Amazon Fund, the project aimed to strengthen the production chains of Brazil nuts and fruit pulp. It was implemented through direct and indirect support actions to 25 associations and cooperatives affiliated to Cooperacre, agglutinated entities according to the public call modality. With regard to direct support actions, the following were carried out: (i) installation of two community warehouses and provision of boxes to improve fruit transport conditions; (ii) expansion of the number of agglutinated cooperatives and associations with organic certification of nut production; (iii) recovery of degraded and/or altered areas in small farms or family farms. The transversal actions included: i) provision of technical assistance and rural extension services (ATER); ii) optimization of Cooperacre's processing structure, through the installation of two new drying greenhouses and the installation of briquetting machines (equipment that transforms the residual shell of Brazil nuts into compacted biomass of high calorific value); iii) development of feasibility studies for the diversification of products; iv) training of representatives of the agglutinated organizations, Cooperacre technicians and the ATER team; and v) investment in communication and marketing.

		Complies	Notes
Poverty reduction	To what extent did the project effectively contribute to economic alternatives that value the standing forest and the sustainable use of natural resources?	Yes	The implementation of SAFs in already deforested areas, where agro-extractivist production is concentrated, increased production efficiency. There was an increase of 2.5 annual harvests per family, increasing income with the sale of products from extractivism and fruits. With the increase in the profitability of agro-extractivism, the producer decreases his/her interest in opening new areas for livestock production.
	To what extent did the project positively influence poverty reduction, social inclusion and improvement in the living conditions of beneficiaries (mainly: traditional communities, settlers and family farmers) living in its area of operation?	Yes	2,000 families and indirectly 1,000 families and a set of 25 associations and cooperatives of producers were directly benefited, strengthening the network of actors in extractivism and family farming. Cooperacre generated more than 300 direct jobs and more than 1,500 indirect jobs, benefiting extractive communities with the guarantee of purchasing extractive products, paying a fair price for production. It increased production efficiency by up to 2.5 harvests per year and, consequently, the income obtained from the sale of products from extractivism and fruit growing. There was an environmental improvement with the use of SAFs, increasing the quality of ecosystem services that provide a basis for people's well-being. The implementation of, on average, 2 hectares of SAF per producer strengthened the family structure and stimulated the paid work of young people in production, obtained by harvesting the products. The women mentioned that SAFs have been improving the quality of life of families, with healthy foods and an increase in income. Some women have produced products for sale in local markets, such as jellies, biscuits, etc.
Redução da pobreza	Was the project able to promote and increase the production in value chains of timber and non-timber forest products, originated in sustainable management?	Yes	The increase in the Brazil nut chain occurred from the certification of producers of 14 organizations in international standards.
	In the case of a project with a scientific and technological development component, did it contribute to the construction of a development model appropriate to the region?	In part	There was no mention of the publication about the technology that promoted the reduction of the use of firewood by more than 70% with the use of briquettes made from Brazil nut waste and used for energy generation. The reduction of pressure on the native forest with the technology adopted proved to be adequate for a regional context of high deforestation rates.
Gender equity	Was the project able to integrate gender issues into its strategies and interventions or did it address the issue in isolation? How?	No	There was no integration of gender issues in the project. The actions were addressed within the scope of families, there was no strategy focused on women and their performance with the chains of products worked.
	Was there gender separation in data collection for project planning and monitoring?	In part	Data on the participation of women in most activities were not collected, but according to an interview with the manager, it can be said that at least 68 women were directly benefited.
	How did the project contribute to gender equity?	No	There was no contribution.

Project: MATERIALIZE
Organization responsible for execution: Consortium and Densified Economic Reforestation Project (Reca)
Beneficiary audience: Families of agro-extractivists associated with the agglutinated entities and beneficiaries of investments in the fruit processing and oil processing plant
Deadline: January 2015 to October 2020
Place of implementation: Acrelândia/AC and Porto Velho/RO
Project summary: Selected through the Public Call for Sustainable Productive Projects, the project covers four agglutinated organizations, namely Associação Baixa Verde (ABV), Associação dos Produtores Rurais do município de Acrelândia (Aspromacre), Cooperativa Agropecuária e Florestal (Coper-RECA) and Associação dos Pequenos Agrossilvicultores do Projeto RECA (Associação RECA), which also acts as the agglutinating entity and executor of the project. The project implemented 315 hectares of SAFs in degraded areas of 135 family units of the associates and cooperative members of the agglutinated entities. Mainly consorted with cupuaçu and açaí, it expanded the productive capacity of families in the medium and long term and provided opportunities for the improvement of fundamental ecosystem services to ensure a dignified life for producers and their families. It carried out transversal actions to reach all the agglutinated entities: a) expansion and modernization of the productive capacity of the fruit processing units, especially cupuaçu and açaí; b) reconstruction of the oil and seed processing unit and the structures for drying and storing nuts and other fresh and processed products; c) institutional strengthening; and d) technical assistance and rural extension (ATER) agroforestry. As a result, it expanded capacity and improved the quality of production, storage and marketing; improved the lives of beneficiaries with a guarantee of fair income from socio-biodiversity products and provided training on SAFs and good practices in production and storage.

		Complies	**Notes**
Poverty reduction	To what extent did the project effectively contribute to economic alternatives that value the standing forest and the sustainable use of natural resources?	Yes	With the implementation of 315 hectares of SAFs in 135 properties of the producing families, the productive base was strengthened. It supported the reform and/ or expansion of the infrastructure for the processing of socio-biodiversity products, adding value and expanding the capacity to offer products that make up the agro-extractivist 'basket'. They were able to process their products in Reca, 435 families in the region. Encouraged the establishment of local businesses for the production of seedlings.
	To what extent did the project positively influence poverty reduction, social inclusion and improvement in the living conditions of beneficiaries (mainly: traditional communities, settlers and family farmers) living in its area of operation?	Yes	The project contributed with an average annual income per family of R$21,913.00. It added value to the products of socio-biodiversity and family farming, increasing the family income and well-being of the farmers involved in the project with the implementation of SAFs for economic and ecological conservation purposes in a region highly pressured by extensive and exclusive agriculture. It contributed to the generation of technical capacity and knowledge of 428 small agro-extractivists with the implementation of SAF and ATER agroforestry and trained community leaders on project management, participatory governance, good production and storage practices and marketing strategies.

Redução da pobreza	Was the project able to promote and increase the production in value chains of timber and non-timber forest products, originated in sustainable management?	In part	There is no information on the realization of sustainable management plans, but there was promotion and increase of the chains of cupuaçu, açaí, seeds and seedlings and oils.
	In the case of a project with a scientific and technological development component, did it contribute to the construction of a development model appropriate to the region?	Yes	The project promoted access to knowledge for the development of rural areas using agroforestry technologies and practices in the recovery of degraded areas. The triple frontier (AM-RO-MT), where the project was executed, is marked by the high pressure of deforestation for agribusiness and the promotion of the forest restoration chain for economic purposes. The project contributed to RECA becoming a reference in SAFs in the Amazon. Reca partnered with the University of Rondônia (UNIR), which sent residents in food engineering and forest engineering to develop actions to improve the quality of agro-industrial processes and the organic composting process, respectively.
Gender equity	Was the project able to integrate gender issues into its strategies and interventions or did it address the issue in isolation? How?	In part	There is an indicator of the participation of women in the management of organizations, but it is not clear what action/strategy was taken to obtain the result. The project carried out specific actions, treating gender in isolation in the training and with the beneficiaries adhering to the SAF, as pointed out by the women's participation indicator.
	Was there gender separation in data collection for project planning and monitoring?	Yes	456 women were trained to practice sustainable economic activities and 227 were directly benefited.
	How did the project contribute to gender equity?	Yes	It supported women to have their own income through their plantations (it was found that women benefited more from the sale of cupuaçu and açaí). The project supported the women's organization for the restructuring of the sales center for handicraft and industrial products. It benefited women with its own production record in the cooperative. It has contributed to the increase of the participation of women in the coordination of the association - of the 64 coordination posts of the agglomerated entities, 41 are occupied by men and 20 by women, with emphasis on the ABV, which has five women in the fiscal and administrative council of the association.

Project: Dema Fund
Organization responsible for execution: Federation of Agencies for Social and Educational Assistance – FASE
Beneficiary audience: Family farmers and agro-extractivists, quilombolas and associated indigenous people in their territories
Deadline: June 2011 to February 2018
Place of implementation: West of Pará - BR-163/Trans-Amazonian Highway/Xingu, around Itaituba and Novo Progresso and Baixo Amazonas
Project summary: The *Dema Fund* aimed to value activities that keep the forest standing in the Amazon of Pará by supporting projects aimed at forest enrichment, diversification of production, improvement of working conditions and the appreciation of native products for commercialization and self-consumption. 112 community association projects were supported for the implementation of SAFs, recovery of degraded areas and riparian forests, installation of mini-industries processing native fruits and products, organic gardens, fish farming, native bee breeding, handicrafts, community radio and territory management. The project's vision was to strengthen forest product chains both to guarantee food and nutritional security of communities and to generate income and for self-consumption. The supported public corresponds to 5,448 people directly affected by the projects, 2,496 of whom are women from the communities benefited, residents of extractive reserves, settlements, indigenous lands and quilombos. It provided a productive base for several PCT groups and indigenous peoples with more than 65 food products that improved food security and family health.

		Complies	**Notes**
Poverty reduction	To what extent did the project effectively contribute to economic alternatives that value the standing forest and the sustainable use of natural resources?	Yes	The project strengthened food production through the recovery of degraded areas, forest management, forest and backyard enrichment. Income generation capacity followed the quantity produced, which showed gains mainly after the completion of the projects, with emphasis on native products, especially fruits and seeds. The project contributed to establishing good sustainable production practices based on actions to prevent and combat fire. Of the projects supported, 44 (73.3%) produced food; of these, 28 (64%) market production in local markets. Services and other products, such as community-based tourism and small animal husbandry, among others, accounted for 21.7% (13 projects); of these, 61.5% (8 projects) accessed local markets.

Poverty reduction	To what extent did the project positively influence poverty reduction, social inclusion and improvement in the living conditions of beneficiaries (mainly: traditional communities, settlers and family farmers) living in its area of operation?	Yes	There was an increase in the circulation of resources in the communities also due to the commercialization of production, surplus of food and handicrafts and visits by tourists to community inns. After the implementation of the project, a quilombola community reported an increase in the monthly income of families from R$600.00 to R$1,000.00. The monthly average per family was estimated at R$2,000.00. From the project there was the diversification of crops and implementation of new activities. There was also the rescue of ancestral practices on the sites, taking into account the interests and needs of the beneficiary communities. Among the results, there was the adoption of new production technologies based on agroecology and encouragement of collective activities and changes in the eating habits of families, promoting food and nutritional security. The collective subprojects worked from the bottom-up approach, providing opportunities for the protagonism and empowerment of the rural and forest populations and their local organizations and networks, in addition to improving their living conditions. The challenge posed by the subproject cycle process was educational and stimulated the legalization and institutional recognition of grassroots organizations, contributing to the dynamization of the partnership framework of many of them. The experience gained by community associations in developing community projects allowed access to new public notices and greater access to municipal and state public institutions in the field of agriculture and the environment after the completion of the projects.
	Was the project able to promote and increase the production in value chains of timber and non-timber forest products, originated in sustainable management?	Yes	In partnership with public agencies responsible for the use, occupation and protection of territories, such as the Chico Mendes Institute for Biodiversity Conservation (ICMBio), the Brazilian Institute for the Environment and Renewable Natural Resources (Ibama) and the State Secretariat for the Environment (SEMA-PA), there was an understanding about the licensing process of each type of territory and the cooperation of the agencies for the forwarding of management plans. Six projects made management plans for native açaí groves and two focused on the use of fallen wood for furniture. In addition to these, use plans and community fishing agreements were supported in agro-extractivist settlements, sustainable development reserve (RDS) and in three quilombola communities.
	In the case of a project with a scientific and technological development component, did it contribute to the construction of a development model appropriate to the region?	Yes	The *Dema Fund* produced a Project Preparation, Management and Monitoring Guide, with the objective of guiding the organizations supported in the planning and administration of collective initiatives. To this end, it presents methodological and practical contributions resulting from the collective learning accumulated by the Fase/Dema Fund team and the popular organizations supported.

Gender equity	Was the project able to integrate gender issues into its strategies and interventions or did it address the issue in isolation? How?	Yes	Globally, support was given to small agroecological food production projects. The agroecology theme was a foundation for the gender approach. Support was given to activities carried out mainly by women, such as backyards enriched with SAFs, vegetable gardens and small animal husbandry.
	Was there gender separation in data collection for project planning and monitoring?	Yes	1,394 women participated in training and 2,791 were directly benefited.
	How did the project contribute to gender equity?	Yes	Women accounted for 46% of the total beneficiaries. There was support for the constitution of a Women's Fund within the Dema Fund itself, involving women's organizations from 19 different municipalities. Women participated in training and, through the approach of agroecology, their role in reforestation, recovery and sustainable management activities was emphasized. Promoted food security and health care. At the request of the WG of the women's movement, she began adapting the Ecological Booklet to record production, giving greater visibility to her work in agriculture. It supported the constitution of five specific women's organizations that have contributed to the visibility and appreciation of work, also to the development of strategies for marketing products through fairs. Community-based tourism also involved female participation with local handicrafts and food and lodging services.