

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

BRAZIL

BIOECONOMY PROGRAM FOR AMAZONIA

(BR-L1603 / BR-G1018 / BR-T1537)

PROJECT PROFILE

This document was prepared by the project team consisting of: Rafael Cavazzoni, Project Team Leader (IFD/CMF); Alexander Vasa, Alternate Team Leader (IFD/CMF); Octavio Jorge Damiani, Alternate Team Leader (CSD/RND); Orlando Lima, Maria Carmen Fernandez, Aurea Fuentes, Eduardo Sierra, Gabriela Andrade, Karina Azar Barros, Claudia Marquez, Sahara de la Torre, Cecilia Bernedo, Eduardo Jaen, Carlos Salgado, Vanina Messere, Laura Mondragon, and Giovanni Leo Frisari (IFD/CMF); Luis Hernando Hintze (CSD/RND), Daniel Hincapié, Carolyn Robert (CSD/ACU), Barbara Brakarz and Ana Champloni (CSD/CCS), Verónica Tejerina (ACU/CBO); Laisa Rachter (SCL/GDI); Felipe Caicedo (ORP/GCM); Jose Luiz Rossi Junior, Leonardo Da Rosa Fernandes, and Fernando Aguiar; Juliana Dubeux (CSC/CBR); Leonardo Corral and Pablo Ordoñez (SPD/SDV); Guillermo Eschoyez, Cristina Celeste (LEG/SGO); Robert Langstroth and Julio Rojas (VPS/ESG); Miguel Baruzzi (VPC/FMP); and Isabel Haro (consultant).

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I. BASIC DATA

Project Name:	Bioeconomy Program for Amazonia		
Project Number:	BR-L1603 / BR-G1018 / BR-T1537		
Project Team:	Rafael Cavazzoni, Project Team Leader (IFD/CMF); Alexander Vasa, Alternate Team Leader (IFD/CMF); Octavio Jorge Damiani, Alternate Team Leader (CSD/RND); Orlando Lima, Maria Carmen Fernandez, Aurea Fuentes, Eduardo Sierra, Gabriela Andrade, Karina Azar Barros, Claudia Marquez, Sahara de la Torre, Cecilia Bernedo, Eduardo Jaen, Carlos Salgado, Vanina Messere, Laura Mondragon, and Giovanni Leo Frisari (IFD/CMF); Luis Hernando Hintze (CSD/RND), Daniel Hincapié, Carolyn Robert (CSD/ACU), Barbara Brakarz and Ana Champloni (CSD/CCS), Verónica Tejerina (ACU/CBO); Laisa Rachter (SCL/GDI); Felipe Caicedo (ORP/GCM); Jose Luiz Rossi Junior, Leonardo Da Rosa Fernandes, and Fernando Aguiar; Juliana Dubeux (CSC/GBR); Leonardo Corral and Pablo Ordoñez (SPD/SDV); Guillermo Eschoyez, Cristina Celeste (LEG/SGO); Robert Langstroth and Julio Rojas (VPS/ESG); Miguel Baruzze (VPC/FMP); and Isabel Haro (consultant).		
Borrower and Executing Agency:	<i>Banco da Amazônia S.A. (BASA)</i>		
Guarantor:	Federative Republic of Brazil		
Financial Plan: ¹	IDB (Loan - Ordinary Capital):	US\$75.0 million	
	IDB GCF (Loan – GCF Funds):	US\$75.0 million	
	IDB GCF (Investment Grant – BR-G1018) ² :	US\$8.8 million	
	IDB GCF (Technical Cooperation Grant – BR-T1537):	US\$4.5 million	
	Total:	US\$163.3 million	
Environmental and Social Policy Framework:	Applicable Performance Standards:	ESPS 1, ESPS 2, ESP3, ESPS 4, ESPS 6, ESPS 7, ESPS 8, ESPS 9, ESPS 10.	
	Impact Classification:	FI	
	Risk Classification:	Substantial	

II. GENERAL JUSTIFICATION AND OBJECTIVES

A. Problem description and background

- 2.1 In 2021, Brazil's Gross Domestic Product (GDP) grew 4.6%, following the -3.9% rate in 2020.³ In the first months of 2022, the post COVID-19 re-opening of lagging sectors and a solid job recovery led to an adjustment in growth expectations for 2022, from 0.3% to 1.93%. However, recent volatile external environment, lower commodity prices, increasing fiscal and political risks, higher inflation leading to a

¹ The sovereign guarantee covers exclusively IDB's Ordinary Capital loan resources and Green Climate Fund (GCF) reimbursable loan resources.

² Investment grant resources are contingent, i.e., any amount unused by the end of the program will be returned to the GCF as established in the approved GCF funding proposal.

³ *Instituto Brasileiro de Geografia e Estatística (IBGE).*

contractionary monetary policy, and the high level of indebtedness of households are now driving growth expectations downwards. Projections are around 0.5% for 2023, compared to 1.5% expected at the beginning of 2022.

- 2.2 **Relevance and vulnerability of Brazil's Amazon.** The Brazilian Legal Amazon (BLA)⁴ covers over 5 million km² and includes the entire area of the Amazon biome. It comprises the states of *Acre*, *Amazonas*, *Amapá*, *Pará*, *Rondônia*, *Roraima*, *Tocantins*, and *Mato Grosso*, as well as part of *Maranhão*, which together host over 70% of natural areas in the country.⁵ Its ecosystem provides essential services for nearly 30 million inhabitants, including 350 indigenous communities who depend on forests and natural resources for their livelihoods. Despite its natural wealth, the BLA's output represents less than 9% of Brazil's GDP⁶ and its Human Development Index is consistently below the national average,⁷ 40% of its population are poor, a much higher rate than in the rest of the country, and its per capita household income is far below other regions.⁸
- 2.3 The BLA is also highly vulnerable to climate change because of its direct exposure to climate risks, its high sensitivity to such risks, and its low adaptive capacity. Existing literature (Annex IV) exposes how global warming may induce a higher frequency of extreme climate events and fires, directly impacting forests and agricultural productivity. Practices that lead to illegal deforestation in the Amazon also pose a risk to its natural capital base, in addition to increasing long-term climate risks.⁹
- 2.4 **Bioeconomy and bio-businesses in the BLA.** The extraordinary biodiversity of the Amazon biome provides an opportunity to promote socio-economic prosperity for the BLA in sync with the conservation and sustainable use of its biodiverse assets.¹⁰ In particular, the concepts of bioeconomy and bio-business development emerge as alternatives to replace unsustainable production systems and practices.
- 2.5 The bioeconomy involves any economic activity based on the use of natural renewable biological resources, from both land and water, to obtain food, materials, and energy without compromising their availability for future generations. It comprises activities related to the invention, development, production, and use of biological products and processes. In the bioeconomy, relationships between primary sector activities and the manufacturing and services industry are strengthened, making them segments of one same process. Thus, the development of the bioeconomy should contribute to a more environmentally-friendly path to development that is based on maintaining the

⁴ The BLA corresponds to the area under the responsibility of the Superintendence of the Amazon Development (SUDAM) established by Article 2 of Complementary Law No.124 (03/01/2007).

⁵ [Amazonia Legal em Dados.](#)

⁶ Santos, D., et al., "*Fatos da Amazônia 2021*", Amazonia 2030 Project, 2021.

⁷ [Atlas do Desenvolvimento Humano.](#)

⁸ [Amazonia Legal em Dados.](#)

⁹ Approximately 17% of the Amazon's original area has been cleared in the past 50 years (WWF, 2020).

¹⁰ Meza, L. and Rodríguez, A., "[Soluciones basadas en la naturaleza para la sostenibilidad de la agricultura: ruta para la sinergia entre las convenciones de Río y la recuperación pos-COVID-19](#)", Economic Commission for Latin America and the Caribbean, 2021.

standing forest, recovering areas that were deforested in the past, and developing innovative products from the biodiversity.¹¹

- 2.6 The bioeconomy has shown signs of attracting foreign investments and strengthening the Brazilian industry, increasingly becoming one of the strong vectors of dynamism of the national economy.¹² This involves primary sector activities, and industries like pharmaceuticals and cosmetics, which use inputs from the Brazilian native flora.¹³ The value of economic activity attributable to the bioeconomy was estimated at US\$285.9 billion in 2016, equivalent to 13.8% of the country's GDP.¹⁴
- 2.7 These figures suggest that strategies around the bioeconomy can largely benefit from the participation of private actors committed to sustainable businesses that can successfully tap the potential of biodiversity across various economic sectors. This proposal refers to these businesses as “bio-businesses”, defined as those involving models, practices and/or technologies that sustainably use natural capital and forest assets in any of the following sub-sectors: perennial agriculture, agroforestry, aquaculture, sustainable forestry plantations (excluding invasive and non-native monocultures), Non-Timber Natural Forest Products (NTFP), nature tourism, and restoration and regulation ecosystem services. The region hosts close to a third of the tropical forests of the planet, offering significant space to expand the share of bio-businesses,¹⁵ shifting local productive structures to reduce the impact of climate change, safeguard local livelihoods, and promote more inclusive development.
- 2.8 **Constraints to the development of bio-businesses.** Bio-businesses face a series of challenges that affect their development and the potential of their productive chains. These comprise financial and non-financial barriers at the business level, including: (i) limited access to technology; (ii) lack of structured value chains; (iii) limited technical capacities and training opportunities; and (iv) lack of financing. From a broader perspective, bio-businesses also face: (v) general lack of local infrastructure; (vi) incipient communal monitoring and surveillance systems; and (vii) relatively undeveloped regulatory and legal frameworks. While overcoming such breath of constraints requires interventions in several dimensions, targeted initiatives can help reduce some of them,¹⁶ in turn promoting ongoing and future advances in addressing other gaps. At the business

¹¹ Extractivism is a traditional activity performed by rural communities in the Amazon to obtain an income from the sale of native products like acai berry, Brazil nuts, native cacao, cupuaçu, and fish.

¹² Instituto de Pesquisa Econômica Aplicada (IPEA), “[Brasil 2035 : Cenários para o desenvolvimento](#)”, 2017.

¹³ This proposal does not contemplate fuel/energy production as eligible activities.

¹⁴ The estimation considers both direct and indirect impact of primary sector activity (agriculture, fishery and aquaculture, and forestry and logging) in other activities of the economy. De Oliveira, M., et al., “[A Bioeconomia Brasileira em Números](#)”, BNDES Setorial 47, 2018.

¹⁵ This involves not only high value-added products for local markets, but also the potential to support exports. Between 2017 and 2019, the amazon's value of exports of the top nature-based products accounted for just 0.17% of the global market for these products. Coslovsky, S., “[Oportunidades para Exportação de Produtos Compatíveis com a Floresta na Amazônia Brasileira](#)”, Amazonia 2030 Project, 2021.

¹⁶ Several initiatives have been implemented in the region, mainly by non-governmental organizations in partnership with public entities, aimed at mobilization, awareness, articulation and strengthening of networks and organizations, groups, and communities. Conexus, “[Relatório Final. Pesquisa de Mercado: A Bioeconomia da Amazônia](#),” 2022.

level (barriers (i) to (iv), above), two broad sets of actions are identified where support is key: access to finance and technical capacities.

2.9 **Access to finance.** Based on a preliminary demand and baseline analysis,¹⁷ local commercial bank debt is scarce and often costly. Financial Institutions (FI) tend to be risk-averse and reluctant to offer long-term credit, which largely limits the availability of financial products adequate to the needs of bio-businesses and producers in the BLA.¹⁸ Overall, inadequate access to credit has its roots in two major aspects:

- a) **Underdeveloped financial markets.** Bio-businesses in BLA are typically run by small family farmers, and Micro, Small, and Medium-sized Enterprises (MSME), which means they are generally too small for institutional financing in the capital markets, find it more difficult to access bank credit, and hence remain dependent on traditional sources for financing. By 2019, the share of credit operations to firms in the BLA, relative to the total country, was merely 3%.¹⁹ Rural producers in the BLA represent 13% of all rural producers in Brazil, but only 6.3% of the total amount of financed contracts, largely concentrated on individuals (99.7% of contracts and 95.2% of financed amount) rather than firms, whereas in the rest of Brazil firms account for 26% of rural credit.²⁰ Firms in the BLA also exhibit lower average credit tickets compared to the rest of the country. Rural credit focuses on working capital (53%) and investment (43%), rather than trade (3.6%) and industrialization (0.3%), which are both tied to commercialization and local processing capacity, and thus required to enhance the value-added in the BLA.²¹ The majority of the rural credit in the BLA is dedicated to livestock (57%, of which 80% goes to cattle) and crops (43%), pointing towards a less business-oriented production, lower investment and lower efficiency in the use of the land. The aforementioned conditions are compounded by a general absence of FIs and higher credit restrictions for bio-businesses.²² Main credit distribution channels are limited to national development banks.
- b) **Incremental risks.** Bio-businesses tend to be riskier and more costly, especially at early stages of development and in low-income, vulnerable areas. Generally, bio-businesses: (i) depend on small enterprises or producers in their value chain with limited or no funding of their own;²³ (ii) lack traditional collateral as required by FI; (iii) involve payback models that may increase transaction costs and risks;

¹⁷ Several initiatives have been implemented in the region, mainly by non-governmental organizations in partnership with public entities, aimed at mobilization, awareness, articulation and strengthening of networks and organizations, groups, and communities. Conexus, [“Relatório Final. Pesquisa de Mercado: A Bioeconomia da Amazônia,”](#) 2022.

¹⁸ These remain highly dependent on government incentive programs, such as the PRONAF, *Plano Safra*, *Plano Agricultura de Baixo Carbono* and *Programa de Aquisição de Alimentos*.

¹⁹ Pamplona, L. et al., [Potencial da bioeconomia para o desenvolvimento sustentável da Amazônia e possibilidades para a atuação do BNDES](#), BNDES, 2021.

²⁰ [6 Peculiarities of Rural Credit in the Amazon](#), CPI, 2021. Other authors suggest an even lower prevalence of financing for firms in the BLA.

²¹ Trade credit provides rural producers or their cooperatives with resources needed to commercialize their products in the market. Credit for industrialization is intended for rural producers or cooperatives seeking to industrialize products provided that at least 50% of the production is done by the firm itself or its associates ([Rural Credit Manual Brazilian Central Bank](#)).

²² Nature Services, *Unlocking Private Capital by Valuing Bioeconomy Products and Services with Climate Mitigation and Adaptation Results in the Amazon*, 2021.

²³ Rubino, M. et al., *Biodiversity and Business in Latin America*, Chapter 4: Financing Needs, IFC, 2000.

- (iv) operate in markets with high volatility; and (v) have limited or no track record on profitability, biodiversity impacts, or contributing factors to climate and environmental risks. Typically, FI refrain from high-risk lending, which is augmented by their limited knowledge and capacity around bio-business lending operations.
- 2.10 **Technical capacities.** Setting up and maintaining a bio-business requires a broad range of capacities which hinders the ability of entrepreneurs, firms, and producers to engage in the bioeconomy and translate ideas into bankable projects. On this front, major disruptions are caused by: (i) lack of specialized knowledge and competences to adopt best practices in bio-business (e.g., project design, marketing, properties of natural sources, agriculture techniques); (ii) low levels of organization among small-scale producers and bio-businesses in the value chain; (iii) inadequate access to markets and limited use of certifications or alignment with international standards and norms, which impairs commercialization; and (iv) lack of tailored solutions to address gender and diversity gaps.
- 2.11 **Women and indigenous communities.** Businesses led by women and other vulnerable groups in Brazil, such as afro-descendants and indigenous communities, are typically more capital-constrained, due both to supply and demand factors. The COVID-19 pandemic hit women and minorities disproportionately, deteriorating the situation further. Survey data²⁴ indicates that the pandemic affected women businesses more than male businesses. Within the BLA, in the state of Amazonas, for instance, between May and November 2020 the number of women MSME decreased by a range of 42.3%–70.9%, contrasting with a reduction of 34.1% of their male counterparts. There is much less data on businesses owned by indigenous groups, although numbers indicate they are largely represented in the BLA (¶2.2).
- 2.12 **Institutional and policy framework.**²⁵ Besides participating in international initiatives to protect the Amazon, Brazil advanced on strengthening its local policy and regulatory environment for the development of the bioeconomy and productive activity, at the federal and state level, highlighting the need for MSME support.
- 2.13 As part of its strategy for the BLA, the Superintendence of the Amazon Development (SUDAM)²⁶ oversees the [*Fundo Constitucional de Financiamento do Norte*](#) (FNO), a public concessional finance source.²⁷ The FNO aims to contribute to the promotion of the economic and social development of the north region through financing programs to private actors engaged in productive activities. The FNO operates in seven amazon states and is allocated through specific programs as established by the federal government, with high predominance of rural sectors (72% of resources). However, the FNO has substantially decreased its relevance

²⁴ IBGE, *Pesquisa Nacional por Amostra de Domicílios: PNAD COVID-19*, 2020.

²⁵ In December 2022, the COP 15 on Biodiversity is being held in Montreal, Canada, to define a global biodiversity framework that addresses the key drivers of nature loss to secure our own health and well-being alongside that of the planet. It also seeks finance for biodiversity and alignment of financial flows with nature to drive finances toward sustainable investments and away from environmentally harmful ones. This operation contributes potential replicable and scalable solutions for advancing the global biodiversity framework.

²⁶ Linked to the Ministry of Regional Development, the SUDAM is a federal authority committed to bring inclusive and sustainable development to the inhabitants of the BLA via public policies aligned with the National Regional Development Policy and the Regional Development Plan of the Amazon.

²⁷ [Law No. 7.827 \(09/27/1989\)](#).

in total rural credit in the BLA, falling from 49% in 2000 to 17% in 2020. Only about 1% of FNO rural credit contracts and 7.5% of financed amount was directed to firms, and two-thirds of the loan amounts are dedicated to livestock.

- 2.14 The *Banco da Amazônia* (BASA), a mixed ownership FI controlled by the Federal Government of Brazil, executes public policy through the channeling of resources to public and private clients, including MSME and small family entrepreneurs, focusing on the sustainable development of the Amazon.²⁸ BASA is the main supplier of credit in 148 municipalities, and only a limited portion reaches firms (MSME and anchor firms). Within this role, BASA administers the FNO, which funds over 75% of its current portfolio.²⁹ However, FNO's penetration of rural credit in bioeconomy value chains is still low, and its allocation remains controlled by federal policy. BASA's other sources of funding restrict credit to key FIs in this sector, such as cooperatives,³⁰ so alternatives are needed to expand credit to bio-businesses.

B. Intervention proposed

- 2.15 **Objectives.** The general objective of the program is to expand nature-based productive activity in the Amazon, to support growth decoupled from environmental degradation. The specific objectives are: (i) provide inclusive supply of credit to local bio-businesses; and (ii) strengthen capacities of local bio-businesses to prepare and fund projects within the bioeconomy.
- 2.16 **Component 1: Funding for on-lending (US\$150 million – BR-L1603).** Loan resources from the IDB (US\$75 million) and the Green Climate Fund (GCF) (US\$75 million) will enable BASA to diversify its financing products and maximize the leverage of the FNO and other funding sources (§2.14), to facilitate its response to credit demand by bio-businesses via targeted financing under terms (cost, tenor, grace) that better fit the amortization profile of subprojects. Although resources will be allocated and disbursed upon demand, it is foreseen that women and women-led beneficiary firms will be prioritized for about 20% of this component. Sector-wise, the distribution of the pipeline is expected to expand the current identified bioeconomy portfolio of BASA which includes Acai, Cacau, Castanha into additional business lines including community-based tourism and contribute to the verticalization of production.³¹
- 2.17 **Component 2: De-risking and credit-enhancement mechanisms (US\$8.8 million – BR-G1018).** GCF contingent investment grant resources will provide coverage to financial instruments, enhancing the collateral profile of borrowers and/or reducing expected losses for intermediary FI.³² This additional layer of concessionality is intended to support riskier transactions, ultimately expanding credit to a larger and/or more diversified portfolio of

²⁸ BASA operates in seven states within the BLA (Acre, Amapá, Amazonas, Pará, Rondônia, Roraima e Tocantins).

²⁹ According to the [Annual report](#), in 2021 the FNO benefitted 23,231 projects providing more than R\$12 billion (~US\$2.3 billion) in financing (BASA, 2022). Latest portfolio data shows an average credit of R\$251,000 (~US\$48,400), a 93% share of microcredit and 48.2% of investment financing.

³⁰ Conexus, 2022.

³¹ Verticalization in the supply chain is a business strategy in which a company decides to centralize the entire process, from production to distribution, taking advantage of its expertise in any given industry.

³² Such as first or second loss guarantees.

- beneficiaries.³³ Component 2 is intended to complement funding from component 1 but is not fully dependent on it, as instruments envisioned under this component are being designed so that they can also provide coverage to funding from other sources and financiers.
- 2.18 Specific eligibility criteria for Components 1 and 2 will be established in the program's Operating Regulations (OR), to be developed as an annex to the Proposal for Operation Development (POD). Preliminarily and subject to further analysis, these will include: (i) a maximum amount for each individual loan of up to US\$250,000 for individual beneficiaries and an amount to be analyzed for cooperatives and anchor companies, (ii) an exclusion list of sectors (§4.1); and (iii) a condition for first-tier institutions to comply with qualitative and quantitative requirements analogous to those established by BASA for their current network.
- 2.19 **Component 3: Institutional capacity (US\$1.5 million – BR-T1537).** GCF technical cooperation (TC) grant resources will fund activities to strengthen the capacity of BASA and FI in: (i) governance, management and resource mobilization of different financial structures; (ii) resource allocation and risk assessment of bio-business investments; (iii) monitoring and assessment tools for bio-business performance; (iv) coordination systems between BASA and FI and other relevant institutions; (v) environmental and social management and (vi) project preparation and implementation. To address the incremental gap, this component envisions a specific allocation to support capacities of FI to better serve bio-businesses led by women and indigenous communities according to best practices.
- 2.20 **Component 4: Technical assistance to bio-businesses (US\$3 million – BR-T1537).** GCF TC grant resources will finance the contracting of expert support to bio-businesses to prepare and implement bankable projects. This component supports bio-businesses that seek to scale their current production, build new businesses, and value chains by supporting anchor companies. This component aims to enhance readiness for accessing credit via Component 1 – thus it will be based on the same eligibility criteria– and will emphasize the dissemination of information and awareness about the importance of nature conservation and the potential of bio-businesses, and the learning by producers of the use of new technologies and practices. Activities will be tailored to the specific features and needs of women and indigenous communities, which is expected to enhance their demand and readiness to benefit from the financing activities of the program.
- 2.21 **Results and beneficiaries.** The Results Framework Matrix for the program will be prepared as an annex to the POD. Indicatively, it will include indicators such as: (i) for specific objective 1: outstanding bio-business loan portfolio, total amount of investments in bio-businesses financed, and number of FI lending to bio-businesses; (ii) for specific objective 2: share of bio-businesses supported that receive credit and number of women or indigenous communities trained; and (iii) for the general objective: revenue of bio-businesses supported and avoided Greenhouse Gas (GHG) emissions. Although the instruments contemplated for the

³³ Firms with a higher risk profile include earlier stage, less mature firms, those with less robust off-take conditions –for value chains still developing or in less consolidated markets–, and those more vulnerable to climate/agricultural risks.

operation separately (loans vs. non-reimbursable investment vs. technical cooperation) have different and independent characteristics, it is noted that they all are envisioned to share the same objectives and expected results.

- 2.22 Direct beneficiaries will be bio-businesses operating in the BLA, including individual and family producers, rural cooperatives, and community associations, MSME (defined by Brazilian local law), and anchor firms,³⁴ differentiated by gender and diversity characteristics. The OR will specify criteria for a beneficiary to be categorized as bio-business, including sector of activity, type of investment and use of funds. To holistically address financial and non-financial barriers to the development of bio-businesses at the business level, both from supply and demand (¶2.8), the program combines financial instruments (loans and risk mitigation mechanisms) and technical cooperation to beneficiaries and BASA. Through this comprehensive structure, the program supports: (i) BASA through funding and support to select, finance, and supervise projects with an environmental impact and innovative technologies and practices; and (ii) the beneficiaries to structure bankable projects and have access to credit.
- 2.23 **Strategic alignment.** The program is consistent with the Second Update of the Institutional Strategy (UIS) (AB-3190-2) and aligns with the challenges of: (i) Social Inclusion and Equality, by targeting a vulnerable region and population; and (ii) Productivity and Innovation, by supporting innovation in business practices and models. It also aligns with the crosscutting themes of: (i) Gender equality, by reducing the gender gap in access to productive finance, (ii) Diversity, by developing plans and strategies to better involve relevant diverse groups in the bioeconomy; and (iii) Climate Change by promoting low-carbon and climate resilient practices in the land-use sector, (iv) Environmental Sustainability, as the activities of the program contribute to the achievement of ambitious targets and sustainable business practices in biodiversity by businesses, and (v) Institutional Capacity and the Rule of Law, by strengthening of institutional frameworks and enhancing BASA' capacity to dialogue with the private sector involved in the bioeconomy.
- 2.24 The program contributes to the Corporate Results Framework (CRF) 2020-2023 (GN-2727-12) in its challenge indicators 2.9 Micro / small / medium enterprises financed (#) and 2.10 Enterprises provided with technical assistance (#); and crosscutting theme indicators 2.19 Emissions avoided (annual tons CO2 equivalent) and 2.21 Habitat that is sustainably managed applying ecosystem-based approaches (ha). The program aligns with IDB's Integrated Strategy for Climate Change Adaptation and Mitigation, and Sustainable and Renewable Energy (GN-2609-1) by targeting investments that reduce GHG-emissions, enhance carbon stocks and/or increase resilience; and with the Institutions for Growth and Social Welfare Strategy (GN-2587-2), by increasing access to credit through local FI. The program is aligned with the IDB Group Strategy with Brazil 2019-2022 (GN-2973) under its strategic objectives of: (i) increase the role of the private sector by improving the quality of the business environment, contributing to the expected result of increased private sector access

³⁴ Anchor firms also play an important role, as they have multiplier effects by mobilizing a wide range of smaller firms around a production chain.

to credit; and (ii) promote greater economic competitiveness by strengthening innovative product supply chains.

- 2.25 **Financial instrument and execution mechanism.** The program is proposed as a global credit operation financed with an investment loan of US\$75 million from IDB's Ordinary Capital plus US\$75 million from the GCF Bioeconomy Program, and an additional an Investment Grant (US\$8.8 million) and a TC (US\$4.5 million) financed with resources from the GCF Bioeconomy Program³⁵. The program is proposed as a double-booking between IFD/CMF and CSD/RND (Annex V). A five-year disbursement period is foreseen.³⁶
- 2.26 Loan and investment grant resources will be deployed using a financial intermediation mechanism by which BASA will provide credit to eligible subprojects either directly to individual and family producers, and MSME, or indirectly via cooperatives and anchor firms (§2.22). Lending will be granted upon demand and subject to loan agreements with each borrower at the subproject level. TC grant resources will be executed via selection and hire of expert consulting services.
- 2.27 **Borrower, Executing Agency (EA) and Guarantor**³⁷. The borrower and EA will be BASA and the Federative Republic of Brazil will be the guarantor of the borrower's financial obligations. BASA³⁸ is a federal government-controlled financial institution³⁹, which is governed by federal law No. 6,404, dated as of December 15, 1976, and Law 13.303, dated as of June 30, 2016. BASA meets the eligibility requirement of being a public sector borrower in light of the eligible borrowers policy (OP-301). BASA has a public mandate to promote inclusive and sustainable productive activity in rural and urban enterprises of all sizes. It has ample experience on managing government targeted funds, as well as setting rigorous criteria for credit analysis for ensuring sustainable practices in the BLA, and is well placed to reach, properly assess, and support beneficiaries at the local level.⁴⁰ This is the first operation for BASA with the IDB.

III. TECHNICAL ISSUES AND SECTOR KNOWLEDGE

- 3.1 **IDB experience.** The program builds on IDB Group's vast experience with MSME access to finance, long-term relationships with governments and partner FI across Latin America, and knowledge of the financial markets. The program will

³⁵ The Amazon Bioeconomy Fund is a fund under IDB administration financed with resources from the GCF, pursuant to GN-3081-1. The objective of the Amazon Bioeconomy Fund is to reduce GHG emissions and increase the resilience of targeted value chains and ecosystems in the Amazon region by enabling the conditions to increase the flow of fund to bio-businesses in the Amazon.

³⁶ An administrative costs section is not included separately, as administrative expenses for monitoring and evaluation will be covered by BASA with its own resources and with financing for specific related activities under Component 3.

³⁷ The Board of Executive Directors will be asked to approve a partial waiver of the Bank's policy on guarantees required from the borrower (Operational Policy OP-303), to allow the Bank to require only the Federative Republic of Brazil's guarantee of the borrower's financial obligations and waive the requirement for the guarantee regarding the borrower's performance obligations and potential local counterpart.

³⁸ The Republic of Brazil is BASA's majority shareholder, with a total 97.0% stake in its capital.

³⁹ BASA was created by Law 5.122, dated as of September 28, 1966.

⁴⁰ The PACI will be annexed to the POD and its outcome will be considered as an input for activities under Component 3.

also benefit from the work of IDB's Natural Capital Lab with biodiversity and bio-business financing, impact measurement, and producer market- linkages.

- 3.2 In March 2021, the IDB launched its [Amazon Initiative](#), which seeks to foster sustainable and inclusive development models in the Amazon for the benefit of its diverse communities. In October 2021, the IDB approved the Program to Promote Sustainable Financing in the Peruvian Amazon Region: Opportunity to Leverage Bio-businesses ([5356/OC-PE/GRT/NL-18870-PE](#)), with the objective of contributing to the economic growth of the Peruvian Amazon by supporting the sustainable use of natural capital via investments in bio-businesses.
- 3.3 **Lessons learned.** Lessons from the above-described experience include: (i) incorporating TC activities to properly implement monitoring tools with regards to impact indicators; (ii) designing objectives, activities and funding structures along with the executing agency, considering limitations associated with relatively new sectors such as the bioeconomy; (iii) advancing preparation of a well-defined OR to facilitate screening and due diligence of subprojects and promptness of disbursements; and (iv) key aspects for eligibility criteria, climate alignment, and environmental and social safeguards. The Low Carbon Agriculture and Avoided Deforestation to Reduce Poverty in Brazil program ([ATN/DE-13768-BR](#) and [ATN/DE-15770-BR](#)) identified among key factors for promoting sustainable low carbon land-use practices: (i) support for accessing credit; (ii) ensuring technical assistance continuity; and (iii) work with organizations or cooperatives to reach beneficiaries.
- 3.4 **Complementarity with other IDB Group operations.** The proposal links directly with IDB Lab's Amazonia Regenerate Accelerator and Investment Trust program ([GRT/GN-17199-RG](#)), which provides investment capital to bioeconomy start-ups and their value chains in various Amazon countries, including Brazil, to transform them into scalable businesses. The program could complement this initiative by providing credit to these businesses at later stages in their development. It also complements the TC Low Carbon Agriculture for Avoided Deforestation and Poverty Reduction Phase II - Strengthening Sustainable Value Chains in the Amazon ([ATN/LC-18953-BR](#)), which aims to mitigate GHG-emissions by promoting nature-positive solutions based on the development of six sustainable agricultural value chains. This TC will also help beneficiaries and organizations develop business plans related to the adoption of sustainable production systems and technologies, some of which could become credit candidates.
- 3.5 **Complementarity with other initiatives and organizations.** The IDB will map collaboration opportunities with public, private, and civil society actors working to support bio-businesses and the bioeconomy in Brazil.

IV. ENVIRONMENTAL SAFEGUARDS AND FIDUCIARY SCREENING

- 4.1 BASA has a broad range of internal policies and procedures for the management of environmental and social risks and sustainability. The Institutional Capacity Analysis (PACI) evaluation indicates that BASA has a good level of experience and capacity in social and environmental matters, an adequate institutional capacity to comply with IDB requirements, and policies and procedures for the preparation, approval and supervision of loans, as well as for project management.

Other findings and opportunities for institutional strengthening will be detailed in the POD. The program will exclude Category A and B subprojects and activities with moderate or significant negative impacts via an exclusion list, a positive list and BASA's due diligence processes. Exclusions will include activities that: (i) involve involuntary resettlement due to physical or economic displacement; (ii) involve negative impact for indigenous communities; (iii) may harm critical cultural sites; (iv) involve negative impact on natural or critical habitats; or (v) involve the introduction or expansion of invasive species. The program will finance activities associated with the production, transformation, and commercialization of products of the bioeconomy, which presents minor occupational and community health and safety risks and minor environmental contamination associated with activities of the agricultural, NTFP, and artisanal fishing sectors. Pursuant to the Environmental and Social Policy Framework (GN-2965-23), the operation is classified as Financial Intermediation. The environmental and social risk rating is substantial due to the contextual risks associated with critical habitats and indigenous peoples in the Amazon region. The disaster and climate change risk is moderate. The ESG due diligence will focus on identifying gaps between BASA's policies and procedures and the required Environmental and Social Management System (ESMS) elements under ESPS 1.

- 4.2 **Retroactive financing.** The IDB may recognize eligible expenditures made by the borrower before the date of approval of the loan for up to 20% of the approved amount, provided requirements substantially similar to those established in the loan contract have been met. Such expenditures must have been made from the date of approval of this Project Profile, but under no circumstances will expenses incurred more than 18 months before the date of approval of the loan be included.⁴¹ Retroactive financing is especially important to ensure the timely disbursement of resources, given the lengthy approval processes in the Brazilian Federal Government and the increasing limitations associated with FNO funding for bio-businesses.

V. OTHER ISSUES

- 5.1. **Risks.** If the interest rate environment increases in Brazil (13.75% currently), the potential cost to swap GCF resources to Brazilian reais may impact the demand by end beneficiaries for the program. Rural credit in the Brazilian Legal Amazon (BLA) is very price sensitive, and BASA's ability to deploy financing under the program will ultimately rely on the competitiveness of the products to be offered to target beneficiaries, as well as its adaptability to properly serve the bio-business value chains. This constitutes a high risk. To mitigate this risk, IDB has been supporting BASA to assess which parts of the bioeconomy value chains the operation will focus on and to develop products to maximize the impact of the operation. Furthermore, FNO resources could eventually be blended with program resources to equalize costs. Other risks have been identified as low or medium-low (Risk Matrix).
- 5.2. **Sustainability.** The program is designed to enable a self-sustaining financing structure that can support bioeconomy markets in the long-term. The program's

⁴¹ The GCF allows retroactive financing from the date of effectiveness of the FAA.

financial instruments are expected to help demonstrate commercial viability and profitability of bio-business models to borrowers and lenders alike, crowding-in other actors and encouraging them to invest more. This is expected to result in a more stable and continued flow of finance to bio-businesses after program conclusion, reducing sustainability risk and boosting portfolio resilience. Disseminated knowledge and capacities are inherently long-term. Productivity gains, GHG-emission reduction, enhanced carbon stocks and/or increased resilience resulting from the program are likely to continue beyond support.

- 5.3. **Coordination with other institutions and/or with the private sector.** The proposed execution scheme does not require formal agreements with other public entities or the private sector, except for the loan agreements to be signed with beneficiaries in the context of each subproject (§2.26). Coordination will be sought with other institutions working with the bioeconomy in the region, to benefit from possible synergies and avoid duplicating efforts (§3.5). Coordination with relevant divisions at IDB Group is fundamental for combining knowhow on financial instruments, business acceleration, and value chains in the rural sector.
- 5.4. **Co-financing.** BASA may complement the financing using funds from other sources, particularly the FNO (§2.14). Resources from intermediary FI will also be leveraged, especially in the case of guarantees, which cover loans only partially.

VI. RESOURCES AND TIMETABLE

- 6.1 Distribution of the POD for Quality and Risk Review (QRR) is expected on February 9, 2023, the approval of the Draft Loan Proposal by the Operations Policy Committee (OPC) on April 11, 2023, and to the consideration of the Loan Proposal by the Executive Board of Directors is expected by June 28, 2023. The estimated budget for preparation of the proposal is US\$100,275 and 1.439 FTEs are required to complete preparation of the proposal (Annex V).

CONFIDENTIAL

¹ The information contained in this Annex is confidential and will not be disclosed. This is in accordance with the "Deliberative Information" exception referred to in paragraph 4.1 (g) of the Access to Information Policy (GN-1831-28) at the Inter-American Development Bank.



E&S Screening Filter

Operation Information

Operation Name	
Bioeconomy Program for Amazonia	
Operation Number	BR-L1603

Operation Details

Organizational Unit	IDB Sector/Subsector
IFD/CMF	BANKING MARKET DEVELOPMENT
Type of Operation & Modality	Original IDB Amount
LON / GCR	\$150,000,000.00
Executing Agency	Borrower
BR-BR, BR-BASA	BANCO DA AMAZONIA  
ESG Primary Team Member	Team Leader
Julio Andres Rojas Lara	Rafael Cavazzoni Lima
Toolkit Completion Date	Author
10/11/2022	Langstroth, Robert Peter
Applicable ESPSs with requirements	
ESPS 1; ESPS 2; ESPS 6; ESPS 10	

Operation E&S Classification Summary

Environmental and Social Impact Categorization (ESIC)	FI
Disaster and Climate Change Risk Classification (DCCRC)	Moderate
Environmental and Social Risk Rating (ESRR)	Substantial

Summary of Impacts / Risks and Potential Solutions

The FI will support sectors with moderate level of direct impacts expected (e.g. housing sector).

The FI will support sectors with substantial level of indirect/cumulative impacts expected (e.g. water and sanitation sector).

The FI activities eligible for financing will be associated with low level of direct impacts.



E&S Screening Filter

The FI activities eligible for financing will be associated with moderate level of indirect/cumulative impacts (e.g. moderate health and safety risks).

The Borrower/Executing Agency has good organizational capacity and competency for E&S management and potential existing E&S management systems.

The FI will have exclusion criteria for the sub-projects and the sub-projects will have low direct impacts.

The FI will have exclusion criteria for the sub-projects and the sub-projects will have moderate indirect/cumulative impacts.

The average amount for sub-project/sub-loans will be less than \$25,000.

There are substantial level of contextual risks associated with the sub-projects under the FI (e.g. political instability, oppression of communities, armed forces in the project area).

Moderate natural hazards, such as earthquakes, droughts, landslides, floods, wildfires, or others, including those caused or exacerbated by climate change, are likely to occur in the sub-projects area, and/or these may impact the sub-project, and/or the sub-project may exacerbate the risk from natural hazards to human life, property, and/or the environment.

The FI portfolio or sub-projects has the potential to have minor impacts or risks on human health and the environment, have GHG emissions, generate waste and/or use pesticides.

The FI portfolio or sub-projects has the potential to have minor impacts or risks on health and safety of the project-affected people. Impacts on the sub-projects themselves from natural hazards and climate change and/or risks associated with human rights.

The FI portfolio or sub-projects will not negatively impact people due to land acquisition.

The FI portfolio or sub-projects has the potential to have minor impacts or risks on Indigenous Peoples.

The FI portfolio or sub-projects has the potential to have minor impacts or risks on cultural heritage.

The FI portfolio or sub-projects has the potential to minorly negatively affect people due to their gender, sexual orientation or gender identity.

ESPS 1 - Assessment and Management of Environmental and Social Risks and Impacts

The Executing Agency will prepare and maintain an Environmental and Social Management System (ESMS) for the operation as defined under ESPS 1.

ESPS 2 - Labor and Working Conditions

The FI portfolio or sub-projects has the potential to have minor impacts or risks associated with child labor or forced labor in the workforce.

ESPS 6 - Biodiversity Conservation and Sustainable Management of Living Natural Resources

The FI portfolio or sub-projects has the potential to have substantial impacts or risks on biodiversity and ecosystem services and/or introduce (intentionally or accidentally) alien, or non-native, species of flora and fauna.



E&S Screening Filter

ESPS 10 - Stakeholder Engagement and Information Disclosure

The Borrower will prepare a stakeholder engagement framework/plan for the lifetime of the program.



E&S Screening Filter

Operation Information

Operation Name	
Bioeconomy Program for Amazonia – De-Risking and Credit-Enhancement Mechanisms	
Operation Number	BR-G1018

Operation Details

Organizational Unit	IDB Sector/Subsector
IFD/CMF	FINANCING FOR ENVIRONMENTAL SUSTAINABILITY
Type of Operation & Modality	Original IDB Amount
IGR /	\$8,800,000.00
Executing Agency	Borrower
BR-BASA	BANCO DA AMAZONIA  
ESG Primary Team Member	Team Leader
Robert Peter Langstroth	Rafael Cavazzoni Lima
Toolkit Completion Date	Author
19/10/2022	Langstroth, Robert Peter
Applicable ESPs with requirements	
ESPS 1; ESPS 2; ESPS 10	

Operation E&S Classification Summary

Environmental and Social Impact Categorization (ESIC)	FI
Disaster and Climate Change Risk Classification (DCCRC)	Low
Environmental and Social Risk Rating (ESRR)	Substantial

Summary of Impacts / Risks and Potential Solutions

The FI will support sectors with low level of direct impacts expected (e.g. non E&S relevant sector).

The FI will support sectors with low level of indirect/cumulative impacts expected (e.g. non E&S relevant sector).

The FI activities eligible for financing will be associated with low level of direct impacts.



E&S Screening Filter

The FI activities eligible for financing will be associated with low level of indirect/cumulative impacts.

The Borrower/Executing Agency has good organizational capacity and competency for E&S management and potential existing E&S management systems.

The FI will have exclusion criteria for the sub-projects and the sub-projects will have low direct impacts.

The FI will have exclusion criteria for the sub-projects and the sub-projects will have low indirect/cumulative direct impacts.

The average amount for sub-project/sub-loans will be less than \$25,000.

There are substantial level of contextual risks associated with the sub-projects under the FI (e.g. political instability, oppression of communities, armed forces in the project area).

No natural hazards, such as earthquakes, droughts, landslides, floods, wildfires, or others, including those caused or exacerbated by climate change, are likely to occur in the sub-projects area, and/or these may impact the sub-project, and/or the sub-project may exacerbate the risk from natural hazards to human life, property, and/or the environment.

The FI portfolio or sub-projects has the potential to have minor impacts or risks on human health and the environment, have GHG emissions, generate waste and/or use pesticides.

The FI portfolio or sub-projects has the potential to have minor impacts or risks on health and safety of the project-affected people. Impacts on the sub-projects themselves from natural hazards and climate change and/or risks associated with human rights.

The FI portfolio or sub-projects will not negatively impact people due to land acquisition.

The FI portfolio or sub-projects will not have significant impacts or risks on biodiversity and ecosystem services and/or introduce (intentionally or accidentally) alien, or non-native, species of flora and fauna.

The FI portfolio or sub-projects will not impact Indigenous Peoples.

The FI portfolio or sub-projects will not impact cultural heritage.

The FI portfolio or sub-projects will not negatively affect people due to their gender, sexual orientation or gender identity.

ESPS 1 - Assessment and Management of Environmental and Social Risks and Impacts

The Executing Agency will prepare and maintain an Environmental and Social Management System (ESMS) for the operation as defined under ESPS 1.

ESPS 2 - Labor and Working Conditions

The FI portfolio or sub-projects has the potential to have minor impacts or risks associated with child labor or forced labor in the workforce.

ESPS 10 - Stakeholder Engagement and Information Disclosure

The Borrower will prepare a stakeholder engagement framework/plan for the lifetime of the program.



E&S Screening Filter

Operation Information

Operation Name	
Bioeconomy Program for Amazonia – BASA Institutional Capacity and Technical Assistance to Bio-businesses	
Operation Number	BR-T1537

Operation Details

Organizational Unit	IDB Sector/Subsector
IFD/CMF	FINANCING FOR ENVIRONMENTAL SUSTAINABILITY
Type of Operation & Modality	Original IDB Amount
TCP /	\$4,500,000.00
Executing Agency	Borrower
BR-BASA	BANCO DA AMAZONIA  
ESG Primary Team Member	Team Leader
Robert Peter Langstroth	Rafael Cavazzoni Lima
Toolkit Completion Date	Author
19/10/2022	Langstroth, Robert Peter
Applicable ESPs with requirements	

Operation E&S Classification Summary

Environmental and Social Impact Categorization (ESIC)	N/A
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Disaster and Climate Change Risk Classification (DCCRC)	N/A
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Environmental and Social Risk Rating (ESRR)	N/A
Overwritten ESRR Justification	
Overwritten ESRR Comments	

Summary of Impacts / Risks and Potential Solutions

The TC or a pre-investment operation will not finance prefeasibility or feasibility studies of specific investment projects that includes environmental and social studies.

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BRAZIL
BIOECONOMY PROGRAM FOR AMAZONIA
BR-L1603

INITIAL ENVIRONMENTAL AND SOCIAL REVIEW SUMMARY

ISSUANCE v.1
November 2022

This document was prepared by:
Robert Langstroth and Julio Rojas (VPS/ESG)
With the support of the Project team:
Rafael Cavazzoni Lima and Alexander Vasa (IFD/CMF)

Initial Environmental and Social Review Summary	
Operation Data	
Operation Number	BR-L1603
IDB Sector/Subsector	IFD/CMF
Type of Operation & Modality	LON
Initial E&S Impact Classification (ESIC)	FI
Initial E&S Risk Rating (ESRR)	Substantial
Initial Disaster and Climate Change Risk Classification (DCCRC)	Moderate
Borrower	Banco da Amazônia (BASA)
Executing Agency	BASA
Guarantor	Federative Republic of Brazil
IDB Loan Amount (and total project cost)	\$150.000.000 loan amount (\$163.300.000 total project cost, including other funding sources)
Applicable ESPs with requirements	ESPS 1; ESPS 2 ESPS 3; ESPS 4; ESPS 6, ESPS 7, ESPS 8, ESPS 9, ESPS 10
Executive Summary	
<p>The proposed operation, the Bioeconomy Program for Amazonia, is a financial intermediation (FI) through the Banco da Amazônia (BASA). The preliminary environmental and social risk classification is Substantial due to the contextual risks of operations in the Amazon region, particularly in regard to vulnerable groups such as indigenous people, quilombolas, traditional rural Amazon communities, and to critical habitats. The Program is the first operation under the Amazon Bioeconomy Fund, financed in part by funds from the Green Climate Fund (GCF), of the IDB's Amazon Initiative.</p> <p>BASA has a range of policies and procedures in place for the management of environmental and social risks and sustainability but does not have a consolidated Environmental and Social Management System (ESMS) and responsibilities are split between two administrative units within BASA. Thus, BASA will enhance its ESMS to be consistent with the IDB's ESMF and its Environmental and Social Performance Standards (ESPS) 1 during implementation of the Program utilizing technical cooperation resources of the project. The PACI evaluation indicates that BASA has a good level of experience and capacity in social and environmental matters.</p> <p>The Program will exclude activities with moderate or significant adverse environmental or social impacts (i.e., activities that would be Category A or B if financed directly by the IDB), by means of an exclusion list, a "positive list" of pre-approved activities, and BASA's due diligence processes. The excluded activities include those (i) involving physical resettlement or economic displacement; (ii) with adverse impacts to indigenous people; (iii) with adverse impacts to critical cultural sites; (iv), with adverse impacts to natural or critical habitats; or (v) involving the introduction or spread of exotic invasive species. Also, the maximum amount per subproject is expected to be below US\$250.000 for final beneficiaries, and the maximum amount financed for and through cooperatives and anchor companies is subject to further analysis and due diligence.</p>	

The Program will finance activities associated with the production, transformation, and/or commercialization of bioeconomy products with minor occupational and community health and safety risks and the generation of environmental contamination associated with agriculture, non-timber forest products, and artisanal fishing. The final beneficiaries of the funds will include a diverse range of bio-businesses, family producers, MSMEs, cooperatives, anchor investors as well as indigenous peoples, quilombolas, and traditional communities. The disaster and climate change classification is Moderate. During the Bank's due diligence, a gap analysis will be performed to identify needs for the strengthening of BASA's internal systems to meet the requirements of ESPS 1 and other applicable performance standards.

Operation Description

The general objective of the Program is to expand nature-based productive activity, decoupled from environmental degradation, and revenue increases through the financing of bioeconomy investments and provision of technical assistance to beneficiaries in the municipalities within BLA Biome.

The specific objectives are: (i) to increase access to credit of local bio-business by providing risk-adjusted financial instruments and strengthening the capacity of the executing entity; and (ii) to support beneficiaries (individual and family producers, MSMEs, cooperatives, and anchor firms) in adopting sustainable practices in productive activity and access productive credit. The investments financed by this operation will i) reduce emissions and increase ecosystem carbon stocks by expanding the forest-based economy, ii) support ecosystem protection, regeneration and adaptation, increasing social, climatic and economic resilience, iii) promote and diversify the productive matrix through more efficient and sustainable use of natural resources, channeling private capital to the conservation, restoration and sustainable use of ecosystems, including soil; or iv) contribute to a more sustainable and resilient post-COVID-19 recovery with socioeconomic co-benefits for the local population and indigenous peoples and seek the participation of women in all financial components.

Components 1 and 2 will finance risk-adjusted financial instruments for bio-businesses to provide credit with reduced cost and increased tenor to better fit the amortization profile of sub-projects. It will also fund de-risking mechanisms to enhance credit access. Specifics of each instrument will be described in the program's Operating Regulations (OR), to be developed as an annex to the Proposal for Operation Development (POD).

Components 3 and 4 will provide technical assistance to BASA and bio-businesses to further the potentialities and sustainability of the Project. Initiatives carried out under this component will be framed under two set of activities: (i) capacity building with gender and diversity lens and support to BASA for the design, funding, delivery and monitoring of financial products; and (ii) assistance to bio-businesses for best practices, business plans, and technology adoption, including mechanisms for enhancing access for women and diversity groups in bio-businesses.

Direct beneficiaries will be bio-businesses operating in the Brazilian Amazon, including small family enterprises, MSMEs as defined by the Brazilian local laws and larger enterprises acting as anchor, provided that they: (i) do not carry out activities or are subjects/entities involved in activities in a pre-defined exclusion list that will be included in the OR and Environmental and Social Management System (SGAS as per its initials in Spanish); (ii) satisfy pre-defined environmental, social and economic criteria to be categorized as bio-business; and (iii) comply with the eligibility of the sector of activity, type of investment and use of funds. Specific criteria will be established in the OR and SGAS.

The PP defines the bioeconomy as involving "any economic activity based on the use of natural renewable biological resources, from both land and water, to obtain food, materials, and energy without compromising their availability for future generations" and bio-businesses as "private businesses that can successfully and sustainably tap the potential of biodiversity for the creation of new products and

processes". As described by the PP, the Program may include any of the following sub-sectors: perennial agriculture, agroforestry, aquaculture, sustainable forestry plantations (excluding invasive and non-native monocultures), Non-Timber Natural Forest Products (NTFP), nature tourism, and restoration and regulation ecosystem services.	
Rationale for Classifications/Rating	
E&S Impact Classification	The operation has a financing structure that involves the provision of funds through financial intermediaries (FIs) or through delivery mechanisms involving intermediation whereby the FI undertakes the task of subproject appraisal and monitoring.
<i>E&S Risk Rating</i>	The operation has been classified as having Substantial environmental and social risk due to the contextual risks of operations in the Amazon region, particularly regarding the potential for adverse impacts on indigenous peoples and other vulnerable groups in the Brazilian Amazon as well as potential adverse impacts on natural and critical habitats.
<i>DCC Risk Classification</i>	The operation's disaster and climate change risk classification is moderate to the occurrence of droughts, floods, and forest fires in the Amazon region and the risks that these are being exacerbated by ongoing climate change and deforestation in the region.
Is the use of Borrower E&S Framework being considered?	
<i>No</i>	
The Program will be designed and executed in accordance with the IDB's ESMF and its applicable ESPSs.	
Environmental and Social Performance Standards (ESPSs) that apply to the proposed project	
ESPS-1. Assessment and Management of E&S Risks and Impacts	
<i>Yes</i>	
<p>BASA has a range of policies and procedures in place for the management of environmental and social risks and sustainability but does not have a consolidated ESMS and responsibilities are split between two administrative units within BASA. Thus, BASA will develop an ESMS consistent with the IDB's ESMF and its ESPS 1 during preparation of the Program. The PACI evaluation indicates that BASA has a good level of experience and capacity in social and environmental matters.</p> <p>The Program will exclude activities with moderate or significant adverse environmental or social impacts (i.e., activities that would be Category A or B if financed directly by the IDB, by means of an exclusion list, a "positive list" of pre-approved activities, and BASA's due diligence processes. The excluded activities include those (i) involving physical resettlement or economic displacement; (ii) with adverse impacts to indigenous people; (iii) with adverse impacts to critical cultural sites; (iv), with adverse impacts to natural or critical habitats; or (v) involving the introduction or spread of exotic invasive species.</p> <p>Through the application of due diligences processes to be described by the ESMS, BASA will ensure that subprojects do not present risks of moderate ("Category B") or significant ("Category A") adverse environmental and social impacts. This will be accomplished primarily by the application of exclusion list and the "positive list" of pre-approved activities. However, the positive list is not limiting, and bio-business may propose activities not included in the list as long as the activity is not excluded by the exclusion list, and it meets other eligibility criteria established in the OR. Thus, it will be necessary to ensure that an adequate review process is in place to screen out Category A or B activities. During execution, IDB's ESG supervision will review these processes and their outcomes. During the Bank's due diligence, it will be determined if loan proposals above a certain threshold may require the Bank's no objection.</p>	

Also, the PP identifies a medium-high risk on impediments to deliver ecosystem-related data on supported subprojects. To mitigate this risk, prior to the first disbursement of lending proceeds, the IDB and BASA will agree on strict eligibility criteria to define a bio-business, which will be part of the OR and ESMS, as well as monitoring data requirements and methodologies with support from the complementary TC.

The requirements for information disclosure and stakeholder participation during the preparation of the Program will be determined through dialogue between the Bank (including the Amazon Coordination Unit) and BASA. During Program execution, BASA will implement a grievance mechanism consistent with ESPS 1.

As part of the preparation process, consultancies have evaluated BASA's existing lending portfolio. Cattle and soybeans are by far the dominant elements of its agriculture sector lending in terms of the volume of loans. While these activities would not be financed by the program, they create a degree of contextual risk. For example, it may be argued that the capital increase by the Program for bioeconomy activities will free up existing capital available for new loans supporting these controversial sectors in the Amazon. The market study identifies the following potential bioeconomy value chains: acai, cacao, Brazil nuts, sustainable fishing, native plant oils for biocosmetics, and agroforestry systems.

The IDB's due diligence will include the identification of potential environmental and social risks and impacts of the proposed value chains to be financed and any gaps between BASA's existing policies, procedures, and organization and the requirements of ESPS 1 and other applicable standards.

As a substantial E&S risk operation, subprojects will be required to demonstrate the compliance with the respective IDB ESPSs that could apply.

ESPS-2. Labor and Working Conditions	Yes
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BASA's current labor policies, such as non-discrimination policies or Codes of Conduct, and their respective compliance with national laws and regulations, including licenses, track record and any sanctions of labor inspectorates and their like will be evaluated during the IDB's due diligence.

The activities to be financed by the Program present occupational health and safety risks associated with the agricultural and non-timber forest product sectors, artisanal fishing, and the processing and transport of products derived from living natural resources. BASA will ensure through their ESMS that final beneficiaries apply good practices at least as protective as the World Bank Group Environmental, Health and Safety (EHS) Guidelines, general and industry-specific, as applicable. BASA will ensure that beneficiary bio-businesses are not using child or forced labor. It is well-known that the harvest of acai fruits in the Brazilian Amazon is often performed by minors, as the slender palms cannot support the weight of a large adult. BASA's due diligence processes will also assure that beneficiary bio-businesses are practicing no discrimination and allow freedom of association and collective bargaining.

ESPS-3. Resource Efficiency and Pollution Prevention	Yes
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BASA will ensure that final beneficiaries apply good practices at least as stringent as the World Bank Group EHS Guidelines, general and industry-specific, as applicable. Bio-business activities may generate solid wastes, hazardous materials, effluents, sediment, atmospheric emissions, dust, noise, and vibrations associated with agricultural activities, transportation, and processing. Any proposed use of pesticides or herbicides by beneficiaries must be consistent with applicable sustainability standards (see ESPS 6) and ESPS 3. The reduction of greenhouse gas emissions and the increase in carbon stocks in the Amazon basin are anticipated outcomes of the program.

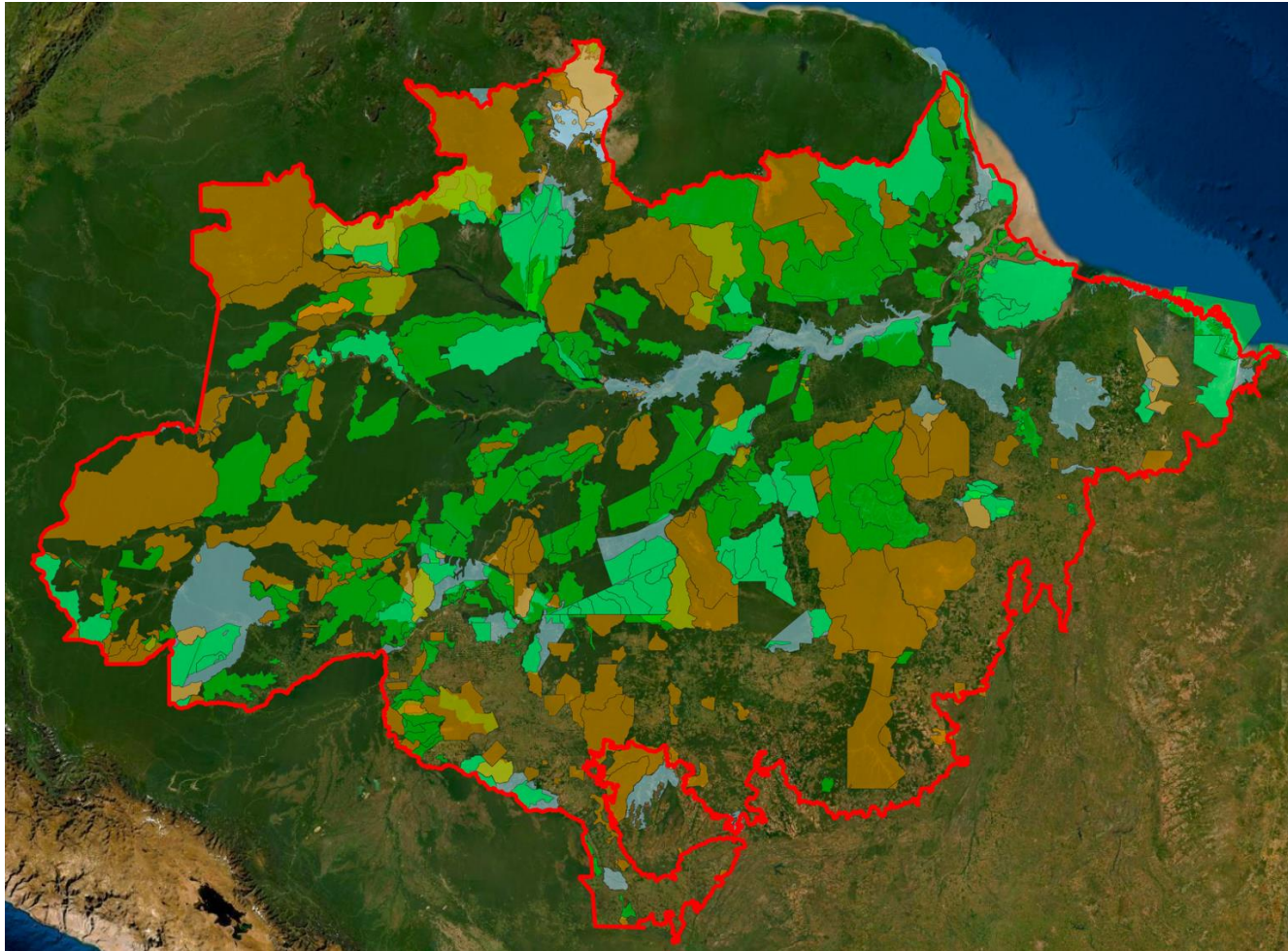
ESPS-4. Community Health, Safety, and Security	<i>Yes</i>
<p>The subprojects to be financed present minor risks and impacts to people living adjacent to facilities, production areas, or transportation routes. BASA will ensure that final beneficiaries apply good practices at least as stringent as the World Bank Group EHS Guidelines, general and industry-specific, as applicable, as well as applicable sustainability standards (see ESPS 6). The financed activities do not present risk of exacerbating exposure to natural hazard or climate change risks. The reduction of greenhouse gas emissions and the increase in carbon stocks in the Amazon basin are anticipated outcomes of the program.</p>	
ESPS-5. Land Acquisition and Involuntary Resettlement	<i>No</i>
<p>The OR and ESMS will exclude the financing of any activities that involve land acquisition, physical resettlement, or economic displacement, including the affectation of the use of natural resources by vulnerable groups.</p>	
ESPS-6. Biodiversity Conservation and Sustainable Management of Living Natural Resources	<i>Yes</i>
<p>The OR and ESMS will exclude the financing of any activities that involve the conversion or degradation of natural habitats or any adverse impacts on critical habitats as defined by ESPS 6. However, bioeconomy activities without adverse impacts on critical habitats could be allowed, for example, the non-destructive harvest of non-timber forest products, such as Brazil nuts, in extractive reserves (which are generally recognized as IUCN Category VI protected areas). Another example is community-based ecotourism in legally protected areas, Key Biodiversity Areas, or critical habitats of threatened species where the proposed activities do not require a habitat conversion or present any risk of adverse impacts to the critical habitat values. If BASA wishes to finance any activities in critical habitats, it will be required to develop and implement a Biodiversity Action Plan to achieve net gains in accordance with ESPS 6. This responsibility is placed on BASA as Borrower, not transferrable to final beneficiaries.</p> <p>BASA existing due diligence processes identify activities in legally protected areas and natural habitats, but do not screen for all of the ESPS 6 criteria for critical habitats. BASA will also be responsible for ensuring that financed activities do not adversely affect ecosystem services, especially priority ecosystem services of vulnerable groups.</p> <p>The OR and ESMS will exclude the financing of activities that will result in the introduction or expansion of exotic invasive species. In this regard, the use of African oil palm (<i>Elaeis guineensis</i>) would not be precluded by ESPS 6, as the species is not considered invasive in the Amazon region and has been cultivated in the region since 1942, and for several centuries in Northeastern Brazil, where it is the source of the culturally significant dendê oil. However, BASA's due diligence processes will need to ensure loans are screened for exotic invasive species.</p> <p>Notwithstanding the exclusions, BASA's ESMS will need to include a monitoring component to ensure that its financed activities are not contributing directly, indirectly, or cumulatively to deforestation, degradation or other habitat or biodiversity loss. BASA will be required to present an initial six-month report followed by annual reports on land use and land cover change in the Program's area of influence. As Borrower, BASA will be required to demonstrate that the Program results in no net loss of biodiversity in natural habitats, if not net gains.</p> <p>As the Program is focused on the promotion of the bioeconomy, the ESPS 6 requirements relating to the sustainable management of living natural resources are applicable. BASA will be required to ensure that all final beneficiaries are informed on and have access to best practices for their respective activities, typically as defined by existing national or international sustainability standards. When there is no</p>	

existing standard, BASA will support the creation of a national standard, including the support of studies that contribute to the identification and demonstration of sustainable practices.	
ESPS-7. Indigenous Peoples	Yes
The Brazilian Amazon is home to numerous indigenous peoples and includes a large area of legally recognized indigenous lands (see Annex A below). The OR and ESMS will exclude the financing of activities with any adverse direct, indirect, or cumulative impacts on indigenous people. Nevertheless, BASA's due diligence processes will be required to identify any potential impacts on indigenous peoples, including their lands and natural and cultural resources. While a sociocultural analysis is not required, a culturally appropriate stakeholder engagement process should be implemented by BASA during Program execution. Free, Prior and Informed Consent will not be required for individual subprojects. The IDB's due diligence will evaluate the risk of exclusion of indigenous peoples and other vulnerable groups from Program benefits.	
ESPS-8. Cultural Heritage	Yes
BASA's ESMS will include screening for potential affectation of cultural heritage and will require beneficiaries to implement a simple chance finds procedure. Furthermore, the OR and ESMS will exclude the financing of activities involving the appropriation of cultural heritage, including the knowledge, innovations, or practices of traditional communities or indigenous people, for commercial purposes.	
ESPS-9. Gender Equality	Yes
The Program includes mechanisms to improve the access to bio-business credit and technical assistance for women and other diverse groups.	
ESPS-10. Stakeholder Engagement and Information Disclosure	Yes
This standard does not apply during preparation of FI operations or to final beneficiaries. However, the requirements for information disclosure and stakeholder participation by BASA during the preparation of the Program will be determined through dialogue between the Bank (including the Amazon Coordination Unit) and BASA.	
IDB Environmental and Social Due Diligence	
For co-financed operations, is a common approach with other lenders being considered?	Yes
The operation is being co-financed with funds from the Green Climate Fund (GCF) and requires the application of the GCF's environmental and social requirements. The operation is part of Amazon Bioeconomy Fund (FP173) which has a publicly disclosed and GCF-approved ESMF that is a binding document of the Funded Activity Agreement between IDB and GCF.	
Strategy for Due Diligence	
The table below summarizes the assessments or documents required during the preparation of the operation to complete gaps identified above, and/or completion before IDB Board Approval, as well as the timeline for the preparation of any studies in relation to the project preparation timeline.	

E&S Assessment requirement	Status of development	Estimated resources to finalize (specify Bank or Borrower cost)	Estimated timeline to finalize
Gap assessment of existing ESHS policy and assessment of institutional capacity.	In process	IDB transactional cost	Execution 2-3 months. Intended start: December 2023.
Environmental and Social Management System (ESMS) tailored to the particular needs of the operation.	The FI's existing ESMS lacks procedures for E&S monitoring and budget	To be updated by BASA with its own resources.	Execution: 2-3 month Intended start: January 2023.
Annexes			
Annex A.		E&S Maps	

Annex A. E&S Maps

Map 1. Brazilian Amazon Biome – Program Area – Green: Protected Areas; Blue-grey: Key Biodiversity Areas; Orange: Indigenous Lands.



INDEX OF SECTOR STUDIES

Studies	Date	References and Links
Pesquisa de mercado para o BASA: A bioeconomia da Amazônia (CONXSUS)	2022	Enlace Sharepoint
Bioeconomia da sociobiodiversidade no estado do Pará (BID)	2021	Enlace Sharepoint
Pereira, G., CNI. 2020. Bioeconomia e a indústria Brasileira.	2020	https://static.portaldaindustria.com.br/media/filer_public/cd/ed/cded4159-a4c5-474d-9182-dd901b317e1c/bioeconomia_e_a_industria_brasileira.pdf
Unlocking private capital by valuing bioeconomy products and services with climate mitigation and adaptation results in the Amazon: A feasibility study covering Bolivia, Brazil, Colombia, Ecuador, Guyana, Peru and Suriname.	2021	Enlace Sharepoint.
6 Peculiarities of Rural Credit in the Amazon	2021	https://www.climatepolicyinitiative.org/wp-content/uploads/2021/05/Insight-6-Peculiarities-of-Rural-Credit-in-the-Amazon.pdf
World Bank. 2020. Mobilizing Private Finance for Nature. World Bank, Washington, DC	2020	https://pubdocs.worldbank.org/en/916781601304630850/Finance-for-Nature-28-Sep-web-version.pdf
World Economic Forum (WEF), “The future of nature and business”, New Nature Economy II, 2020	2020	http://www3.weforum.org/docs/WEF_The_Future_Of_Nature_And_Business_2020.pdf
Rodríguez A. et al., Towards a sustainable bioeconomy in Latin America and the Caribbean: elements for a regional vision, 2019.	2019	https://repositorio.cepal.org/bitstream/handle/11362/44994/1/S1901014_en.pdf
Rodriguez A., La bioeconomía: oportunidades; y desafíos para el desarrollo rural, agrícola y agroindustrial en América Latina y el Caribe, 2017.	2017	http://repositorio.cepal.org/bitstream/handle/11362/42724/1/S1701068_es.pdf
Cruz, C.M. 2020. Bioeconomia permite ao brasil se tornar referência econômica mundial. Energia que fala com você.	2020	https://www.energiaquefalacomvoce.com.br/2020/09/01/bioeconomia-permite-ao-brasil-se-tornar-referencia-economica-mundial/
IDB, “Impact Investment for Biodiversity Conservation: Cases from Latin America and the Caribbean”, 2021.	2021	https://publications.iadb.org/publications/english/document/Impact-Investment-for-Biodiversity-Conservation-Cases-from-Latin-America-and-the-Caribbean.pdf

Studies	Date	References and Links
The Paulson Institute, "Financing Nature: Closing the Global Biodiversity Financing Gap - Paulson Institute", 2020.	2020	https://www.paulsoninstitute.org/wp-content/uploads/2020/09/FINANCING-NATURE_Full-Report_Final-Version_091520.pdf
IPCC (2019), Special Report on Climate Change, Desertification, Land Degradation, Sustainable Land Management, Food Security, and Greenhouse Gas Fluxes in Terrestrial Ecosystems: Summary for Policy Makers.	2019	https://www.ipcc.ch/srccl/
Diagnóstico do portfólio de operações de crédito, taxonomia sustentável e tagging do portfólio do Banco da Amazônia - BASA (SITAWI)	2022	Enlace Sharepoint
Línea de base de la cartera de bioeconomía de BASA para la línea GCF (CONEXSUS)	2022	Enlace Sharepoint
Proyección de la cartera de bioeconomía de BASA para la línea GCF (CONEXSUS)	2022	Enlace Sharepoint
Instrumentos financieros para la Bioeconomía en el Amazonas (CONEXSUS, IDB y LAB BR)	2022	Conexsus. A ser preparado
Marengo, J., Souza, C. 2018. Climate Change: impacts and scenarios for the Amazon. Sao Paulo: CEMADEN and Imazon.	2018	www.oamanhae hoje.com.br/eng/
Magrin, G., Marengo, J., Boulanger, J., Buckeridge, M., Casterllanos, E., Poveda, G., . . . Vicuña, S. 2014. Central and South America. In: Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part B: (V. Barros, C. Field, D. Dokken, M. Mastrandrea, K. Mach, T. Bilir, . . . L. White, Eds.)	2014	https://www.ipcc.ch/report/ar5/wg2/central-and-south-america/
Strassburg, BBN, Latawiec, AE, Barioni, LG, Nobre, CA, Vanderley P, et al. 2014. "When Enough Should be Enough: Improving the Use of Current Agricultural Lands Could Meet Production Demands and Spare Natural Habitats in Brazil." Global Environmental Change 28: 84–97.	2014	https://landportal.org/node/76521
ABIEC. 2017. Perfil da Pecuária no Brasil – Relatório Anual - Associação Brasileira das Indústrias Exportadoras de Carne.	2017	http://abiec.siteoficial.ws/images/upload/sumario-pt-010217.pdf
Alves Menezes, J., Confalonieri, U., Madureira, A.P. de Brito Duval, I., Barbosa dos Santos, R., Margonari, C. 2018. Mapping human vulnerability to climate change in the Brazilian Amazon: The construction of a municipal vulnerability index. PLOS ONE 13(2): e0190808.	2018	https://doi.org/10.1371/journal.pone.0190808

Studies	Date	References and Links
Arvor, D.; Daugeard, M.; Tritsch, I.; Mello-Thery, N.A.; Thery, H.; Dubreuil, V. 2015. Combining socioeconomic development with environmental governance in the Brazilian Amazon: the Mato Grosso agricultural frontier at a tipping point.	2015	https://link.springer.com/article/10.1007/s10668-016-9889-1
Assunção, J., Gandour, C., and Rocha, R. 2015. Deforestation slowdown in the Brazilian Amazon: prices or policies?	2015	Environment and Development Economics, 20(6), 697-722. https://climatepolicyinitiative.org/wp-content/uploads/2012/03/Deforestation-Slowdown-in-the-Brazilian-Amazon-Prices-or-Policies-Technical-Paper.pdf
Avdalov, N., Pereira, G., Josupeit, H., de Jesús, R., Mendoza Ramírez, D., Menezes, A.C., Perucho Gómez, E. y Ward, A. 2020. Estimaciones de pérdida de pescado – Brasil, Colombia y Perú.	2020	FAO, Circular de Pesca y Acuicultura https://www.fao.org/3/ca9525es/CA9525ES.pdf
Batista, A., A. Prado, C. Pontes, M. Matsumoto. 2017. “VERENA Investment Tool: Valuing Reforestation with Native Tree Species and Agroforestry Systems”.	2017	Technical Note. São Paulo, SP: World Resources Institute Brasil. https://www.wribrasil.org.br/sites/default/files/VERENA_technical_note_ENG.pdf
Carvalho, W., Mustin, K., Hilario, R. and Vasconcelos, I. 2019. Deforestation control in the Brazilian Amazon. Perspectives in Ecology and Conservation.	2019	Doi: 10.1016/j.pecon.2019.06.002 https://docs.ufpr.br/~jrgarcia/amazonia/Deforestation%20control%20in%20the%20Brazilian%20Amazon%20A%20conservation%20struggle%20being%20lost%20as%20agreements.pdf
Coelho, D. B., Zirlis, C., de Toledo, G. C., Tosi, N. V., and Fonseca, R. N. Cadeia Global de Valor Açaí.	2017	https://ri.espm.br/wp-content/uploads/2018/08/Setor-do-A%C3%A7a%C3%AD.pdf
Covre, J., Clemente, F., and Lirio, V. S. (2015). New Brazilian forest code: changes and prospects (No. 1008-2016-80333).	2015	http://ageconsearch.umn.edu/bitstream/183043/2/New_Brazilian_forest_code_final.pdf

Studies	Date	References and Links
Da Silva, P. E., Santos e Silva, C. M., Spyrides, M. H. C., Andrade, L. D. M. B. 2019. Precipitation and air temperature extremes in the Amazon and northeast Brazil.	2019	International Journal of Climatology, 39(2), 579-595. https://rmets.onlinelibrary.wiley.com/doi/abs/10.1002/joc.5829
Espinoza Villar, J. C., Ronchail, J., Guyot, J. L., Cochonneau, G., Naziano, F., Lavado, W., ... & Vauchel, P. 2009. Spatio-temporal rainfall variability in the Amazon basin countries (Brazil, Peru, Bolivia, Colombia, and Ecuador).	2009	International Journal of Climatology: A Journal of the Royal Meteorological Society, 29(11), 1574-1594 https://core.ac.uk/download/pdf/250077344.pdf
Kileen, T.J. 2020. Historical and Current Status of the Political Economy of the Pan Amazon: Drivers of Deforestation and other forms of Environmental Degradation.	2020	Abstracted from the unpublished manuscript: Perfect Storm in the Amazon Wilderness: Success and Failure in the fight to save an Ecosystem of Critical Importance to the Planet.
USAID. 2018. Climate Risk Profile: Amazon Basin.	2018	https://www.climatelinks.org/sites/default/files/asset/document/S.AmericaRegional_CRP_Final.pdf
Marengo et al. 2013 in Prüssmann J., Suárez C., Guevara O. and A. Vergara. Vulnerability and climate risk analysis of the Amazon biome and its protected areas. Amazon Vision, REDPARQUES, WWF, UICN, FAO, PNUMA. 48 pp. Cali, Colombia.	2013	https://wwfint.awsassets.panda.org/downloads/vulnerability_analysis_of_the_amazon_biome_and_its_protected_areas_2015_amazonvision.pdf
Rainforest Alliance, 2015. Transformando la producción forestal no maderable a pequeña escala en una empresa competitiva: Un estudio de caso del trabajo con asociaciones de castañeros.	2015	https://documen.site/download/transformando-la-produccion-forestal-no-maderable-a-pequea_pdf

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