

## GEF-8 PROJECT IDENTIFICATION FORM (PIF)

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#### **General Project Information**

#### Project Title

Empowering Indigenous Peoples and Local Communities (IPLCs) to manage biodiversity data and information as a strategy to conserve their territories, safeguard traditional knowledge, and promote integrated biodiversity management

Region	GEF Project ID
Brazil	11269
Country(ies)	Type of Project
Brazil	FSP
GEF Agency(ies):	GEF Agency ID
UNEP	01797
Executing Partner	Executing Partner Type
Ministry of Science, Technology and Innovation (MCTI)	Government
GEF Focal Area (s)	Submission Date
Biodiversity	4/12/2023
Project Sector (CCM Only)	

#### Project Sector (CCM Only)

#### Taxonomy

Supplementary Protocol to the CBD, Biodiversity, Focal Areas, Acess to Genetic Resources Benefit Sharing, Influencing models, Strengthen institutional capacity and decision-making, Demonstrate innovative approache, Convene multi-stakeholder alliances, Stakeholders, Civil Society, Non-Governmental Organization, Community Based Organization, Academia, Indigenous Peoples, Local Communities, Private Sector, Individuals/Entrepreneurs, SMEs, Species, Plant Genetic Resources, Animal Genetic Resources, Wildlife for Sustainable Development, Threatened Species, Biomes, Tropical Rain Forests, Grasslands, Protected Areas and Landscapes, Terrestrial Protected Areas, Community Based Natural Resource Mngt, Mainstreaming, Forestry - Including HCVF and REDD+, Forest, Amazon, Communications, Behavior change, Public Campaigns, Education, Awareness Raising, Type of Engagement, Participation, Information Dissemination, Consultation, Partnership, Gender Equality, Gender results areas, Participation and leadership, Access and control over natural resources, Capacity Development, Access to benefits and services, Knowledge Generation and Exchange, Gender Mainstreaming, Gender-sensitive indicators, Beneficiaries, Sexdisaggregated indicators, Capacity, Knowledge and Research, Knowledge Generation, Learning, Indicators to measure change, Theory of change, Adaptive management, Knowledge Exchange, Innovation

Type of Trust Fund	Project Duration (Months)
GET	48
GEF Project Grant: (a)	GEF Project Non-Grant: (b)
6,192,695.00	0.00
Agency Fee(s) Grant: (c)	Agency Fee(s) Non-Grant (d)
588,305.00	0.00
Total GEF Financing: (a+b+c+d)	Total Co-financing

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6,781,000.00	49,450,000.00
PPG Amount: (e)	PPG Agency Fee(s): (f)
200,000.00	19,000.00
PPG total amount: (e+f)	Total GEF Resources: (a+b+c+d+e+f)
219,000.00	7,000,000.00

**Project Tags** 

CBIT: No NGI: No SGP: No Innovation: No

#### **Project Summary**

Provide a brief summary description of the project, including: (i) what is the problem and issues to be addressed? (ii) what are the project objectives, and if the project is intended to be transformative, how will this be achieved? iii), how will this be achieved (approach to deliver on objectives), and (iv) what are the GEBs and/or adaptation benefits, and other key expected results. The purpose of the summary is to provide a short, coherent summary for readers. The explanation and justification of the project should be in section B "project description".(max. 250 words, approximately 1/2 page)

Anthropogenic transformations, unsustainable use of biodiversity and climate change threaten biodiversity and ecosystem integrity in the preserved Indigenous Peoples and Local Communities' (IPLCs) territories of the Brazilian Amazon and Cerrado biomes. Besides, the ever-growing use of genetic resources in the cosmetic, pharmaceutical and perfumery industries has not been accompanied by a robust system for tracking related traditional knowledge. The extent of biodiversity of importance in IPLC territories remains relatively unknown. This project seeks to strengthen IPLC capacity to effectively manage their territories and safeguard their traditional knowledge systems. IPLC-led biodiversity surveys will generate global environmental benefits by systematizing data and information on the use of species and strengthening their sustainable use and conservation. In this way, biodiversity monitoring and assessments will facilitate more systematic biodiversity management by IPLCs for clearer conservation outcomes. Proposed activities include co-designing data and information sharing protocols and building IPLC capacity to use innovative data sharing technologies and traceability tools. Proposed activities will be undertaken under the auspices of the Brazilian Biodiversity Information System (SiBBr) and will involve collaboration between three Ministries. This represents an innovative and pioneering effort to systematize IPLC scientific knowledge in favour of biodiversity conservation, and an opportunity to promote the long-term sustainability of GEF investments. This project will further empower IPLCs by generating the scientific and knowledge base for them to claim the fair and equitable sharing of benefits from the utilisation of genetic resources occurring in their biocultural territories while enhancing the management effectiveness of these protected areas.

**Indicative Project Overview** 

**Project Objective** 

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To strengthen the capacity of indigenous peoples and local communities (IPLCs) in the Amazon and Cerrado biomes to produce and manage biodiversity data and information as a strategy to effectively protect their territories, safeguard traditional knowledge, and promote integrated biodiversity management.

#### **Project Components**

## Component 1 Mutually agreed understanding and co-constructed strategies for biodiversity data collection and sharing.

Component Type	Trust Fund
Technical Assistance	GET
GEF Project Financing (\$)	Co-financing (\$)
2,116,722.00	16,902,481.00

Outcome:

#### Outcome 1.1

Gender differentiated strategies for data collection and governance of biodiversity in the Amazon and Cerrado under CARE and FAI principles[2]<sup>1</sup> have been agreed and protocols adopted by ILPCs and relevant stakeholders along all spheres of government

[2] CARE Principles to indigenous data governance and research include Collective benefit, Authority to control, Responsibility, and Ethics. FAIR Data Principles include Findable, Accessible, Interoperable and Reusable data.

Output:

#### **Output 1.1.1**

Selected IPLCs in the Amazon and Cerrado supported with training and technical assistance to define gender-sensitive strategies fo data collection by third parties, systematization of local knowledge and licensing using CARE and FAIR principles.

#### **Output 1.1.2**

IPLCs supported to define local protocols to enable data gathering by third parties, building on indigenous rights, gender considerations and CARE principles.

#### **Output 1.1.3**

Survey of women's activities related to biodiversity (management, data collection, knowledge management) carried out, supporting the development of specific protocols.

#### Component 2 Identification, integrated management, and sustainable use of biodiversity.

Component Type	Trust Fund
Investment	GET
GEF Project Financing (\$)	Co-financing (\$)
2,002,304.00	15,988,833.00
Outcome:	

Outcome 2.1

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#### Outcome 2.2

IPLCs strengthen capacities for the conservation and sustainable use of biodiversity.

Output:

#### **Output 2.1.1**

Participatory biodiversity survey and assessment protocols, with gender differentiation, defined by IPLCs in partnership with researchers.

#### **Output 2.1.2**

Capacities created for implementation of participatory biodiversity survey and assessment protocols, including for monitoring the environmental impacts of economic activities and infrastructure works.

#### **Output 2.1.3**

Participatory diagnoses of IPLC biodiversity conservation measures planned and/or implemented in line with management instruments (Environmental and Territorial Management Plans, Life Plans, Management Plans, Ethnomaps, etc.), to identify the use of threatened species, monitoring practices, species surveys, management and sustainable use, among other things.

#### **Output 2.2.1**

Species with potential for sustainable use and economic exploitation defined, and 3-6 plans for the management and sustainable use of those species prepared and/or implemented in target territories.

#### **Output 2.2.2**

At least 3 socio-biodiversity value /production chains strengthened for target species, including strategies listed by IPLCs to ensure sustainability and/or value addition (structuring, certification of origin, etc.).

#### **Output 2.2.3**

Development and implementation of sustainable use and conservation plans for threatened species with identified use.

# Component 3 Knowledge Management through information technologies. Component Type Investment GET GEF Project Financing (\$) 1,601,844.00 Trust Fund Co-financing (\$) 12,791,067.00

Outcome:

**Outcome 3.1** IPLCs, relevant stakeholders and the general public can access open data and information on biodiversity associated with IPLC culture and knowledge in the Brazilian Biodiversity Information System (SiBBr).

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#### Outcome 3.2

Stakeholders can access project information, data and results based on the terms of use associated with culture and knowledge established by IPLCs.

Output:

#### **Output 3.1.1**

Data collection and sharing tools developed under SiBBr.

#### **Output 3.1.2**

Biodiversity occurrence records from IPLC territories made available on SiBBr, with access restrictions for sensitive data.

#### **Output 3.1.3**

Portal with data and information on each target IPLC developed and available on SiBBr, with emphasis on activities carried out by women.

#### **Output 3.2.1**

Data policy and terms of use premised on CARE principles made available on SiBBr.

#### **Output 3.2.2**

Data use monitoring and traceability tools developed and made available on SiBBr.

#### **Output 3.2.3**

Georeferenced database developed based on secondary data on species currently used by IPLCs that have potential commercial us and/or associated chemical compounds.

#### **Output 3.2.4**

Communication plan designed, and experiences and formats for sharing data, information and traditional knowledge disseminated

#### **Output 3.2.5**

Information about the project systematized and produced in printed and audiovisual formats (booklets, videos, etc.) for distribution in target communities.

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176,935.00	1,412,857.00
GEF Project Financing (\$)	Co-financing (\$)
Technical Assistance	GET
Component Type	Trust Fund

Outcome:

Outcome 4. Project performance is kept on track to cost-effectively achieve expected results.

Output:

#### Output 4.1

Technical and financial oversight carried out by the Project Steering Committee.

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#### Output 4.2

Internal monitoring, reporting and review of lessons learnt used to inform project management.

#### Output 4.3

External evaluations used to improve project performance and sustainability.

#### **Component Balances**

Project Components	GEF Project Financing (\$)	Co-financing (\$)
Component 1 Mutually agreed understanding and co-constructed strategies for biodiversity data collection and sharing.	2,116,722.00	16,902,481.00
Component 2 Identification, integrated management, and sustainable use of biodiversity.	2,002,304.00	15,988,833.00
Component 3 Knowledge Management through information technologies.	1,601,844.00	12,791,067.00
M&E	176,935.00	1,412,857.00
Subtotal	5,897,805.00	47,095,238.00
Project Management Cost	294,890.00	2,354,762.00
Total Project Cost (\$)	6,192,695.00	49,450,000.00

Please provide justification

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#### **PROJECT OUTLINE**

#### A. PROJECT RATIONALE

Briefly describe the current situation: the global environmental problems and/or climate vulnerabilities that the project will address, the key elements of the system, and underlying drivers of environmental change in the project context, such as population growth, economic development, climate change, sociocultural and political factors, including conflicts, or technological changes. Describe the objective of the project, and the justification for it. (Approximately 3-5 pages) see guidance here

The Amazon basin encompasses the largest remaining rainforest and longest river system in the world. Thus, playing an essential role in balancing the global climate by capturing circa 25% of anthropogenic greenhouse gas emissions. The Amazon is home to an enormous diversity of species, with 14,543 species of flora and fungi catalogued by science, more than 11,000 tree species, and more than 3,000 species of fish. Yet, there is widespread consensus that the actual extent of Amazonian biodiversity remains largely unknown. The Amazon's biodiversity is expected to be much greater than the set of organisms already catalogued by science, most notably if microorganisms are considered. Hopkins (2019) estimates that floristic surveys and botanical research in the Brazilian Amazon are about 70 years behind other Brazilian biomes.

It follows that limited scientific knowledge of Brazil's Amazon biodiversity renders efforts to determine which species are endemic to Brazil and which are shared with other South American countries rather challenging. Clement et al. (2015) mapped the different centres of plant domestication distributed in the Amazon region. These species each have tens to hundreds of creole varieties dispersed in the region, many of them currently cultivated within and outside of the Amazon, which, in turn, leads to questions about the legal nature of ownership of these varieties and their associated traditional knowledge. Limited understanding and scientific registry of the 'use value' of specific species from the Brazilian Amazon, and how these relate to indigenous livelihoods and culture (including gender roles), also hinders the possibility of meaningfully engaging in bioprospecting activities and the eventual distribution of benefits derived from these activities. It also thwarts the definition of sustainable management strategies to conserve species (in particular if facing decline or threatened) that have spiritual, medicinal, nutritional, ecological and economic value for IPLCs.

In terms of drivers, over the past 20 years there has been an increase in intensity of dry periods in the Amazon basin. Drought and prolonged dry seasons, exacerbated by climate change, increase the frequency and intensity of man-made fires, and affect rainfall patterns, leading to increased savannization of the forest. Although indigenous territories in the Amazon have healthier forests and present lower degradation than areas without any conservation management regime, this tendency is proving difficult to maintain due to changes in the delimitation of indigenous lands, climate change, forest fires, deforestation pressures and other impacts from the livestock, oil and mining industries and hydroelectric projects. A further latent threat is the unwitting overexploitation by IPLCs of specific species of local and global significance that are not under sustainable management.

The Cerrado biome is a tropical savanna with great diversity of plants, including 13,979 catalogued species and more than 5,000 endemic species. The Cerrado covers 24% of the Brazilian territory and is the second largest biome in the country after the Amazon. The Cerrado contributes to the supply of large rivers such as the São Francisco, Amazonas and Araguaia rivers, accounts for 14% of Brazil's surface water production (Lima & Silva 2005) and is therefore of vital importance to the availability of surface and groundwater in the country.

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The Cerrado has very favourable environmental characteristics for the expansion of agricultural activities, which led to anthropic pressures relatively more intense than those observed in the Amazon. Currently, the most significant remnants of natural vegetation cover in the Cerrado are found in conservation units and Indigenous Lands.

The Amazon and Cerrado are adjoining Brazilian biomes. The so-called Cerrado-Amazon Transition (TCA in Portuguese) is the largest savannah-forest transition in the world. The TCA is a large and complex region, and its traditional linear representation proves inadequate for the recognition and conservation of biodiversity. Over 30 years of analyses, the TCA suffered more deforestation than the forests and savannas in each of the two biomes.

The last Census of the Brazilian Institute of Geography and Statistics (IBGE) in 2010 noted that Indigenous Lands represent 12.5% of the Brazilian territory; this corresponds to approximately 27% of the country's forest area. In terms of the population that self-identifies as indigenous peoples, there are 305 indigenous ethnic groups and 274 indigenous languages in Brazil (IBGE Census, 2010). The 9 states of the Brazilian Legal Amazon are home to 98,25% of the total area extension attributed to Indigenous Lands in Brazil; this translates into 424 territories out of total of 732 Indigenous Lands in Brazil, 115,344,445 hectares and 23% of the total Amazonian territory<sup>(3)2</sup>. There are an estimated 433,363 indigenous peoples in the Brazilian Legal Amazon (IBGE Census, 2010). The Cerrado, in turn, is home to about 216 Indigenous Lands. The indigenous territories in the project's intervention area are shown in Annex C. Protected Indigenous Lands represent 4.3% of the Cerrado biome, with a total area of 8,800 km² (Joly et. al 2019). The Cerrado indigenous population is of approximately 100,000 inhabitants from 83 different ethnic groups, including Ava-Canoeiro, Tapuia, Karajá, Krahô, Xavante, Xerente, Tapirapé, Carajá. The Cerrado is equally home to diverse local communities and traditional populations including quilombolas (communities of escaped afro-descendant slaves), geraizeiros, babassu coconut breakers, riverside dwellers, and evaded people.

The Amazon and Cerrado biomes are therefore socially and culturally diverse regions inclusive of a diversity of local and traditional indigenous knowledge systems. The use of species and natural resources for different purposes integrates a unique biocultural component of the peoples that inhabit each territory. Indigenous Peoples and Local Communities (IPLCs) in the Amazon and Cerrado harbour important traditional knowledge associated with local biodiversity in these biomes. Research in archaeology, botanical archaeology and historical ecology has shed light on the influence of sociocultural aspects in the formation of the Amazonian landscape. Contrary to well-established notions of 'virgin forests', Balée (1989) and Denevan (1992) have argued that much of the Amazon's biodiversity is the result of landscape management and genetic selection undertaken by indigenous peoples over the years (Balée, 1993, 1994, 2013; Clement et al., 2015; Clement, 2006; Levis et al., 2012; Posey 1985), thus resulting in 'cultural forests' or 'anthropogenic forests' (Balée, 1989; CLEMENT, 1999; Denevan, 1992, 2001, 2006; Erickson, 2006; Gómezpompa et al., 1987, 1990; Heckenberger et al. al., 2003; Janzen, 1998; Posey; Balée, 1989; Rival, 2006).

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However, from a scientific perspective, little is known about the biological diversity of Indigenous Lands, nor about the conservation status of species used by indigenous peoples. While there are records of the use and management of biological resources occurring in Indigenous Lands by indigenous peoples, almost nothing has been systematically quantified following specific methodologies. Indigenous Lands are largely known to contribute to the maintenance of significant extensions of native vegetation in the Amazon and Cerrado. Through their traditional ways of using and occupying their territories, IPLCs have significantly contributed to avoiding and combating deforestation, forest heritage preservation, and ecosystem service provision. Given the degree of forest conservation in Indigenous Lands, these territories are critical to the maintenance of carbon stocks and make a decisive contribution to climate change mitigation and adaptation strategies. Demarcated Indigenous Lands are estimated to store about 30% of the Amazon's carbon stock or 13 billion tons of carbon (IPAM, 2015).

At the same time, there are sporadic reports of resource depletion in Indigenous Lands that equally go largely undocumented. For example, reports on the use of the buriti palm tree (*Mauritia flexuosa*), used for multiple purposes (house roofs, baskets, logs, food, ceremonies, etc.) by numerous Cerrado indigenous peoples, that has become scarce within reserves, precisely due to exploitation without management or replacement of new individuals. In sum, despite there being mostly strong indications of the sustainable use of natural resources by indigenous peoples, the lack of biodiversity assessments in their territories remains an important gap.

Monitoring the use of species related to traditional knowledge is of fundamental importance to promote the rights and interests of IPLCs. The Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Derived from their use seeks to, among other things, recognize the traditional knowledge of communities. In Brazil, Law No. 13,123 of May 2015 regulates access to genetic heritage, protection, access to associated traditional knowledge and the sharing of benefits from the conservation and sustainable use of biodiversity. Besides, a vast body of research and innovation processes, mainly for medicinal and cosmetic purposes, depend on the use of wild species and associated traditional knowledge. On the side of industry and/or prospecting research, one of the first steps to enable the use of a species of interest is to verify its centre of origin and whether it is endemic to a given country. However, this information is not always available. The term "diffuse knowledge" is frequently used by the pharmaceutical and cosmetic industries; in this scenario, prospects for them to attribute knowledge to traditional populations remain very elusive. It follows that recognizing and supporting indigenous and local knowledge, and enabling monitoring and traceability of local data use are essential.

In addition, IPLCs have historically experienced racism from local residents, as well as conflicts with land grabbers, and institutional racism in accessing public policies and prioritizing the distribution of resources. There is also a lack of recognition of their own researchers and their own science and technology as valid forms of knowledge and knowledge management.

Without concerted and inclusive endeavours to enable IPLCs to produce and manage biodiversity data and information in their territories, efforts to maintain and conserve cultural and biological wealth at local and global levels will remain ineffective and inadequate. At the local level, systematically managing data and

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information on biodiversity species of interest to IPLCs can empower them to strengthen claims to the protection of their territories and traditional knowledge, and, where necessary, enhance sustainable management prospects. At the global level, these very efforts can enhance globally available scientific knowledge on the origin of species of interest and the different centres of plant domestication. Thus, clarifying the nature of ownership of these biological resources and the traditional knowledge associated with them, would limit the possibility of their unaccounted use by scientists and different industries operating at national and global levels.

Systematizing traditional knowledge on the use and management of natural resources, whether related to hunting, extractive activities, cultural practice, medicinal knowledge, or other uses of plants is of fundamental importance to ensure this knowledge can be protected and properly recognized, but also to enable society at large to incorporate conservation and sustainability considerations. Besides, it is important to establish a constructive dialogue with IPLCs on the ways to protect their knowledge and practices on biodiversity management and use, and how these can serve both developmental purposes and global conservation goals. These dialogues should discuss opportunities and methods to publicly recognize and give visibility to IPLC-produced information and knowledge, and the pertinence or not of sharing data and information. They may wish to maintain confidentiality on several aspects, or strategically disclose information when appropriate.

In this context, this project intends to pursue the following outcomes in Amazon and Cerrado IPLC target territories: co-create strategies for biodiversity data collection and data sharing; promote the identification, integrated management, conservation and sustainable use of biodiversity; and manage and disseminate the knowledge generated by the project by using information technology and information systems.

On the one hand, barriers to achieving these outcomes include the following:

- Barrier 1: non-participation of IPLCs in the integrated management of and decision-making on biodiversity conservation. Despite their important roles in biodiversity conservation and management of globally significant areas, IPLCs do not participate in project design/execution/evaluation. This is in part explained by limitations in access to administrative management and IT skills and to language barriers, and partly explained by the coloniality of knowledge[4]³, which may prevent democratic decision-making with proponents of internationally funded projects. IPLCs are rarely contemplated in science-based efforts to manage drivers of biodiversity loss in an integrated manner, plus their own conservation efforts tend to go unnoticed, nor have they been included in institutional efforts to systematically quantify, monitor, and conserve biodiversity led by government, academia, and private actors.
- Barrier 2: information gaps on the status of biodiversity in IPLC territories weaken territorial
  management and its conservation and sustainable use. Despite extensive IPLC knowledge about the
  environment and its associated biodiversity, especially about the resources they have historically used
  for their subsistence and spiritual practices, little knowledge has been formally captured or
  systematized about biodiversity in these territories. There is no set of information that is sufficiently

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dense and available to support assessments on availability, intensity of use, need for management and state of conservation in indigenous territories. The remoteness of Indigenous Lands, especially in the Amazon basin, further corroborates with these information gaps.

• Barrier 3: lack of access to available technologies that can enable sovereignty, data management and safeguarding of traditional knowledge. IPLCs seldom have access to culturally appropriate and cost-effective technologies to monitor and manage biodiversity, which may weaken prospects to safeguard the integrity of their territory and their traditional knowledge. Besides, acceding to virtual information systems and biodiversity may not be a readily available option from remote IPLC territories. Unequal access to modern technologies limits their ability to monitor their biocultural territories and to detect and denounce threats and attacks to them. The lack of access to technology is a barrier to ensuring the use of IT tools and improving participatory and management processes.

On the other hand, the project hopes to build on strategic enablers to address these barriers and achieve proposed outcomes. These include strategies and methodologies to strengthen scientific and traditional knowledge and promote their intersection. Intercultural dialogue and research have the potential to generate strategies for the protection of traditional knowledge, biodiversity conservation, participatory monitoring, self-determined data management, environmental management, and sustainability of agrobiodiversity management. Moreover, project preparation and implementation will build upon CARE and FAIR principles. CARE Principles to indigenous data governance and research include Collective benefit, Authority to control, Responsibility, and Ethics, as well as the consideration of gender roles. FAIR Data Principles include Findable, Accessible, Interoperable and Reusable data. Strategic partnerships with IPLC-led and centred grass-roots institutions and relevant government and scientific institutions will be key to overcome existing barriers and promote a rights-based approach premised on local ownership and priorities.

Furthermore, there is a **baseline of previous policies and interventions** that equally act as key enablers to addressing barriers at stake and delivering on the proposed vision. One of the project's main proposed ideas is that IPLCs are involved in monitoring activities in the Brazilian Biodiversity Information System (SiBBr), whose initial design efforts were financed by a UNEP-implemented GEF-project completed in 2021. The SiBBr is coordinated by the Ministry of Science, Technology and Innovation (MCTI) as the country's central platform for advancing knowledge about biodiversity. SiBBr is a technological infrastructure and services tool aimed at organizing, indexing, storing and making available data and information on Brazilian biodiversity and ecosystems. Information such as distribution, taxonomic classification, and degree of threat is available for more than 168,000 species recognized in Brazil. The SiBBr has seen a number of recent successes that explain its strategic relevance and stability as a national tool:

- ✓ Aichi Target 19 was one of the few evaluated as achieved in Brazil, using records available on SiBBr.
- ✓ The platform currently has more than 24 million occurrence records, and continues to show increases in data publication and access, with around 320,000 users per year and more than 470,000 accesses.
- ✓ A cooperation agreement recently signed between the National Education and Research Network (RNP) and the Renova Foundation aims to improve SiBBr's standardization, publication and data repository.
- ✓ A partnership between SiBBr and the Brazilian Institute of Geography and Statistics is assessing Brazil's biodiversity data coverage and carrying out studies related to environmental accounting.

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The SiBBr is operated by the National Teaching and Research Network (RNP), which is also tasked with developing tools and services aimed at meeting new demands, such as, for example, enabling the tracking and control of information use and access to species names in indigenous languages. The SiBBr is already a reference[5]<sup>4</sup> for industry sectors that work in bioprospecting. It is proposed that the SiBBr acts as this project's knowledge repository and tool to ensure that information collected by the project can, with IPLC support, enter the public domain. To this end, the MCTI and its associated institutions contribute a set of fundamental tools, experiences and lessons learned, as well as ongoing initiatives that can support or complement local activities, such as those targeting the bioeconomy and the strengthening of production chains. Synergies with policies and programmes aimed at food sovereignty and nutritional security are also envisaged.

The largest biodiversity research network in Brazil, the Biodiversity Research Program (PPBio), offers more than 15 years of experience in field work in the Amazon and Cerrado and will play a key role in field-based activities for surveying and monitoring biodiversity. The PPBio brings together specialists from various areas of biology and ecology, and is a key user of the SiBBr. There are also a number of research institutes associated with the MCTI, namely, the National Institute for Research in the Amazon (INPA), the Museu Paraense Emílio Goeldi (MPEG), the Instituto de Desenvolvimento Sustentável Mamirauá (IDSM), plus a series of regional universities that partner with these institutes, that are already working with IPLCs and will act as local interlocutors for the project. In addition to making up the SiBBr Management Committee, these institutes (IDSM, INPA and MPEG), together with their research partners, are currently engaged in projects in indigenous lands and conservation units and can contribute not only knowledge, practices, specialized human resources, coordination and logistics to the project, but also relationship building with indigenous communities. Through them, target IPLCs will have access to cutting-edge scientific knowledge about biology and ecology and will be able to interact with, and input into, intercultural research, in line with territorial needs and ongoing collaborative initiatives aimed at strengthening productive/value chains, monitoring biodiversity, achieving food security and sovereignty, researching links between biodiversity and nutrition (as with the edible fungi of the Yanomami people), protecting indigenous languages, studying climate and environmental changes, training riverside and indigenous researchers to assess the impacts of major works (as with the Belo Monte Hydroelectric Plant, Xingu River), and promoting good governance and management practices for sustainable fishing, among other actions.

Moreover, this project also hopes to build on the experience and lessons learnt from initiatives in the Upper Negro River River and Middle Xingu River on local and participatory monitoring, and collaborative research with the view of transposing them to other regions in the Amazon and Cerrado. Relevant experiences include installation of permanent plots and technological instruments for community measurement of fauna and flora, daily or monthly recording of environmental dynamics and fish populations, and translation of data collection protocols on biodiversity to indigenous languages. There are 15 years of collaborative research in the Upper Rio Negro led by the Federation of Indigenous Organizations of the Upper Rio Negro (Foirn), in partnership with the Instituto Socioambiental (ISA) and more recently with other organizations such as the INPA. These efforts have impacted the design of local Territorial and Environmental Management Plans in indigenous lands. On the Middle Xingu River, since 2013, ISA and the Federal Public Ministry in the State of

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Pará (MPF-PA) have initiated independent biodiversity monitoring efforts in indigenous territories in Pará, with collaboration from the Federal University of Pará (UFPA).

The main objective of this project is to strengthen IPLC capacity to produce and manage biodiversity data and information as a strategy to effectively protect their territories, safeguard traditional and local knowledge, and promote integrated biodiversity management for conservation. To this end, an accurate assessment of demands, resource availability, fluctuations in wild populations, sustainability of hunting and extractive activities, will be undertaken under the guidance of IPLCs in targeted territories to map out challenges and opportunities and identify sustainable management strategies. The project's vision is that the data, information, and knowledge collected and systematized are made publicly available in the SiBBr, observing FAIR and CARE principles, and become useful for conservation purposes and empowering IPLCs to better manage their territories, livelihoods and biodiversity of global significance to which they are stewards. This work is also relevant for emerging zoonoses monitoring, to which Amazonian indigenous groups are particularly vulnerable, in view of the enormous diversity of microorganisms in the Amazon rainforest. Alignment with country priorities and the description of stakeholders that will be mobilized to deliver on this vision can be seen in the sections below.

Central to this, will be a commitment to enable IPLCs to choose how and if they want their knowledge, information, and data to be assessed and made publicly available. Empowering women and youth will equally be a cross-cutting imperative across project activities and will be especially relevant in Components 1 and 2. In view of external threats to biodiversity and ecosystems in IPLC territories and the fragility of systems to safeguard traditional knowledge, it will be extremely important to support existing IPLC governance systems in their territories, follow ethical standards, and promote the active observance of indigenous rights as established by the Brazilian Constitution and the international agreements and conventions to which Brazil is a signatory. Access to information technology tools and training in the use of these technologies will be a central feature of the project and a key exit strategy for the durability of proposed results. The most used species in target territories, especially when threatened, will receive particular attention with the development in conjunction with IPLCs of management plans. Emphasis will be placed on creating biodiversity monitoring protocols and capacities that are gender-responsive, meet conservation and territorial management needs and fill critical biodiversity information gaps, while protecting associated traditional knowledge.

[3] Instituto Socioambiental, Povos Indígenas do Brasil, <a href="https://pib.socioambiental.org/pt/P%C3%A1gina\_principal">https://pib.socioambiental.org/pt/P%C3%A1gina\_principal</a>

[4] This refers to the tendency to disregard traditional indigenous knowledge as a valid form of knowledge.

[5] https://abifisa.org.br/protocolo-de-nagoya-impactos-para-a-industria/

#### **B. PROJECT DESCRIPTION**

#### **Project description**

This section asks for a theory of change as part of a joined-up description of the project as a whole. The project description is expected to cover the key elements of good project design in an integrated way. It is also expected to meet the GEF's policy requirements on gender, stakeholders, private sector, and knowledge management and learning (see section D). This section

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should be a narrative that reads like a joined-up story and not independent elements that answer the guiding questions contained in the PIF guidance document. (Approximately 3-5 pages) see guidance here

The **project's intervention logic and theory of change** are guided by the 'drivers', 'assumptions', and 'logical pathways' needed to achieve its ultimate objective: to strengthen the capacity of indigenous peoples and local communities (IPLCs) in the Amazon and Cerrado biomes to produce and manage biodiversity data and information as a strategy to effectively protect their territories, safeguard traditional knowledge, and promote integrated biodiversity management, and consequently deliver on anticipated global environmental benefits. The key drivers are those activities and processes that the project can potentially and directly sponsor (inputs), in support of project outputs and outcomes, while the assumptions are those conditions and circumstances that are necessary to achieve the desired project results but are outside the control of the project. The logical or impact pathways are the set of steps, consisting of activities, processes and assumptions that will collectively deliver the desired project objective (see TOC diagram in Figure 1).

The project's proposed interventions/activities (drivers) build on the baseline conditions, which already exist and aim to respond to identified barriers described in Section A above. Proposed interventions further seek to drive those additional steps and processes required to achieve further incremental results. The project's intervention logic also capitalizes on the enabling environment provided by the Brazilian Constitution's provisions on indigenous peoples rights, the Brazilian Biodiversity Information System (SiBBr), and commitments of the Government of Brazil with respect to various international conventions and agreements, most notably the Convention on Biological Diversity, the ILO Convention 169 on Indigenous and Tribal Peoples' Rights, and the UN Declaration on the Rights of Indigenous Peoples.

#### Primary *drivers* include:

- Concerted capacity building efforts to empower IPLCs to manage scientific data and traditional knowledge in a culturally appropriate manner that privileges women and youth.
- Biodiversity data collection, monitoring, conservation, and sustainable use activities are focused on
  effectively promoting the nexus between traditional and scientific knowledge to support research and
  enhance conservation outcomes in IPLC territories through gender-responsive approaches.

#### The project's key <u>assumptions</u> are:

- a) **Outputs to Outcomes:** Drivers of change supported by the project create enabling conditions for access and use of biodiversity data and associated traditional knowledge, and are effective in delivering anticipated outcomes as indispensable inputs to reaching necessary intermediate states.
- b) Outcomes to Intermediate States: Data to assess the conservation status of biodiversity in IPLC territories is effectively collected, and can be placed in the public domain, while traditional knowledge and use systems are mapped (including the use and management of indigenous species in indigenous territories with emphasis on activities carried out by women) in ways that favour IPLCs and biodiversity.

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c) Intermediate States to Impact/GEBs: The incorporation into the SiBBr of indigenous knowledge and species data, strengthens in-situ conservation processes, research, management effectiveness of indigenous territories and accrual of benefits from the use of genetic resources.

The project's logical pathways are summarized below:

**Pathway 1**: This logical pathway sets a route to arrive at an agreed 'framework for action' under which biodiversity data and information can be purposefully and strategically managed. It proposes that if mutually agreed understanding and co-constructed strategies for collecting and sharing biodiversity data are established with IPLCs in target territories through the observance of approaches based on governance, data use terms—and multi-level and inclusive decision-making processes, then effective bridges between traditional and scientific knowledge will be built, leading to innovations in data management, research and knowledge management.

**Pathway 2:** This pathway advocates that if the assessment of biodiversity in indigenous territories is successfully carried out (including the recognition of traditional knowledge systems, the traditional use of species and uptake of scientific approaches), then biodiversity-based livelihoods and *in situ* conservation and sustainable management of IPLCs territories will be improved and the use of social technologies promoted.

**Pathway 3:** This pathway proposes that if the knowledge, data and information collected by this project is duly captured and made publicly available in the Brazilian Biodiversity Information System (SiBBr), with dedicated webpages for indigenous knowledge curated by IPLCs, a huge contribution to promoting traditional knowledge and adequate sharing of benefits from the use of genetic resources will have been made as well as the foundations for replicability of project methods and sustainability of project results laid out.

The project's main strategy is anchored in the recognition of local knowledge systems, the strategic use and management of biodiversity data and the effective promotion of the nexus between traditional and scientific knowledge for the conservation of biodiversity and other GEBs in indigenous lands. The following aspects support the option for this strategy:

- 1. Data collection and information gaps: Indigenous lands occupy 13% of the Brazilian territory and more than 20% of the Legal Amazon. However, information on the status of biodiversity in these territories is based on satellite images, since there are virtually no species occurrence records in national or global databases. Information gaps make it impossible to prepare species management plans, for either conservation or sustainable use, and recognize areas of high biodiversity significance (such as Key Biodiversity Areas) for further support. Despite sustainable management of indigenous territories by indigenous peoples, recent changes in land use and dynamics (including the isolation and reduction in size of indigenous lands, climate change and the increasing incidence of fires) are affecting the population dynamics of many species on indigenous lands and increasing threats in areas around indigenous lands. Thus, species use under these conditions, can have negative impacts on their populations (eg. the buriti case, above). As such, biodiversity diagnoses and monitoring are strategic to enable IPLCs to continue using specific species in the future, based on data-informed plans for their use and conservation.
- 2. **Knowledge nexus:** Combining traditional knowledge with scientific knowledge is an innovation as much for obtaining data and evaluating population parameters, as for establishing strategies for the sustainable use and management of species.

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- 3. **Use of technology:** The publication of IPLC practices and knowledge through the use of IT tools can enable the information to be made available with restrictions and owner control (i.e. terms of use), and can assist in preserving and valuing this knowledge across society at large.
- 4. Safeguarding traditional knowledge associated with biodiversity: Despite a legal framework in place on genetic heritage and benefit sharing, there are several cases of intellectual property that have ignored underlying traditional knowledge. Conversely, bioprospecting companies that are interested in carrying out benefit-sharing processes correctly, find it difficult to obtain information about the distribution or center of origin of a species, compromising the possibility of benefit-sharing in relation to traditional knowledge. Constructing a database with information on the origin and occurrence in indigenous territories of species used in medicine, cosmetics, etc., and associated chemical compounds, with traceability functions, access control and defined terms of use, is an innovative strategy to safeguard traditional knowledge, yet making it accessible, so as to reconcile FAIR and CARE principles.

To achieve this, the project is structured as three Components, with interconnected outputs that mutually support intended results, as follows. While there will be specific commentary on stakeholders expected to be mobilized under each output, it is important to note that under the leadership of the Ministry of Science, Technology and Innovation (MCTI), the custodian of the SiBBr, a consortium of partners including the newly created Ministry of Indigenous Peoples (MPI) and the Ministry of Environment and Climate Change (MMA) has been formed and started exchanging on the scope and intended impact of activities. This consortium has defined an initial strategy and set of criteria, laid out in Annex C, to orient the process of determining the exact areas where project interventions will take place. A key criterium to determine which IPLCs and territories to work with, will be the interest expressed by IPLCs in studying biodiversity, sharing their knowledge and using this information for management and development purposes. The MCTI-MPI-MMA consortium will continue to guide the design of project activities while mobilizing their programmes and networks for project success. Further investigation on additional contributions from these Ministries will also be established during PPG.

## <u>Component 1: Mutually agreed understanding and co-constructed strategies for biodiversity data collection and sharing.</u>

Component 1 will define the terms of engagement between project parties – IPLCs, researchers, scientific institutions, the project management unit, IPLC-led organizations, and other partner organizations; establish conditions for data gathering by third parties; define the preferred approach to data management; identify existing local governance structures upon which the project will build; and generate consensus on project implementation strategies. Prior and informed consent from IPLCs, observance of local contexts and self-determination, and the consideration of gender roles will be central principles underpinning proposed activities. Strategies to ensure the specific roles and needs of women are highlighted, and to maximize opportunities for women to build capacity, accede to technology, and benefit from the overall project approach, will equally be pursued.

Outcome 1.1: Gender differentiated strategies for data collection and governance of biodiversity in the Amazon and Cerrado under CARE and FAIR principles [6] have been agreed and protocols adopted by ILPCs and relevant stakeholders along all spheres of government

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This Outcome will establish the foundations of participation and data sovereignty principles. IPLC capacity will be built for data production and management, intellectual property and relationship to traditional knowledge and benefit sharing, data use licenses, CARE and FAIR principles, participatory monitoring, data portals, traceability tools and terms of use of data, strengthening of traditional knowledge systems as a way to strengthen governance and knowledge management. Target audiences will also receive training on biodiversity information systems, protection of traditional knowledge, and benefit sharing. This Outcome will support the definition of gender-sensitive local strategies for data collection by third parties through participatory approaches. In addition, this Outcome will support the establishment of IPLC priorities for local knowledge sharing, thus capturing their demand on which species/ data are of importance for sharing and for what purposes, if there is interest in making species names available in local languages, and other cultural aspects. A focus will be given to activities carried out by women in each community, and their relationship to the use and monitoring of biodiversity. The information technology infrastructure will also be evaluated, such as the use and existence of cell phones, computers and internet network availability, to determine the specific challenges and demands of each people/community involved and how best to address them considering project scope and resources.

Finally, protocols and metadata related to the use of data and information will be generated, including clear definitions of how each community wants to be portrayed, traditional knowledge, images and cultural aspects to be eventually made publicly available in the Brazilian Biodiversity Information System (SiBBr – see Component 3 below) openly or with use restrictions. Formal consultations and negotiations with communities will be initiated during the project preparation phase (PPG) under the principles of Free, Prior Informed Consent (FPIC) and Mutually Agreed Terms (MAT). Existing governance mechanisms and tools will be mobilized to facilitate meaningful participation and ownership of project activities, support the delivery and evaluation of project results, and to promote long-term sustainability of actions. Involving IPLC-led organizations active at the local/ grass-roots level will serve to secure IPLC access to learning, meaningful engagement, and sustainability of results over time.

#### Component 2: Identification, integrated management, and sustainable use of biodiversity.

Following from Component 1, which essentially sets the parameters for action, Component 2 focuses on the assessment, conservation status and sustainable use of biodiversity by IPLCs themselves, including a dedicated focus on species conservation to benefit the livelihoods of target IPLCs. Instruments such as Environmental and Territorial Management Plans, Life Plans, Management Plans, and Ethnomaps, will provide a basis for IPLC conservation measures and planning, while fresh biodiversity data will also inform these instruments, where needed. Having such instruments in place is one of the criteria suggested for the selection of IPLC sites (see Annex C). Anticipating that a number of species are used by IPLCs for food nutrition or for their economic value, and that threatened species are also found in indigenous territories, a reference list of 165 plant species that occur and are subject to use in indigenous territories of the Amazon and Cerrado biomes was prepared (see Annex G). This list was obtained from crossing the threat list (Portaria MMA Nº 148, of June 2022)[7]<sup>5</sup>

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with the socio-biodiversity list (Portaria Interministerial MAPA/MMA Nº10, of July 2021)[8]<sup>6</sup> with the species listed in the book[9]<sup>7</sup> "Species native to Brazilian flora of current economic value or potential: plans for the future: North Region. Brasília, DF: MMA, 2022", in addition to SIBBr records for occurrence of these species in the project macro-regions. This list, which comprises food species and other uses, combined with information on threats, will be used as a reference for the preparation of diagnoses and plans for management and sustainable use in this Component.

IPLCs, researchers, scientific institutions, relevant government institutions (Ministries of Science, Technology and Innovation; Ministry of Indigenous Peoples – including the National Foundation of Indigenous Peoples - and the Ministry of Environment and Climate Change), IPLC-led and other civil society organizations, will continue to be mobilized alongside social entrepreneurs involved in the dissemination of cost-effective technologies and promotion of the bioeconomy. The leadership of traditional and IPLC researchers, and appropriate spaces for women and youth, will be promoted as a conduit for the success of proposed activities. Besides, the Ministry of Science's experience with the design and management of the SiBBr and its capacity to mobilize its network of regional research institutes will be equally invaluable.

## Outcome 2.1: IPLCs use traditional and scientific knowledge for biodiversity identification and assessment in indigenous territories

Under this outcome, participatory monitoring, and fauna and flora monitoring protocols will be defined and implemented by IPLCs, in partnership with researchers and taking into account gender roles in the assessment of biodiversity. Capacities for biodiversity monitoring will be created for those IPLCs interested in harnessing and using biodiversity data from their territories (indigenous lands or conservation units). Existing local management instruments (Territorial and Environmental Management Plans, Life Plans, etc.) currently under implementation or revision, offer an important framework for working with IPLCs in line with their needs and priorities, and will be key for incorporating issues pertaining to biodiversity conservation and sustainable use, as needed and informed by biodiversity monitoring. For this, a diagnosis is first needed for a clearer understanding of how (and if) biodiversity conservation is addressed in these instruments, and what current practice consists of (for biodiversity monitoring, management, sustainable use, etc.). Intercultural dialogue will be a conduit for building on traditional knowledge and biodiversity management practices and introducing scientific methods and information technology tools (i.e.: data recording mobile apps) for biodiversity data collection and field monitoring. Consensus on how and when to privilege different methods will be established locally by each IPLC group contemplated by the project. The promotion of this nexus between IPLC traditional knowledge and scientific knowledge is expected to give rise to innovations in research and the use of technologies, thus strengthening practices to protect and sustainably manage biodiversity. Research grants will be offered to facilitate field work through programs that have a curated focus on the involvement of women and youth. IPLCs will also be trained as curators of the SiBBR digital platform. It is expected that IPLCs will bring demands related to biodiversity monitoring for different purposes, such as to: legitimize the sustainability of their own hunting and agroforestry activities, orient sustainable use and management plans for specific species (especially those facing decline), provide relevant data and information to compose territorial management plans, and inform inter-scientific dialogues on the impacts of major infrastructure

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works, economic activities and/or other biodiversity projects in their territories. The project will equally seek to promote the future replication of these efforts by capturing methods and lessons learnt through Component 3.

#### Outcome 2.2: IPLCs strengthen capacities for the conservation and sustainable use of biodiversity.

This Outcome will directly contemplate the sustainable use and management of species of interest identified by IPLCs in Component 1 and implementation of management plans in target territories. During the PPG phase, a feasibility assessment will be undertaken to identify a few pilot investments in which GEF funds could strengthen value chains or production chains for strategic species defined by IPLCs and enhance community benefits. These projects could be related to the ABS agenda or to sustainable production and the bioeconomy more broadly. With the definition of the target species in the territories, and considering local governance and priorities, engagement with the private sector could be articulated for support and valuation of productive local chains and use of social technologies.

In the Brazilian Amazon and the Cerrado, there is experience with initiatives that prove that the strengthening of socio-biodiversity value chains results in improved livelihoods and greater environmental and territorial governance and, consequently, in greater conservation of biodiversity. Once a species enters into a community production scheme, local and legal mechanisms of territorial protection are activated by the IPLCs. Two positive examples of this socio-environmental dynamic are the collection of Brazil nuts (Betholletia excelsa) in the Kayapó Indigenous Land, and the collection of babassu coconuts (Attalea speciosa) in the Extractive Reserves of Terra do Meio (Xingu), among others. These productive processes tend to be inserted within landscape management dynamics, which in some cases are millenary, through systems of knowledge, practices, innovations and traditional/indigenous technologies that use, interact, restore and even (re)create (agro) biodiversity and have ecosystem-wide impacts. Support for socio-biodiversity production /value chains under this Outcome will be based on Brazil's experience, accumulated over more than a decade, under the National Plan for the Promotion of Socio-biodiversity Product Chains (enacted in 2009). The selected cases should occur in territories and with communities where clear biodiversity benefits can be had from the sustainable use of specific species, and where it is possible to verify the following: (i) land regularization, (ii) local experience in the production process, (iii) some level of infrastructure to support production and commercialization, (iv) some level of local technical capacity and social organization, (v) existing or nascent interfaces with research, and (vi) potential for generating income and local jobs. In addition, Law 13,123/2015 regulates all access to genetic heritage and traditional knowledge associated with genetic heritage, which confers legal certainty to the development of bioeconomic activities of this nature.

#### Component 3: Knowledge management through information technologies.

Component 3 will ensure the knowledge mobilized by the project is catalogued and made available in SiBBR. Thus, generating a solid and verifiable basis for IPLCs to claim ownership of their local and traditional knowledge, and ensuring IPLC knowledge is part of this national information system. The integration of IPLC knowledge in SiBBR is unprecedented and constitutes therefore a necessary innovation. Stakeholders mobilized under Components 1 and 2 will equally be of importance under Component 3. The data to be managed under this Component has the potential to influence and shape intercultural research programmes

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on biodiversity and environmental change led by Institutes of Science and Technology (ICTs), Research Institutes, public Universities and Teaching Institutions. Overall, greater biodiversity data availability is also relevant for updating or designating Key Biodiversity Areas that coincide with IPLC territories in Amazon and Cerrado.

## Outcome 3.1: IPLCs, relevant stakeholders and the general public can access open data and information on biodiversity associated with IPLC culture and knowledge in the Brazilian Biodiversity Information System (SiBBr).

Based on the protocols negotiated in Component 1, data and information collected in Component 2 will be made openly available in SiBBR, filling information gaps on biodiversity data. Based on interest and prior consent, there will be a biocultural page dedicated to each IPLC group, highlighting particular aspects and activities carried out by women. The species names in indigenous language will be added on the SiBBr pages along with the scientific name and common name. Besides, IPLCs will have benefited from training on rights-based approaches to data governance to ensure they are empowered to navigate and use SiBBR to their benefit.

## Outcome 3.2 Stakeholders can access project information, data and results based on the terms of use associated with culture and knowledge established by IPLCs.

A database will be developed from primary and secondary information on the use of biodiversity species, in addition to the integration of existing databases. This will present information on the origin of the associated traditional knowledge, where it will be possible to verify what type of natural product, genetic resource or traditional knowledge may be involved in the act of formulating a final product or object of patent. Information displayed on selected species will include general information about their chemical compounds, range and overlap with IPLC territories. Access to this database will be associated with a clear data policy and terms of use, as well as tracking and monitoring tools for data access and use. On the one hand, researchers and the industry sector that prospects for biodiversity assets will have clear information about the origin of a given species and whether it is associated with traditional knowledge. On the other hand, IPLCs will have a guarantee that the users of the database will be committed to the restrictions imposed from the terms of use and protocols discussed in Component 1. This database associated with the tools and services for tracking usage should support benefit-sharing processes in an innovative way. Finally, this Outcome will promote replication and uptake of project methods and lessons learnt to promote sustainability of results over-time. Dedicated knowledge-products and communication tools will be contemplated, dissemination with broader audiences and IPLCs beyond direct areas of project intervention, both at local and national levels, will be sought as part of project efforts to generate social and technological learning. Using the SiBBR IPLC pages to this end will already contribute to the project's exit strategy. Technical exchanges will be promoted between local experiences and public policies, innovation policies, and international forums (especially the Amazon Cooperation Treaty Organization (ACTO).

In this proposed context, **global environmental benefits** are expected from the improved management of at least 1,500,000 ha of IPLC-managed territories of high biodiversity value. Thus, leading to the conservation of globally significant biodiversity; the strengthening of cultures and systems of traditional ecological knowledge; the sustainable use of the components of globally significant biodiversity identified as species of interest by

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IPLCs; and to the fair and equitable sharing of the benefits arising from the utilization of genetic resources, including by appropriate access to genetic resources. Enhanced scientific knowledge about Amazonian and Cerrado biodiversity is expected to be achieved by the project. The much-needed acceleration in the production of this type of scientific knowledge, especially in the case of the Amazon, can only be achieved through effective collaboration of indigenous peoples, and local communities, the profound connoisseurs of the "secrets" of the forest (SBPC, 2007). A viable sustainable economy in the Amazon region that keeps the forest standing has been described as having three central elements: biological resources, traditional knowledge and scientific knowledge (Cunha, 2015). This project will lay out the foundations to strengthen these three pillars. In this regard, the combining of indigenous and scientific knowledge and practices to inform conservation actions, management decisions and biodiversity assessments is expected to work in favour of different sectors (IPLCs, government, research and development, private companies), making this project cost-effective in achieving lasting global environmental benefits. This innovative approach promises to deliver methodological gains, learning for improved land management and IPLC sovereignty, and multiple tools within the SiBBr to enable safe, reliable and traceable access to traditional knowledge and biodiversity information, following FPIC and MAT. Some of the project's expected global environmental benefits are:

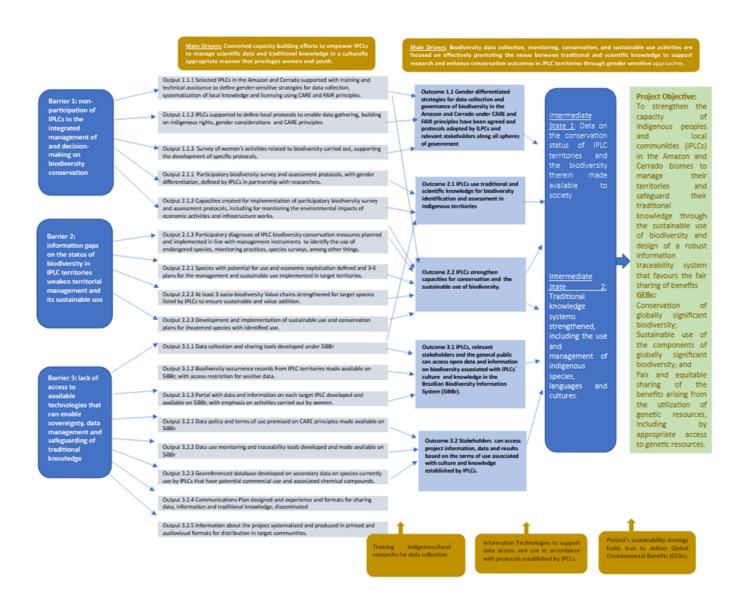
- Management and sustainable use plans for species used in indigenous territories (including species on the MMA Threatened List and globally significant species), enabling local and community conservation of threatened species and ecosystems;
- Sustainable management of agrobiodiversity and fisheries, and maintenance of traditional agricultural practices and knowledge systems;
- Coalitions at local, regional, national or global levels to better interpret discussions on biodiversity and its threats, based on IPLC knowledge, and negotiate strategies for new or ongoing public policies and programs;
- Strategic information (such as center of origin or traditional knowledge associated with key species), accessible
  from within Brazil and abroad, to facilitate ABS processes and implementation of the Nagoya Protocol for
  sectors of the bioprospecting industry.
- Support for productive activities with low carbon emissions within IPLC territories.

Substantial risks to the project are related to: (1) policy and governance and (2) Stakeholder Engagement. In the first case, the risk presented is the non-sharing of data and information by IPLCs. This risk is related to the challenge of making data open as much as possible, while safeguarding traditional knowledge systems and ensuring the sovereignty of IPLCs. As a way of facing this challenge, the project bets on capacity building, so that IPLCs' choices are based on legal foundations, benefit sharing law, as well as on available IT technologies that enable the tracking and control of the use of information by diverse users. The non-engagement of the IPLCs themselves and of these with other project participants is a real risk, since each people/ethnic group has different aspirations. As a mitigation measure, the project's PPG phase will support bringing together different IPLC groups for discussion and co-development of the project, along with regional indigenous organizations (such as APIB) and partner organizations at the regional and national levels.he project's approach to Knowledge management and Learning, enhancing capacities to strengthen biodiversity conservation is an ambition that permeates the entire project, from efforts to build consensus with IPLCs on protocols related to data acquisition (Component 1), to data collection (Component 2) generating knowledge and making data and information openly available (Component 3). One of the main expected results is filling information gaps in biodiversity at the local and national level, since there is an urgent demand to assess the environmental

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conditions of the Indigenous territories. The project hopes to build on CARE and FAIR principles to empower IPLCs to share their traditional knowledge in terms defined by them, thus enhancing the prospects for them to derive benefits in negotiations and initiatives related to access and benefit sharing and the promotion of the bioeconomy.



<sup>[6]</sup> CARE Principles to indigenous data governance and research include Collective benefit, Authority to control, Responsibility, and Ethics. FAIR Data Principles include Findable, Accessible, Interoperable and Reusable data.

- [7] https://specieslist.sibbr.gov.br/speciesListItem/list/drt1656510072242
- [8] https://specieslist.sibbr.gov.br/speciesListItem/list/drt1634323883259
- [9] https://specieslist.sibbr.gov.br/speciesListItem/list/drt1661896856710

#### Coordination and Cooperation with Ongoing Initiatives and Project.

Does the GEF Agency expect to play an execution role on this project?

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If so, please describe that role here. Also, please add a short explanation to describe cooperation with ongoing initiatives and projects, including potential for co-location and/or sharing of expertise/staffing

UNEP is the proposed Implementing Agency. The Ministry of Science, Technology and Innovation (MCTI) will act as the lead Executing Agency. An additional Executing Agency to oversee financial management and technical aspects will be identified during PPG. Besides, a Consortium of Partners formed by MCTI (lead), the Ministry of Indigenous Peoples (MPI) and the Ministry of Environment and Climate Change (MMA) will steer project development and execution. Collaboration between these institutions is already in place and they have all contributed with the design of this PIF.

This project will largely build upon the Brazilian Biodiversity Information System (SiBBr), a platform Coordinated by the Ministry of Science, Technology and Innovation (MCTI) and operated by the National Education and Research Network (RNP). SiBBr was designed under the MCTI-led GEF project implemented by UNEP: 'Improving Brazilian Capacity to Conserve and Use Biodiversity through Information Management and Use' (2012-2019 | total budget: USD 28.1 million | GEF grant: USD 8.1 million). SiBBr is the first national data and information infrastructure on Brazilian biodiversity and ecosystems. SiBBr adopts international datasharing standards and protocols and is the focal point (national node) for the Global Biodiversity Information Facility — GBIF. The current project will build on these functionalities and use SiBBr as a repository of information related to IPLC territories, cultural aspects, the use and management of species, different typologies of names attributed to biodiversity, etc. SiBBr further captures data from <a href="Long-term research programs">Long-term research programs</a> — PELD (Long Term Ecological Research Program) and PPBio (Biodiversity Research Program). The current project aims to both build on this SiBBr functionality and promote synergies with these long-term research programs and associated partner networks.

The SiBBr platform should also support efforts to promote equitable access and benefit sharing (ABS) in the country by providing a database of species used in Brazil with an indication of the types of use and traditional knowledge associated with them (when relevant and shared by IPLCs) and their geographic occurrence in indigenous territories (identifiable origin). This database is a demand from several industry researchers[10]<sup>8</sup> who argue that complying with ABS regulations, responsibly, requires information that allows specific compounds to be traced back to specific species with specific uses in specific IPLC territories. The bioprospecting sector highlights that without a "go-to" reference database that offers information on species use in Brazil and whether associated traditional knowledge has been mapped, Law Nº 13,123/2015 allows them to inform that traditional knowledge is of unidentifiable origin, so no FPIC is triggered. Moreover, when this occurs, any economic exploitation that results from this traditional knowledge identifies the Federal Government as the default recipient for benefit-sharing purposes. Should traditional knowledge and use have an identifiable origin – i.e. one that can link back to at least one indigenous population, traditional community or traditional farmer – then ABS processes could have altogether different outcomes.

This project will also seek to build on the lessons learnt, methodologies and networks mobilized under the GEF Project BRA/09/G32, known as the GATI Project - Environmental and Territorial Management on

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Indigenous Lands. Despite having closed a while back, the GATI project has great legitimacy among indigenous groups in Brazil and gave rise to a crucial policy instrument, which this project equally aims to support – the National Policy on Environmental and Territorial Management on Indigenous Lands (PN-GATI). In particular, the current project hopes to build upon GATI project efforts to design environmental management strategies in Indigenous Lands (TIs) for biodiversity conservation and sustainable use and its successful approach to multilevel governance. The project will also draw from MMA's perspective and experience so far with the UNDP-GEF project "Sustainable, Accessible and Innovative Use of Biodiversity Resources and Associated Traditional Knowledge in Promising Phytotherapic Value Chains in Brazil", which is currently underway and offers potential for synergies that will be explored during the PPG phase.

The National Biodiversity Monitoring Program - Monitor Programme will equally be a key point of reference for the current project The Monitor Programme was established by Normative Instruction ICMBio n.º 3/2017, and reformulated by ICMBio Normative Instruction No. 2/2022. It is coordinated by the Chico Mendes Institute for Biodiversity Conservation (ICMBio), under the Ministry of the Environment and Climate Change (MMA). In particular, the current project aims to build on the Monitor Programme's experience of building local data collection procedures using simple techniques with low financial and operational costs, and privileging the participation of local actors, including communities residing in conservation units, that share analysis and collective interpretation of results with the Programme.

On a regional level, the project will seek coordination and cooperation with initiatives carried out by the Amazon Cooperation Treaty Organization (ACTO), especially regarding the regional initiative on the survey of biodiversity and ecosystem services that considers traditional knowledge (BioAmazonia ACTO/GIZ Project) and the traditional and indigenous knowledge platform within the scope of ACTO's Regional Amazon Observatory (ORA).

[10] See: https://escolhas.org/wp-content/uploads/Destravando-a-agenda-da-Bioeconomia-recursos-gen%C3%A9ticos-e-conhecimento -traditional-in-Brazil-Sum%C3%A1rio-Executivo-.pdf

#### **Core Indicators**

#### Indicator 4 Area of landscapes under improved practices (hectares; excluding protected areas)

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
1500000	0	0	0

## Indicator 4.1 Area of landscapes under improved management to benefit biodiversity (hectares, qualitative assessment, non-certified)

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
1,500,000.00			

#### Indicator 4.2 Area of landscapes under third-party certification incorporating biodiversity considerations

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
ria (Expedeed de l'il)	The (Expected at old Endonderner)	Tra (7 torne ve a a c ivi i i i )	110 (101110100000000000)

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	'	

#### Type/Name of Third Party Certification

#### Indicator 4.3 Area of landscapes under sustainable land management in production systems

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

#### Indicator 4.4 Area of High Conservation Value or other forest loss avoided

Disaggregation	Ha (Expected at	Ha (Expected at CEO	Ha (Achieved at	Ha (Achieved at
Туре	PIF)	Endorsement)	MTR)	TE)

#### **Indicator 4.5 Terrestrial OECMs supported**

Name of the	WDPA-	Total Ha	Total Ha (Expected at CEO	Total Ha	Total Ha
OECMs	ID	(Expected at PIF)	Endorsement)	(Achieved at MTR)	(Achieved at TE)

#### Documents (Document(s) that justifies the HCVF)

Title		

#### Indicator 11 People benefiting from GEF-financed investments

	Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)
Female	3,000			
Male	2,000			
Total	5,000	0	0	0

Explain the methodological approach and underlying logic to justify target levels for Core and Sub-Indicators (max. 250 words, approximately 1/2 page)

This project is designed to operate in Indigenous Lands that have been officially demarcated as protected territories as well as in high-biodiversity landscapes inhabited by local/ traditional communities. Target biomes include the Amazon and the Cerrado, and the Transition Area between them. Under the leadership of the Ministry of Science, Technology and Innovation (MCTI), a consortium of partners including the newly created Ministry of Indigenous Peoples (MPI) and the Ministry of Environment and Climate Change (MMA) has established a multi-criteria approach, through which 7 Macro-Regions of socio-environmental interest have been identified, that will guide the definition of accurate project intervention zones during the project preparation phase (see Annex C for additional elements, including the initial criteria for site selection). Following a request from MPI that, in line with the ILO 169 Convention and Brazilian law, any work in Indigenous Peoples Lands is premised on prior and informed consent, the actual enumeration of official Indigenous Lands will only take place once PPG resources are available to undertake consultations and site-assessment.

Core Indicator 4 is currently a proxy for the average expected landscape of intervention in each of the 7 Macro-Regions identified and will be further reviewed during PPG. The number of beneficiaries under Core Indicator 11 is equally a proxy for the landscapes identified based on the latest available Census (2010). They may be adjusted during PPG once intervention areas are refined. The

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2010 Census points to relatively low population density in Indigenous Territories, most notably in the Amazon, hence the seemingly low figures.

#### **Risks to Project Preparation and Implementation**

Summarize risks that might affect the project preparation and implementation phases and what are the mitigation strategies the project preparation process will undertake to address these (e.g. what alternatives may be considered during project preparation-such as in terms of consultations, role and choice of counterparts, delivery mechanisms, locations in country, flexible design elements, etc.). Identify any of the risks listed below that would call in question the viability of the project during its implementation. Please describe any possible mitigation measures needed. (The risks associated with project design and Theory of Change should be described in the "Project description" section above). The risk rating should reflect the overall risk to project outcomes considering the country setting and ambition of the project. The rating scale is: High, Substantial, Moderate, Low.

Risk Categories	Rating	Comments
Climate	Moderate	Extreme weather events have been increasingly frequent, including in the Amazon. At the same time, severe droughts have occurred in different regions of the biome, historical floods have compromised the life of IPLCs by flooding floodplain areas where plantations and clearings are mostly made. The Cerrado region has experienced quite disruptive dry seasons leading to severe fires in the recent past. The project aims to monitor these risks and build on a robust network of partners to build adaptive management strategies as necessary.
Environment and Social	Moderate	Organized crime has become established in some regions of the Amazon, often associated with illegal deforestation, prospecting and illegal mining. This means not only a risk for the execution of the project but also for the communities themselves. However, combating these illegal activities in the Amazon was placed as a priority for the current government and building on relevant

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		alliances in this regard will be a strategy contemplated by the project.
Political and Governance	Substantial	Communities may not be interested in sharing their knowledge about the use of species, even considering that this sharing is necessary to support the benefit-sharing process. As a mitigation measure for this risk, the project will invest in capacity building, on implementation of national legislation as well as on IT technologies, so that IPLCs can make informed decisions.
Macro-economic	Low	Currency fluctuations in Brazil may affect the overall project cost over the years.
Strategies and Policies	Low	Relevant international documents and conventions have already recognized the importance of community-based management of lands and resources in global biodiversity conservation and mitigation of climate change. The project will engage in national level priorities, policies, and programs under relevant conventions, promoting IPLCs participation and providing the evidence-base for IPLCs contribution to national level biodiversity benefits as well as GEBs.
Technical design of project or program	Low	This project is strongly structured in the technology of services and tools for the use, sharing and tracking of data and information. Available tools may not meet the expectations of communities, which in turn may not take ownership of proposed technologies.
Institutional capacity for implementation and sustainability	Moderate	Information Technology tools may not be adequate to the reality of IPLCs.
Fiduciary: Financial Management and Procurement	Moderate	The territories where the project will be carried out are difficult to access,

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		which implies low internet connectivity. However, there is a government project to bring internet to the Amazon region, in addition, the proposed tools should work offline.
Stakeholder Engagement	Substantial	IPLCs are primary stakeholders for engagement in the process.  Engagement with local/ regional organizations, including research institutes and civil society organizations throughout the all process, will mitigate conflicts and leverage financial or technical resources. The goal of engagement is to involve all project stakeholders, as early as possible, in the design, implementation, evaluation and to make sure their views and input are received and taken into consideration. As a mitigating measure, prior articulation with indigenous peoples and indigenous partner organizations is planned during the PPG.
Other		
Financial Risks for NGI projects		
Overall Risk Rating	Moderate	During PPG phase, risk mitigation strategies will be put forward and discussed with IPLCs.

#### C. ALIGNMENT WITH GEF-8 PROGRAMMING STRATEGIES AND COUNTRY/REGIONAL PRIORITIES

Describe how the proposed interventions are aligned with GEF- 8 programming strategies and country and regional priorities, including how these country strategies and plans relate to the multilateral environmental agreements.

Confirm if any country policies that might contradict with intended outcomes of the project have been identified, and how the project will address this.

For projects aiming to generate biodiversity benefits (regardless of what the source of the resources is - i.e., BD, CC or LD), please identify which of the 23 targets of the Kunming-Montreal Global Biodiversity Framework the project contributes to and explain how. (max. 500 words, approximately 1 page)

The project aligns with the following objectives of the GEF-8 programming strategy for Biodiversity and goals of the Kunming-Montreal Global Biodiversity Framework (GBF):

- Objective 1. To improve conservation, sustainable use, and restoration of natural ecosystems (Goals A and B of the GBF): proposed interventions will essentially seek to enhance the management effectiveness of indigenous biocultural territories formally recognized as protected areas by Brazilian

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legislation as it will enable IPLCs to collect information on biodiversity occurring in their territories as well as to systematize traditional practices for the sustainable use of biodiversity of global importance.

- Objective 2. To effectively implement the Cartagena and Nagoya protocols (Goals A, B and C of the GBF): through its focus on building IPLC capacity to effectively assess and monitor the traditional use of genetic resources.

The project is in line with the principles, Vision and Mission of the Global Biodiversity Framework, which provides that traditional knowledge must be respected, documented and preserved, in particular that relating to biodiversity, innovations, worldview, values and practices, while promoting gender equality and the empowerment of women. In particular, the proposal responds to Targets 1, 4, 5, 9, 10, 13, 20, 21, 22 and 23 of the Global Biodiversity Framework.

In relation to national priorities, the project responds to Brazil's National Biodiversity Policy, and National Biodiversity Strategy and Action Plan, both of which place a strong emphasis on the conservation of Brazil's genetic heritage and protection of associated traditional knowledge, the conservation of threatened species and key ecosystems, and the need to fill information gaps regarding Brazil's biodiversity for improved management, among other strategi issues. In support of MMA's mandate for implementation of the Nagoya Protocol, there is an opportunity to boost complementarities (and eventually move towards interoperability) between the SiBBr and MMA's new SisGen platform, which any research seeking access to genetic resources from Brazil has an obligation to use. As the SisGen could potentially draw information directly from the SiBBr, especially that concerning IPLC species use and associated traditional knowledge, the means and convenience of doing so will be looked into during the PPG phase.

The project also aligns with the National Policy for Environmental and Territorial Management of Indigenous Lands (PN-GATI - Decree n.7,747 of June 2012). The Territorial and Environmental Management Plans for Indigenous Lands are important tools for the implementation of PN-GATI. This project aims to strengthen the design and implementation of these plans in target geographies in Indigenous Lands. It will in effect integrate PN-GATI with other national plans and programmes, namely, the PPBio, the National System of Conservation Units, and National Plan for the Promotion of Socio-biodiversity Product Chains. In addition, the project is also in line with Federal Law 13,123 (2015), which regulates Article 15 and §§ 3 and 4 of Article 16 of the Convention on Biological Diversity, enacted by Decree No. 2,519 (1998); which includes provisions on access to genetic heritage, protection, and access to associated traditional knowledge and sharing of benefits for the conservation and sustainable use of biodiversity.

Brazil has assumed a series of international commitments to guarantee the respect and promotion of the human rights of indigenous peoples. These commitments reaffirm territorial rights and access to natural resources, fundamental to not only physical survival, but also cultural, and therefore are considered fundamental rights. Convention 169 of the International Labor Organization (ILO) on the Rights of Indigenous and Tribal Peoples (1989) and the UN Declaration on the Rights of Indigenous Peoples (2007) are the main international human rights instruments aimed at protecting and promoting rights of indigenous peoples. ILO Convention 169, a supralegal standard, recognizes that indigenous and tribal peoples have their own ways of

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life and organization, and have autonomy in decision-making about their lives, their plans for development and the future. The ILO Convention also reaffirms and protects the right to land, health, education, and work, and establishes for the State the duty to consult indigenous peoples before adopting measures that may affect their rights or their lives.

#### D. POLICY REQUIREMENTS

#### **Gender Equality and Women's Empowerment:**

We confirm that gender dimensions relevant to the project have been addressed as per GEF Policy and are clearly articulated in the Project Description (Section B).

Yes

#### Stakeholder Engagement

We confirm that key stakeholders were consulted during PIF development as required per GEF policy, their relevant roles to project outcomes and plan to develop a Stakeholder Engagement Plan before CEO endorsement has been clearly articulated in the Project Description (Section B).

Yes

#### Were the following stakeholders consulted during project identification phase:

Indigenous Peoples and Local Communities: Yes

Civil Society Organizations: Yes

**Private Sector:** 

#### Provide a brief summary and list of names and dates of consultations

The Ministry of Science, Technology and Innovation (MCTI) builds on its network of regional research institutions, with whom it maintains a close dialogue and that will have a crucial role in the implementation of proposed activities such as the National Institute for Research in the Amazon (INPA), Museu Paraense Emílio Goeldi (MPEG) and Instituto de Desenvolvimento Sustentável Mamirauá (IDSM). The experience of the institutes with research in biodiversity and with direct connections to IPLCs in the field is a fundamental element of the proposal. Furthermore, this proposal will be strictly implemented in partnership with the Ministry of Indigenous Peoples (MPI), the National Foundation for Indigenous Peoples (FUNAI) and the Ministry of Environment and Climate Change (MMA). MPI and MMA have been duly consulted and mobilized to take part in project conceptualization. In the case of MPI, the Ministry staff is largely composed by indigenous peoples' representatives and they are actively connected to a broad network of indigenous civil society and grass-roots organizations that will be key to project development. There are other entities with whom linkages can be explored, such as the Fundacao Osvaldo Cruz, affiliated to the Ministry of Health, which is well recognized for its strengths in research and development across Brazil, as well as the SisGen platform of MMA mentioned above. Also relevant are the efforts led by Health In Harmony to support the well-being of indigenous communities in the Lower and Middle Xingu Basin, state of Pará.

IPLCs are the primary beneficiary audience of this project. As such, and recalling the need to follow FPIC and ILO guidelines, the project has at this stage included only what is provided for, permissible or prioritized

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under the Environmental and Territorial Management Plans, and Conservation Unit Management Plans, for the indigenous territories of the Amazon and Cerrado biomes, which will also be used as a basis for negotiations during the PPG, in addition to already established Consultation Protocols and Community Protocols.

As project geographies are settled during the PPG phase, dedicated consultations and information sessions with IPLCs will take place. Engagement with local and regional organizations, including research institutes and civil society organizations throughout the implementation process, will mitigate conflicts and leverage financial and/or technical resources. The goal of engagement is to involve all project stakeholders, as early as possible, in the design, implementation, evaluation and to make sure their views and input are received and taken into consideration.

#### **Project Stakeholder List**

Institution/organization	Mission/Objectives	Role in PPG phase
Ministry of Indigenous Peoples (MPI)	Giving voice to the original peoples, the new Ministry comes up with proposals to demarcate indigenous lands, stabilize the health budget and combat mining in areas already demarcated, as well as protecting peoples who have not yet had their lands recognized.	Coordination, data source and policy support in indigenous affairs
National Foundation for Indigenous Peoples (FUNAI)	Its institutional mission is to protect and promote the rights of indigenous peoples in Brazil.	Collaboration, data source and policy support in indigenous affairs
Ministry of Environment and Climate Change (MMA)	Promote the adoption of principles and strategies for Protecting and restoring the environment, sustainable use of natural resources, valuing environmental services, and integrating development into the formulation and implementation of public policies	Coordination, data source and policy support
National Institute for Research in the Amazon (INPA)	Promotion, conduct, and contribution to research related to the field of mathematical sciences and related areas, as well as the training of researchers, dissemination of mathematical knowledge, and integration with other areas of science, culture, education, and the productive sector	Collaboration, data source and policy support
Mamirauá Sustainable Development (IDSM)	Promote scientific research on the biodiversity, management, and conservation of natural resources in the Amazon in a participatory and sustainable manner.	Collaboration, data source and policy support
Museu Paraense Emílio Goeldi (MPEG)	Conduct research, promote scientific innovation, train human resources, conserve collections, and communicate knowledge in the	Collaboration, data source and policy support

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Institution/organization	Mission/Objectives	Role in PPG
Institution/organization	Wilssion/Objectives	phase
	fields of natural and human sciences related to	
	the Amazon.	
Brazilian Institute for the	Environmental inspection, generation and	Collaboration, data
Environment and Renewable	dissemination of information related to the	source and policy
Natural Resources (IBAMA)	environment, environmental monitoring, and	support
	support for environmental emergencies.	
Chico Mendes Institute for	Brazilian environmental agency responsible for	Collaboration, data
Biodiversity Conservation	proposing, implementing, managing and	source and policy
(ICMBIO)	protecting federal conservation units, and	support
	assessing the conservation status of Brazilian	
National Council for Scientific	fauna species Institution linked to the Ministry of Science,	Collaboration, data
and Technological	Technology and Innovation with the main	source and policy
Development (CNPq)	mission of promoting research in Brazil.	support
Development (entry)	mission of promoting research in Brazil.	Зарроге
Socioenvironmental Institute	Brazilian non-governmental organization with	Collaborating
(ISA)	the aim of defending collective and diffuse social	partner in
	goods and rights related to the environment,	indigenous affairs
	cultural heritage, and the rights of indigenous	
	peoples in Brazil.	
	Produce, share, and transform knowledge in	Data source and
Universidade Federal do Pará	the Amazon to educate citizens capable of	technical support
(UFPA)	promoting the construction of an inclusive and	
	sustainable society.	
	To produce, systematize, and disseminate	Data source and
Universidade do Federal do	knowledge based on the integration of teaching,	technical support
Acre (UFAC)	research, and extension, to form critical and	
	engaged citizens in the development of society	
	Train and qualify professionals in different	Data source and
Universidade Federal do	fields, produce knowledge and technological and	technical support
Amapá (UNIFAP)	scientific innovations that significantly	
	contribute to regional and national development	
	Produce, disseminate knowledge, and train	Data source and
Universidade Estadual do	professionals who are ethical and socially	technical support
Amapá (UEAP)	responsible, for the sustainable development of	
	the Amazon	
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Institution/organization	Mission/Objectives	Role in PPG phase
Universidade do Amazonas (UFAM)	To cultivate knowledge in all areas of expertise through teaching, research, and extension, contributing to the formation of citizens and the development of the Amazon region	Data source and technical support
Universidade do Estado do Amazonas (UEA)	Promote education, advance scientific knowledge, particularly about the Amazon, along with ethical values that integrate individuals into society and enhance the quality of human resources in the region where it is located	Data source and technical support
Universidade Federal do Amazonas (UFAM)	Promote efficient and quality ICT solutions aligned with the strategies of the Federal University of Amazonas	Data source and technical support
Universidade Federal de Rondônia (UNIR)	Produce and disseminate knowledge, taking into consideration the unique characteristics of the Amazon, aiming at the development of society	Data source and technical support
Universidade Federal de Roraima (UFRR)	Produce, integrate, and disseminate knowledge to educate citizens committed to cultural, social, economic, and environmental development	Data source and technical support
Universidade Estadual de Roraima (UERR)	Provide the society of Roraima with technical, scientific, and cultural mechanisms that can contribute to the holistic formation of individuals, the economic and social growth of the State, and act as a transformative force for social and regional inequalities	Data source and technical support
Universidade Federal do Tocantins (UFT)	Form citizens committed to the sustainable development of the Legal Amazon through innovative, inclusive, and quality education	Data source and technical support
Universidade do Tocantins (UNITINS)	Promoting quality and innovative teaching, research, and extension to contribute to professional and civic education, prioritizing the social, economic, cultural, political, and sustainable development of the state of Tocantins	Data source and technical support
Universidade Federal de Goiás (UFG) - Núcleo Takinahaky de Formação Superior Indígena	Responsible for the higher education of indigenous teachers from ethno-educational territories in central Brazil.	Collaborating partner in indigenous affairs, ecology and technical support

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Institution/organization	Mission/Objectives	Role in PPG phase
Universidade Federal do Pará (UFPA)	Produce, disseminate, and transform knowledge in the Amazon region to educate citizens capable of promoting the construction of an inclusive and sustainable society	Data source and technical support
Universidade Federal Rural da Amazônia (UFRA)	To educate qualified professionals, share knowledge with society, and contribute to the sustainable development of the Amazon region	Data source and technical support
Universidade do Estado do Pará (UEPA)	To produce, disseminate knowledge, and train ethical professionals with social responsibility for the sustainable development of the Amazon region	Data source and technical support
Universidade Federal do Oeste do Pará (UFOPA)	To generate and disseminate knowledge, contributing to citizenship, innovation, and development in the Amazon region	Data source and technical support
United Nations Environment Programme (UNEP)	Organization of the United Nations. Sets the global environmental agenda, promotes the coherent implementation of the environmental dimension of sustainable development within the United Nations system and serves as an authoritative advocate for the global environment. Technical advice, project oversight and quality control.	GEF Implementing Agency

(Please upload to the portal documents tab any stakeholder engagement plan or assessments that have been done during the PIF development phase.)

## **Private Sector**

Will there be private sector engagement in the project?

Yes

And if so, has its role been described and justified in the section B project description?

Yes

# **Environmental and Social Safeguard (ESS) Risks**

We confirm that we have provided indicative information regarding Environmental and Social risks associated with the proposed project or program and any measures to address such risks and impacts (this information should be presented in Annex D).

Yes

Overall Project/Program Risk Classification

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PIF	CEO Endorsement/Approval	MTR	TE
Medium/Moderate			1

## E. OTHER REQUIREMENTS

# **Knowledge management**

We confirm that an approach to Knowledge Management and Learning has been clearly described in the Project Description (Section B)

Yes

## **ANNEX A: FINANCING TABLES**

# **GEF Financing Table**

Indicative Trust Fund Resources Requested by Agency(ies), Country(ies), Focal Area and the Programming of Funds

GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Programming of Funds	Grant / Non-Grant	GEF Project Grant(\$)	Agency Fee(\$)	Total GEF Financing (\$)
UNEP	GET	Brazil	Biodiversity	BD STAR Allocation: BD-1	Grant	3,096,347.00	294,152.00	3,390,499.00
UNEP	GET	Brazil	Biodiversity	BD STAR Allocation: BD-2	Grant	3,096,348.00	294,153.00	3,390,501.00
Total GE	F Resourc	es (\$)	1	1		6,192,695.00	588,305.00	6,781,000.00

# **Project Preparation Grant (PPG)**

Is Project Preparation Grant requested?

true

PPG Amount (\$)

200000

PPG Agency Fee (\$)

19000

GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Programming of Funds	Grant / Non- Grant	PPG(\$)	Agency Fee(\$)	Total PPG Funding(\$)
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Total PPG Amount (\$)					200,000.00	19,000.00	219,000.00	
UNEP	GET	Brazil	Biodiversity	BD STAR Allocation: BD-2	Grant	20,000.00	1,900.00	21,900.00
UNEP	GET	Brazil	Biodiversity	BD STAR Allocation: BD-1	Grant	180,000.00	17,100.00	197,100.00

Please provide justification

# **Sources of Funds for Country Star Allocation**

Total GEF Resour	7,000,000.00				
UNEP	GET	Brazil	Biodiversity	BD STAR Allocation	7,000,000.00
GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Sources of Funds	Total(\$)

# **Indicative Focal Area Elements**

Programming Directions	Trust Fund	GEF Project Financing(\$)	Co-financing(\$)
BD-1-1	GET	3,096,347.00	24725000
BD-2-2	GET	3,096,348.00	24725000
Total Project Cost		6,192,695.00	49,450,000.00

# **Indicative Co-financing**

Sources of Co-financing	Name of Co-financier	Type of Co- financing	Investment Mobilized	Amount(\$)
Recipient Country Government	Ministry of Science, Technology and Innovation (MCTI)	Public Investment	Investment mobilized	37700000
Recipient Country Government	Ministry of Science, technology and Innovation (MCTI)	In-kind	Recurrent expenditures	250000
Recipient Country Government	Brazilian Development Bank (BNDES)	Public Investment	Investment mobilized	11500000
Total Co-financing				49,450,000.00

Describe how any "Investment Mobilized" was identified

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Investments mobilized by MCTI and BNDES (executed by the MCTI) cover research and development, expansion and modernization of infrastructure and promotion of R&D projects related to science, technology and innovation for sustainable urban development.

In-kind support by MCTI is an estimate of the contribution in time from staff from the Secretariat for Strategic Policies and Programs and its General Coordination for Ecosystems and Biodiversity.

Revisions to co-financing are expected during the project preparation phase (PPG), with additions from the Ministry of Indigenous Peoples (MPI) and the Ministry of Environment and Climate Change (MMA).

#### **ANNEX B: ENDORSEMENTS**

## **GEF Agency(ies) Certification**

GEF Agency Type	Name	Date	Project Contact Person	Phone	Email
GEF Agency Coordinator	Victoria Luque Panadero		Tea Garcia-Huidobro		tea.garcia-huidobro@un.org

### Record of Endorsement of GEF Operational Focal Point (s) on Behalf of the Government(s):

Name	Position	Ministry	Date (MM/DD/YYYY)
Livia Farias Ferreira de Oliveira	General Coordinator for Sustainable Finance	Ministry of Finance	5/2/2023

#### ANNEX C: PROJECT LOCATION

Please provide geo-referenced information and map where the project interventions will take place

The strategy for establishing the areas where project interventions will take place was defined by a Consortium of Partners led by the Ministry of Science, Technology and Innovation that also included the Ministry of Indigenous Peoples (MPI) and the Ministry of Environment and Climate Change (MMA). MPI expressed strong reservations against any effort to tentatively indicate Indigenous Lands where project interventions could take place without consultations to relevant indigenous groups that observed free, prior and informed consent (FPIC) principles. Considering there were no resources available to undertake consultations at PIF stage in remote areas of the Amazon and Cerrado biomes, the Consortium of Partners identified 7 macro zones (macro regions) of socio-environmental interest based on a rapid multi-criteria (see below) assessment from where specific project intervention locations could be identified through FPIC by indigenous peoples following consultations during the project preparation phase (PPG).

MPI's position mainly contemplates the importance of carrying out prior and informed consultations with indigenous communities in line with provisions under ILO Convention No. 169 that are equally fully covered by the Brazilian legal system. Even a tentative indication of potential Indigenous Lands without the populations who inhabit these lands being aware would have meant a deviation from established legal provisions. This measure aims to facilitate a strong success rate of planned actions, which would be contingent upon the ability

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to mobilize and engage indigenous populations from the planning process onwards. Maps 1 and 2 included below show the overall biomes the project will focus on (Amazonia and Cerrado), as well as all the indigenous territories that are located within these biomes. The definition of exactly which Indigenous Peoples and Local Communities will comprise the scope of the project will be conducted between the project partner Ministries and will be, mainly, the subject of debate and negotiation with the IPLCs during the project preparation phase (PPG).

The broader geographies where project activities will take place will be the Amazon and Cerrado biomes, as well as the transition zone between them. The multi-criteria used to define the macro-regions in which interventions will take place was established by the Consortium of Partners mentioned above and is listed below. The idea is that during PPG phase, the project continues to build on these criteria to further the specific Indigenous Lands, conservation units and landscapes in which interventions will take place:

- Interest in participating expressed by the communities through their FPIC;
- Regions with gaps in biodiversity data and information;
- Pressure and environmental impacts suffered by IPLCs, such as pressures caused by deforestation and environmental degradation, expansion of agriculture, contamination of rivers, impacts of major works (hydroelectric plants, highways, etc.);
- Previous experiences of local monitoring of biodiversity, ecosystem services and environmental changes coordinated by IPLCs;
- Existing or previous partnerships between IPLCs and Research Institutes and/or Universities for intercultural research in the survey and monitoring of biodiversity;
- Regions with Indigenous environmental and territorial management plans (under PN-GATI National Plan for Environmental and Territorial Management in Indigenous Lands) and advanced use and management plans (under SNUC – the National System of Protected Areas); - see list provided at the end of this Annex
- Presence of solid local/ grass-roots organizations and partner entities, with a history of socioenvironmental action;
- Regions with demands related to indigenous education and training in biodiversity sciences;
- Territories with training experiences for environmental agents and indigenous and PCT researchers;
- Experience with or potential to work under the MCTI and PPBio Research Institutes;
- Demands for territorial management actions compatible with the creation of new PPBio/PELD centers/networks.

Based on the above criteria, 7 macro regions in the Amazon and Cerrado biomes were preliminarily defined to be considered by project partner Ministries in the definition of specific territories during the PPG phase. For each of these macro-regions, at least two protected areas will be selected (Indigenous Lands and/or

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Sustainable Use Conservation Units). Since the project equally targets local communities who retain traditional knowledge and live in high-biodiversity areas outside of Indigenous Lands target landscapes within these 7 macro-regions that align with the aforementioned criteria may equally be contemplated. At this stage, the project aims to bring at least 1.5 million ha of Terrestrial Protected Areas and Landscapes under improved management. It follows that indicators will be further refined during PPG and there is an expectation to populate the GEF Core Indicator 1 once consultations have ensued.

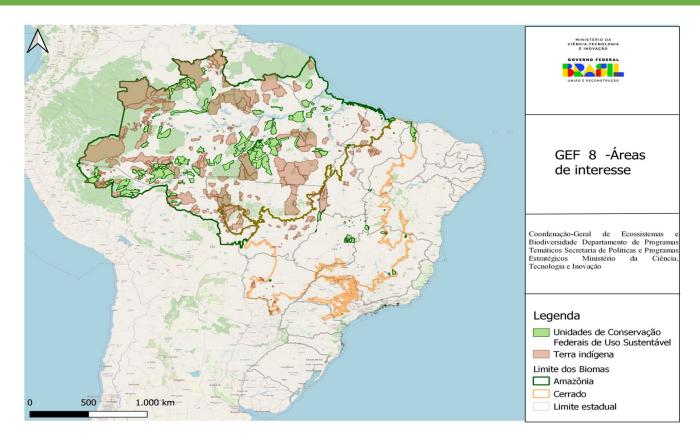


Map 1 – Proposed Macro-Regions for Project Interventions

Map 2 – Indigenous Territories in project intervention areas

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Source: Ministry of Science, Technology and Innovation, Secretariat of Strategic Policies and Programmes,

Department of Thematic Programmes, General Coordination on Ecosystems and Biodiversity.

Proposed Macro-regions and rationale for their selection:

1. Alto Rio Negro Region: intercultural research on biodiversity and environmental changes that strengthen the environmental and territorial governance of the peoples of the region.

Macro-region characterized by the large contiguous extension of protected lands, inhabited by diverse ethnic groups belonging to different linguistic matrices, composing a cross-border regional nexus. Biodiversity preserved and protected from the economic expansion fronts of the surrounding national society. History of socio-political organization of indigenous communities, whose social organization articulates the local and regional levels in the form of formally recognized associative organization and registered in the State. High linguistic diversity and polyglotism, an aspect that constitutes a great asset for the processes of information management on biodiversity.

It also has PPBio structures/units/grids in areas of Indigenous Land or close/contiguous, with a history of interaction and indigenous participation and interaction with researchers. Data from 15 years of intercultural research on biodiversity and environmental changes already exist in the region. In addition, the region has historical support from non-indigenous socio-environmental organizations and a network of associated researchers, and it also has a structure of Science and Technology Institutes in its vicinity with the potential to mobilize human and technological resources.

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2. Middle Xingu Region: Production and management of local biodiversity data used to identify and mitigate the environmental impacts of the Belo Monte dam.

Macro Region with a strategic position for the conservation of the Xingu river valley. Northern limit of a large corridor of protected areas of approximately 26 million hectares, formed by a block of Indigenous Lands of the middle Xingu, the mosaic of Conservation Units of Terra do Meio and the block of Kayapó Indigenous Lands in southern Pará and the Xingu Indigenous Park. In recent years, the construction of the Belo Monte Hydroelectric Power Plant has significantly altered the landscape of the Volta Grande on the Xingu River, producing impacts that are still little known on biodiversity and local ecosystems.

Several endemic species of fish and birds from alluvial forests occur in Volta Grande do Xingu. This unique socio-ecological system, including a seasonally flooded forest ecosystem (igapó), an aquatic rapids ecosystem, and indigenous and riverside communities, suffers the impacts of the construction and operation of the Belo Monte Hydroelectric Power Plant, whose energy generation depends on the expropriation of the waters of the river, relegating the region to a state of permanent drought.

The struggle of these peoples and communities in defense of the life of Volta Grande do Xingu resulted in the realization of a collaborative Territorial Environmental Monitoring (MATI-VGX) through a partnership with ISA (Social and Environmental Institute) and with researchers from different areas of knowledge from Brazilian public universities. The expansion of the collaborative analyzes had the main objective of registering changes in the relationship between the flow in cubic meters per second of water that is poured into the Volta Grande do Xingu region, in the Reduced Flow Stretch (TVR), and the water level in areas of various types of piracemas, responsible for fish reproduction and feeding processes.

Floodable ecosystems are home to a unique portion of Amazonian biodiversity and support traditional ways of life for indigenous and riverside populations (Zuanon et al., 2020). In the Brazilian shield, with narrower rivers and restricted igapós, there are important endemisms associated with floodplains. In addition, the continuity of the terra firme forest area is increasingly threatened in the region (https://www.raisg.org/), affecting endemic species from the Tapajós and Xingu areas of endemism (Ribas et al 2022). The middle Xingu river region is strategic for the conservation of both the biodiversity associated with floodable and non-flooded forests and is threatened by progressive deforestation, climate projections of reduced precipitation (-10 to -40%) by the year 2050 (Sorribas et al., 2016) and the recent construction and operation of the Belo Monte Hydroelectric Plant (UHE).

3. Juruena River Basin Region: biodiversity data management for conservation in view of the expansion of agricultural activity and impacts of Small Hydroelectric Power Plants.

The Juruena hydrographic basin occupies an area of 19.1 million hectares, with the main river, the Juruena, 1,080 km long and where smaller courses such as the Camararé, Juína, Papagaio, Sangue and Arinos flow. Together with the Teles Pires river basin, they give rise to one of the largest and most important hydrographic

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basins in the Amazon, the Tapajós river. Currently, there are 22 indigenous lands identified in this region, responsible for the conservation of four million hectares. These territories represent 27% of the total area of the Juruena basin and are home to 12 of the 43 indigenous peoples of Mato Grosso.

The region is home to one of the most extensive areas of preserved Amazon Forest in the state of Mato Grosso and is characterized by an area of transition between the Amazon and Cerrado biomes, pressured by agricultural expansion projects. The floristic diversity of the region is still little known, which reinforces the need for more biological inventories. As for regional socioeconomic pressures, one of the greatest threats to the region's indigenous peoples and natural resources concerns mining activity. Currently there are numerous mining processes overlapping the Juruena River basin, representing about 11.8% (2.25 million hectares) of its total area, which jeopardizes the survival and physical and cultural reproduction of the people of the region, in addition to maintaining biodiversity and ecosystem services. In addition, the region has also been impacted by the construction of Small Hydroelectric Power Plants and, according to the local indigenous peoples, with a direct impact on fish stocks and species.

4. Middle Juruá Region: biodiversity data management to strengthen conservation and sustainable use.

The Middle Juruá is located in the southwest of the State of Amazonas, in a continuous region of conserved tropical forest. The territory is bathed by the Juruá River, one of the main tributaries of the Amazon River, with its source in the Peruvian Andes, and its water has a high concentration of nutrients, which contributes to its rich biodiversity. Riverside and indigenous populations live along the river. In the Middle Juruá there are 2 contiguous conservation units (Extractive Reserve of the Middle Juruá, with 286 thousand ha and the Sustainable Development Reserve of Uacari, with 632 thousand ha), indigenous lands, in addition to riverside communities that on the banks of the Juruá River live and share common resources through a Fisheries Agreement. This territory also has the international recognition of Ramsar Site, for containing recognized wetlands that can benefit from priority access to international technical cooperation and financial support to promote projects aimed at its protection and the sustainable use of its natural resources, favouring the implantation, in such areas, of a development model that provides quality of life to its inhabitants.

The main production chains are oilseeds, rubber, fishing, management of arapaima, cassava, açaí and wood, through community forest management. Marketing takes place through Cantinas, through Comércio Ribeirinho Solidário, organized by ASPROC in the region. There is a wide network of researchers and research institutions working in the region with the communities, studying biodiversity, the management of natural resources and the riverside people's ways of life. In an innovative way, there is technical training for youth as environmental agents and technicians in sustainable production in conservation units. At the higher level, the pedagogy course is in progress to serve riverside schools.

5. Middle Purus Region: biodiversity data management to strengthen sustainable use and protection against deforestation.

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The Purus river enters Brazil through the state of Acre, runs through the state of Amazonas and flows into the Solimões river, with a length of 3,500 to 3,700 km. The region known as Médio Purus covers the municipalities of Boca do Acre, Pauini, Lábrea, Tapaupá and Canutama, in the south of the State of Amazonas. It is a region of extreme importance for conservation with an "extremely high" classification for biological importance, according to the 2nd Update of Priority Areas for Biodiversity Conservation 2018, although in recent decades the region has undergone significant transformations in patterns of use and land occupation, impacting the socio-environmental context. Since the Trans-Amazonian, the region has been the stage for the expansion of the agricultural frontier, in addition to other degrading activities, such as illegal logging and livestock. Lábrea, the southernmost municipality, occupying the region called the "arc of deforestation", is among one of the most deforested municipalities in the state of Amazonas, according to data from the National Institute for Space Research - INPE. Despite the rapid transformations, the region is home to a set of contiguous protected areas, including conservation units and indigenous lands, with around 4 million ha. Proper territorial management of this mosaic of protected areas is of fundamental importance to minimize the impacts generated on biodiversity and IPLCs.

The constant incidence of predatory practices around and inside the territories, the importance of fishing in indigenous social relations and in the context of the regional economy, as well as the observation of the increase in fishing effort and the subsequent pressure on ichthyofauna stocks motivated the peoples and communities in the region to incorporate management techniques (territorial surveillance, lake mapping, arapaima counts and definitions of rules for fishing) that would reinforce traditional fishing practices. Actions to monitor the conservation status of biodiversity have been developed in the region with indigenous peoples, including pirarucu counts, which makes it possible to monitor the recovery of fish stocks since 2009. Another technique that has been implemented since September 2012 is the installation of camera traps in the flooded areas of the ILs. These methodologies make it possible to analyze and diagnose the state of conservation of the fauna, qualifying actions for the conservation of biodiversity and the management of natural resources.

Among the recommended actions for the region, polygon AMZ - 664 are: recognition of Indigenous Lands, integrated management of protected areas, ecological corridors and territories of peoples and traditional communities. About 30 species are identified as target species, among rare and/or threatened species. Among the species indicated for Sustainable Use are: Chestnut (Bertholletia excelsa); Copaiba (Copaifera multijuga Hayne); Black caiman in flooded forests and in the macrophyte environment; Chelonians (Kinosternon scorpioides, Peltocephalus dumerilianus, Podocnemis expansa, Podocnemis sextuberculata and Podocnemis unifilis). Among the actions recommended for the region, polygon AMZ-438, are: research: diagnosis of sociobiodiversity value chains and faunal resources for subsistence purposes. 27 species are identified as target species, among rare and/or threatened species. Among the species indicated for Sustainable Use are Chestnut (Bertholletia excelsa); Copaiba (Copaifera multijuga Hayne); Black caiman in flooded forests and in the macrophyte environment; Chelonians (Kinosternon scorpioides, Podocnemis expansa, Podocnemis sextuberculata and Podocnemis unifilis).

6. Rio Branco Basin – Uraricoera Region: diversity of peoples and landscapes in an environment of fragile ecosystems and great socioeconomic pressures.

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The Rio Branco, named after the junction of the Rio Uraricoera with the smaller tributary Tacutu, until it flows into the Rio Negro, is one of the largest tributaries of the Amazon River system, whose total length (Branco: 584 km, Uraricoera: 870 km) borders on 1,500 km, just behind the Rio Negro (1,700 km). The river basin thus characterized, which largely coincides with the territory of the State of Roraima, covers a territory of approximately 200,000 km2 (20 million ha.) with very different environmental characteristics within the Amazon. Among them, its location in a transition area between the Amazon basin and the Guiana Shield stands out, characterized by a very different mosaic of ecosystems and "atypical" Amazonian landscapes in the general context of the Amazon, such as upland forests and mountains, including the largest area of Amazonian savannah, with some characteristics similar to the Cerrado biome, locally called "Lavrado".

Such characteristics, which on the one hand can be considered "natural", on the other hand are inseparable from the historical and "cultural" characteristics arising from the human presence, secularly represented by at least 8 peoples from 3 linguistic families. Even today, with more than 50,000 indigenous inhabitants among the 631,000 in the state, Roraima has the largest indigenous demographic in Brazil. The 33 Indigenous Lands of the State, diversified by several factors, from the extension to the prevailing ecosystem (forest and/or savanna), and consequently the biodiversity present in them, share, on the one hand, a set of important characteristics: on the one hand, biodiversity of these territories has so far been little surveyed and studied by official science; on the other hand, indigenous communities continue to use it according to their uses, customs and traditional knowledge. At the same time, research carried out over decades in some Conservation Units, including ESEC Maracá (among the largest river islands in the Amazon, in the Uraricoera River) did not completely bypass the closest communities, involving the collaboration of indigenous peoples such as logistic assistants and para-taxonomists in studies carried out in PELD and/or PPBio modules.

This has recently awakened the interest of academics and indigenous professors for research in biodiversity and ecology, also thanks to the local presence of institutions such as INPA and UFRR, although with numbers well below existing potential. Other strong regional aspects are the presence of the Indigenous Council of Roraima (CIR), founded 53 years ago, it is one of the oldest grassroots organizations in Brazil, and the training of indigenous researchers at local universities. At the same time, indigenous territories in Roraima have been suffering from increasing pressure and threats. In 2022, according to a survey by IMAZON, Roraima registered 5 among the 10 Indigenous Lands most threatened by deforestation. Of these, 4 are Indigenous Lands located in Lavrado, the Amazonian savannah of Roraima, an environment particularly exposed to the advance of monocultures (both grain and trees), whose biodiversity is also extremely fragile due to the lack of Conservation Units, leaving only Indigenous Lands as the only type of Protected Area in this fragile ecosystem.

# 7. Interfluvial Araguaia Tocantins Region: fluvial island peoples and communities in an area of the Cerrado rich in biodiversity and a priority for conservation.

Tocantins-Araguaia Interfluve - comprises a set of elevations arranged in mountain alignments, aligned hills, escarpments and plateaus that cover the so-called Serra do Estrondo, Cordilheiras, Malhada Alta and Roncador. This set of mountains makes up an extensive divider between the basins of the Tocantins and Araguaia rivers, and extends for more than 500 kilometers in a long north-south strip along the center-north of the state of Tocantins. This region has a high richness of birds and a great diversity of environments, presenting several polygons of high and extreme importance for biodiversity, according to the 2nd Update of

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Priority Areas for Biodiversity Conservation 2018. In this region there are several Indigenous Lands and others protected areas of great importance, such as the Araguaia National Park. This region also suffers from the impact of agricultural expansion.

# <u>List of Indigenous territories that have in place a local management instrument:</u>

TERRAINDÍGENA	Região da Ti	POVO	BIOMA	Instituicoes e parcei ros	Coordenação Regional FUNAI	Instrumento de gestão	STATUS	Año el aboraç ão
Apurină Km124 BR:317	Médio Purus	Apurină	Amazônia	IEB	Alto Purus	PGTA	Implementação	
Boca do Acre	Médio Purus	Apurină	Amazônia	IEB	Alto Purus	PGTA	Implementação	
Camicuâ	Médio Purus	Amaz ôn la	Amazônia	IEB	Alto Purus	Diagnástico sod oambi ental	Elaborado	2014
Camicuã	Médio Purus	Amazônia	Amazônia	IEB	Alto Purus	Etnomapeamento	Elaborado	2015
Seruini /Marienê	Médio Purus	Apurină	Amazônia		Médio Purus	Le vantamento Etnoecológico	Elaborado	2008
Tumiă	Médio Purus	Apurinã	Amazônia		Médio Purus	Levantamento Etnoecológico	Elaborado	2008
Alto Sepatini	Médio Purus	MI ranha	Amazônia	FOCIMP	Médio Purus	Plano de VI da	Elaborado	2011
Admå	Médio Purus	Apurină	Amazônia	FOCIMP	Médio Purus	Plano de VI da	Elaborado	2011
Camadeni	Médio Purus	Jamamadi .	Amazônia	FOCIMP	Médio Purus	Plano de VI da	Elaborado	2011
Zuruahä	Médio Purus	Zuruahā	Amazônia	FOCIMP	Médio Purus	Plano de VI da	Elaborado	2011
Catipari/Mamoriá	Médio Purus	Apurină	Amazônia		Médio Purus	Levantamento Etnoecológico	Elaborado	2008
Hi Merimä	Médio Purus	Hi Merimä	Amazônia	FOCIMP	Médio Purus	Plano de VI da	Elaborado	2011
Jarawara/Jamamadi /Kanamati	Médio Purus	Jamamadi , Jarawara, Kanamati	Amazônia	RUNAI - CR Médio Purus	Médio Purus	PGTA	Elaborado	desde 2013
Jarawara/Jamamadi /Kanamati	Médio Purus	Jamamadi, Jarawara, Kanamati	Amazônia	OPAN (Operação Amazônia Nativa)/I DAM (Instituto de Desenvolvimento Agrope cuário e Fl orestal Sustentável do estado do Amazonas)/FOCIMP (Federação das organizações e comunidades Indígenas do Médio Purus	Médio Purus	PGTA	Elaborado	2008
Juma	Médio Purus	Juma, Isolados	Amazônia		Madeira	Plano de VI da	Elaborado	
Paumari do Cuniua	Médio Purus	Paumari	Amazônia	OPAN, USAID, Petrobrás	Médio Purus	PGTA	Implementação	2011

## ANNEX D: ENVIRONMENTAL AND SOCIAL SAFEGUARDS SCREEN AND RATING

(PIF level) Attach agency safeguard screen form including rating of risk types and overall risk rating.

Title

ANNEX D - Brazil IPLCs SRIF for PIF submission

## **ANNEX E: RIO MARKERS**

Climate Change Mitigation	Climate Change Adaptation	Biodiversity	Land Degradation	
Significant Objective 1	Significant Objective 1	Principal Objective 2	No Contribution 0	

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# ANNEX F: TAXONOMY WORKSHEET

Level 1	Level 2	Level 3	Level 4
Influencing Models	Strengthen institutional capacity and decision-making		
	Convene multi-stakeholder alliances		
	alliances		
	Demonstrate innovative approaches		
Stakeholders	Indigenous Peoples		
	Private Sector	SMEs	
		Individuals/Entrepreneurs	
	Local Communities		
		Community Based Organization	
	Civil Society	Non-Governmental Organization	
		Academia	
		Information Dissemination	
		Partnership	
	Type of Engagement	Consultation	
		Participation	
		A Dai:	
		Awareness Raising	
		Education	
		Public Campaigns	
		Behaviour Change	
	Communications		
Capacity, Knowledge and Research	Capacity Development	Theory of Change	
and nescaren		Adaptive	

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	Knowledge Generation and Exchange		
	Learning	Management Indicators to Measure Change	
	Innovation Knowledge and Learning	Knowledge Management Innovation Capacity Development Learning	
Gender Equality	Stakeholder Engagement Plan Gender Mainstreaming	Beneficiaries	
		Sex-disaggregated indicators  Gender-sensitive indicators	
	Gender Results Areas	Access and control over natural resources  Participation and leadership  Access to benefits and services	
		Capacity development  Awareness raising  Knowledge generation	
Focal Area/Theme	Biodiversity	ABS  Protected Areas and Landscapes	Nagoya Protocol  Terrestrial Protected Areas

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		Community Based Natural Resource Management
	Mainstreaming	Forestry (Including HCVF and REDD+)
		Threatened Species
	Species	Wildlife for Sustainable Development
		Plant Genetic Resources
		Animal Genetic Resources
		Tropical Rain Forests
		Grasslands
		Amazon
		Amazon
	Biomes	
Forests		
	Forest	

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