

Safeguarding Sustainable Development: BNDES, Fundo Amazonia, and Sustainable Development in the Northwestern Brazilian Amazon



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ABSTRACT

This reference study serves as background to the GDP Center Working Paper, Safeguarding Sustainable Development: BNDES, Fundo Amazonia, and Sustainable Development in the Northwestern Brazilian Amazon. It gives context, evidence, and case study results based on in-depth fieldwork. It is part of the broader Safeguarding Sustainable Development project, a multi-year collaboration between the Boston University Global Development Policy Center' FLACSO, Quito; Universidad del Pacífico, Lima; and INESAD, La Paz. It is supported by the John D. and Catherine T. MacArthur Foundation, the Charles Stewart Mott Foundation, and the Rockefeller Brothers Fund. More information about the project can be found at http://www.bu.edu/gdp/development-banks-in-the-andean-amazon/

Introduction

The development destiny of the northwestern Brazilian Amazon is caught in a bipolar struggle between large-scale industrial extraction and conservation-oriented sustainable development. The first is driven by the desire to cash in on China's evolving mineral and timber resource demands to power Brazil's economic growth (Fearnside, Figueiredo, and Bonjour 2013, Klinger 2017). These international market pressures intersect with long-standing interests within the Brazilian state and military to use big infrastructure projects to conquer the immense Amazonian frontier (Pinto 1973, Browder 1997). The second is driven by a realization on the part of environmental and indigenous rights organizations that "fortress conservation" (Brockington 2002, Siurua 2006) is insufficient to protect indigenous people and Brazil's vital environments from invasion and deforestation. Instead, under the emergent paradigm in the Amazon, conservation-based practices must generate monetary gains for local communities and for the country. Both approaches have their supporters in all levels of government and civil society, from the local to international scales. More importantly, both agendas have their respective champions within major development banks, which hold the keys to the finance and expertise necessary for either vision to triumph. Therefore development banks have a crucial role to play in determining whether the future of the Brazilian Amazon will be one of intensifying deforestation, indigenous expropriation, and mineral extraction, or one of forest restoration, sustainable development, and indigenous livelihood protection. In either case, development banks and their safeguards—or lack thereof—are important arbiters of local development outcomes.

BNDES—the Brazilian National Economic and Social Development Bank—holds special non-reimbursible funds to support both visions. The USD\$1.1 billion devoted to *Fundo Amazonia*, paid into by developed countries (primarily Norway and Germany) to curb deforestation, unsustainable extraction, and to support conservation-based development, has an extraction-driven counterpart. The *Inova Mineral* is a R\$1.2bn fund jointly created between BNDES and *Finep*, the Funding Authority for Studies and Projects under the Ministry of Science and Technology. The purpose of *Inova Mineral* is to provide non-reimbursable financial support to new mining and mineral processing projects in Brazil (Vasquez and Dias 2016). The co-existence of these conflicting initiatives within one institution is not unique to BNDES or Brazil. Smets and Jarzabkowski (2013), Powell and DiMaggio (1991), among others, have shown that large institutions are characterized by complex and often competing mandates.

Although there is considerable difference in the size of the funds (USD\$1.1bn vs. R\$1.2bn, which is USD\$379 million), the "one billion" number is symbolically significant among the resource nationalists behind *Inova Mineral*, some of whom characterize foreign-funded conservation schemes of any sort as an affront to Brazilian sovereignty. Under such a framing, the expansion of agro-industrialism is framed as vital to the country in popular and public discourse (Rossi 2017). Thus the groups behind *Inova Mineral* responded to the foreign and NGO-backed formation of the *Fundo Amazonia* in 2008 with R\$1 billion package of their own in 2016.

This paper examines a case in which a local indigenous community, polarized by the debate between mining and conservation among community members, enlisted *Fundo Amazonia* to undertake a government-mandated integrated planning program to determine their development destiny. After five years of deliberation, they chose to develop *Ecoturismo Yaripo*, a community-run for-profit enterprise that provides fully supported tourism and research expeditions to a mountain within their constitutionally demarcated indigenous territory. The paper finds that extensive adoption of social and environmental safeguards by banks, governments, and civil society organizations has a positive impact on development project formulation and implementation to the point that Indigenous people played a central role in project design. This outcome resulted from a thorough implementation of social and environmental safeguards as required by the FA and supported by international, national, and local policies. Although the ongoing nature of the project means that the ultimate outcomes remain to be seen, they do raise several intriguing possibilities, not least of which is the demonstration that local communities can be entrusted to direct their own development. The paper discusses the actors, institutions, and practices that generated preliminary positive project outcomes.

I. Methods and Approach

This case study examines the impact of a sustainable development planning initiative funded by a southern-led development bank on indigenous peoples, sustainable development, and biodiversity in the upper Brazilian amazon. The study uses a mixed methods approach that included serial semi-structured interviews, official data analysis, local site visits and environmental evaluations, and multi-data triangulation over a ten week period between June and August of 2017.

To accomplish this study, the author conducted six weeks of desk research and conducted 30 interviews with diverse stakeholders in São Paulo, Brasilia, Rio de Janeiro, Belem, Manaus, São Gabriel da Cachoeira, and Maturacá. Stakeholders included BNDES staff, NGO partners, members of the *Fundo Amazonia* oversight committees, federal, state, and local government officials, researchers in the academic, NGO, and public sector, indigenous leaders, and members of the indigenous communities in and around Maturacá. These interviews were semi-structured and open-ended, which allowed the author to gather data on the perceptions and discourses of diverse stakeholders with respect to the *Fundo Amazonia*, the case study as well as the political, economic, cultural, institutional, and geopolitical context in which the project was formulated and implemented at multiple scales.

At the local scale, the author also used the methods of participant observation and local environmental assessment. The author co-financed, co-organized and participated in a technical expedition with *Ecoturismo Yaripo*, which included an ascent of Pico da Neblina, as part of an environmental assessment of the ecotourism site and infrastructure in July 2017. At the request of the local indigenous organizations, AYRCA (Yanomami Assocation of the Rio Cauaburis and Tributaries) and Kumirayoma, the technical expedition team included representatives from NGOs and government agencies, the Environmental Directorate of the Brazilian Mountaineering and Climbing Association, a prominent Brazilian journalist, a ecotourism business plan consultant who doubled as a professional photographer, a multicultural education specialist, and a technician from a radio communications firm. One key purpose of the technical expedition was to assess the environmental impact of the *Ecoturismo Yaripo* and to identify possible problem areas from a multidimensional sustainable development appraisal matrix. The data gathered from the interviews were then triangulated with data gathered from available documentation, participant observation, and local site visits. Documentation consisted of internal documents, memoranda, policy reports, relevant press releases, and institutional records from government, non-government, financial, and community organizations.

II. Case Study Background and Context

This case study presents an expansive evaluation of a project supported by the *Fundo Amazonia* program administered by BNDES—Brazil's National Economic and Social Development Bank. In addition to examining the impact of this ongoing project, this case study investigates the institutional and political economic context through which the project was formulated and implemented in order to identify broader lessons for other southern-led and multilateral development banks.

The specific project of interest in this case is the Yaripo Ecotourism Development Project in Maturacá village, in which a Yanomami Indigenous association has put together a cooperative for-profit enterprise to offer tourist expeditions to Pico da Neblina (Yaripo in local language). Pico da Neblina is the tallest mountain in Brazil, a biodiversity hotspot, and a sacred site to the Yanomami. It is located on the Brazil-Venezuela border, on the northwestern edge of their 97,000 square kilometer territory. Yaripo is one outcome of the community-based National Environmental and Indigenous Lands Management Plan (PNGATI - *Política Nacional de Gestão Ambiental e Territorial em terras indígenas*), mandated by the Brazilian government and financed by the *Fundo Amazonia*, a special development fund managed by BNDES. Each of these will be explained in turn.

BNDES has a troubled history with sustainable development in the Brazilian Amazon. There is abundant documentation of the social, environmental, political, and economic harm done by large infrastructure projects that proceeded with little to no attention to social or environmental safeguards (Bergamini Junior 2003, Fearnside and de Alencastro Graça 2006, Brasil 2011), the most iconic of these in recent years is the Belo Monte dam (Fearnside 1996, Diamond and Poirier 2010, Jaichand and Sampaio 2013, Bratman 2014). BNDES is notable among major development banks for failing to publish, much less adhere to, even the most basic transparency and social safeguard parameters used by other major development banks (Gallagher and Yuan 2017). One reason for this, as given by BNDES personnel, is that the bank's primary function is to provide financing for projects formulated by the state. Therefore it is up to the democratically elected governments and the electorate to ensure that social and environmental safeguards are incorporated into project design. By contrast, the *Fundo Amazonia* is governed by a comprehensive set of safeguards and criteria, which were formulated by two committees, in which civil society not only had robust representation but also veto power (Marcovitch and Pinsky 2014). Like other large development banks, BNDES is a complex institution in which multiple values and mandates compete internally for recognition and resources. This is evident in the co-existence of *Inova Mineral* and *Fundo Amazonia* within BNDES.

The Fundo Amazonia (FA) is the world's largest deforestation control fund and was established by Legal Decree No. 6527 on August 1, 2008. Its purpose is to raise money for non-reimbursable investments in efforts to prevent, monitor, and combat deforestation while also promoting the preservation and sustainable use of the Brazilian Amazon. It is administered by BNDES in cooperation with the Ministry of the Environment. BNDES is responsible for managing the fund, facilitating contracts, and monitoring projects. The FA is one of several outcomes of a 2003 study that calculated Brazil's global economic contribution for greenhouse gas sequestration in the Amazon rainforest to be worth USD\$21 billion annually (FAO 2005). The Brazilian delegations to the 2006 United Nations Framework Convention on Climate Change Conference of Parties emphasized this contribution, which helped inspire the adaptation of the Global Environment Facility and the Green Climate Fund to facilitate monetary transfers from developed to developing countries in exchange for the recipient countries' maintenance and expansion of tropical forest carbon sinks. The primary donors have been the Norwegian government, KfW (Germany), and PetroBras, but any government or business can contribute directly or through the UNFCCC Green Climate Fund. Financial transfers to FA are conditional upon reducing greenhouse gas emissions that result from deforestation. In other words, it is essential for the Brazilian government to prove the reduction of deforestation in the Amazon in order to be eligible to receive additional payments. This results-based payment scheme has been hailed as a success in international forest conservation policy (Seymour and Busch 2016). Monitoring forest cover trends is the responsibility of Brazil's National Space Research Institute, INPE (Instituto Nacional de Pesquisas Espaciais), which uses several dedicated satellite arrays to keep track of deforestation (Krug 1998, Teixeira 2015). The objective of the Fundo Amazonia is to support the creation of sustainable livelihoods among people who actually live in the Amazon. This is meant reduce the social and economic pressures to engage in environmentally destructive livelihoods such as mining, logging or cattle ranching. A concurrent objective is to improve Brazil's state capacity to monitor and prevent environmental crimes.

To support this initiative, President Dilma Rousseff issued Decree 7747 on June 5, 2012 to institute the National Policy of Territorial and Environmental Regulation in Indigenous Lands (PNGATI). The objective of this decree is to:

"guarantee and promote the protection, recuperation, conservation, and sustainable use of natural resources in Indigenous Lands and territories, securing the integrity of the Indigenous patrimony, the improvement of the quality of life and the necessary conditions for physical and cultural reproduction of the current and future generations of indigenous peoples, respecting their socio-cultural autonomy, in accordance with current legislation." (1.1)

To implement this, the Decree called for *Ethnomapping* and *Ethnozoning* projects to be undertaken. Ethnomapping is a participatory mapping project in which communities determine their areas of environmental, socio-cultural, and productive relevance as held in local indigenous knowledge. Ethnozoning follows this process with a participatory planning, in which communities collectively determine how the environmental, socio-cultural, and productive assets of their territory will be used. The law then enumerates five axes according to which sustainable and culturally-appropriate development in indigenous lands should be supported. These include, *inter alia*, the mandate to:

П	in the production of artisan products for commercial ends; (2.3.5.C)
	Support the substitution of non-sustainable productive activities in indigenous lands with sustainable activities (2.3.5.D)
	Support social and environmental impact assessments on non-traditional productive and economic activities undertaken at the initiative of indigenous communities (2.3.5.E)
	Support sustainable indigenous ecotourism and ethnotourism initiatives that respect the community's decision and the diversity of indigenous peoples, promoting, as appropriate, preliminary studies, diagnoses of social and environmental impacts, and training indigenous communities to manage these activities.

The selected tenets presented here most immediately informed the development of *Ecoturismo Yaripo*. It provides an instructive model for federal policy that not only has the potential to support culturally-sensitive sustainable development initiatives in indigenous territories, but also shows which sort of policies are conducive to establishing a regulatory environment in which a development finance entity such as FA can feasibly operate.

The PNGATI was undertaken in Yanomami Indigenous Territory first by Environmental Ministry personnel working within the Chico Mendes Institute for Biodiversity Conservation (ICMBio) beginning in 2013. This directly complemented projects by ICMBio personnel to restore trust within the community since 2010, following several years of negligence on the part of the Ministry. On June 26, 2016, an NGO with extensive history working with other groups of Yanomami on the eastern edge of their territory, *Instituto Socioambiental* (ISA), won a R\$ 11.7 million (USD\$ 3.55 million) grant from FA to complete PNGATI diagnostics, integrate public policies, and to formulate community development plans in several indigenous territories, including the Yanomami (BNDES 2016). Hence the FA did not create a new project, rather it served to support constructive grassroots development efforts already under way. Furthermore, civil society organizations were given a leading role in policy implementation.

The case study site is located on the western edge of Yanomami Indigenous Territory. It is an area of approximately 97 square kilometers bordered to the south by the Rio Cauaburi, to the north by Pico da Neblina and the Brazil-Venezuela border, and to the east by the Porapiwei Mountain range. The field research was concentrated in two areas: the first in the village of Maturacá, and the second along the 37 kilometer mining and hunting trail intended to be used as an ecotourism trail to the summit of Pico da Neblina, which is the highest mountain in Brazil.

The case study site is located within the Pico da Neblina national park, with an area of 22,500 square kilometers (about the size of New Jersey). The national park is superimposed over part of the Yanomami indigenous territory. Maturacá, is located on the western edge of Santa Isabel do Rio Negro, and of the national park. But since it is separated from the urban center by 320 km of dense forest, all economic activity and political engagement occurs through the neighboring municipality of São Gabriel da Cachoeira. Reflecting this closer political and economic relation, the government of São Gabriel is the municipal partner for the ecotourism enterprise, rather than Santa Isabel. Depending on the height of the rivers and the condition of the 90 km stretch of unpaved road connecting São Gabriel da Cachoeira to the southernmost river access point, travel times between Maturacá and São Gabriel da Cachoeira vary between one and two days.

Approximately 600 indigenous people live in the village of Maturacá. The fifty-year presence of a Salesian mission has facilitated the concentration of services in this village that are intended to serve the roughly 2000 people who live along the Cauaburis River and tributaries. These include a primary school, military base, and health clinic. Located seven hours by boat from the nearest road, the village is also a gateway for people and organizations entering Yanomami Indigenous lands from São Gabriel da Cachoeira. This combination of factors has resulted in a community that has heavier institutional and NGO

presence, as well as political and economic stratification among households that have selectively engaged with both licit and illicit economic activities in the region. Consistent with the observation that poverty varies among the poor (Blaikie et al. 2014, Agarwal 1989) these factors mean that, among "remote" and "marginalized" communities, Maturacá is of relatively easier access for both constructive and destructive development agendas.



Figure 1: Map of the Northwestern Brazilian Amazon, showing principle indigenous groups and land classifications.

At the local level, the majority of the community now supports the development of a Yanomami-run ecotourism enterprise because it would provide a concrete alternative to illegal gold mining. Small-scale gold mining contaminates soil and water with mercury and cyanide. It is physically dangerous work that requires Yanomami participants to be away from their homes for several weeks or months at a time. Nevertheless, conflicting interests remain. A dozen families have earned their living by working in illegal gold mines, running their own mines, or collecting protection money from non-indigenous miners who pass through their region. In the best cases, these households can earn up to R\$2000/month (USD\$600). In a region where there are few sources of income aside from the few government-paid positions of schoolteacher or medical worker, this is a considerable sum. By contrast, participants in the ecotourism enterprise earn between R\$800 – R\$2000 (USD\$240 - USD\$600) per each 10-day expedition, of which there are projected to be 10 per year. Eighty households are expected to benefit directly through service provision and sales of indigenous goods related to the ecotourism enterprise.

The ecotourism project emerged from community dialogues carried out over a multi-year period and facilitated by government and civil society partners of the FA. These BNDES partners are not employees of BNDES. Rather, some are members of the technical and orienting committees that now oversee the FA, others are veterans of civil society movements that mobilized against various BNDES-funded infrastructure projects, and others are designated facilitators between the FA and indigenous communities. The fact that key personnel charged with initial evaluation, project formulation, and implementation were not employees of BNDES gave them greater latitude to act in the interests of the community in developing and implementing the project, rather than, as is often the case (Maren 2009, Easterly 2006) in the interest of the funding institution and their individual job security within it.

Ecoturismo Yaripo is the result of the sustained participation of representatives of the six communities under AYRCA and Kumirayoma jurisdiction, with an average of 55 participants in each meeting. The majority of participants were under the age of 30. Traditional leaders, directors of AYRCA and Kumirayoma, schoolteachers and local healthcare workers also attended the meetings over the course of several years. The deliberations, the plan, and the resulting project had to proceed according to several institutional protocols, including FUNAI (The National Indian Foundation, the federal agency charged with the protection of indigenous lands), ICMBio, the FA Safeguards, and local community practice. These regulations and safeguards were sometimes discussed collectively, and other times individually among stakeholders depending on the

interests and concerns of the community. In 2015 in particular, several day-long meetings were held to discuss local concerns over the potential transformations visited upon traditional Yanomami culture by community implementation of a for-profit enterprise. A point of considerable pride among the Yanomami interviewed and the project personnel involved is the fact that they put in the time needed to allow community members to think through what their concerns might be, to express them, and to discuss each of them collectively. In this case, the process was the point. It was given greater weight than a pre-determined project outcome.

The enterprise only became acceptable to the majority of the community after it was envisioned as a means through which traditional techniques of navigating and knowing the forest could be reclaimed and taught to younger generations. They also identified several strategic purposes. Most broadly, the elders recognized that simply demanding that compliance with the law forbidding unauthorized access of non-indigenous outsiders was ineffective at preventing invasions. The transition to ecotourism came to be seen as a transition from a defensive to an offensive stance, where the Yanomami are inviting people into their land on their own terms. By increasing the flow of legitimate traffic, they hope to better manage illegitimate traffic. Profits generated from the enterprise are held in a community account, and expenditures are determined through consensus-based decision-making.

This strategic vision on the part of the Yanomami attracted other supporters. FUNAI, ICMBio, the Brazilian military, the São Gabriel da Cachoeria Tourism Secretariat, and ISA came on board after 2014 in order to support this Yanomami-led initiative. Each organization joined because they perceived that the promotion of ecotourism in the region, in a form that is well-regulated and under control of the local community, resonated their respective institutional interests. Indigenous-run ecotourism would allow the military to better securitize the frontier through more routine patrols and provide a politically palatable justification to improve communications infrastructure across Yanomami territory. Because earlier military-backed infrastructure construction attempts in Yanomami territory garnered national and international outrage when they were brought to light by prominent Yanomami spokesperson Davi Kopenawa (Kopenawa and Albert 2013), building infrastructure to support indigenous ecotourism is seen as a rehabilitation of the military's public image. Further, the initiative would attract tourism revenue to São Gabriel da Cachoeira, the first stop for people visiting the region, where it is necessary to spend the night before embarking on the 1-2 day journey to Maturacá. Indigenous-run ecotourism would support the form of development long advocated by NGOs, environmentalists, and indigenous rights activists. That is, development that is driven by people at the grassroots, governed by principles of equality and environmental conservation, and makes its central priority the provision of environmentally sustainable livelihoods for the present and foreseeable future. Each organization reënvisioned the project according to their own hopes and interests, and provided personnel, in-kind services, and financial support to help bring the project to fruition. None of this is to suggest that this particular confluence of institutions and interests is unproblematic, rather to point out that it proved to be effective in advancing the safeguard-compliant development project in this particular case. Consistent with findings elsewhere (Ray, this volume, Brinkerhoff 1996), development banks are most likely to engage in when a host of national and local policies require and reinforce socially and environmentally responsible development.

III. Key Institutions

The multiple actors and institutions involved in *Ecoturismo Yaripo* suggests that development bank safeguards are more likely to be effectively implemented when multiple actors coordinate in the interest of shared outcomes. In this particular case, the social and environmental safeguards of FA supported the expansion of ongoing government, NGO, and local community initiatives already under way. The early successes of *Ecoturismo Yaripo* are the result of a confluence of multiple actors and institutions concerned with achieving successful sustainable development in the Amazon, financed through the FA. Several key institutions are presented here.

Donors: Government of Norway, Government of Germany, and Petrobras

The governments and entities that provide funds to major development banks have a key role to play in the bank's conduct

and priority areas, including the adoption and effective implementation of social and environmental safeguards. While it is not unusual for research on development financing to analyze donor conditionality in the case of bilateral aid (Killick 1997, Molenaers, Dellepiane, and Faust 2015), foundation-NGO relations (Reith 2010, Elbers 2012) or development bank loan conditionality to recipient states (Kapur and Webb 2000, Humphrey 2014), less attention is paid to the conditions imposed by governments that pay into development banks in the form of direct contributions or on-lending facilities. This is a key relationship for further research and policy intervention, and for which the FA provides an instructive example. The entities that provide financial resources to the FA condition each tranche of funding on verified evidence that the rate of deforestation is decreasing. This data is aggregated by the Ministry of the Environment based on satellite data gathered by Brazil's National Space Research Institute, INPE. All data is publicly available.

The first transfer of funds from the government of Norway arrived in March 2009. The first donation agreement between the Norwegian Ministry of Foreign Relations and BNDES established that they would transfer up to 700 million Kroners (USD\$ 89 million). Between 2011 and 2016, Norway made additional contributions between 750 and 900 million Kroners, bringing the total contribution between 2009 and the end of 2016 to 1.1 billion dollars. The German government, through KfW, contributed USD\$30 million to the fund between 2010 and 2014. BNDES established a donation contract with Petrobras in 2011 to contribute to the FA. Although the frequency and amount of donations has decreased in recent years in light of economic and political difficulties, Petrobras contributed USD\$7 million to the FA between 2011 and the first quarter of 2017. For Petrobras, these donations count as carbon offsets. Each donation is measured in terms of tonnes of carbon offset. Donations have ranged from USD\$7 thousand to USD\$2 million (BNDES 2017c).

In light of the news that Brazil's deforestation had increased in 2016 (INPE 2016, Mooney 2016), Norway and Germany announced in late June 2017 that they would be cutting funds to the FA (Chade 2017, Girardi 2017). While disappointing to many, BNDES personnel and their Norwegian counterparts stated that this outcome was not surprising. After all, the annual receipt of funds through 2030 is contingent upon decreasing deforestation and keeping the rate of deforestation below 19,000 square kilometers per year. Should deforestation decrease in subsequent years, contributions are likely to resume.

Fundo Amazonia

Housed at the BNDES headquarters in Rio de Janeiro, Fundo Amazonia (FA) is not a typical development bank fund, but it does offer an instructive model for development financing, particularly between more and lesser-developed countries. The fund was proposed in 2006 by the Brazilian delegation at COP-12 in Nairobi, Kenya. The objective is to incentivize Brazil and other developing countries with tropical forests to voluntarily reduce greenhouse gas emissions resulting from deforestation. The FA has adapted eight social and environmental safeguards from the REDD+ paradigm. These concern: Legal compliance, Recognition and Guarantee of Rights, Distribution of Benefits, Economic Sustainability and Poverty Reduction, Environmental Conservation and Recovery, Participation, Monitoring and Transparency, and Governance (UNFCCC 2010).

As of October 31, 2017, the fund has disbursed USD\$243 million to 89 projects across six sectors working in the legal Amazon: International, National, State, Municipal, University and Civil Society. The projects supported are diverse, ranging from supporting collaboration in remote sensing data sharing among all nine Amazonian countries, to issuing deeds to land occupied by Amazonian inhabitants, to supporting sustainable fisheries among riverine communities, to funding fire departments in deforested areas vulnerable to wildfire. Supporting projects at all levels of government was a deliberate strategy to ensure policy coherence and to maximize buy-in from multiple stakeholders.

Two committees oversee the FA. The first is the Guidance Committee (COFA: Comitê Orientador do Fundo Amazônia), which is responsible for setting guidelines and monitoring project results. Its guidelines are elaborated according to the goals, commitments, and policies of the Federal Plan for Prevention and Control of Deforestation in the Amazon (PPCDAM), and the guidelines of the Sustainable Amazon Plan (PAS), both of which are explained in Section V. The COFA is composed of representatives from federal ministries, state governments, and civil society organizations. There is equal representa-

tion among the three blocs and there is no 'token' representation; every member of the committee has full voting and veto power. COFA is responsible for ensuring the fidelity of initiatives supported to the objectives of FA (BNDES 2017a). Many civil society members of COFA have an extensive history of engagement with BNDES via the civil society coalition *Plata-forma BNDES*, which dialogued with the bank over social, environmental, labor, and distributional concerns emerging from BNDES-financed projects in the 1990s and 2000s (Plataforma BNDES et al. 2007).

The second committee is the Technical Committee (CTFA: Comitê Técnico do Fundo Amazônia). It is responsible for measuring and analyzing annual data on carbon emissions caused by deforestation. The data is gathered and compiled the Ministry of the Environment and verified by INPE. Committee members are technical and scientific specialists with "unimpeachable reputation" (BNDES 2017b) appointed by the Ministry of the Environment for three-year, unpaid terms, following consultations with the Brazilian Forum on Climate Change. Members include Brazilian scientists who have served in the UN, with the IPCC, or have directed successful research programs in INPE or in universities. This committee is responsible for defining the methodology used to calculate the amount of carbon dioxide emitted through deforestation, and the cost of such emissions. Based on the average rate of deforestation between 2001-2010, the committee calculates the amount of emissions avoided through reductions in the rate of deforestation. (MMA 2017).

The combination of mandates, funding structure, and institutional home make the FA unique in the development finance world (Rival 2012). Although BNDES does not have the practice of providing development finance in the form of grants, a central tenet of the FA is that funds cannot be used to generate revenue for BNDES. That means no loans of any sort, and no services provided by the bank can be charged to recipients of FA resources. Until the formation of *Inova Mineral*, FA was the only such large resource pool within BNDES that provided grant-based financing.

According to Presidential Decree 6527, a project must contribute directly or indirectly to the reduction of deforestation in the Legal Amazon in order to be eligible for funding from *Fundo Amazonia*. The Legal Amazon is larger than the Amazon biome. The former was designated in 1948 and encompasses all nine Brazilian states that contain the Amazon biome. At over five million square kilometers, this includes 59% of Brazilian territory. Within Brazil, the Amazon biome is about 80% of the size of the Legal Amazon.

Up to 20% of FA resources can be used to develop monitoring and deforestation control systems in other Brazilian biomes and in other tropical countries. Different sets of criteria govern projects within and outside the legal Amazon. For the purposes of this paper, only those criteria and safeguards concerning projects within the legal Amazon will be included. Each FA-funded project within the legal Amazon must conform to the guidelines and strategies for the FA; the Guidelines for the prevention and control of deforestation in the Legal Amazon, and the National REDD+ Strategy.

The FA guidelines cover five areas, described below in Table 1. The elaboration of this multidimensional set of criteria and safeguards is the result of extensive civil society engagement with BNDES in the years preceding the creation of the FA. The criteria outline minimal conditions for the projects. Both are summarized in the table below:

Table 1: Guidelines

Thematic					
The FA supports projects from the following thematic areas:					
	Management of public forests and protected areas;				
	Control, monitoring, and environmental regulation;				
	Sustainable forest management;				
	Economic activities deriving from sustainable vegetation use;				
	Ecological and economic zoning, land tenure and land regularization;				
	Conservation and sustainable use of biodiversity; and				
	Recuperation of deforested areas.				
Geogra	phical				
	Projects carried out in priority municipalities for the prevention, monitoring, and combat of deforestation				
	Projects carried out in municipalities under the influence area of major infrastructural works				
	Projects carried out in municipalities or regions with greater forest conservation programs				
	Projects carried out in priority areas for biodiversity conservation or the conservation of endangered plant and animal species				
Diversity of Actors Involved and Shared Governance					
Projects	that involve the articulation between diverse actors, from the public, private, third sector or local				
communities, with shared governance structure.					
Public Relevance					
Projects involving direct benefits to traditional communities, settlements, and family farmers.					
Relevance					
Projects with a greater potential to be replicated.					
Projects with a greater potential impact (for example: R\$/hectare of forest protected or sustainably managed.					

Table adapted from Fundo Amazonia Diretrizes e Criterios para aplicação doe Recursos e focos de atuação para o Biênio 2017 e 2018. PP.4-6.

Likewise, the extensive civil society engagement with the formulation of FA conditions is manifest in the minimum conditions for the projects, which consists of fourteen issue areas.

Table 2: Minimum Project Conditions Minimum Project Conditions Results Indicators The project should include results indicators that are measurable and directly related to FA objectives. **Proponents and Executors** The project should include consent of all partners and co-executors **Social Participation** Projects involving traditional communities and indigenous peoples are obligated to present documents that verify the prior informed consent of these communities or of their representative institutions. The communities involved or affected must be made explicit in the project. Coherence with FA Thematic Areas The project must fit within at least one thematic area of FA, as stated in Decree 6527/2008 **Coherence with State Plans** The project must demonstrate a clear coherence with the actions foreseen in the PPCDAm (Plan for the Prevention and Control of Deforestation in the Legal Amazon), the State Plans for the Prevention and Combat of Deforestation, and when applicable, with Proveg (National Policy for the Recovery of Native Vegetation) Coherence with REDD+ National Strategy The project should demonstrate clear coherence with the National Strategy for Reducing Emission of Greenhouse Gases from Deforestation and Forest Degradation, Forest Carbon Stocking, Sustainable Forest Management, and Forest Carbon Stock Enhancement (also known as ENREDD+) Additionality of Resources Projects must respect the principle of additionality to the direct public budgets destined to the areas of application of the FA. In applying this criterion, the following aspects may be considered: The average direct public budget executed in the previous two years in the proposed action; The variation of the budget of the responsible institution or body compared to the variation of the budget of the federal entity to which it is linked or in which it is integrated; Prediction of multi-year government plans in force (PPAs). **Counterparts** Projects must present the contributions of counterparts and/or nonfinancial contributions that demonstrate additionality to the resources sought from FA as well as the potential multiplier effects for the investments made by the FA. The counterparts may be in th form of financial resources directly invested in the project or by the provision of infrastructure, personnel, and other indirect or in-kind services. **Territorial Base** Projects must clearly state their territorial base of operations (the state and, where applicable, the municipal-**Publicity and Transparency** Projects must have a mechanism to disseminate their implementation process through the internet. **Sustainability of the Project** Present strategies to sustain the project results after implementation **Resource and Funding Distribution** A balance should be sought in all of the FA's activities to support all thematic areas according to the defined priorities. **Results of Projects with Economic Ends**

Such projects should prioritize collective or public benefits related to:			
	Productive infrastructure, services and inputs for collective use, with out risk of individual appropriation of benefits intended for the FA target population;		
	Studies and surveys with results available to the community;		
	Training and capacity building open to the community;		
	Technological development with the results open to the community;		
	Replicable innovations and practical applications;		
	Other collective benefits identified in project evaluation process		
Non-substitution for other funding sources			
FA resources cannot be substituted for other sources of financing			

Table adapted from Fundo Amazonia Diretrizes e Criterios para aplicação doe Recursos e focos de atuação para o Biênio 2017 e 2018. PP.4-6.

As the tables 1 – 2 show, the guidelines incorporate general best practices, such as REDD+ safeguards and the International Labor Organization Convention 169 on Free, Prior, and Informed Consent. This process of national adaptation of international norms is crucial to the effective adoption and implementation of social and environmental safeguards by development banks. State and legislative support in the form of targeted initiatives at national, state, and municipal levels create a regulatory context that complements the objectives of the FA, and helped create the conditions of possibility for the Yaripo ecotourism initiative to emerge.

Many projects funded by FA do not take place within indigenous land or national parks, but it is also one of the few BNDES initiatives that has provided development finance to these regions outside of the conventional approaches that favor big infrastructure projects. As such it is the only sector within BNDES that has supported development projects in Indigenous areas without also creating considerable backlash on social and environmental grounds. This incredible achievement demands a closer look at the process that made it possible.

In order for a project to be considered for funding, it must first undergo a preliminary consultation with bank personnel in one of the three areas: science, technology, and innovation; public administration; or third sector (civil society) projects. For the first two areas, the preliminary consultation consists of a careful check over the application materials and an evaluation of the applying institution. Special attention is paid to the institution's management capacity, prior project history, and auditing reports. If the project is found to be consistent with BNDES and FA criteria and objectives, then it is put forward to the BNDES Framework and Credit Committee to see if the institution is judged creditworthy to receive FA resources and carry out the proposed project. Following a positive decision from this committee, a final detailed proposal is solicited for analysis by FA Management Department in BNDES, which includes meetings and interviews with the applicant institution, as well as site visits. This must happen before the project is approved, contracted, and funded. This is the sort of funding solicited by the INPE to expand satellite monitoring and data analysis programs (BNDES 2013), for example, or by state and local governments to develop forest monitoring, recuperation, and sustainable livelihood projects (BNDES 2010).

For the purposes of this paper, the third sector protocol is most relevant. The project consultation, analysis, and approval follows the same steps described above, but the preparation for the preliminary consultation is much more extensive. Applicants must describe how their project is consistent with the COP16 Cancun Safeguards as well as a series of crosscutting criteria formulated by COFA and observed by the FA. In order to meet the minimum project conditions, they must also describe a monitoring and evaluation protocol as well as a demonstrated capacity to meet reporting deadlines. In the case of Yaripo,

the indigenous community association AYRCA (*Associação Yanomami do Rio Cauaburis e Affluentes*) and Kumirayoma are the ultimate executors of the project. But they at the time of the study had little experience working with large budgets, so a trusted partner institution was enlisted to manage funds and fulfill paperwork needs.

ISA (Instituto Socioambiental)

AYRCA and Kumirayoma work with ISA, a well-established NGO with an extensive history administering large project budgets and working with multiple stakeholders. Many of its personnel have devoted their careers to indigenous rights, several of whom have worked specifically with the Yanomami. For indigenous communities seeking to access FA funds, selection of a competent and committed institutional partner is crucial to ensure that the project will be executed faithfully in the interests of the community. ISA has multiple roles in relation to the FA and to BNDES. A long-time critic and opponent to BNDES-funded projects, it played a key role in conveying the results of the 2003 carbon sequestration study to NGO counterparts in Norway, who pressured the Government of Norway to commit to regular contributions to Brazil for rainforest protection and recuperation in an amount comparable to the Government's oil and gas interests in the country. In part, then, the creation of the FA was stimulated by a 2006 inquiry from the Norwegian Embassy in Brazil to the Government of Brazil regarding the possible recipients of annual results-based donations.

ISA was co-founded by the anthropologist Beto Ricardo and sociologist Fernando Henrique Cardoso (who later became the President of Brazil 1995 - 2002) to defend the collective and individual rights of indigenous people, their environments, and their cultural heritage in the Amazon. It was instrumental to the enumeration of protections for Indigenous lands and cultures in the 1988 Constitution and in mapping indigenous territories in the Northwestern Brazilian Amazon in the 1980s and 1990s. Together with regional partner organizations and indigenous associations, ISA plays a key role coordinating policy strategies, research initiatives, development projects, and legal work with and on behalf of the indigenous communities in the region.

With respect to the FA, ISA personnel and their partners in *Plataforma BNDES* made a strategic decision in the mid-2000s when the Government of Norway inquired as to a possible destination for their donations. They determined that housing the FA at BNDES would provide greater opportunities for engagement, and would sensitize bank personnel not only to the importance of social and environmental safeguards, but also give BNDES direct experience working with development projects that protected people and environments while also generating economic results. Although fascinating and relevant, the contentious negotiations and deeply involved mutual learning processes between NGOs, government officials, and BNDES personnel is beyond the scope of this article. The lesson, however, is that in order for development banks to truly achieve sustainable development, they must be prepared to work with stakeholders with whom they may otherwise view as irrelevant at best and adversarial at worst.

ISA now has multiple personnel working in various capacities in the FA. Some participate in the COFA. Others work as partner institutions with local communities, and still others are working to implement portions of FA funded-projects. The project management and intercultural communication skills of ISA personnel are invaluable to effective mediation between the two radically different world of BNDES and Maturacá. In the case of Yaripo, ISA has since 2016 formally assumed responsibility for co-organizing and participating in the PNGATI mapping and community planning exercises mandated by the Brazilian government, has provided capacity-building and training to the local community under the auspices of the FA, and has supported the application and management of FA funds on the part of the indigenous associations in Amazonas state, São Gabriel da Cachoeira, and Maturacá.

IV. Local institutions

BNDES personnel are not actively involved in proceedings at the local scale. This has not, demonstrably, been the strength

of BNDES, illustrated by accounts of bank personnel showing up in starched suits and high heeled shoes to visit a project-affected indigenous community that could only be reached by a rigorous hike through dense forest. Instead, the FA provides financial resources to the partner organizations and local associations that are carrying out projects intended to reduce deforestation and generate sustainable economic development in the region. In this case, ISA has assumed the responsibility for ensuring that the reporting requirements are fulfilled and that the expenditures are reported. Selecting a trusted entity, such as an established NGO or local government office with verified good standing in the community and a healthy accounting record is standard operating procedure for many of the FA projects. At the local scale, project success or failure hinges on the actions of specific individuals occupying key positions of power, so their full empowerment to implement the project according to their best understanding of local conditions is crucial to the success of FA projects.

In this case study, the local institutions are: Pico da Neblina National Park, Yanomami Indigenous Territory, the National Indian Foundation (FUNAI), ICMBio Chico Mendes, Yanomami Association of the Rio Cauaburis and Tributaries (AYRCA), and Kumirayoma, the Yanomami Women's Association. Each are discussed in turn.

Pico da Neblina National Park

Created by President João B. de Figuereido's Decree 83550 on June 5, 1979, Pico da Neblina National Park is super-imposed over Yanomami Indigenous territory. Decree 83550 established the park's boundaries and charged the Brazilian Forest Development Institute under the Ministry of Agriculture with oversight. The purpose of the park, as stated in the decree, was to "protect flora, fauna, and natural beauties in their existing locations, subject to the special regime of the 1965 Forest Code" (Figueiredo 1979). Following many years of illegal invasions by gold prospectors, adventurers, and poachers, and the revelation that their entry was often facilitated by the very government officials charged with keeping unwelcome parties out, institutional leadership changed to the Ministry of the Environment upon its establishment in 1992. At that time, the sub-organization responsible for Pico da Neblina was IBAMA, the Brazilian environmental law enforcement agency. In the late 1990s and early 2000s, there were several reports of IBAMA issuing permits to tourist groups bound for Pico da Neblina without consulting with the local Yanomami communities. Brazilian federal law requires all visitors be invited by the community and authorized by FUNAI.

Since Maturacá was the primary point of entry to the trails to Pico da Neblina, the Yanomami living in this community were most affected by invading tourists. Some were hired to serve as porters for the hikers, for which they were paid very little. After filing several complaints with the Ministry of the Environment, the Public Ministry, and FUNAI, all tours to Pico da Neblina were suspended in 2003 when Marina Silva was appointed Minister of the Environment. Inspired in part in order to address the lack of confidence between the Yanomami and IBAMA, Minister Silva established ICMBio, the Chico Mendes Institute of Biodiversity Conservation, in 2007. ICMBio assumed responsibility for Brazil's protected areas in collaboration with FUNAI, and employed all newly hired staff selected through competitive public examinations.

FUNAI (National Indian Foundation/Fundação Nacional do Indio)

The nearest FUNAI office is located in São Gabriel da Cachoeira. It is responsible for the affairs of twenty-three ethnic groups in the Upper and Middle Rio Negro regions and is staffed by a trained indigenous person native to the region. This individual has been responsible for coordinating visits of PNGATI teams to all indigenous communities in order to introduce the policy, concept, and expected outcomes. In some cases, as with Maturacá, the PNGATI initiative is jointly funded by ICMBio, FUNAI, and ISA, with the latter coordinating applications to *Fundo Amazonia* and facilitating the transfer of funds. In other cases, the city of São Gabriel, the military, private sector, or university partners support specific PNGATI initiatives with cash or in-kind services. FUNAI is responsible for screening applications for individuals wishing to enter indigenous lands, and is the final word on whether anyone is permitted to enter. Unauthorized outsiders are reported to FUNAI, which then works with the military police or the army to physically remove offending individuals from Indigenous lands.

As such, the local FUNAI office serves as an important gatekeeper to between several diverse indigenous communities and outside actors. Often it falls to this individual to explain development initiatives to local communities, and to offer guidance

on whether to accept, reject, or mobilize against a given proposal. Therefore, the interests, ideologies, and perceptions of the individual staff member responsible for this region have a significant influence on the success or failure of a given project.

In this case, the local FUNAI staff member understands PNGATI to be a tool through which communities can dialogue with non-indigenous people about the value and land use practices they use on their own Indigenous Lands. The collective process combines oral histories with the use of GIS technologies to create sophisticated maps of the assets and sacred sites held by the community. Communities then use these maps, technologies, and institutional forms to arbitrate internal decisions over resource use and to engage more forcefully in external debates that justify the size of their officially demarcated territories. As the staff member put it in a presentation to a visiting delegation from an indigenous community upriver: "It is a way to sensitize white people to the special indigenous knowledge we use to govern our territory, thereby enabling us to argue effectively for our rights."

This way of framing the government-mandated ethnomapping exercise was critical to generating community buy-in, especially in a region in which cartographic and surveying activities have been directly linked to experiences of dispossession of indigenous people at the hands of state, corporate, and military actors. It was introduced in Maturacá in 2013, after three years of constructive engagement on the part of ICMBio and the community. Both of these factors were critical to the implementation of PNGATI, and the eventual decision to develop *Ecoturismo Yaripo*.

The Chico Mendes Institute for the Conservation of Biodiversity (ICMBio)

ICMBio was established by Minister of the Environment, Marina Silva, and contemporary of the late Chico Mendez. It assumed responsibility for improving the management, protection, and community relations in Brazil's protected areas. Thus for FA projects that take place in national parks, biological reserves, or conservation units, ICMBio serves as a partner institution, whether in the application and management of resources, or to provide support and in-kind services to FA-funded projects.

ICMBio began dialoging with the community in 2010. The first order of business was to repair the distrust between the local community and the government that had resulted from years of unauthorized tourism to Pico da Neblina facilitated by IBAMA personnel overseeing the national park. This was one manifestation of a larger problem in which the Indigenous people were never formally engaged by the Ministry of the Environment or IBAMA, and were never consulted on any matters pertaining to their territory which fell within the boundaries of the national park. To break this vicious cycle of distance and distrust, ICMBio personnel approached the communities to form an Oversight Council so they could take a more active role in park governance. Reforming existing institutions in order to secure indigenous protagonism and governance over their territory had a transformative effect on relations between the government and the indigenous peoples of the region. This also catalyzed community discussions on strategies to take a more organized approach to building economic alternatives to mining in advance of the PNGATI process.

In 2012, the Council was formally recognized by the federal government. In 2013, all thirteen members of the council completed management and consultation capacity-building courses. This ushered in a new era of Yanomami protagonism in matters of development occurring within their territory, and laid the ground for productive and forward-looking engagement with the PNGATI process which began in late 2013. At an annual regional assembly in 2014, a majority voted to focus their efforts on organizing *Ecoturismo Yaripo* as a way of simultaneously developing the local economy while learning the collective and collaborative ethnomapping and ethnozoning techniques mandated by PNGATI. The broader territorial mapping exercises would focus on identifying natural resources that could be used to complement the ecotourism enterprise, enhance tourist experience, and identify new scientific research agendas to catalogue Yanomami Indigenous knowledge, as well as identifying natural resources that were used in traditional Yanomami livelihood activities but have been progressively abandoned in the decades since the communities have settled in single-family homes near the Salesian mission in Maturacá.

Local ICMBio personnel have been deeply dedicated to promoting indigenous protagonism in the PNGATI and the new initiatives that have emerged from this exercise. The São Gabriel da Cachoeira-based staff member visits monthly for extended stays, has learned the language, and participates in festivals, rituals, and assemblies. The physical, emotional, and professional demands of this depth of engagement have led to a high staff attrition rate, however, with only one of the eight hired to work with this region remaining after the first two years. According to government officials based in São Gabriel who work on PNGATI in multiple indigenous communities, this critical groundwork laid by ICMbio was essential preparation for community engagement in the development projects that lay ahead.

AYRCA (Yanomami Association of the Cauaburi River and Tributaries/Associação Yanomami do Rio Cauaburi e Affluentes), Kumirayoma, and Partners

The leading local organizations in Maturacá that oversee the ethnomapping, ethnozoning, and ecotourism enterprise development are AYRCA and Kumirayoma. Both organizations represent the 2750 people who belong to the Yanomami Communities along the Cauaburis River. In addition to Maturacá, these are the communities of Ariabú, Ayari, Inambú, Maiá, and Nazaré.

AYRCA was formed nearly twenty years ago for an entirely different purpose: to defend the interests of Yanomami gold miners. This association of economically powerful Yanomami men wished to present an organized front to both white outlaw miners and the state: to the outlaw miners in order to negotiate transportation and labor deals, as well as to collect protection money in exchange for permitting them to operate within their territory, and to obscure their operations from state inspections. This group was initially opposed to an ecotourism enterprise because it conflicted directly with their immediate economic interests: ecotourism would mean bringing in more people, which means more witnesses to potentially report illegal mining activities to the authorities. Although economically powerful, members of this group also suffered first hand the ill effects of illegal gold mining: mercury and cyanide poisoning, and high risk of physical injuries from the informal mining operations and conflicts among criminal enterprises.

Given this historical orientation, it is noteworthy that ICMBio, ISA, and other partner environmental organizations working with nthe community neither marginalized or aggrandized this group, as has been attempted in many development intervention cases elsewhere (Dahal, Nepal, and Schuett 2014, Thrupp 1989, Kellert et al. 2000). Instead, project personnel engaged in long-term trust building exercises, dialogue, and mutual learning in order to support the transition of the priorities of established local institutions toward more sustainable enterprises. Importantly, the objective was never to "bust" illegal gold mining or condemn Yanomami participants. Instead, the strategy was to enlist economically powerful men in the project of creating a viable economic alternative to the dangerous enterprise. This approach enabled the community to talk more openly about their experiences with the negative effects of illegal gold mining without assigning blame. This facilitated the buy-in of AYRCA leadership, but also means that some small-scale mining continues.

The institutional innovation that project personnel did foment on the local level was the formation of a women's association, Kumirayoma. Established in 2014, it is the first formal organization within these communities that provides political representation and formal leadership opportunities to women. Instigated in part by the mandates of the FA, government policy, and NGO donor conditions for representation of women in all projects, the organizations facilitated an initial resolution of a long-term conflict within the community concerning women's lack of formal political representation, economic autonomy, and community decision-making power.

Both AYRCA and Kumirayoma are responsible for the ecotourism enterprise. The elected leadership manages the funds, arbitrate disputes, and coordinate logistics. The leadership are held accountable through regular community assemblies and biennial elections. Kumirayoma, in particular, oversees the production of diverse commercial products, such as the sale of

handicrafts and specialty food items at regional exhibitions and to visitors to Maturacá. This is not to say that there are not turf wars, communication breakdowns, and other conflicts stemming from male resistance to greater gender equality. But after three years of contentious debate, the associations, supported by the majority of their representative communities, agreed to the principles of equal representation of women in all key positions in the Yaripo enterprise. These principles have been finalized in the first formal visitation plan and protocol governing *Ecotourismo Yaripo* which was released on July 3, 2017 (Lima 2017).

When the community decided to focus PNGATI efforts on supporting the development of an ecotourism enterprise, they renamed the process *Stonipë Ioway*, which roughly translates as "Straight Path to Ecotourism." This signaled a greater sense of community ownership over the project, and formalized the adaptation of the federally-mandated mapping and zoning exercise to local conditions and development strategies. To support this process, ICMBio introduced AYRCA and Kumirayoma to an analytical framework designed by GIZ for ecotourism initiatives in the Himalayas.

The methodology identifies complementary value chains for ecotourism destinations. The orientation of the methodology is to draw together all stakeholders in a process of continuous improvement and clarification, through eight steps. These are: (1) Analysis of the local reality; (2) Analysis of the ecotourism value chain and identification of possible points of greater participation and revenue generation; (3) Construction of a shared vision for the future; (4) Definition of strategies for improvements; (5) Development of an operational plan; (6) Construction of agreements about strategy, promotion, and management of the initiative; (7) The implementation of improvement projects; (8) Ongoing monitoring, evaluation, and planning.

AYRCA and Kumirayoma adapted this methodology to the local context. They held a series of assemblies over a period of eighteen months in which each of the steps were worked through collaboratively. One adaptation concerned step #3: construction of a shared vision for the future. AYRCA and Kumirayoma timed this discussion with the annual *Reahu* feasts, in which all communities gather to commemorate the relatives that have passed away and to form new alliances. This feast is an important point in the social and political life of these communities. At the end of the second day of the feast, AYRCA and Kumirayoma asked participants to return to their homes and camps to dream about what they would like to accomplish with the ecotourism initiative. The next morning, several members of the community circulated among the guests present and recorded the dreams from the night before. More than a hundred dreams were registered and were aggregated into seven broad themes. These were:

	Employment and income opportunities
	Improvements in the quality of life
	Strengthening education
	Achieving environmental sustainability
	Strengthening Yanomami culture and traditions
	Yanomami protagonism in territorial management
	Strengthening the existing associations, particularly AYRCA
П	The constant return to these questions and desires throughout the entire process.

It is remarkable how closely the dreams of the community resonate with sustainable development principles: from the United Nation's 2030 Sustainable Development Goals to the mandates of various government and NGO organizations. This suggests that a constructive step toward achieving sustainable development is first to ask communities what they want, rather than telling them what they need. There are many tools to use to enable this dialogue. In this case, it was the adaptation of GIZ principles to local practices that enabled project personnel to better access Yanomami interests and visions. After more than three

years of working on the Visitation Plan and Protocol for the ecotourism initiative, in 2017 the community arrived at the point where technical assessments logistical improvements needed to be made in order to prepare the initiative for commercialization. The first technical expedition was conducted in July 2017 to assess the environmental impact of the proposed enterprise and to identify possible problem areas from a multidimensional sustainable development appraisal matrix.

As noted in Section I, the author co-organized and participated in the technical expedition, with a team that included the ICMBio staff member, two representatives from FUNAI, the environmental director of the Brazilian Mountaineering and Climbing Association, a radio communications installation specialist from a private company in São Paulo, a leading science journalist with the *Folha de São Paulo*, and a representatives ISA, which is a partner institution to both the community and the FA. The participants fulfilled roles requested by AYRCA and Kumirayoma to support the final phase of development of the ecotourism enterprise. Each participant signed agreements assuming full responsibility for the risks involved in a technical expedition in challenging terrain on a trail that was not yet designed safely receive visitors. All members of the technical expedition were formally invited by AYRCA and Kumirayoma, and fulfilled the necessary medical and authorization requirements required by FUNAI headquarters in Brasilia and then sent to the São Gabriel office three months in advance of the expedition. With the exception of costs for ISA and ICMBio personnel, FA resources did not pay for the expenses incurred by participants or provide any payment in exchange for the services of the technical expedition. Funds for the expedition, which included the amount charged by the community as envisioned in the Visitation Plan and Protocol, were paid to ISA, which then disbursed them to AYRCA and Kumirayoma for payment to local participants. This was the first paid expedition of the ecotourism enterprise. It was therefore the first opportunity for ARYCA and Kumirayoma to manage a live budget, and the first time for the team of Yanomami guides, porters, and cooks were paid for their work.

The technical expedition was led and supported by a team of fifteen Yanomami, all of whom have regularly traversed these trails as part of their hunting and mining activities. All members of the Yanomami team had participated in the meetings and discussions formative to the Visitation Plan and in all training and capacitation workshops offered by partner organizations. For the Yanomami, this was run as a "dress rehearsal," meant to test the plans for all aspects of tourism service provisions in the field. Yanomami participants received their payments in a public meeting the day after the conclusion of the expedition. ISA personnel disbursed the payment as a demonstration to AYRCA and Kumirayoma personnel. The public nature of this transaction had a transformative effect on community perceptions of the viability of this enterprise. A senior patriarch from one of the powerful mining families described how witnessing the distribution of payments "in the plain light of day" contrasted dramatically with his lifelong experience of conducting mining related transactions in secret, in aggressive circumstances, and often in fear of violence.

The expedition was followed by a three-day assembly in which over a thousand members from the six communities resident along the Rio Cauaburi were present. Representatives from government education and healthcare offices located in the city of São Gabriel attended, as did the two priests of the Salesian mission and a representative of the 5th Frontier Battalion of the Brazilian army located adjacent to the community. The community of Maturacá organized food and housing for the 400 visitors who traveled from other communities. 1.5 days (of nine hours each) were devoted to a collective discussion of the ecotourism enterprise, during which 37 people (33 men, 4 women) spoke. At the assembly, all participants in the technical expeditions presented their preliminary findings in moderated panel discussions after which followed open commentary and discussion. Translation and interpretation was available for elders who do not speak Portuguese, and for guests who do not speak Yanomami. Although the process is not free from conflict, the local institutional norms that govern the enterprise are built on open dialogue, consensus-based decision-making, and transparency.

This case also shows that successful implementation depends on empowered local staff dedicated to the long-term development of the region and local community associations.

This is not to say that the project was free of problems. Questions of gender, in particular, remains only partially addressed. Rather, this suggests that development banks seeking to "go it alone" or work according to rapid timetables with a streamlined set of national partners are likely to encounter problems in project formulation and implementation, including failed

projects or projects that are implemented only at great political, social, and environmental expense.

This multi-institutional collaboration is facilitated by the platform provided by PNGATI. All of these organizations work together under the PGNATI legal framework, for which primary implementation responsibility rested with ICMBio, with financial support provided by the FA and logistical support provided by ISA. PNGATI provides guidelines for indigenous appraisal of the resources on their lands, and mandates the formation of collective decision-making around productive and sustainable use of those resources for economic ends. What the community choses to do with this is up to them. In this case, the community sought FA resources to support its own locally-formulated development project, elaborated according to its own criteria, and monitored by trusted partners of the community. This flips the standard dynamic of community consultation in development projects, where the development agenda is formulated far away from the community and monitoring is carried out by paid consultants with little to no relationship to the community. Instead, FA waits for communities to solicit funds to implement projects that have been formulated by the communities in a culturally appropriate and supportive legal environment. This shifts control for project formulation, implementation, monitoring, and enforcement out of BNDES' and into community partners' hands. To function at all, this approach requires careful vetting of partner organizations and a supportive legal environment.

V. Governing Legal Codes

Fundo Amazonia is the outcome of several legal and institutional innovations unfolding at multiple scales, from the international to the local. Development banks are internationally integrated through their projects, capital sourcing, and institutional arrangements, and BNDES is no exception. Therefore which international norms influence which institutions is of central importance to questions concerning the adoption and use of safeguards in bank-funded projects.

The international framework governing the transfer of capital to FA was first raised by the Brazilian delegation COP 12, held in Nairobi, Kenya in 2006, and has been clarified in subsequent years (Forstater, Nakhooda, and Watson 2013). For example. Decision 3/CP.19 concerns long-term climate finance. It "requests Parties to enhance their enabling environments and policy frameworks to facilitate the mobilization and effective deployment of climate finance," and:

"Urges developed country Parties to maintain continuity of mobilization of public climate finance at increasing levels...in line with their joint commitment to the goal of mobilizing USD 100 billion per year by 2020...in the context of meaningful mitigation actions and transparency of implementation." (UNFCCC 2014, 9)

Under this framework, several developed countries were effectively looking for an institutional destination into which they could begin transferring their contributions. In the dialogues between Brazilian, Norwegian, and German counterparts, three conditions were set forth for the creation of the FA. First, the responsible institution should be Brazilian with demonstrated institutional capacity. Second, there should be a credible system in place to monitor deforestation. Third, there should be a robust civil society to monitor and participate in the implementation of these resources at all stages of domestic projects. A number of factors led to the selection of BNDES, including the strategic considerations of NGOs noted above. At the time, BNDES was chaired by a prominent environmental economist and had a working history with the Ministry of the Environment and several civil society organizations. The personal and professional interest of the BNDES chairman is cited as instrumental to influencing the placement of the FA. As for a forest monitoring system, INPE already had the PRODES satellite monitoring program in place for two decades. In addition to monitoring deforestation in Brazil, it also shares data with neighboring countries and other tropical developing countries, a practice which has expanded with FA investment (Pontes 2011). The third condition—of a robust civil society engagement in all aspects of the FA—was identified in the sustained interest of *Plataforma BNDES* and its derivative coalitions of NGOs, unions, and think tanks engaged in ongoing dialogue with BNDES over the social and environmental impacts of its projects.

Per the COP recommendations and guided by the conversations among Brazilian, Norwegian, and German government and NGO counterparts, a variety of national-level legislation and Presidential Decrees were issued in order to formalize institutional and regulatory conditions favorable to the formation of the FA. These strengthened existing laws and generated new legislation concerning sustainable development in the Brazilian Amazon. Existing legislation included the National Constitution of 1988 and the 2004 Plan for Prevention and Control of Deforestation in the Legal Amazon (PPCDAM). Legislation subsequent to COP12 included Presidential Decree 6321 of 2007; The Sustainable Amazon Plan (PAS), and the Presidential Decree 6527 of 2008, which established the FA.

1988 Constitution

The indigenous rights enshrined in the Constitution of 1988 were the outcome of decades of struggle on the part of indigenous rights groups, Brazilian civil society, and international advocacy groups. Chapter VIII of the Constitution lays out the federal government responsibilities and protections for Indigenous peoples and their lands. Article 231 holds that:

"the lands traditionally occupied by Indians are destined for their permanent possession, and they shall be entitled to the exclusive usufruct of the riches of the soil, rivers, and lakes existing thereon...the Union has the responsibility to delineate these lands and to protect and ensure respect for all their property" (Assembly 1988).

This provided the basis for subsequent legislation and presidential decrees.

Plan for Prevention and Control of Deforestation in the Legal Amazon - PPCDAM

Launched in 2004, this plan was developed in order to consistently and continuously decrease deforestation while also creating the conditions to establish sustainable development models in the Legal Amazon. The Legal Amazon is larger than the amazon biome. Therefore the PPCDAM is a more expansive legal plan, intended to prevent and control deforestation in biomes adjacent to the Amazon.

From 2004 to 2013, the executive branch of Brazil's federal government operated the PPCDAM in order to facilitate coordination across several ministries. In 2013, oversight for the program transferred to the Ministry of the Environment. It covers four broad areas: territorial and land use planning, environmental monitoring and control, the promotion of sustainable activities, and the development of economic and regulatory instruments. It is divided into four phases, covering a period of sixteen years between 2004 and 2020 (MMA 2011). The PPCDAM established the broader institutional framework in which multiple government entities could coordinate actions to reduce deforestation in the Amazon. It was an important predecessor to the FA and subsequent related legislation.

Presidential Decree 6321 of 2007

Issued by President Luiz Inacio Lula a Silva on December 21, 2007, Decree 6321 was conceived in order to meet the funding conditions of potential contributors to the FA. Decree 6231 provides for actions related to the prevention, monitoring and control of deforestation in the Amazon biome. It mandates the Ministry of the Environment (MMA) to release an annual report on municipalities historically responsible for deforestation. Article 2 requires that all data be verified by the Brazilian National Space Research Institute, INPE. The MMA and INPE must report annually on the total area of deforested land, the total area of land deforested in the last three years, and the rate of acceleration of deforestation in at least three of the last five years. This data is critical to assessing the efficacy of FA projects, and also to determining whether additional funds will be

forthcoming from international donors. In order to continue to receive performance based payments from the government of Norway and KfW, Brazil must keep the rate of deforestation below the average calculated between 1996 and 2005, which was 19.500 square kilometers per year.

Strategic guidelines of the Sustainable Amazon Plan - PAS

The Sustainable Amazon Plan was released on May 8, 2008 in order to define the parameters of what constitutes sustainable development in the Legal Amazon. The PAS provides an overarching framework for the region that consists of promoting sustainable development in a way that valorizes social, cultural, and ecological diversity and also reduces regional inequalities; amplifies the democratic presence of the national, state, and local government; promotes recovery of deforested areas as well as scientific and technological innovation; implements ecological and environmental zoning that promotes the rights of indigenous and traditional communities; and increases and prioritizes easier access to credit for environmental services and sustainable production chains. It therefore provided the framework for coordination and differentiation between federal, state, and local government in a diversity of activities. This work was critical to sensitizing and aligning sub-national actors across the region with a concept of development that protects the forest and serves national security interests in conjunction with the complex social and cultural realities of Amazon inhabitants.

Presidential Decree 6527 of 2008

These plans required a funding mechanism. Brazilian President Luis Inacio Lula da Silva established the FA by Presidential Decree 6527 on August 1, 2008. It authorized BNDES to receive donations from domestic and international entities as payment for reductions in Amazon deforestation. It further stipulated that funds can only be applied to non-reimbursable projects intended to monitor prevent, and combat deforestation in the Amazon. Other eligible projects include the promotion of conservation and sustainable use of the amazon biome and recuperation of deforested areas. Up to twenty percent of the total FA resources can be used in other biomes and in other tropical countries to support the protection of the Amazon rainforest. The decree further establishes the governance structure discussed in Section III, for which no more than three percent of the total value of the fund can be allocated for operating expenses. The entire structure must be compliant with the PPCDAM.

These multiple legal codes ensure that the FA is executed in a favorable legal context. As with other cases examined in this collection, enforcement is crucial. There is a positive feedback loop between the creation of laws intended to charge multiple scales and sectors of government with the responsibility to oversee the sustainable development of the Amazon, and dedicated non-reimbursable funds available through the FA to support the faithful execution of these laws.

VI. Analysis: Project Progress and Preliminary Outcomes

The intersecting social and environmental safeguards of the FA, of REDD+, ICMBio, FUNAI, and ISA, combined with an open-ended timetable in which they could be discussed and implemented by the local community, was fundamental to successful project outcomes. Crucially, the local community, working with trusted NGO partners, approached the FA to solicit funds to support its own development project. This occurred within the context of *productive redundancy* (Ray, this volume), of federal and local efforts to remediate past non-compliance with social and environmental protections provided in Brazilian Federal and State law, and was supported by an international financial commitment to pay for developing sustainable livelihoods that help ensure the health of the Amazon.

It is noteworthy that the terms of the project set by BNDES listed in Tables 1-2 were met by the planning and preliminary implementation of the PNGATI project. Much of the critical work involved in enacting social and environmental safeguards was already in process once FA began supporting the project. The introduction of FA funds enabled an expansion and intensification of planning and consultation activities. Critical to the success of the project was the fact that the schedule was not

dictated by the financing organization. The project is in many ways exemplary for the culturally appropriate manner in which norms and laws were implemented. However, potential local social and environmental costs, ranging from the introduction of diseases or harmful substances by visitors, to the carbon footprint of increasing international tourism to this remote area, are the subject of ongoing discussion and analysis. The extent to which ecotourism replaces illegal gold mining as a viable livelihood alternative remains to be seen.

The FA funded activities related to the implementation of the PNGATI will continue until the fourth quarter of 2019, which means that the project has funding for further capacity building and institutional support until then. The objective is that *Ecoturismo Yaripo* will be self-sustaining by then, or will receive support from different partners. Therefore the future is somewhat uncertain. Deforestation rose in 2016, and the policy decisions under the Temer administration to reduce forest protection and extend an amnesty to all illegal acts of deforestation committed before 2008 means that deforestation is likely to continue increasing. Because the FA provides results-based payments for reducing deforestion, this means that future payments may not be forthcoming. For policymakers and other stakeholders vested in short term gains from deforestation, the suspension of payments to a deforestation prevention program does not constitute a negative outcome. Just as development banks are characterized by internal debate and contradictions, so too are governments characterized by multiple and sometimes competing interests. Prioritizing social and environmental safeguards serves some interests while marginalizing others.

This is the precarious side to the otherwise promising arrangement between international norms, diverse national stakeholders, and local people. Without the federal government providing an important measure of productive redundancy, the initiative could potentially be threatened. By the same token, the alignment of diverse state, NGO, and community institutions in the interest of preventing deforestation through sustainable development initiatives could mitigate the local impacts of a single government policy decision.

Conclusion

This paper examined the impact of social and environment safeguards on BNDES-funded project outcomes. Given that the objective was to plan for a community development initiative, and that initiative launched in 2017, the project succeeded according to its own terms. It is still early to determine the final extent to which social and environment safeguards influenced the ultimate project outcomes. Despite the uniqueness and ongoing nature of the case study, the process and context holds some compelling lessons for development banks. For policymakers, it is important to remember that development banks such as BNDES implement the policies defined by their home governments. The lesson here is that development banks can be key drivers of socially and environmentally sustainable development—and all the attendant benefits for social stability, national development, and human security—if the policy context specifically mandates socially and environmentally sustainable development. This supportive policy context consists of the intersection among international, national, and local standards with a funding mechanism that requires local communities to determine for themselves what sort of development project they would like to implement.

The larger question is whether the FA model can be applied to more conventional development deals between banks and recipient countries. Too often, putting the needs of the local community first is understood by bank personnel to be at odds with achieving conventional development outcomes such as major infrastructure construction. But this case shows that local communities can occupy a central role in their own development while putting bank resources to efficient use. While it is premature to conclude whether this case study constitutes a paradigm shift in development financing practice, it does provide a clear institutional model for banks to incorporate funding streams for dedicated environmental protection and remediation activities. The fact that BNDES finances environmentally destructive activities while also administering the FA is less a testament to the failure of the FA to transform bank practice than a compelling demonstration of the viability of supporting socially and environmentally sustainable development without radically transforming the bank as a whole. Using the FA as a model for incorporating non-reimbursable funding for community-led sustainable development projects, this can help

developed countries meet their Paris Accord commitments while diversifying the institutional capacity of other development banks. The case of BNDES shows how development banks can actively contribute to sustainable development without jeopardizing other development priorities.

The process of community organizing and governance reform was underway before BNDES funded the project, which means that any successes can only partly be attributed to the development bank. This suggests that an effective risk management strategy for development banks may be to identify promising works in progress by local communities. This would require development banks to invest in more exploratory field work to identify what grassroots projects are already under way and to consider developing the appropriate infrastructure to support them. If bank personnel are unable or unwilling to allocate extended time in target communities (weeks instead of days, several times a year) to build trust and to learn about local needs, goals, and capacities then they should consider working with, and trusting the judgment of, actors qualified to do so. A middle ground might be for development banks to follow the FA model of accepting project proposals from locally embedded civil society organizations with strong records of project and financial management.

In fact, this case shows that government, non-government, and university organizations that specialize in the sort of in-depth, deeply engaged fieldwork that is essential to meaningfully implement social and environmental safeguards are instrumental to successful project formulation and implementation. The evolution of the relationship between NGOs and BNDES—from adversaries to administrative partners under the FA framework—should show development bank leadership that civil society has more to offer than either acquiescence or resistance. Working with such counterparts can transform project reach and return, even if such counterparts were previously opposed to other bank projects. Collaboration has additional gain of improving the bank's image, especially if it has a history of funding controversial projects. The example of *Fundo Amazonia* shows that when multiple stakeholders find common ground, be it climate change mitigation, poverty alleviation, or sustainable development, social and environmental safeguards can generate greater buy-in and lead to more sustainable outcomes.

Perhaps the greatest lesson from this case study is the importance of local community protagonism in defining development and directing the development process in partnership with diverse stakeholders. For the bank, its role here has been to facilitate, finance, and audit. This transforms the conventional approach from development *of* local people to development *by* local people. This case shows that such an approach leads to robust institutional outcomes and productive working relationships between state, bank, military, civil society, local communities, and international donors, even if the long term outcome of this particular ecotourism initiative remains to be seen.

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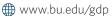
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