2019/2020
Biannual Report

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Partnership for the Conservation of Amazon Biodiversity

USAID
FROM THE AMERICAN PEOPLE

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Partnership for The Conservation of the Amazon Biodiversity

Biannual Report – 2019/2020

USAID FROM THE AMERICAN PEOPLE

Cover photo

Macaw in the Extractive Reserve Médio Juruá - Amazonas State (Bruno Bimbato/ICMBio)

Rubber tappers of Vila Franca in the Extractive Reserve Tapajós-Arapiuns – Pará State (Bruno Kelly/USAID)

Extractive Reserve Verde para Sempre, where rivers are the main mode of transportation - Pará State (Bruno Kelly/USAID)Pirarucu sustainable fishing at Medio Juruá river - MCruppe/Taste of the Amazon

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Photo: Juliana Nogueira/USAID

Photo: Neil Palmer (CIAT)

Brasilia, Brazil

Ted Gehr
USAID/Brazil Director
Partnership for the Conservation of Amazon Biodiversity (PCAB)

"Since 2014, USAID/Brazil's main goal has been to conserve biodiversity in the Amazon by supporting Brazil to promote sustainable development and to improve living conditions for the populations whose livelihoods depend on the rainforest."

When we were preparing to launch our 2019 Annual Report, in April 2020, the impacts of the global pandemic profoundly changed the way our network of partners operated. The need to immediately respond to the COVID-19 crisis to protect beneficiaries and mitigate risks of infection in remote areas called for the rapid mobilization of USAID/Brazil and our partners.

So that we can better report on these adjustments, we decided to postpone our Annual Report release and are now launching a report that combines results from both 2019 and 2020.

Since 2014, USAID/Brazil's main goal has been to conserve biodiversity in the Amazon by supporting Brazil to promote sustainable development and to improve living conditions for the populations whose livelihoods depend on the rainforest. Our portfolio is dedicated to protecting the largest rainforest on the planet which provides 20% of all freshwater on Earth and plays a critical role in balancing the global climate.

In spite of the pandemic, our small and dynamic team has ensured the continuity of our operations in all nine states of the Legal Amazon, with 14 activities implemented through a large network of partners. These robust partnerships are the driving force behind USAID's Partnership for the Conservation of Amazon Biodiversity (PCAB). Our partners include organizations with consolidated operations and experience in the Amazon region, as well as research institutions, and federal, state, and municipal government agencies. These entities in turn work closely with cooperatives and associations of traditional communities including Indigenous Peoples.

We also count on valuable technical cooperation provided by the United States Forest Service.

Without this collaborative work in a region where everything is superlative, we would not have been able to provide support to 153 Protected Areas covering 46 million hectares – an area larger than California. The majority of our projects (88%) are in Indigenous Lands or protected areas in which sustainable economic activities are allowed.

Together with the Alliance of Bioversity International and the International Center for Tropical Agriculture (CIAT), we have strengthened our private sector engagement strategy as part of an ongoing effort to build a new sustainability-based development model for the region. Launched in 2017, the Partnership Platform for the Amazon (PPA) continues to evolve. In December 2020, the PPAh ad 42 members, 33 of which are private companies. All PPA members are committed to our shared goals of integrity and conservation of the Brazilian Amazon ecosystem together with improved well-being and socioeconomic status of its rural communities.

Thirty startups have already benefited from the PPA Acceleration Program – the only program solely focused on the incubation and acceleration needs of Amazon startups that meet rigorous sustainable agenda requirements. Since 2018, the PPA program has invested US$2 million in startup companies, contributing to increased innovation, the bioeconomy, sustainable value chains, and territorial management.

Through multiple public-private partnerships and the PPA, US$ 24 million in private resources were co-invested alongside USAID's funds during the reported period, amplifying impact and validating our role as a catalyst for sustainable impact.

While continuing to make advances in conserving biodiversity in the Amazon, much of our focus over the last year was on responding to the COVID pandemic. In addition to donating 1,000 ventilators to Brazil in 2020, USAID rapidly joined forces with partners to respond to the essential health and sanitation needs of Amazon communities. Under the PPA Solidarity Fund, our private sector partners co-invested US$ 3,5 million with USAID to help sustainable businesses in the Amazon weather the economic downturn and to provide critical health products and services to impacted communities.

Even in this challenging period when many of our field operations came to a halt, the PCAB program and USAID's work has not ceased. The partnership between the people of the United States and the people of Brazil has remained strong. Our bilateral investment commitment increased from US$80 million to US$130 million. And our partnerships continue to grow, mobilizing resources, commitments, and market-based solutions for the Amazon. It is with great enthusiasm that we present here the results of the PCAB's 2019-2020 collaborative efforts to ensure the integrity of the Amazon ecosystem and improve the well-being of its communities.

"Without this collaborative work in a region where everything is superlative, we would not have been able to provide support to 153 Protected Areas covering 46 million hectares – an area larger than California."

Ted Gehr, Director USAID/Brazil

Photo: US Forest Service archives

PCAB OVERVIEW

The United States Agency for International Development (USAID) has been present in Brazil for more than 50 years. Historically, USAID has engaged in initiatives related to education, vocational training, income generation and protection of socioeconomically vulnerable women and youth. In the past two decades it has worked jointly with the Brazilian government on several environmental programs.

In 2014, USAID/Brazil became the first strategic partnership mission, thereby abandoning its traditional role in development assistance to become a catalyst and facilitator of innovative solutions.

Under this new concept, its largest joint program is the Partnership for the Conservation of Amazon Biodiversity. The bilateral agreement between USAID/Brazil and the Brazilian Cooperation Agency (ABC) has a mission to conserve biological resources in the Brazilian Amazon and encompasses the Brazilian Protected Areas System, including Indigenous Territories. It is implemented in partnership with the Ministry of Environment, the Chico Mendes Institute for Biodiversity Conservation (ICMBio) and the National Indigenous Foundation (Funai), among other key Brazilian Institutions.

Those institutions form a Steering Committee as part of an organizational framework developed to increase coordination in program design and implementation.

Four technical working groups were created in 2020:

- **Fire Management** - To provide training and information sharing while enhancing bilateral and multilateral cooperation;
- **Institutional Strengthening** - To enhance professional competency to promote biodiversity conservation and sustainable forest management in Protected Areas;
- **Value Chains and Tourism** -To improve community well-being by strengthening public lands management and biodiversity conservation while supporting tourism and value chains in Protected Areas;
- **Biodiversity Monitoring and Restoration of Degraded Areas** - To improve biodiversity monitoring through science and technology tools, and enhance the capacity to identify and to restore native vegetation of degraded habitats;

Using US budget resources earmarked by Congress for biodiversity conservation in the Amazon, the PCAB supports projects and programs that can generate models and good practices to be replicated in other areas.

From 2019 to 2020, deforestation in PCAB-supported Protected Areas dropped 49%, as compared to a drop of only 29% in non-PCAB supported Protected Areas.

In May 2020, the PCAB's agreement was extended until 2030 and the United States contribution was increased by US$ 50 million.

Over the past four years (2017-2020), PCAB has expanded its scope to boost private sector participation. Together with large corporations and companies of all sizes, it has supported several studies and integrated actions in the region. Companies that source raw materials in the Amazon can become the drivers of new sustainable development models, organizing value chains of forest based products and contributing to scale up initiatives that add value to the standing forest. This will in turn improve the well-being of local populations and allow regional economic growth.

Public-Private Partnerships (PPPs) have also been sought and encouraged, strengthening Amazon forest-based and sustainable smallholder value chains, as well as unlocking innovative approaches to engage with municipalities and communities on integrated territorial management.

Duration

16 years (2014 – 2030)

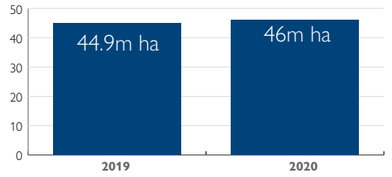
Budget

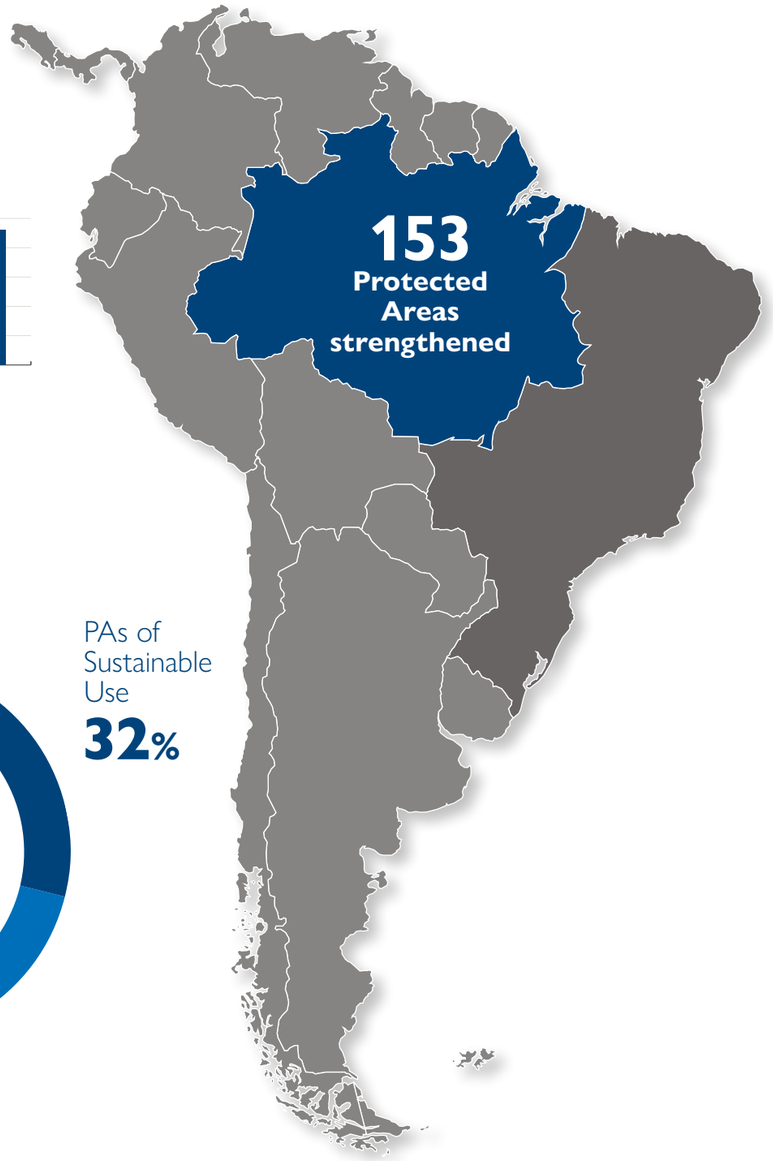
US$ 130 million

Emissions avoided

50 million tons of CO_2

PCAB IN 2020



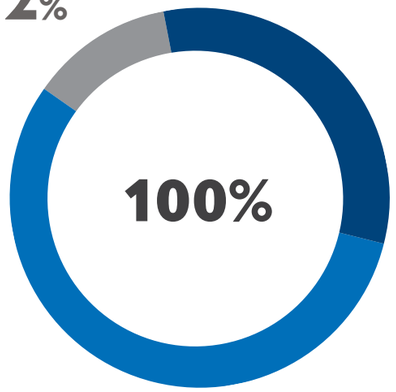


National Parks, Biological Reserves or National/ State Forests

12%

PAs of Sustainable Use

32%



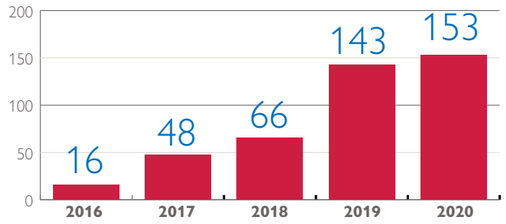
Indigenous Territories

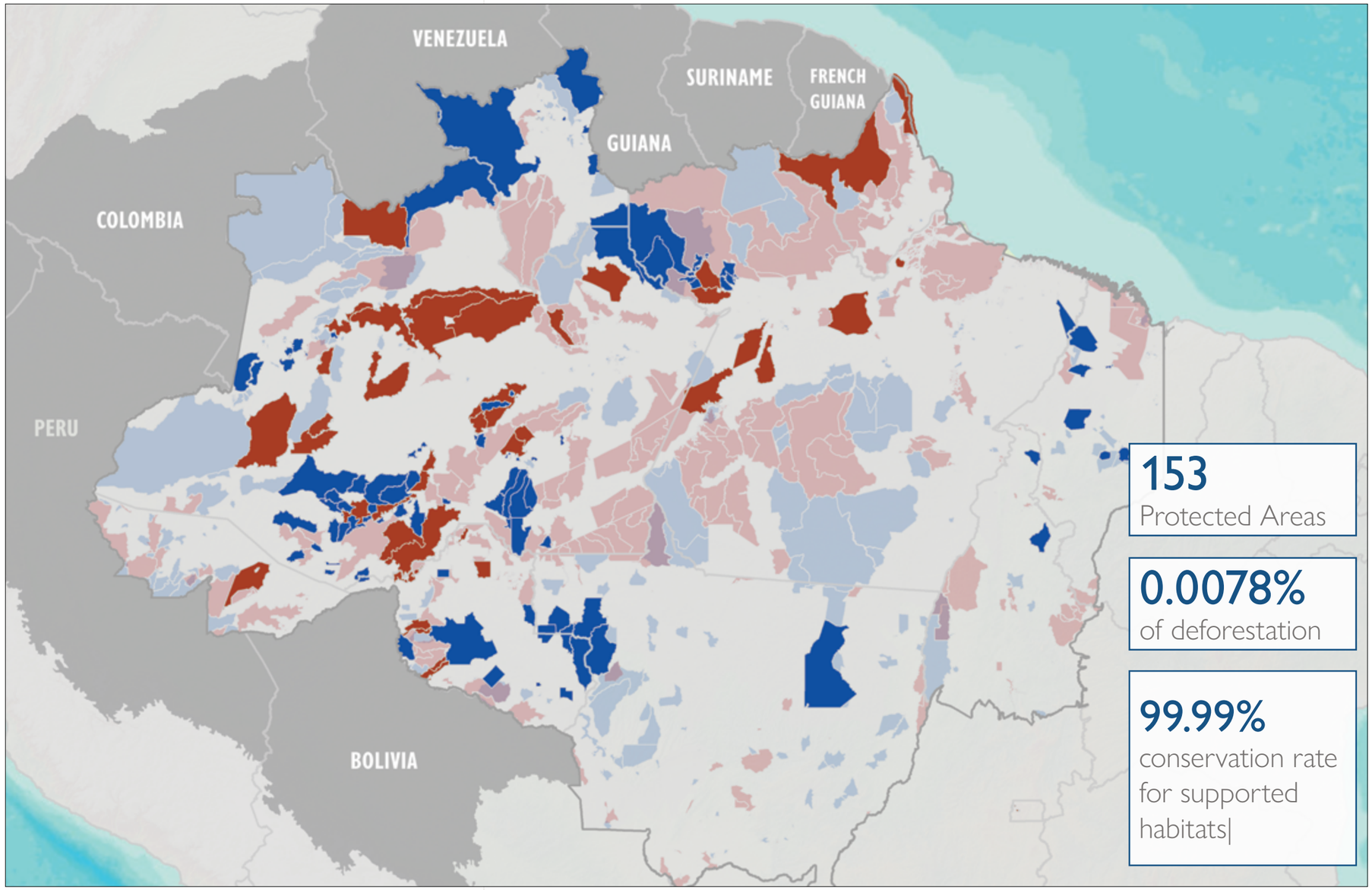
56%

Conservation Portfolio 2020

- USAID Programming in Protected Areas (Federal Conservation Units)
- USAID Programming in Indigenous Lands and Quilombola Territories
- Protected Areas (Conservation Units)
- Indigenous Lands and Quilombola Territories
- Amazon Ecoregion
- Brazilian Amazon

Protected Areas Supported by PCAB





Source: ESRI, USGS, NOOA

WHERE WE WORK

153
Protected Areas

0.0078%
of deforestation

99.99%
conservation rate for supported habitats|

Results Framework (Theory of Change)

The PCAB aims to ensure the integrity and conservation of Brazilian Amazon ecosystems over the next 20 years and, at the same time, to improve Amazon communities' well-being and standards of living. Its four main objectives are:

Innovation, Science and Technology:
Advancing the use of cross-cutting technology, innovation and science-based decision making in all PCAB activities;

Consolidation of Protected Areas

Strengthening conservation and sustainable development in Protected Areas in the Amazon with their management, implementation, monitoring, and conservation roles met. This includes Indigenous Lands, Quilombola Territories*, and Conservation Units;

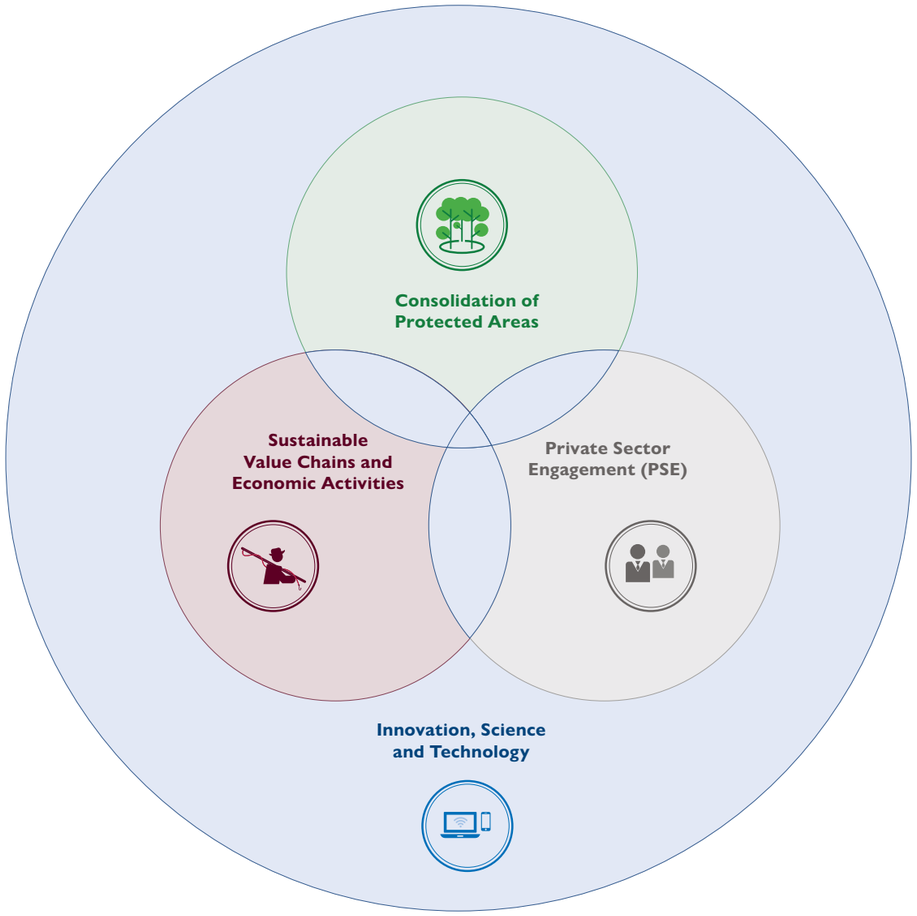
Private Sector Engagement (PSE)

Catalyzing the private sector to invest and partner to support long-term Amazon conservation;

Sustainable Value Chains and Economic Activities

Expanding forest-based value chains and businesses that foster biodiversity conservation, weakening deforestation drivers;

*Lands bought or traditionally occupied by descendants of former slaves organized in communities called quilombos



To achieve these outcomes, the PCAB focuses on strengthening public and private institutions involved in managing protected areas, nurturing community engagement and governance with and over these areas, expanding the economic value of sustainably managed forests and biodiversity for local communities, and building a public constituency by connecting people with the natural beauty attractions of National Parks and other Protected Areas.

Promoting sustainable development inhibits illegal activities often linked to transnational criminal networks, contributing to regional security, curbing illegal deforestation, wildlife trafficking, illegal mining, and drug trade.

Why biodiversity matters

The variety of life on Earth is the biological diversity or biodiversity. It comprises variability within species, among species, and of ecosystems. It also refers to the complex relationships among living things, and between living things and their environment. Total estimates worldwide vary widely: from 3 million to 100 million species.[1]

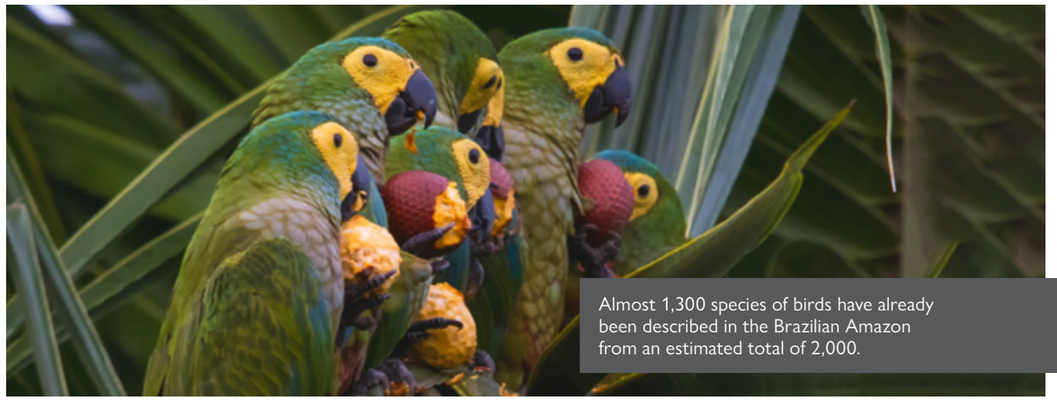
However rich is the diversity of life on the planet, the Amazon is home to no less than 10% of all living species and 20% of animal species. The humid and hot ecosystems of the tropical forest are among the main mega biodiversity hotspots – areas with great biodiversity and endemic species under pressure. In the last 50 years, the Brazilian Amazon (60% of the Amazon) has lost over 17% of its forest cover and many species face extinction before they are even discovered.

Based on the interdependence of species, ecosystems provide a variety of environmental services. Some are well known, such as bee pollination, necessary for the propagation of new plants, including hundreds of thousands of agricultural crops. Other, like flying rivers, are just being revealed by researchers. They spread water and moisture to the whole South American continent and have a global cooling effect. The Amazon forest might not be the lungs of the world, as it absorbs almost as much oxygen as it releases, but it is the planet's air conditioner.

The loss of biodiversity has huge implications: from the disruption of food supplies to loss of clean water, future medicines, and fertile soils. Ecosystems' services in Brazil were deemed equivalent to 21% of the country's Gross Domestic Product (GDP). These services can also be responsible for up to 89% of the income of 20 million Brazilians living in rural and/or forest areas[2].

The 2020 Global Risk Report of the World Economic Forum (WEF) ranked biodiversity loss as one of the top five risks for global political and economic stability over the next 10 years. Biodiversity loss and human environmental damage also featured among the main threats in the 2021's edition.

The Global Assessment Report on Biodiversity and Ecosystem Services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) had highlighted in 2019 that one million species are at risk of extinction and major land-based habitats had fallen by at least 20% since 1900.



Almost 1,300 species of birds have already been described in the Brazilian Amazon from an estimated total of 2,000.

Photo: US Forest Service archive

1 https://www.cbd.int/convention/guide/

2 Globe International Natural Capital - 2014
http://www.globeinternational.org/files/-202e484dc6-70465621_rwny62vn8j2errxxpiyvgy.html

Reaching 9,888 feet above sea level, the Neblina Peak is home to many endemic species.

Photo: Paulo Rezende/Wikipedia

New species discovered in the Amazon

In January 2020, two new species of lizards collected close to the Neblina Peak, the highest mountain in Brazil, were described in a scientific magazine and featured in the São Paulo Research Foundation (Fapesp) online portal. They were collected close to the Venezuelan border in the Guiana Shield, one of the most preserved areas of the Amazon rainforest.

The peak, sacred to the Yanomami Indigenous people, was scheduled to open for adventure/ethno-tourism in March 2020, after years of planning. The Visitation Plan respecting consultation to Yanomamis and built with their active participation took five years to be concluded and was supported by PCAB, with technical assistance from the US Forest Service, ICMBio and Funai. Due to the pandemic, the first group trip was postponed indefinitely. The reopening of the Neblina Peak after 10 years will have to wait until it is safe for the Yanomami.

As in large parts of the Amazon, biodiversity is understudied in the region. Due to lack of access, most studies are concentrated alongside the rivers and in forests surrounding populated areas.

The lizards were discovered in a scientific expedition in 2017, in which researchers were guided by the Yanomami and the Brazilian Army. The plateau named "God's Home" by local Indigenous, is part of the Imeri Mountais, rich in endemic species, as the mountains kept animals and plants mostly isolated.

Riolama Grandis is one of the two new species only found in the Peak

Photo: Renato Recoder

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A study published in *Nature Communications* in 2019 revealed two new species of electric-eels in the Amazon. One of them emits the highest voltage ever registered in an animal: 860 volts. Researchers also found that these eels can act in groups to attack enemies. Prior to this discovery, only one species of eel was known.

Electrophorus voltai at the Xingu River is one of two new species.

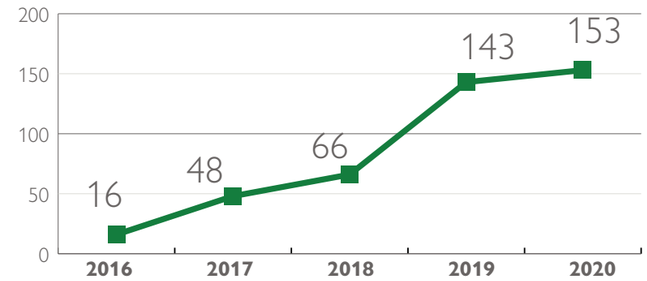
Photo: L. Sousa

Blossoming Ipê, one of the tallest trees in the Amazon

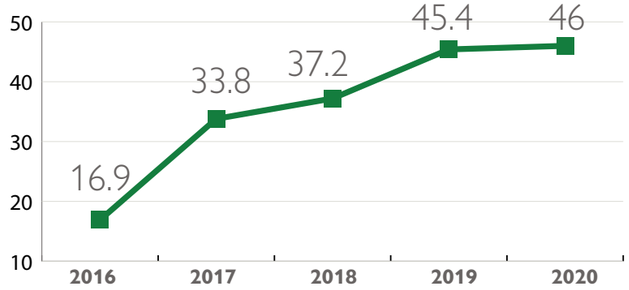
Photo: Juliana Nogueira/USAID

CONSOLIDATION OF PROTECTED AREAS

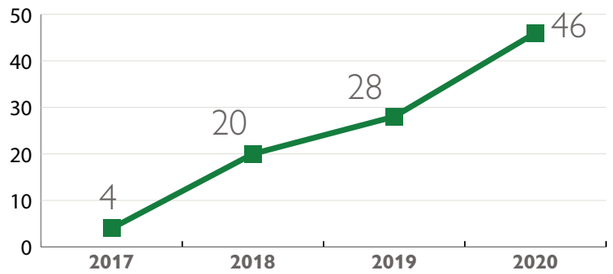
Protected Areas supported by PCAB



PAs strengthened by PCAB (in million hectares)



Laws, policies or regulations that address biodiversity conservation and/or environmental themes officially proposed, adopted or implemented



Participatory Biodiversity Monitoring (PBM)

The objective of monitoring biodiversity is to assess how it responds to changes in the environment[1] and to understand how species are affected by conservation practices and external pressures, such as overexploitation, habitat loss and degradation, forest fires, invasive species, and climate change. By collecting long-term data it is possible to capture changes over time.

The Institute of Ecological Research (IPÊ), PCAB's implementing partner has been working to strengthen ICMBio's National Biodiversity Monitoring Program (Monitora) in the Amazon through the Participatory Biodiversity Monitoring Project.

Participatory biodiversity monitoring is already a reality in 18 PAs in the Amazon, reaching almost 12 million hectares. Since 2016, when PCAB began supporting the collaboration between IPÊ and ICMBio, 2,000 people have engaged in monitoring activities and 333 monitors were trained in 57 courses – 30% of monitors are women.

"The Participatory Biodiversity Monitoring project, supported by USAID, has been promoting scientific discussions on the project's outcomes with local communities in the Amazon. Thus, in addition to providing information on Amazon biodiversity, which can be used to inform the management of protected areas and natural resources, the project is strengthening local communities through the democratization of access to science and information, and contributing to the conservation of Amazon biodiversity." – Cristina Tófoli, IPÊ's Project Coordinator

Results are presented to local communities

Photo: Juliana Nogueira/USAID

1 (Scholes et al., 2012,Han et al., 2014).

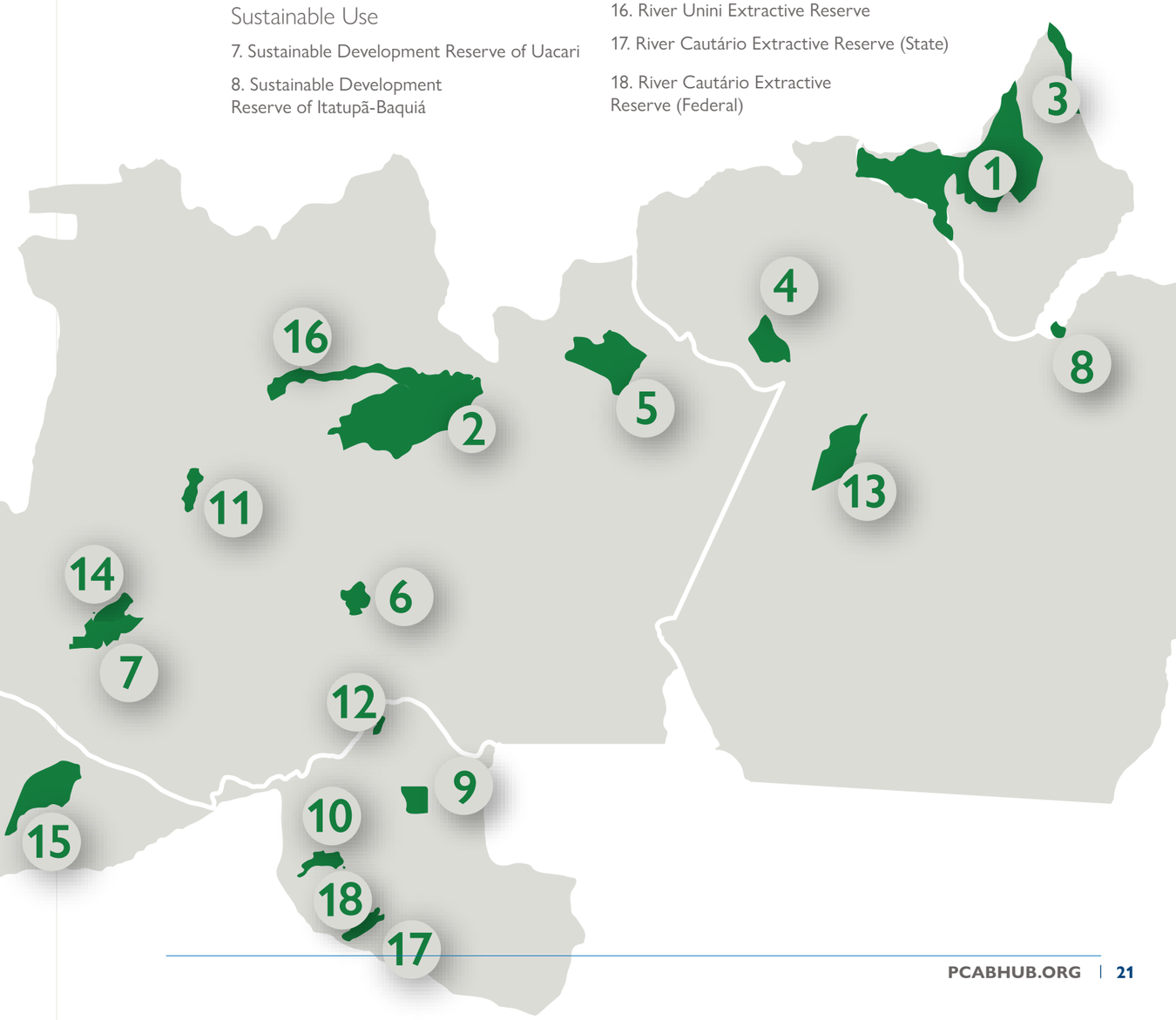
Areas of Monitoring of Biodiversity

Full Protection

1. National Park Mountains of Tumucumaque
2. Jaú National Park
3. National Park of Cabo Orange
4. Biological Reserve of Trombetas River
5. Biological Reserve of Uatumã
6. Biological Reserve of Abufari

Sustainable Use

7. Sustainable Development Reserve of Uacari
8. Sustainable Development Reserve of Itatupã-Baquiá
9. Jamari National Forest
10. Extractive Reserve of Ouro Preto River
11. Baixo Juruá Extractive Reserve
12. Extractive Reserve Lago do Cuniã
13. Extractive Reserve Tapajós-Arapiuns
14. Médio Juruá Extractive Reserve
15. Cazumbá-Iracema Extractive Reserve
16. River Unini Extractive Reserve
17. River Cautário Extractive Reserve (State)
18. River Cautário Extractive Reserve (Federal)



Cazumbá-Iracema Extractive Reserve

Impact in the field - Community Engagement

Traditional and academic knowledge come together to assess species diversity and to ensure the abundance of natural resources in the forest

The Participatory Biodiversity Monitoring project trains community members who live in Sustainable Use Conservation Units (UCs, as protected areas are called in Brazil), or in the vicinity of National Parks.

It is based on the sharing of information among researchers, managers of Conservation Units, and communities living in the forest. Data collection employs simple techniques, with low financial and operational costs and it is supported by shared analyses and collective interpretation of results.

"By engaging communities as active stakeholders, we can secure social participation. In addition to supporting science, this is a conservation strategy that shows respect for local populations," adds Tófoli. The data collected feeds the he National Program of Biodiversity Monitoring (Monitora), providing a broader understanding of biodiversity changes, helping to guide ICMBio's management of Protected Areas and alignment with public policies.

The Monitora Program was conceived by the Brazilian government in 2007 and formally created in 2017 as part of the National Biodiversity Monitoring System. Standardization is important to generate information not only for local, regional and national decision making on the use of resources, but also to contribute to global biodiversity monitoring, providing data to the Convention of Biological Diversity.

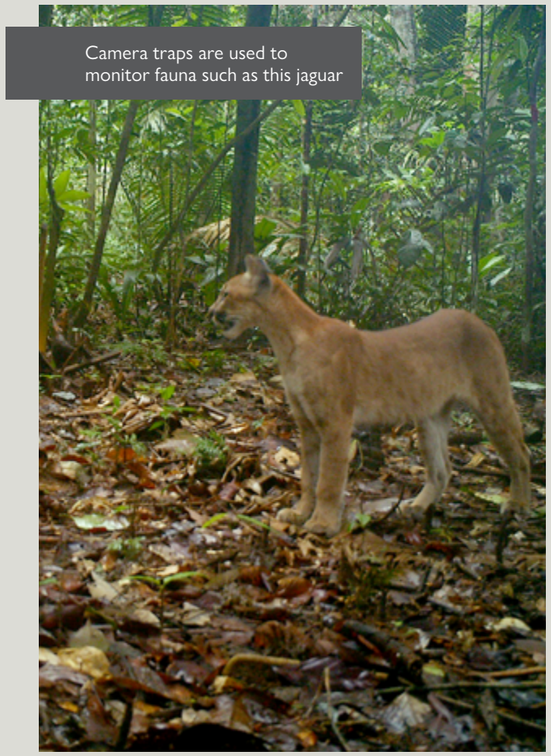
In the Amazon Forest, Monitora focuses on large trees; medium and large terrestrial mammals; fruit-eating butterflies; and birds of selected families (global interest species). Communities take part in the identification of one regional and local interest target species, which could be Brazil nut, mammals, or birds that are affected by forest management and subsistence hunting. Fish, turtles, and migratory birds are also considered targets in coastal, wetlands and mangrove regions (aquatic and marine biomes). The distribution and quantity of species are indications of the ecosystem's health.

In addition to standardized monitoring, IPÊ has developed additional monitoring protocols with the communities participating in the program, according to the interests and needs of each group.

"We have always considered monitoring as more than just a means to generate information. We think of how this information is directly applied to the management of each (Conservation) Unit, the use of resources, and the daily lives of the communities," says Cristina Tófoli. Therefore, standard Monitora protocols are not always enough for certain PAs.

"Knowledge is a prerequisite for conservation. That is why we ensure communities are involved in the whole process: identifying what to monitor, setting targets, collecting data, interpreting, analyzing and applying their findings."

Cristina Tófoli, IPÊ's Project Coordinator



Camera traps are used to monitor fauna such as this jaguar

In the Cazumbá-Iracema Extractive Reserve, in Acre, the community had no doubts about the species they wanted to choose, as they already faced a problem needing resolution. Their Brazil nut trees – a source of income for some 60 families – were aging and reducing their production, and the community could not find younger trees that would one day replace the old ones.

"The Brazil nut protocol was requested by the community," says Ilnaiara Souza, IPÊ's local researcher, responsible for monitoring activities

"We developed a protocol in 2014 in which part of the methodology was to identify Brazil nut seedlings in a trail (linear transection). When we went to the field, we realized that the seedling estimates were not working. We held workshops and meetings with experts and groups of Brazil nut collectors in 2016 to come up with something easy to be done in the field. We completed the new protocol, based on estimates in parcels (plots) towards the end of 2016. When it was put to test in 2017, it finally worked," Souza recounts.

The work revealed that one of the main difficulties was related to spotting young Brazil nut trees. These trees are large, but saplings resemble many other native species, making it difficult to distinguish them.

"We didn't know what their seedlings looked like. When we were harvesting, we would usually clear the whole area," recounts Charles dos Santos, a Brazil nut collector and monitor at the reserve.

The seedlings were being cut during the opening of trails, or when collectors cleaned the area around bigger

Participatory Monitoring project in figures:

1,474 monitors in **50 training programs** (33% are women)

More than **2,000 people engaged** in biodiversity monitoring activities

26 local institutions involved in participatory biodiversity monitoring, with **10 local partners** supporting monitoring implementation, data analysis, and interpretation

Photo: Juliana Nogueira/USAID/Brazil

Brazil nut tree in the Cazumbá-Iracema Reserve

trees to gather the nuts, which fall in large bunches. In the process, they were killing young Brazil nut trees.

Santos says they are now marking the seedlings to prevent them from being accidentally uprooted. "Thanks to the monitoring, we were able to identify the saplings, stopped killing them and now we help them to survive."

Other possible causes for the falling production were also identified, such as excess of vines, which started to be removed during management. With support from the Brazilian Public Research Corporation on Agriculture (Embrapa), the study continues to test assumptions related to Brazil nut productivity. "We will only know for sure in 10 or 20 years from now," says Souza. The Brazil nut monitoring protocol developed at Cazumbá-Iracema has been so successful that it is being adjusted and replicated in three other Conservation Units – Resex do Rio Cautário (federal), another Resex with the same name, but managed on State level, and Resex do Lago Cuniã, all in Rondônia State. The objective is to develop a standard methodology for monitoring.

The proposal to engage in participatory monitoring is not usually immediately attractive because some communities are suspicious of what the program might entail. With time, as they learn more about the process, it tends to be accepted and can generate major changes in the communities, as it happened in Cazumbá-Iracema.

"In the beginning, half the population embraced the idea of monitoring, but some feared it might restrict hunting," recalls Francisco Souza Carvalho, one of the monitors. "But as time went by they saw that our goal was not to harm, but to help them."

Although subsistence hunting is allowed within Extractive Reserves, and communities have hunting agreements, many residents were concerned. "The people living in the forest rely on hunting. Their supermarket is the forest with the animals they can hunt to eat," says Raimundo Nonato, nut gatherer and local monitor.

By working in partnership with the communities, researchers managed to build trust and nurtured positive changes.

As residents started to monitor the species, they realized that some of the animals they usually hunted were decreasing in numbers. "We wanted to understand what was happening with our game. Tapirs hardly showed up anymore. Deers were also scarce, and so were peccaries." said Carvalho, adding that local residents traditionally hunted with dogs. One of the objectives of monitoring is precisely to control the impact of non-native species to the biome, which are likely to harm the ecosystem. The evidence convinced the community to ban dog hunting. "After two or three years, the game started to show up again, as we witnessed in our latest monitoring exercise. These animals are back in the forest," celebrates Carvalho.

For Nonato, his new monitoring role made him aware of the importance of conservation. "People now understand that we have to respect animals. We need to use them, but also to leave enough alone for the next generations. I have a son, and my son is going to get married and have his own children. We are talking about passing our way of life from one generation to another. If we kill all the animals in the forest, my son may not have them and my grandson may not have them."

Local communities naturally monitor plant growth and animal behavior and the recognition of their value also

raises awareness of traditional knowledge. "I found out that I was born a monitor; and that my great-grandfather, my grandfather and my father were also monitors. We still have the same rubber tree that has been here for almost 200 years, sapped by my great-grandfather," says Nonato.

This feeling became even stronger when he had a close encounter with an elusive deer on the monitoring trail. "It was there grazing on the trail, and it let me get closer and closer. It would look at me, move its ears, step forward, come closer, turn to one side, then to the other. So I called my colleague and showed him the deer. We continued talking, while the deer grazed. There, quiet, minding its own business. As if it was saying: - 'I am your friend, be my friend too.' So it was really cool for us to see that animal, and have that close contact. And I felt that we became more friendly towards the animals."

Community monitors Charles dos Santos (right) and Francisco Carvalho measuring a Brazil nut tree

Photo: Juliana Nogueira/USAID Brazil

All the information gathered in the Participatory Biodiversity Monitoring will be available on a digital platform (SIS Monitora), and support the creation of a virtual bridge to share biodiversity monitoring data at the Environment Ministry's **Biodiversity Portal**.

Photo: Juliana Nogueira/USAID

Brazil nuts being collected in the forest

Photo: Adobe Image Stock

The pink dolphin is one of the two species of dolphins found in the Amazon's rivers

Monitoring Results (July 2016 - December 2020)

Mammals & Birds: 5,549 records

Plants: 849 records

Subsistence hunting: 5,689 individuals of 35 species

Peacock bass fishing monitoring: 136,581 fish records

Fishery self-monitoring: 15,230 kg fished, and 10,190 kg consumed

Mammals in sustainable logging areas: 83,000 photos of 42 species (camera traps)

Aquatic turtles: 734 records of turtles,14,993 nesting sites and 639,903 hatchings

Pirarucu: 39,636 records of individuals (16,561 adults); 2,332 individuals fished (145,729 kg)

Brazil nut: 1,392 trees, and 117,182 fruits (nuts)

Dragonflies – 35 records and 37 records of small fishes at Igarapés (shallow watercourses)

Butterflies: 8,494 records

Impact in the field – Technology as tool to access public policies

Program assists quilombola communities in the use of technology, mapping traditional territories and increasing access to public policies

Photo: Raphael Rabelo/ECAM

Raimundo Nascimento (left) shows the certificate of participation in the Sharing Worlds program

"When a community understands the development process (behind a project), they understand its value. It is not just someone who drops something there and then leaves – in this manner things end up losing their meaning. When we have a broader understanding, the community will know how to protect the program, and such protection is critical." This is how Raimundo Magno Cardoso Nascimento summarized the importance of taking part in the Sharing Worlds program.

Nascimento is a member of the Africa quilombo, a quilombola community in the Moju municipality, less than 150 km from Pará's state capital, Belém. Quilombolas are descendants of slaves who fled farms in the 18th and 19th centuries and formed free communities (known as "quilombos"). One in every five quilombos in Brazil is in the Amazon, according to official data.

Sharing Worlds was developed by PCAB's implementing partner ECAM in partnership with Google Earth Outreach. The project was created "to support communities in their efforts to record their past, understand their present, and gather inputs to plan for their future," according to Meline Machado, project coordinator. It has enabled 140 quilombola communities to map their territories and collect socioeconomic data about their members.

"When a community understands the development process (behind a project), they understand its value."

Raimundo Nascimento, member of the Africa quilombola community

Photo: Rafael Rabelo/ECAM

Learning to analyze data in a Sharing Worlds workshop

"We have developed an approach that meets the demands of these communities. At first, we worked in seven communities, and the result was great," says Nascimento. The program involved quilombola groups in six states within the Legal Amazon (Maranhão, Mato Grosso, Tocantins, Amapá, Pará and Rondônia). It sought to provide the communities with technological tools to identify their potentials and needs, in addition to facilitating access to public policies.

At all stages, local society played an active role. The questionnaires were answered by 15,679 quilombolas. The result is an unprecedented survey of these communities' socio-structural profile, placing them literally on the map.

Now, they have an opportunity to analyze all this information and to reflect on how to claim their rights, improve and strengthen the management of their territories. For some activities, they had support from the National Coordination Office of Black Rural Quilombola Communities (Conaq) and of the Association of Remaining Quilombo Communities of the Municipality of Oriximiná (Arqmo).

Local youth learned how to use ODK (Open Data Kit, a free software) on smart phones to collect data and became multipliers in their communities. The questionnaire information was organized in blocks: Who we are, with data on communities' historical and cultural aspects; Our infrastructure, with information on the building materials they used, as well as their access to water, energy, basic sanitation and infrastructure; Our work and Our rights, including citizenship and basic benefits and rights.

Training also meant to support communities in their efforts to access public policies and to record their history and opportunities. All information, data and charts will be available through an online platform. The Sharing Worlds methodology is expected to be replicated and improved in traditional communities in other Brazilian biomes.

To illustrate program results, Nascimento highlights the case of Jambuaçu, in the municipality of Moju. During the mapping activities, the quilombolas realized that some planned construction works overlapped with their community land – including areas that were already being licensed for the construction. When the maps were ready, the team returned them to the community, which reported the case to official agencies, such as the Public Prosecution Service and the Public Defender's Office.

In the Mojú-Mirim community they verified – through their georeferencing work – that an area that residents believed to be within their land was actually outside. When Mojú-Mirim gained its land title, that area was left out. "Now they are fighting to try to incorporate it again", said Nascimento, adding that "the experience gave the communities more visibility."

The Brazilian Institute of Geography and Statistics (IBGE) does not collect data on people identifying themselves as quilombolas in Brazil. This will be included – for the first time – in the next General Census, postponed to 2022 because of the pandemic.

However, IBGE estimates that Brazil has 5,972 quilombola communities, amongst 1,672 municipalities. In total, 404 have lands officially recognized.

"We have realized that there is no centralized information on quilombola communities. When we asked funders why there were no calls for projects in these regions, we learned that they lacked data to direct resources in an informed way. With Sharing Worlds we want to put these communities on the map, so others can understand their way of living and their reality. From there we can have a better understanding of diversity in Brazil. Diversity is what makes us strong as a country," says ECAM's Executive Director, Vasco van Roosmalen.

"This work has shown how strong and resistant they are, and how they fiercely defend their culture and customs. But they are facing immense challenges," says Machado. Among those challenges are their efforts to be included in public policies, and assure their rights to deeds of their communal lands.

The Sharing Worlds program has assisted Legal Amazon communities in the development of community management plans. These plans are based on methodologies used to implement territorial and environmental management policies in traditional territories and are labelled as Life Plans.

In Oriximiná municipality, communities used cultural maps to record their past and present. A socioeconomic questionnaire helped them to understand their current reality, enabling them to develop goals for future actions and strategies for the future, through a planning exercise that addressed culture, education, health, income generation, other aspects.

In 2019 and 2020 workshops in various communities across six states helped to train 600 young people, who then acted as multipliers, training others on how to apply the tools in the field, more than doubling the total number of youngsters carrying out the surveys. The program taught young people how to use ODK to record detailed information on the socioeconomic

Photo: Rafael Rabelo/ECAM

"We have realized that there is no centralized information on quilombola communities. When we asked funders why there were no calls for projects in these regions, we learned that they lacked data to direct resources in an informed way. With Sharing Worlds we want to put these communities on the map, so others can understand their way of living and their reality. From there we can have a better understanding of diversity in Brazil. Diversity is what makes us strong as a country,"

Vasco van Roosmalen, ECAM's Executive Director

Photo: Rafael Rabelo/ECAM

600 youth were trained to teach their new skills in the communities

conditions of communities, and Google Earth to map not only their territory, but the location of resources, such as Brazil nut trees, family vegetable gardens and subsistence plantations.

Machado highlights the importance of engaging youngsters in actions aimed to replicate the knowledge acquired through the program. “They planned the actions, visited different territories, and trained other young people in their communities,” she recalls.

“Each one commits to carry on with the work, so that we can really map the community with our eyes and share the way that we experience our daily life in the quilombos.” says Laura Silva, a young member of the Mata Cavalo quilombo, in the state of Mato Grosso.

According to Elizabethe Miguel, who belongs to the same community, their work has strengthened their real vision of the community. “It was very useful because, even though I live out in the country, dealing with animals, planting, and having a life that people consider old fashioned, we also have to use technology. Sometimes people out there hear things that are not real, which are different from what actually happens here, because of their superficial view. The survey is important because it is based on facts, collected in each community; and it is done by us, quilombolas.”

In 2020, Conaq and ECAM released Quilombos and Quilombolas - Challenges for Recognition with the support of USAID. It presents the surveys’ results in the six states.

Other highlights:

Implementation of the national policy for Management Plans on Protected Areas (inspired by US National Parks Service methodologies) was rolled out. Twelve management plans under the new guidance are already in place.

ICMBio published an Environmental Interpretation guide and created policies for recording visitors’ figures in federal Protected Areas; it also published a handbook with methods for monitoring visitors’ numbers in federal Protected Areas.

13 Environmental and Territory Management Plans were elaborated and/or implemented.

In 2020, the International Education Institute of Brazil (IEB), another implementing partner, concluded direct micro-grants projects, building capacity for four Indigenous-led organizations. The initiative provided small grants to implement priority projects and to empower Indigenous communities, women and youth.

In December 2020 the US Forest Service marked the conclusion of PCAB’s Public Use component in partnership with the Colorado State University with a webinar attended by more than 100 people in various countries and simultaneously translated in Portuguese, English, and Spanish. Panelists gave an overview of the project, carried out in partnership with ICMBio and discussed the main results, strategies and lessons learnt. The seminar is available online and more information is available at PCAB’s website. The US Forest Service will keep its role of providing technical assistance to the Brazilian government under the Fire Management cooperation, led by the Regional USAID office in Latin America and the Caribbean, with the participation of USAID/Brazil.

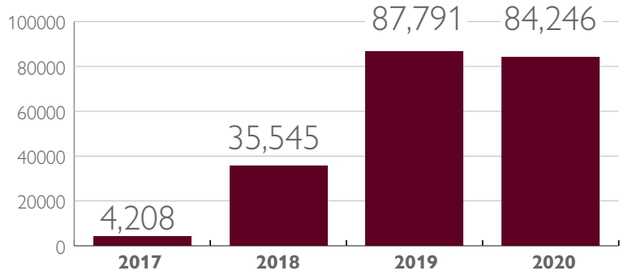
Sustainable pirarucu fishing in Médio Juruá

Marizilda McCruppe/Gosto da Amazonia

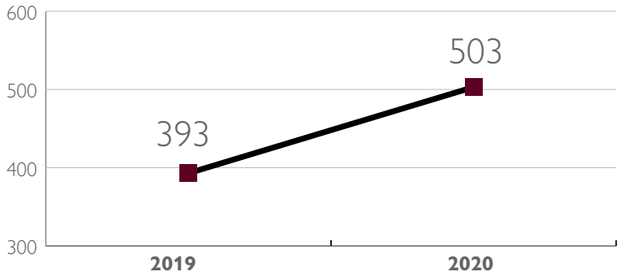
2019/2020 Biannual Report – Partnership for the Conservation of Amazon Biodiversity

EXPANSION OF VALUE CHAINS

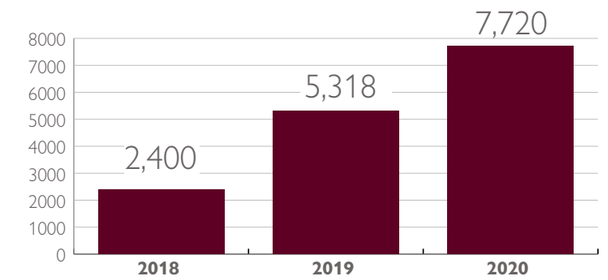
People who had improvement linked to PCAB's value chains



Associations, groups, organizations and/or institutions trained in sustainable natural resources management and/or biodiversity conservation



People trained in sustainable natural resources management and/or biodiversity



In 2020, **8,277** people increased their well-being through **66 contracts signed** in value chains with **US$1.8 million** in sales.

In 2020, **women represented 49%** of those with improved socioeconomic conditions (47.8% in 2019).

Juliana Nogueira/USAID

Cocoa planted in AgroForestry System supported by PCAB

Sustainable Value Chains

The consortium of local implementing partners working with PCAB's Sustainable Value Chains and Territorial and Environmental Management of Protected Areas in the Amazon works in partnership with ICMBio and counts on technical support from the US Forest Service.

Through this component, PCAB provides training, technical assistance, tools, processes and facilitates links to markets and commercialization. The overarching goal is to promote self-sustainable communities, ensuring that forest value chains they depend upon can improve their livelihoods and, at the same time, contribute to raise the economic value of the standing forest. By improving the socioeconomic benefits through a sustainable value chain approach, local communities are stimulated to protect the forest and its resources.

In 2019, under the leadership of the US Forest Service, PCAB supported the consolidation of eight community-based value chains across 23 Protected Areas, including nine Indigenous Territories. A total of 64 contracts were signed, totaling US$2.7 million in sales and improving the wellbeing of over 6,000 people.

Quilombolas supported in the Public-Private Partnership led by ECAM sealed a contract with the Swiss company Firmenich to sell oil extracted from the copaíba tree, increasing incomes by 429% in 2019.

The pandemic slowed down progress in support of 46 value chain products including Brazil nuts, pirarucu fish, açaí berry, essential oils, and timber (via certified community forest management) during 2020. Due to the increased vulnerability of traditional communities and Indigenous Peoples living in the Amazon, in-person contact with communities ceased in March 2020. A Protected Areas ban on visits followed to prevent the spreading of the coronavirus to those populations.

As most of USAID/Brazil's work in the Amazon is in remote areas with limited access to reliable internet, overcoming the communications challenges became one of the priorities. Some programs have installed internet connections in rural areas, a few Protected Areas were opened, but connectivity and access remain a barrier.

The consortium led by the International Education Institute of Brazil (IEB) and formed by Operation Native Amazon (OPAN), Vitória Amazônica Foundation (FVA), Pacto das Águas, Memorial Chico Mendes (MSM) and Mamirauá Sustainable Development Institute (IDSM) allowed PCAB to support value chains across 43 Protected Areas, including 14 Indigenous territories; and improved management interventions in açaí berry, Brazil nuts, pirarucu fish, plus sustainable community and family forest management (timber). In total, 66 new contracts benefited 8,277 people, generating **US$1.8 million in 2020**.

Over 100 contracts were signed in 2019/20, improving the well-being of more than 8,000 people and generating US$ 4.5 million in total.

2019/2020 Biannual Report – Partnership for the Conservation of Amazon Biodiversity

PARTNERSHIPS IN SOCIOBIODIVERSE FOREST-BASED VALUE CHAINS PRODUCTS

2019/2020

The value chain component of PCAB resulted in improved social organization and bargaining power, new public policies, better working conditions, access to new markets, increased volume of sales, fair contracts, and higher prices. The private sector led Partnership Platform for the Amazon (PPA) has also worked on organizing and developing value chains in the region.

Key to products

Timber, Açaí, Copaiba, Brazil Nut, Indigenous Pepper, Guaraná, Cumaru, Pirarucu, Tourism, Cocoa, Handicraft, Rubber, Babassu

Castanhadora

Impact in the field - Innovation

Calculator for forest collectors receives innovation award

Brazil nuts are increasingly popular among those seeking for a healthy, protein-rich diet. This value chain, however, has a weak link: the collectors, otherwise known as extractivists in Brazil. Every year, riverines and Indigenous communities go deep into the forest in search of the “castanhais” (groups of Brazil nut trees).

Between January and March, they collect the pods that fall from the tall trees. Despite the height, the “pods” do not break and few animals, such as the agouti, have teeth strong enough to gnaw the thick skin and reach the kernels.

The work is hard and can keep whole families camping in the forest for weeks. Gatherers have to individually break the pods one by one before the soil moisture damages the nuts. The nuts are then bagged or placed in large straw baskets and carried back home on their backs, in canoes or small motorcycles.

Most collectors are not used to considering factors such as food, fuel, tools and labor when calculating their costs. Unable to go to cities to sell their produce, most are dependent on middlemen that set the selling price. In the forest, Brazil nuts are sold for as little as R$ 2.00 per kilogram (US$0.40).

A lightweight application (2.4M) has begun to change this scenario. It was jointly designed by a group of 45 people from which 35 are collectors from the states of Rondônia and Amazonas.

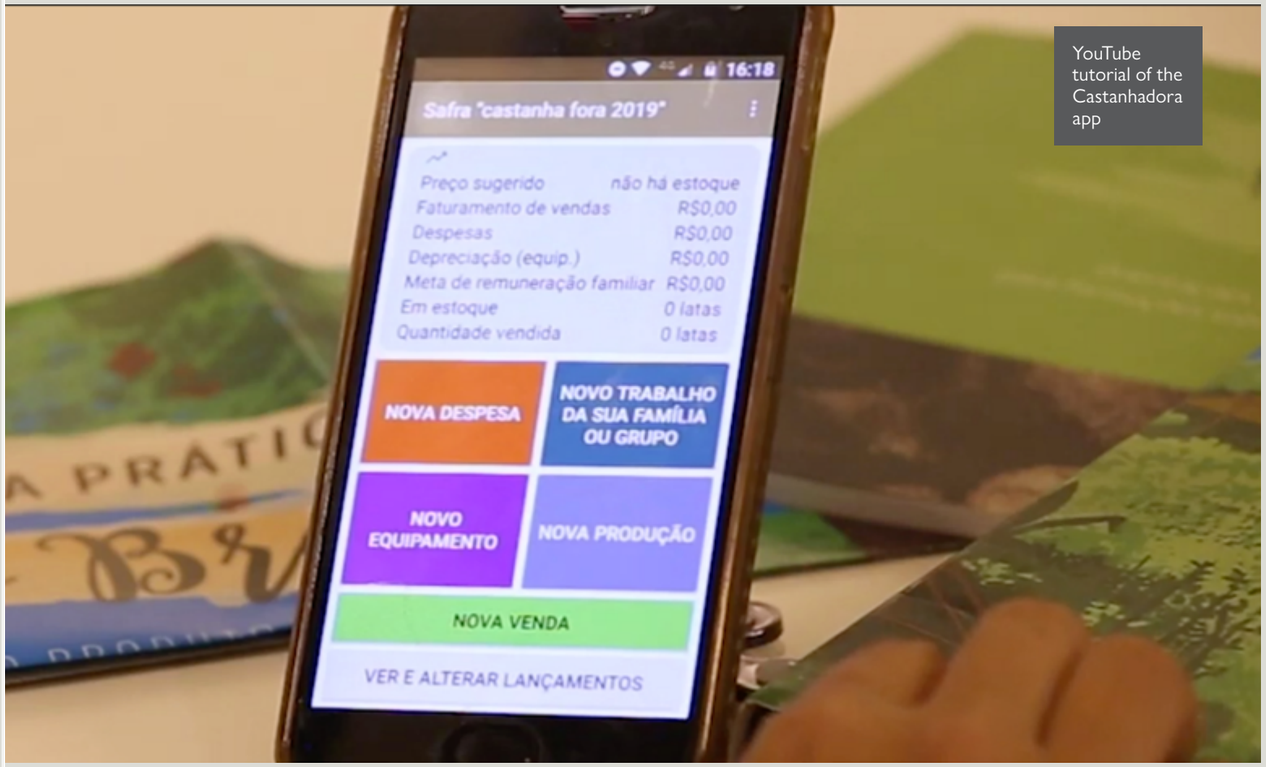
“The app tells us how many cans or barrels we still need to collect to break even,” says Paulo Silva da Costa, from the Rio Ouro Preto Extractive Reserve, in Rondônia, who collects Brazil nuts together with his family.

The app Castanhadora presents simple questions to assist users in figuring out their real costs. It is able to work offline, as most gatherers do not have access to the internet.

Launched in October 2019, was one of the 12 winners of the United Nations Development Program (UNDP) Innovation Challenge. The US$20,000 prize was used towards production of visibility materials and YouTube tutorials recorded by one of the collectors who participated in the project.

Castanhadora was conceived and developed by the SEMEAR Castanha collective, created towards the end of FORMAR Castanha - a modular training program for nuts collectors coordinated by IEB under the PCAB’s umbrella. During FORMAR Castanha participants were given an opportunity to learn about other links in the Brazil nut value chain and to better understand the process.

Castanhadora was conceived and developed by the SEMEAR Castanha collective, created towards the end of FORMAR Castanha - a modular training program for nut collectors coordinated by IEB under PCAB’s umbrella. During FORMAR Castanha participants were given an opportunity to learn about other links in the Brazil nuts value chain and to better understand the process.



YouTube tutorial of the Castanhadora app

Wanting to keep in touch and exchange information, the participants created SEMEAR Castanha. In addition to nut gatherers, the collective brings together technical support organizations, community associations, social movements, researchers, and state agencies.

In person workshops were replaced by remote ones and tutorials on YouTube.

“It is too early to evaluate the results, and some people are still reluctant to use the app. But little by little we are breaking this paradigm, especially among young, who have started using WhatsApp groups to exchange information about prices and ways of using the app,” explains André Tomasi, IEB’s Project Advisor.

Other organizations were also involved in the development of the awarded calculator: Pacto das Águas, Native Amazon Operation (OPAN), Fundação Vitória Amazônica (FVA) and the Cooperative for Education Information and Technology for Self-Management (EITA).

The Castanhadora app is available for download on Google Play.

Impact in the field - Conquering new markets

Helping riverines to find new markets and introducing pirarucu to high end restaurants

The pirarucu is the largest scaled freshwater fish in the world and is symbolic in the Amazon. The big fish can weigh up to 300 kilograms and was almost driven to extinction in the 1990's because of predatory fishing practices. The successful management of the pirarucu carried out for the last 20 years by riverine communities and Indigenous Peoples is also becoming a symbol for biodiversity conservation and income generation in the Amazon.

Gosto da Amazônia (Taste of the Amazon) is a project that aims to open new urban markets for the sustainable pirarucu fish. It is implemented by a consortium of Amazon civil society organizations together with ICMBio and Rio de Janeiro's Bars and Restaurants Association, with technical assistance from the US Forest Service. It is part of PCAB and is also supported by the German Agency for International Cooperation (GIZ).

The sustainable management of the wild pirarucu is carried out at lakes formed in the dry season, when rivers recede after flooding the plains during the rainy summer months. They stay in the lakes to reproduce and are counted when coming up to the surface to breath. Quotas for fishing are established, by the Brazilian Institute of Environment and Renewable Natural Resources (Ibama) that regulates fishing in Protected Areas.

When management started in the 1990's, there were so few pirarucus that communities such as the Paumari (Indigenous People from Rondônia State) had to wait years until they could reintroduce the fish in their diet and start selling it.

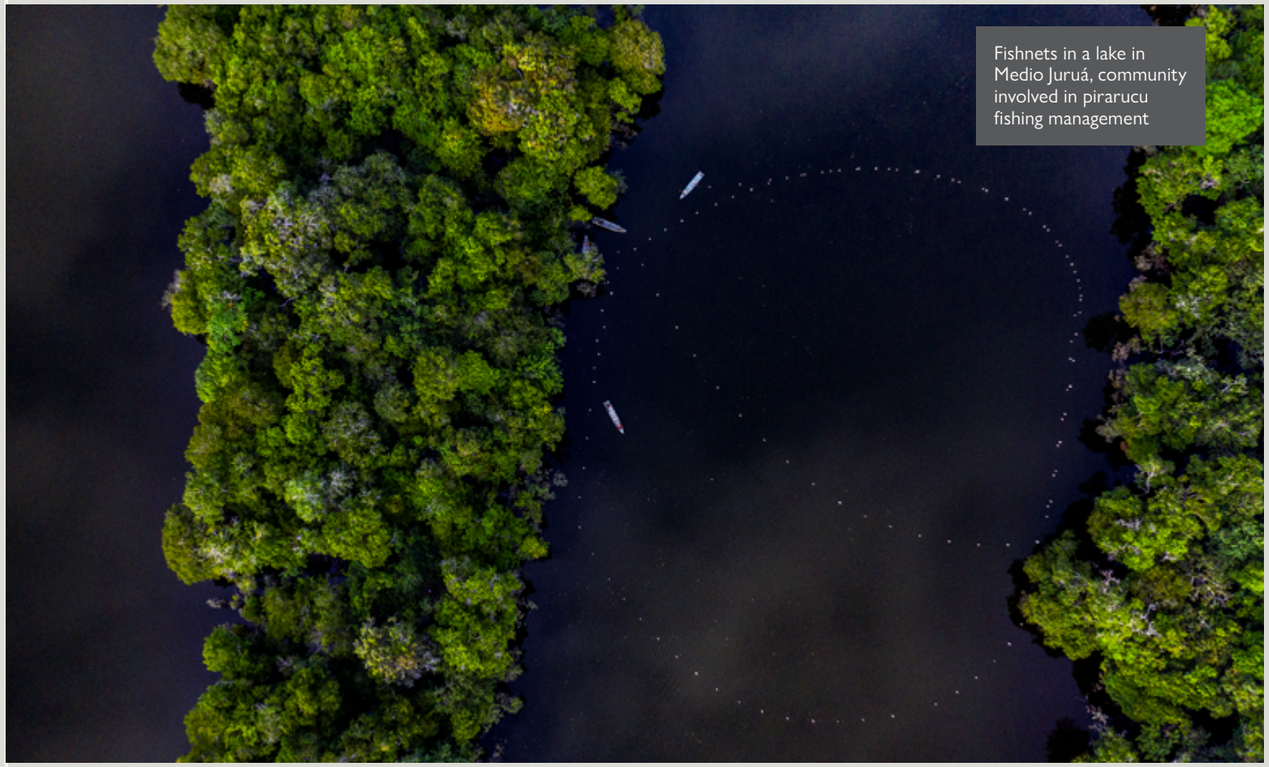
In 2020, recipes with the big Amazonian fish were being marketed in Brasília and offered in some of the best restaurants in Rio de Janeiro and São Paulo. Two events highlighted the initiative: Rio's Gastronomical Delivery Festival, organized to support Rio de Janeiro's bars and restaurants affected by the pandemic; and the Taste of the Amazon Festival in Sao Paulo, in which over 20 restaurants included a pirarucu dish in the menu for 10 days, in November.

Outside the Amazon region, pirarucu is still unknown, and diners generally prefer imported or salt water fishes, such as cod and salmon. Freshwater species are not seen in these markets as a high quality product and to change that perception Taste of the Amazon started positioning pirarucu as a healthy and fair-trade option.

The project was created in April 2019 and encourages the sustainable development of communities involved in the management of pirarucu, fosters income generation for local communities and seeks to strengthen local associations in the Médio Juruá river. The Juruá snakes inside the Amazon forest for 3,000 km and is the main mode of transportation, as well as the main source of food for communities living along its banks. It flows into the Solimões river, as the Amazon river is called in Brazil, before meeting the Negro river in Manaus.

In 2020, the US Forest Service contributed to the establishment of a minimum price policy for sustainable managed pirarucu and participated in the Taste of Amazon partnership. The project, supported by USAID is on its way to become the first to get organic certification for wild pirarucu.

Photo: M Cruppe/Taste of the Amazon



Fishnets in a lake in Medio Juruá, community involved in pirarucu fishing management

In 2019, three events were held to show ways of preparing and tasting the fish. Some of those chefs became ambassadors of the pirarucu, helping to market the qualities of the white meat fish.

Apart from improving livelihoods, local communities have seen collateral benefits, such as empowerment of women and improvements in monitoring their territories.

In Médio Juruá, Quilvinene Cunha chairs the local women's association: "We are still developing our roles. In the past, we only helped and cooked, but now we are taking part in meetings. We are not just in the kitchen anymore." As there is interest, women will receive training on counting the pirarucu in the lakes. "I think they will be great, as women are good observers," says Cunha.

A Federal University of Rio Grande do Norte study showed that in communities along the Juruá River involved in fish management, 77% of women are in paid work. In communities without fish management projects these figures fall to 8%, because their participation is seen as an extension of their domestic duties.

In 2020, the US Forest Service contributed to the establishment of a minimum price policy for sustainable managed pirarucu. The project supported by USAID is on its way to be the first to certify wild fish as an organic product.

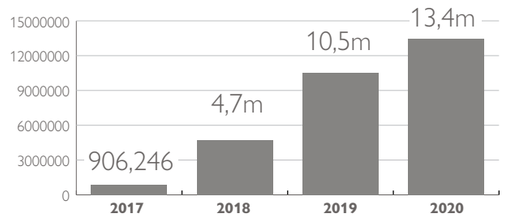
Palm oil being harvested at the Natura and Camta's Agroforestry System research project in Tomé Açu/Pará State

Photo: Natura Archive

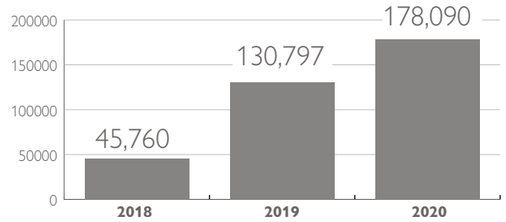
2019/2020 Biannual Report – Partnership for the Conservation of Amazon Biodiversity

PRIVATE SECTOR ENGAGEMENT

Private Sector resources leveraged (in US$)



Number of people benefiting from private sector PCAB activities:



The participation of the private sector is key to build a new economic model in which development and improved livelihoods go hand in hand with biodiversity conservation.

Scaling up best practices and forging innovative partnership models, USAID/Brazil uses its expertise and the know-how of its partners to attract impact investment, social finance and to mobilize credit. Facilitating collective action from the private sector, it has supported the strengthening of Public-Private Partnerships (PPPs), which includes companies such as Coca-Cola, Ambev, Google Earth Outreach, Natura and Mineração Rio do Norte (MRN).

USAID/Brazil gathered support for a private-led partnership to foster innovation and has nurtured joint initiatives blending civil society, state and local governments, as well as big companies to include local communities interests into development decisions.

Private sector engagement activities represented 40% of the mission´s budget in the last two years mobilizing another US$10.5 million in private money in 2019 and in 2020, despite the uncertainties brought about by the global pandemic.

With direct participation in its co-design, USAID and its partners witnessed the launch of the first impact investments fund fully focused on the Amazon. Althelia Biodiversity Fund (ABF) - which is in the process of being re-branded as Amazon Biodiversity Fund- has already signed the first two contracts to invest in local startups.

The pilot of a Quilombola Fund financed by Mineração Rio do Norte (MRN) is investing US$230,000 on development priorities defined by local communities neighboring its bauxite (aluminum) mine in the banks of the Trombetas river. The pilot is testing the fund's governance capabilities and investing in health, education and other needs identified by a baseline survey funded by PCAB on territorial and environmental management.

In 2019 the Partnership Platform for the Amazon (PPA), uniting companies committed to promote innovation and sustainability for their businesses and for the region, expanded to Pará State and is now active in more states in the region.

A robust Monitoring, Evaluation and Learning system is being shaped to measure impacts from this new strategic approach.

PPA's Acceleration Program workshop

Photo: Idesam/Archive

Partnership Platform for the Amazon (PPA)

In its role as a business engagement catalyzer, USAID/Brazil facilitated the creation of the Partnership Platform for the Amazon in December 2017. The PPA is one of the first examples in the Amazon of a convening platform led by the private sector. It facilitates collective action on joint development and conservation solutions.

It is a unique model that recognizes and empowers companies as drivers of regional development who are often best equipped with science, technology and innovative solutions.

The platform's key objectives are to leverage socio environmental investments; share best practices, models and lessons learned from companies operating or seeking inputs in the Amazon; create shared solutions for specific challenges in the region; and promote new, efficient partnerships.

USAID/Brazil has significant experience in forging partnerships with the private sector in Brazil (e.g. Mais Unidos) and in providing technical advice through its partners. Building on this experience, and together with the Alliance of Biodiversity International and CIAT, USAID/Brazil is committed to assessing results and leveraging positive impacts for the conservation of Amazon biodiversity.

Initially implemented by civil society organizations - Peabiru in Pará and the Institute for the Conservation and Sustainable Development of the Amazon (IDESAM) in Amazonas State, the PPA now has its own Executive Secretariat.

PPA' s incubation and acceleration program launched in 2018, has accelerated 30 startups and invested in 12 from a range of sectors. All of them received individualized mentoring, participated in face to face workshops, scholarships and were guided on accounting and marketing.

PPA PARCEIROS PELA AMAZÔNIA
ppa.org.br

USAID/Brazil is committed to assessing long-term results and learning how the platform can leverage positive impacts for the conservation of Amazon biodiversity.

The program was awarded the best acceleration one in the Northern region by the National Association of Entities Promoting Innovative Enterprises (Anprotec), in 2019. In the same year, was considered the second best among Innovative Solutions for Sustainable Development that contribute to the Sustainable Development Goals (SDG) in Latin America.

In two years, it invested more than US$1.5 million with support from USAID, the Humanize Institute and Vale Fund in blended capital (private and philanthropic).

It has evolved to become an independent Impact Accelerator (AMAZ) in 2021. The PPA will keep developing acceleration solutions for the region connected to the conservation of biodiversity.

Besides acceleration and incubation, the PPA Entrepreneurship Award was given in 2019 to three outstanding Amazonian startups: Ouro Verde Institute, which supports family farming; Serras Guerreiras de Tapuruquara dedicated to ethnic tourism in Indigenous Lands; and Cacauway, a sustainable chocolate brand.

Due to restrictions imposed by the pandemic the 2020 Acceleration Program Business Round and the Entrepreneurship Award were canceled.

+UNIDOS

Mais Unidos

Mais Unidos Platform of Partners was convened in 2006 by USAID/Brazil, when it brought together American companies to collaborate on Corporate Social Investment (CSI) projects to transform the education and technology sector.

Through capacity building, venture philanthropy and Public Private Partnerships with the State of Sao Paulo, it has been facilitating access to increase their access to productive economic resources to young people.

With over 30 companies, the platform invests in science, technology, and innovation and has been increasing its effectiveness and reach over time.

Although the platform has been autonomous for several years, with no funding from USAID, the agency still has a seat on the board and the role to provide governance and technical support and direction.

Photo: Juliana Nogueira/USAID

Factory of Manioca, one of the businesses accelerated in Pará

PPA Pará launch

"Who would imagine – 15 years ago – that private companies and NGOs would be sitting around the same table?" wondered Marcello Brito, CEO of Agropalma and Director of the Brazilian Agribusiness Association during the opening of the Belém seminar for the official launch of the Partnership Platform for the Amazon (PPA) in the state of Pará.

Talking to an audience of over 100 representatives from businesses, civil society organizations, academia, and government agencies, Brito celebrated the dialogue between companies and NGOs.

The event was interpreted as "a milestone in the relationship between the companies involved and other sectors of society, aimed at Amazon sustainability and conservation", according to João Meirelles, director of the Peabiru Institute.

Bernardo Ricco, who was then Deputy Assistant Administrator of the USAID Latin America and Caribbean Department and attended the event in Belém, noted that "contributing to national GDP growth while conserving forests and their biodiversity is not an easy task. It's a journey that requires joint work, collaboration, and innovation".

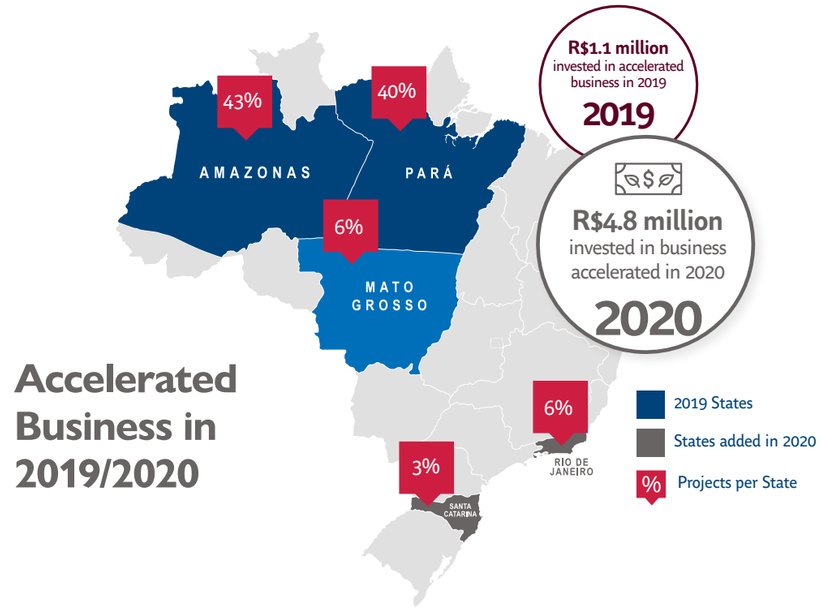
The seminar panels showcased some examples of how the PPA can move forward. A coconut breaker from the state of Maranhão, who collects babassu nuts in the area reserved for natural vegetation in a farm belonging to Suzano (the biggest pulp and paper company in the country) explained that the partnership between the company and collectors has actually improved their working conditions. "We were concerned when Suzano bought the area, but we now have more access and support," said Zuleide Pereira de Souza, of the Coquelândia Babassu Coconut Breakers Association.

Photo: Maycon Nunes/Peabiru

Marcello Brito, of the Brazilian Agribusiness Association: dialogue of business and civil society is a milestone.

Photo: Juliana Nogueira/USAID

Zuleide Souza is one of the coconut breakers of Maranhão State who work at a Suzano's farm



Accelerated Business in 2019/2020

PPA Members

Deliberative Council

Members Network

Impact Investment

Using risk mitigation to foster private investment in biodiversity conservation

SITAWI, a PCAB implementing partner and also member of the PPA carried a comprehensive assessment of impact investment in the Legal Amazon – a region that encompasses the Northern Region of Brazil, part of the State of Maranhão in the Northeast, and Mato Grosso State in the Middle West. The publication"Impact Investment in the Amazon: Pathways for Sustainable Development"[1] examined existing investment mechanisms, types of enterprises, value chains, current obstacles and investment opportunities, generating a solid baseline framework for fostering discussion and structuring decision making.

The civil society organization is specialized in financial solutions for social and environmental impact. Its assessment on impact business was aimed to assist not only PCAB's partners, but specialists in conservation and social action, plus investors, as a contribution tool for a community of learning and practice committed to create innovative business models.

The findings showed that despite the fact that there were value chains with high potential value, established international markets (e.g. timber and Brazil nuts) and fast growing demand, such as açaí extract, there was a lack of impact investment: the sort of money that fosters social and environmental benefits alongside long term financial returns. The Amazon region lacked credit for risk investments and had inadequate public support to nourish enterprises aligned with conservation. It concluded that to promote a sustainable economy, new investors could be attracted through risk mitigation approaches such as first-loss financing.

In order to motivate investors and entrepreneurs towards impact businesses in the region SITAWI's study also suggested the need for financial support to deliver technical assistance and to deal with the well documented constraints of operating in a remote area lacking basic infrastructure, "outdated business culture"low socioeconomic indicators and limited levels of service.

The study proposed new finance mechanisms that included both risk mitigation strategies and non-refundable capital in a blended finance model. And a more market-oriented perspective on the choice of the value chains to receive investment, directing resources towards the ones that could yield positive socio-environmental impact in a financially sustainable manner.

"These risk mitigation strategies need to be incorporated in finance mechanisms specially designed for specific types of entrepreneurs

"These risk mitigation strategies need to be incorporated to finance mechanisms specially designed for specific types of entrepreneurs and value chains, in order to maximize their effectiveness."

SiTAWI

1 https://info.sitawi.net/impactinvesting_amazon

Pirarucu fished cleaned and weighed in a community's cold store in Medio Juruá

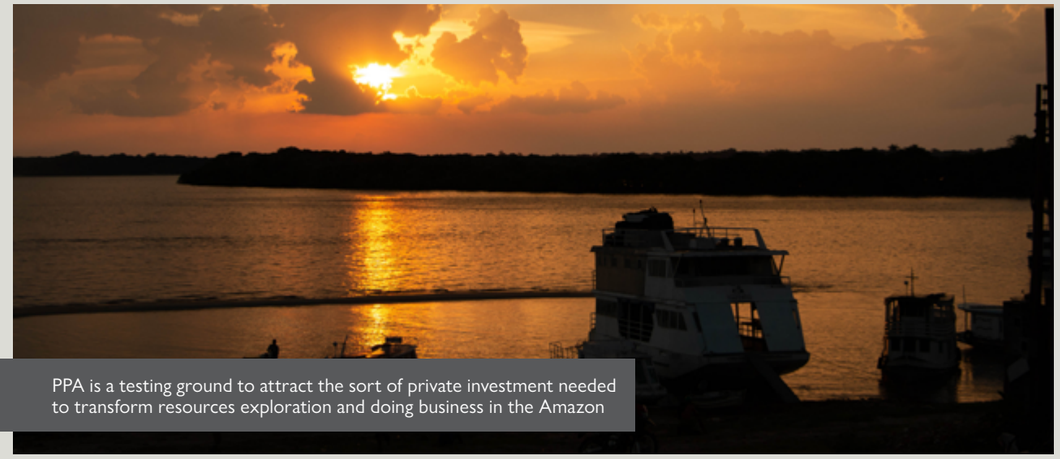
Photo: USFS/Archive

and value chains, in order to maximize their effectiveness," prescribed SiTAWI.

As a long-term USAID partner bringing expertise in development research and evidence-based solutions to safeguard agricultural biodiversity, the International Center for Tropical Agriculture (which from 2020 became part of the Alliance of Bioversity International and CIAT), shared with USAID/Brazil the task of using the Partnership Platform for the Amazon (PPA) as a testing ground to attract the kind of private investment needed to transform the way of exploring resources and doing business in the Brazilian Amazon.

Together, USAID and the Alliance took the challenge of promoting the creation of innovative mechanisms, also studying its concrete effects and which solutions and small business turned up to be most successful and had a greater contribution to biodiversity conservation in the region.

"It was a process in which USAID studied what is happening in the Brazilian Amazon in terms of conservation strategies. Without economic security, some people can get involved in illegal activities, such as logging and mining. It can be a vicious circle," explains Wendy Francesconi, the Alliance's Ecosystem Services and Environmental Impact leader.



PPA is a testing ground to attract the sort of private investment needed to transform resources exploration and doing business in the Amazon

Photo: Juliana Nogueira/USAID

Photo: Maycon Nunes/Peabiru

Nick Oakes, officially launching the ABF Brazil at the PPA's Pará event, in 2019

Althelia Biodiversity Fund Brazil *

The First PPA Business Round, in 2018, attracted 81 applications from startups willing to compete for funding, incubation, and acceleration. Applications more than doubled and totaled 201 in the following year. The increasing interest confirmed the existence of entrepreneurs with sound and innovative ideas ready to receive funding and to expand. PPA also demonstrated that there are companies and philanthropic foundations willing to invest time and money to foster sustainable development in the Amazon.

USAID/Brazil then decided to raise the bar and seek new forms of financing that could amplify impacts through investments in larger companies and cooperatives, scaling up results.

During 2019, USAID and the Alliance/CIAT worked to attract the blended finance recommended by SITAWI's research. Mirova Natural Capital (MNC), Althelia's parent company embarked on the task of creating an impact investment fund for the Brazilian Amazon, with the patient investment capital needed to allow companies focused on sustainability to thrive.

In recent years, impact investment has grown rapidly around the world. In Brazil, this growth has been concentrated in more urban areas in the South and Southeast, and in sectors such as health and information technology (IT). The Althelia Biodiversity Fund Brazil, launched at the end of 2019, is the first private impact-investment fund solely focused on promoting conservation in the Legal Amazon.

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*In 2021 the Althelia Biodiversity Fund Brazil was being re-branded as Amazon Biodiversity Fund Brazil.

USAID has served as a catalyzer for bringing together partners to jointly design the ABF. Led by Althelia Funds and the Alliance/CIAT, a consultation was carried out with a broad array of partners, including PPA members. They also incorporated recommendations from USAID on environmental, social, and governance policies to ensure that the ABF's impact approach would be aligned with USAID's Biodiversity Policy.

Risk mitigation was provided by USAID's Development Credit Authority (DCA), which guarantees 50% of the capital invested. In addition, USAID provided a US$15 million grant to the Alliance/CIAT to further biodiversity conservation and sustainable development in the Brazilian Amazon, as well as to learn from innovative blended-finance models. Given the fund's closely aligned goals, the Alliance/ CIAT invested R$60 million in the ABF, becoming its cornerstone investor. USAID became a member of the Advisory Board.

Nick Oakes, Althelia's Investment Director in 2021 became Mirova's Investment Director in Brazil. He highlighted the advantages of working with the US government: "The credit guarantee has helped with fundraising."

ABF Brazil - Priority investment areas

- Conservation and improvement of the quality of life of local communities;
- Sustainable systems for small farmers, such as agroforestry;
- Sustainable agriculture, reforestation, and restoration of degraded areas;
- Innovation in biodiversity, finance, and technology services.

Evaluating impacts

"A critical factor for the Alliance/CIAT is evaluation. The ABF is a new experience – the first fund fully dedicated to biodiversity conservation," says Wendy Francesconi, Environmental Assessment leader in CIAT, who works in the partnership between USAID/Brazil, Alliance, and CIAT.

"ABF will provide progress reports to investors, but the questions we want to address are what types of business models work best? Which ones can be replicated? And what kind of conservation may be possible?"

ABF Brazil uses an innovative structure for the payment of performance fees, coupling carried interest with an impact performance fee, and encouraging a focus on long-term biodiversity impacts. Mirova Natural Capital will carry out due diligence assessments in which a team of experts will collect financial information and data in the field to inform the selection stage. Across the entire portfolio of investments the fund will monitor and report annually on seven thematic areas with environmental, social, and economic indicators developed in its co-design. Independent audits will be carried out annually after the first three years.

From a total of 17 environmental, social, and economic indicators developed in the co-design stage, investment recipients will need to comply with at least seven.

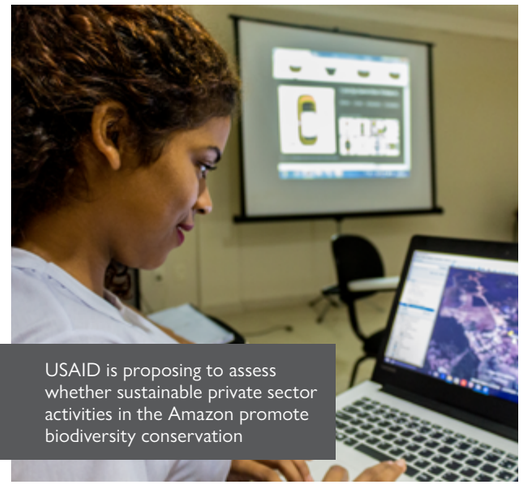
To analyze results, independent assessments will be carried out to identify favorable business models, and where they are capable of promoting greater impacts, as part of the learning process of engaging with the private sector. USAID, the Alliance/ CIAT and partners will employ a state-of-the-art geospatial analysis tool to monitor land use change, environmental degradation, and biodiversity, in addition to community monitoring of key species. Those assessments on ABF Brazil investments are scheduled to start in the third year.

The combined expertise of the Alliance of Bioversity and CIAT, ICMBio, IPÊ and Imaflora was key to create TerraBio. They convened experts to attend workshops focused on developing metrics to assess positive impacts of ABF investments on Amazon biodiversity.

According to Anna Toness, former USAID/Brazil Environment Director, "the idea was to put our heads together to agree on the best way to measure the impact of an activity on biodiversity over time, and with the use of geospatial models. USAID is proposing this as a priority approach to assess whether sustainable private sector activities in the Amazon do make a difference."

TerraBio's geospatial analysis will encompass changes in land use, degradation, restoration, and landscape connectivity, coupled with monitoring of species that are critical for the assessment of ecosystem's health. Once implemented, TerraBio will be able to perform quasi-real-time monitoring, indicating the impacts of biodiversity benefits.

Photo: ECAM/Archive



USAID is proposing to assess whether sustainable private sector activities in the Amazon promote biodiversity conservation

As one of the learning and evaluation co-designers, Francesconi says that she has been approached by institutions operating in conservation to discuss the experience of integrating the private sector as part of the solution. "These are inclusive options, rather than protectionist," she says. She also believes that these new mechanisms are faster, adding that "they do not rely on the public sector, and could be an efficient alternative with lasting impacts on conservation."

Andy Jarvis, Associate Director General at the Alliance of Biodiversity International and CIAT, spoke about the process that brought together all participating institutions to create the first private impact fund in the Amazon. "The best things in life come about by serendipity. We had the right people, sitting around the table discussing the right issues at the right time."

Photo: Adobe Stock

Impacts of COVID-19

ABF is an 11-year fund and intends to raise R$300 million (US$55-65 million) in the first five years. Its second investment round has opened in April 2021, but even before that Mirova National Capital (MNC) has been approached by institutions looking for sound sustainable investment options in the Brazilian Amazon.

"Junior capital and the portfolio credit guarantee have both been instrumental in our discussions so far," said Nick Oakes, MNC Investment Director, referring to CIAT's cornerstone investment and the portfolio credit guarantee provided by DFC. "As a company, our long-term partnerships with CIAT, USAID and DFC are really important to us."

Four startups received letters of interest from Mirova in December 2019, during the PPA's Second Business Round. Although the due diligence process was delayed and some have been impacted significantly by the pandemic, ABF approved its first two investments by the end of 2020.

ABF is a patient investment fund – being a long term fund will help to dilute the impacts of COVID-19 on the deal flow and is not likely to have a major impact on the overall fund, according to Oakes. "There have been delays, as lots of companies are trying to stabilize and the investment process has been different, but we have adapted to remote due diligence and can conduct in person visits once restrictions are lifted."

Oakes also stresses that this long-term approach is an advantage for startups and other businesses supported by the ABF. "We are providing long-term financial and non-financial support with the aim that they are able to weather future crises by becoming resilient, well-governed impact enterprises."

In October 2020, ABF Brazil won the Environmental Finance Impact Award in the category Multi-Asset Fund of the Year.

Impact in the field - Innovation getting scale

Betting on a rubber cycle to improve livelihoods and strengthen conservation in the Amazon rainforest

In the midst of the pandemic, a natural rubber factory in the heart of the Amazon forest is defying the odds and more than doubling the market price to community rubber tappers, using a clean, sustainable technology improved from traditional indigenous techniques. Headed by Francisco Samonek, the factory in Castanhal – about an hour's drive from the capital of the northern state of Pará – produces rubber sandals, flip flops, home, and fashion products without polluting the water or the air.

The certified and organic cooperative in which rubber tappers own the factory, and share the profits protecting the standing forest and its rubber trees, results from Samonek's master research at the University of Acre – the home state of Brazil's most famous rubber tapper, Chico Mendes.

Samonek patented the technology joining science and traditional technique, winning several awards for innovation and social technology over the past decades. In addition, it was selected as one the first four startups to receive impact investment through the Partnership Platform for the Amazon (PPA) and joined the first group of small Amazon-based companies in the PPA Acceleration Program.

During PPA's First Forum on Impact Investment and Sustainable Business in 2018, the impact investment manager Nonprofit Enterprise and Self-Sustainability Team (NESsT) decided to invest and mentor the cooperative, which was re-branded as Seringô the following year. NESsT, one of the pioneers in impact investment in Brazil, selects social enterprises to invest in and scale up.

"Up to two years ago, the factory was actually more of a lab," says Samonek. With PPA's support, he created a business plan and developed a better understanding of investment needs, costs and margins. This, combined with the cooperative's re-branding under the PPA Acceleration Program, attracted the interest of high-end fair-trade retailers and of established footwear brands in the country.

"This extractivist forest reserve has enormous potential," says Samonek: "There are 71 communities and 23,000 people here – and everywhere, the rubber trees are very close to where the people live."

The COVID-19 pandemic has delayed plans of scaling-up production, but Seringô has started to market its new collection through direct sales. Mercado Livre, one of the biggest e-commerce platforms in Brazil, and a member of the PPA, is supporting Seringô and nine other startups connected to the Acceleration Program to sell their fair trade products online.

Maria Angélica Correa was trained by Samonek's team six years ago – alongside other women in Vila Franca – on how to produce crafts

Vila Franca, on the banks of Arapiuns River, a few hours from Santarém, in Pará

Photo: Bruno Kelly/USAID

from rubber. She and her colleagues led the revival of traditional rubber tapping in her village, one of over 70 small ones located within Tapajós-Arapiuns Reserve, a protected forest in the state of Pará.

This idyllic village, on the shore of the clear blue Arapiuns river, saw its rubber economy disappear due to the lack of demand and decline of natural rubber. Most youth have left to look for work in Santarém (an hour and a half away by boat), and the remaining ones depend on government grants to make ends meet, leaving the community without autonomy.

Angélica, as she is known in the community, has always worked as a craftswoman. However, after developing mobility problems, she was no longer able to collect straw from the forest to make her baskets. The R$100 (approximately US$18) she received monthly from the government cash transfer program, Bolsa Família, in 2019, was not enough to support herself and her two children. The creation of a rubber artisans group helped her to more than double her income. Now, Angelica increasingly sells products to tourists through the Reserve`s Association shop in Santarém.

The cooperative pays R$5 per kilo of latex to associated local rubber tappers – more than twice the minimum price of R$2 Angélica and her group also pay that price to locals for the rubber in Santarém.

At the end of 2019, she and a group of women from other communities nearby, together with an artisan from Oriximiná municipality, took part in a bio jewelry and handicraft workshop. During the event, they exchanged experiences about producing natural rubber accessories, colored rubber sheets, bags, rubberized tablecloths, and even table mats in the format of giant Amazon water lilies (known as vitória-régia).

They are particularly proud their bags were chosen as part of a Press Gift Pack for journalists covering the 2016 Olympic Games in Rio de Janeiro. "We worked around the clock and managed to meet the deadline, delivering 500 bags," recounts Correa.

While the women learned and taught new techniques, Samonek delivered a workshop to share best practices on proper latex collection and storage with local rubber tappers. The cooperative is keen to ensure training activities are gender-balanced. Indigenous who live in a village closeby also participated.

In addition to trading with local women, the rubber tappers can now supply rubber to the factory. The price stands well above the

Photo: Bruno Kelly/USAID

Samonek leading the workshop for rubber tappers at Vila Franca, in Pará State

Photo: Bruno Kelly/USAID

Seringô factory in Castanhal, Pará State

minimum price set by the government, as the Co-op is able to advance the profit of the manufactured goods to them. As women in the community have their own source of income, they feel more empowered, and have greater autonomy to invest in their own priorities.

The schedule for holding workshops in other communities has been delayed due to the pandemic. Plans to scale up production and reach 220 tons of rubber in 2020 have been affected. Still, Vila Franca maintains its latex production and sends it to the Castanhal factory.

"This extractivist forest reserve has enormous potential," says Samonek: "There are 71 communities and 23,000 people here – and everywhere, the rubber trees are very close to where the people live." He believes there is tremendous potential for sustainable growth, as only a small percentage of rubber trees are being exploited.

Brazilian Extractivist Reserves are Protected Areas that allow the sustainable use of natural resources by the riverine and indigenous residents. In Vila Franca, as in other communities within the 777,000 hectares Reserve, rubber trees are all around, within the natural, native forests, and near homes. Most were planted in the late 19th century by the first settlers in the region. Studies show that for each kilo of natural rubber produced, one hectare of forest is conserved.

Samonek feels closer than ever to his dream of seeing a new, more sustainable rubber cycle in the Amazon. And this time, he says, rubber tappers will be in the driver's seat as owners of the factory, selling organic certified products, partnering with big players, and promoting a new sustainable development model entwined with forest conservation.

Angelica (left) coordinates the women's group of Vila Franca

Rubber craft changes gender power relations and trade keeps going during the pandemic

It was through handicrafts, introduced to the region by artisan Zélia Damasceno, that life began to change in Vila Franca.

Damasceno chairs the Amazon Eco-Extractive Producers Cooperative (COOPERECO), accelerated by the PPA, and works together with Francisco Samonek in promoting income alternatives for riverine communities. She says that after a train-the-trainers workshop, a group of women in Vila Franca started asking for more molds, and then began selling their own products.

They convinced their friends and husbands to start collecting latex to produce tablecloths, table mats, bookmarks, bags, etc. These products are sold to tourists visiting their community, as well as at the store run by their association in Santarém.

"We try not to interfere with their marketing. When they were offered the opportunity of making 500 bags to be given to journalists during the Olympic Games, they called me in fear. I told the men that they needed to supply the raw material, and meet the deadlines. They fulfilled the task brilliantly, and earned more than R$20,000," says Damasceno.

She was then approached by a group of local men, who asked her to help the women manage their money. Her answer was: "Let them spend it as they please." Damasceno explains that women are financially dependent on men for almost everything. With the income earned from their crafts, they can now buy "a lipstick, a new outfit, or a backpack for their children. Women in communities often say that they work, but the money is not theirs. Rubber crafts have empowered the artisans group."

Some men feel uncomfortable with the new situation, but most end up accepting it. Vilma de Souza was one of the first women to join the group. Her husband Antônio says that, thanks to her work, they have already bought a television, a sound system, and topped up the money they were saving for a boat engine.

Vilma explains that she works at home. In the morning, she helps her sick parents; after lunch she goes to the workshop set up next to Angélica's house; and then she returns home to cook dinner. Sometimes she even works a little at night. "After Mr. Francisco came here (to hold the latex collection workshop,), everything improved. We thought about giving up in the beginning, but the other day my husband told me that he is excited, and wants to bet on it."

The determination of the Vila Franca's group helped them to keep sending their rubber to Seringô's factory through the pandemic and to secure their growing reputation as reliable partners.

Photo: IJUS/Archive

Food distribution in a Mamuru river community only accessible by boat

PPA Solidarity: Response to COVID-19 in the Amazon

Remote communities in the Amazon suffered shortages of essential items and with the additional difficulties of delivering their production. The members of the Partnership Platform for the Amazon (PPA) have been proactive in supporting response in the territories where they work.

USAID and the PPA's Deliberative Council coordinated efforts to maximize PPA's response. and Through the New Partnerships Initiative (NPI Expand), USAID contributed US$2.1 million leveraged by an additional US$3.5 million from private sector partners to form PPA Solidarity: COVID-19 Response in the Amazon. It is a cross-sector partnership aiming to help address the impacts of the pandemics in the region.

PPA Solidarity partnered with companies such as Alcoa, Bank of America, Beraca, Cargill, Caterpillar, Fundo Sustentabilidade Hydro, Mineração Rio do Norte, Suzano and Vale in eight projects in different states of the region.

Its lines of action are:

1. Mobilize communication campaigns to address COVID-19 while empowering vulnerable or isolated communities to protect themselves against exposure and transmission of COVID-19;
2. Promote measures to prevent and control infections in health facilities and in communities;
3. Support the local health system (hospitals, health posts, and community health services) to respond and control COVID-19 through case management and surveillance services;
4. Support small businesses in the Amazon Region affected by the pandemic(entrepreneurs, producer groups, and cooperatives) with financial advisory services and low-interest loans;

USAID contributed US$ 2.1 million leveraged with an additional US$ 3.5 million from private sector partners to form PPA Solidarity: COVID-19 Response in the Amazon, a cross-sector partnership aiming to help address the impacts of the pandemic in the region.

Training for health workers in the communities in Juruti, Pará State

+380,000
non-medical face masks were donated

+500,000
people reached with information about the pandemic

+14,500
families received food donations and hygiene kits

Remote communities receive information on prevention, kits, and tools to support economic recovery

In the west of Pará State, close to the border of Amazonas State in a region known as Lower Amazon, the PPA Solidarity is supporting communities in the municipality of Juruti through the local Sustainable Juruti Institute (IJUS) and the Juruti Family Agriculture Cooperative (Cooafajur.) The partnership also includes Alcoa (which has a bauxite mine there and runs a sustainability project.)

The project operates on a tripod: knowledge dissemination, food basket donations, and support for local entrepreneurs. It has already provided training workshops on COVID-19 protocols for over 250 health agents and community leaders in Juruti, as well as to sanitation crews at local health clinics. "This guidance helps prepare health staff to become agents of information for their communities," explains Bárbara Espíndola, IJUS Executive Secretary. "It also helps with our work delivering prevention kits because community leaders take this information back home."

Kelly Góes, a nurse who coordinates a health center at Juruti Velho community stressed the importance of receiving hygiene kits: "This training was very positive for us because it provided the community not only the information but prevention. There is no use talking about protection and not having the means to provide it."

The Institute has distributed over 3,000 food parcels and hygiene kits for vulnerable families in 2020.

By boat, the IJUS team have reached the most remote communities along the Mamuru river. Some of the 14 villages of the municipality are up to 16 hours by boat from the city of Juriti. Milena Correia, from Mocambo, shared how pleased she was with the arrival of the donations and the training team: "We are forgotten here and I liked this first workshop to talk about the pandemic, to bring food and hygiene kits. I hope they come again."

Valdemira Santos, of the Nova Canaã community stressed: "We need a lot of help. It is very difficult to leave here when we need to access services and care."

The next step for this project will be to distribute seeds and tools to small farmers who have their families as their workforce. The goal is to support the recovery of family-based agriculture from the impacts of the pandemic. With the closing of the local Agriculture Fair at Juruti city and the suspension of the government program that buys local produce for school meals, small farmers and Indigenous villages have no outlets for their products and no funding to plant. Each of the 50 beneficiaries will receive up to R$ 1,000 (approximately US$ 200)[1] in agricultural inputs to start sowing again.

1 Exchange rate from January 2020

Community leaders receive training in remote village to learn about COVID-19 protocols

Photo: IJUS/Archive

Impact in the field - Innovation from private sector

Supported by USAID, a cosmetics company and researchers show that it is possible to abandon monoculture and grow oil palm alongside native vegetation.

"In the morning, we can hear all types of birds singing here: thrushes, kiska-dees, doves, chachalacas – you name it. In 11 years, a lot has changed, and I have seen many new birds and other animals in our land. Opossums, ant-eaters, foxes, and even deer have crossed this area. You never know when it is winter or summer here – the plants are always beautiful," says André da Silva Moura, who is in charge of one of the sections within the palm oil Agroforestry System (AFS) in Tomé-Açu, a municipality in the state of Pará.

This is a startling different reality from the vast monoculture plantations of dendê, as Brazilians call the oil palm, which covers some 30 million hectares worldwide – about 10 times the size of Belgium[1].

Indonesia and Malaysia are the top producers, with more than 80% of the market, but palm oil production has advanced considerably in Latin America. In Brazil, its output more than doubled in the last 10 years, reaching 540,000 metric tons in 2019. It currently spreads over 200,000 hectares in the Amazon, mainly in Pará.

Traditionally grown as a single crop, the oil extracted from the palm is the most consumed vegetable oil in the world, present in a multitude of products in the food, cosmetics, and biofuels industries. As a natural preservative, it is in almost half of the products we find on supermarket shelves – from chocolate to shampoo. It is colorless and odorless, and can be added to other foods without changing their characteristics.

This versatile palm from the West Coast of Africa (*Elaeis guineensis*) is one of the main causes for tropical deforestation in Asia, as well as for the destruction of the natural habitat of endangered species, such as the orangutan and the Sumatran rhino. Palm oil plantations are often linked to labor exploitation, poor working conditions, and precarious food security for small farmers.

Smallholders in Brazil often have to sign a contract banning subsistence farming since there is a belief that palm oil trees cannot grow inter-cropped with other species. This agreement reduces small farmers' food security, as they become unable to grow beans and other crops important to their diets.

"Natura was interested in the production of palm oil because it is an important ingredient for the cosmetics industry. However, we wanted a more sustainable chain – something that would generate more environmental and social benefits, and better quality of life for farmers. So, we proposed

Smallholders in Brazil often have to sign a contract banning subsistence farming since there is a belief that palm oil trees cannot grow inter-cropped with other species.

1 https://www.statista.com/chart/20114/global-consumption-of-palm-oil/

trying a diversified system," explains Débora Castellani, Science Manager and Project Coordinator of the multinational cosmetics company based in Brazil.

Natura Holding is the fourth largest cosmetics company in the world, having bought traditional brands such as Avon, Body Shop and Australian Aesop. In 2006, it launched a partnership with Embrapa (the state-owned Brazilian Agriculture Research Corporation) and the Tomé-Açu Mixed Agricultural Cooperative (CAMTA) to create an Agroforestry System - intentionally integrating trees and shrubs into crop and animal farming systems. "We invited CAMTA, a world reference for AFS; and Embrapa, a leader on agriculture research innovation. It was a bold move, as there were no previous studies on this (palm oil in Agroforestry systems). So, we are pioneers. It was even more daring because, apart from promoting biodiversity, we also wanted an Agroecological System, free of chemical products," recalls Castellani.

Embrapa is known worldwide for having adapted soybean strains to the climate of the Brazilian Midwest, thus enabling its expansion. CAMTA, a cooperative from the state of Pará, was one of the first to invest in Agroforestry Systems. After a pest nearly led cooperative members into bankruptcy, it decided to move away from its black pepper monoculture.

The project started with funding from FINEP (a public research funding agency) in three demonstrative units that served as open-air laboratories. After selecting areas

Photo: Juliana Nogueira/USAID

André Silva Moura has been with the project since it began in 2008

Palm oil plantation in Agroforestry System proved to be even more productive

Photo: Natura Archive

that were already degraded or in disuse, they prepared the soil, and planted oil palm trees together with native cocoa and açaí, interspersed with other species of economic or systemic purposes. As the trees and palms grew, they replaced the inter-cropped species with others that survived better with lower exposure to the sun.

In the beginning, it was not easy to convince farmers. "The Dendê AFS was a challenge for us. When we were invited to take part in this project, there was no example of inter-cropped oil palm. Some people were very skeptical, saying that palm trees do not grow in the shade of other plants. But we braved the challenge because we already had experience in AFS, and we saw oil palm as just another species for us to work with. It was also an opportunity to innovate, to add another species to a system that we believed could work in the Amazon," says Jailson Takamatsu, an agronomist who owns the plot of one of the demonstration units. "Many, many people want to join us now, but at first, it was not like that. After 10, 11 years, people are changing their minds. Several companies also used to say that it would never be possible to grow inter-cropped dendê, especially in this biodiverse system."

Once the scientific results of the study were published, the general mindset started to change in Tomé-Açu. "Large buyers can see that this farming model yields positive results. Local people have not had a very positive experience with single cropping, so we tend to be suspicious of any type of monoculture. This project has been particularly important to the region, and also for palm agribusiness," said Ernesto Suzuki, a forest engineer and one of the cooperative members who have joined the project.

Since 2016, when SAF Dendê was added to the PCAB portfolio, it has expanded to another 12 demonstration units – mostly small producers – totaling about 50 hectares. The implementation was carried out in partnership with the International Center for Research in Agroforestry (ICRAF), which assists farmers with technical issues related to the implementation of Agroforestry Systems. "The idea is to get all the learning and expertise that Natura, CAMTA and Embrapa have accumulated, and adapt the Dendê AFS to specific needs," said André Miccolis, ICRAF's National Coordinator.

For small farmers, the main challenge is the wait time between sowing and harvesting the species that generate higher income. "So far, not much has changed because we are still in the beginning. And it only gets good when people start making money. In the future it will be better because we will have a much higher income," adds José Paixão, one of the new farmers.

Conservation and food security are also concerns, according to José Carneiro dos Santos: "I joined the project because it is good for us in terms of producing food. It's good for us, and good for nature. It is a slow change. We would like to see results soon, but it takes time to grow. We started with beans, and now we have some passion fruit, and coconuts – which are being gradually eliminated. It is difficult but we have to wait."

"The partnership with USAID was an opportunity that allowed us to monitor our palms until their peak production. The palms have a 25-year lifespan and we have been part of this project for 10 years. It gave us a chance to see how resilient this system is over time. Some people wondered whether it would respond well when it reached full production. But now we feel safe to disclose the results," says Castellani.

The experience proved that when palm trees are combined with other crops, yields can surpass those of conventional farming.

"From the seventh year onwards, we can say that our productivity is equal to, or higher than conventional systems. This was a surprise to all. On average, other farmers harvest 650g to 700g of dry cocoa beans per year. Our units are yielding 1kg. It has already beaten the region's average, and it is organic," celebrates Suzuki.

For him, the taste of their products is also better. "We are biased, of course, but I believe that our açaí pulp does taste different," he jokes. "Another differential is that our revenue is now spread over the year. It is true that we harvest the oil palm trees the whole year, peaking in the harvest season. But we now have the added benefit, which are the other crops we harvest in between. Cocoa, andiroba, mombin, açaí – they secure us a better income throughout the year. It is a huge benefit compared to monoculture."

Agroforestry allows producers to work in the shade and mimicking forests, the farms are cooler. "The working conditions are better," explains André da Silva Moura, who has been part of the project since the beginning having abandoned palm monoculture. "We don't work with chemical products, or under the sun. And the area is very well organized, which has added to our comfort."

Embrapa's research confirms Moura's perception. "We have compared different AFS models with single crop farming, and also with fragments of secondary forests, which are the most intact forest fragments that we have access to. Most of the evidence suggests that the SAF Dendê has much more in common with forests than with monoculture," adds Steel Vasconcelos, Embrapa's project coordinator.

Photo: Juliana Nogueira/USAID

José Paixão was just starting to implement the agroforestry system, but was pleased with the manioca harvest

A meteorology tower and sensors on the ground measuring humidity and collecting soil information are connected to the Embrapa's lab in Belém. "Embrapa's initial involvement was directly related to monitoring environmental services, fauna, and insects. We have seen an increase in soil carbon stock, which means that SAF Dendê has a higher potential to mitigate the effects of climate change adding to the potential of environmental benefits.

For Castellani, the project has fulfilled its goal to grow sustainable palm. "After 10 years we can say that the system works, generates countless positive impacts, plus it can be replicated. And there is no step or practice that cannot be adopted by small farmers. I hope this influences the oil palm value chain and its environmental and social problems, proving that it is possible to do things differently."

USAID's joint research program with Natura was concluded in 2020. Their results with sustainable palm oil production were presented in more than 30 workshops and seminars.

ICRAF has been sharing the SAF Dendê evidence with projects in Peru, Malaysia and Indonesia - where a project with an Agroforestry approach is being developed.

The Natura partnership led to the development of a business model fort he commercialization and expansion of the SAF Dendê project, including construction of a small plant and conversion of monoculture plots into Agroforestry Systems.

Photo: Juliana Nogueira/USAID

Carlos was one of the first to implement palm oil agroforestry and now trains helpers to manage the land

How an immigrant community in the Amazon abandoned monoculture in favor of Agroforestry

Immigrants from Japan founded the Camta Co--op in Tomé-Açu back in 1929. By the 1950's Camta was one of the largest exporters of black pepper in the world. Fast forward 10 years and the co-operatives had to look for help to avoid its demise after a pest devastated their pepper bushes. With technical support from the Japanese government, they created their first Agroforestry System (SAFTA,) combining fruit trees with forest species to provide economic stability to farmers and mitigate the impacts of pests and crop losses.

"SAFTA's goal was never to plant forests, but to develop a sustainable system that would last 20 years and would give us short, medium, and long term cycles. At the end of that cycle, we could remove the native species, make money from timber and start planting again to ensure our subsistence for another 20 years," says Alberto Keiti Oppata, current Camta's President. They were already Natura suppliers of fruit pulp when the company invited the Co-op to test SAF Dendê.

Since it shifted to Agroforestry their production became more diversified and the Co-op has grown again. With over 150 members it sells to the internal market and exports fresh and frozen pulp to Japan.

Satellite image of an Amazon river

Photo: ©voran - stock.adobe.com

MONITORING, EVALUATION, AND LEARNING

PCAB employs standardized social and biodiversity indicators to assess the real impacts of the projects supported. Every year, USAID/BR holds training activities with implementing partners to improve data collection and accuracy.

In 2019, USAID and The Alliance of Biodiversity and CIAT formed a partnership program to foster engagement with the private sector. The Catalyzing and Learning through Private Sector Engagement for Biodiversity Conservation (CAL-PSE) program aims to transform the conservation approach in the Brazilian Amazon while improving the well-being of Indigenous Peoples and local communities.

Implemented by the Alliance/CIAT and a network of local partners and private companies in Brazil the program is developing monitoring solutions that will measure day-to-day project management and long-term impacts. This will ensure that implementing partners are accountable and that both USAID and private sector partners can employ adaptive management, make informed decisions, and capture learning.

The program also aims to identify innovative models and private sector partnerships fostering replication of successful initiatives with potential of gaining scale. These tools are being developed with this objective in mind and some are already being applied in the PCAB portfolio:

Social Progress Index (SPI) - This is a multidimensional evaluation tool used to estimate concrete aspects of human well-being, including health, education, and access to clean water. The Sustainable Territories Program (STP) started using this methodology to monitor the results of a project developed by Fundação AVINA and CIAT with logistical support from ECAM.

In order to build the SPI, independent professionals living in the region interviewed residents of riverine and quilombola communities in Oriximiná municipality. The first survey was conducted in 2019, and the results were released in 2020. Through the SPI, it will be possible to monitor social and environmental changes in quilombola territories and riverine areas, allowing residents to assess a range of issues that may influence their quality of life and organize local demands for public and private support.

Social Network and Relationship Impact Analysis (SNA) - The Social Network Analysis will be an important tool to monitor the development of the Partnership Platform for Amazon. Every year, the methodology will analyze relationships formed among the members of the PPA and between those members and other institutions. This analysis will support the implementation of the platform, detecting elements able to be replicated or to gain scale, and identifying factors that may have contributed to the good functioning of the alliance. The SNA tool adopts a methodology that combines both quantitative and qualitative analyses. The first interviews were conducted by the Alliance/CIAT in conjunction with the Amazon Environmental Research Institute (IPAM) in 2019 and the first SNA was concluded in 2020.

TerraBio -This is a monitoring methodology to assess the ecological impact of private sector investments on biodiversity conservation using a combination of Earth observables and in situ data (Participatory Biodiversity Monitoring.) TerraBio will provide information on the impact of three co-investment interventions on forest habitat biodiversity. Landscape-level habitat characteristics of interest include forest cover spatial extent, conditions, and configuration, including connectivity and fragmentation

Geospatial Data Management and Context Analysis - Geographic Information Systems (GIS) are designed to work with spatially referenced data and multiple databases that can be integrated, analyzed, and visualized to inform decision making. This component plans and conducts geo spatial analysis using primary and/or secondary data. These analyses provide insight socioeconomic and biophysical contexts when interpreting and measuring project impacts, besides additional Monitoring & Evaluation results.

PCAB Partner Network

USAID/BRAZIL TEAM

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Anna Toness Environment Office Director (2019)

Catherine Hamlin Environment Office Director

Ana Paula Mendes Supervisory Program Officer

Marcos Bauch South America Regional Program Country Coordinator

Alex Araújo Project Management Specialist

Alex Alves Private Sector Engagement and Partnerships Specialist

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Photos: US Forest Service archives

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