

GEF-7 CHILD PROJECT CONCEPT

CHILD PROJECT TYPE: Full-sized Child Project

PROGRAM: IP FOLU

PROJECT INFORMATION

Child Project Title:	Sustainable Multiple Use Landscape Consortia - Vertentes Project
Country:	Brazil
Lead Agency	WB
GEF Agency(ies)	WB
Executing Agency(ies):	Ministry of Environment; Ministry of Agriculture, Livestock and Food Supply; TBD.

A. INDICATIVE FOCAL/NON-FOCAL AREA ELEMENTS AND FINANCING

Programming Directions	Trust Fund	(in \$)	
		GEF Project Financing	Co-financing
BD-1-1 (select)	GEFTF	9,981,651.60	76,160,000.00
(select) LD-1-1	GEFTF	6,403,669.80	60,330,000.00
IP FOLU incentive approved	GEFTF	8,192,660.60	62,510,000.00
Total Project Cost		24,577,982.00	199,000,000.00

B. PROJECT COMPONENTS AND FINANCING

Project Objective:						
Project Components	Component Type	Project Outcomes	Project Outputs	Trust Fund	(in \$)	
					GEF Project Financing	Co-financing
1. Development of Integrated Landscape Management Systems	Investment	1.1 Selected landscapes with improved planning & management practices to foster sustainable food systems	ILM Action Plans under implementation	GEFTF	LD 2,457,669.80	12,250,000.00
			Sustainable Multiple Use Landscape Consortia implemented within the selected productive landscapes		BD 751,651.60	
			Enhanced capacity of local ILM institutions			
			Environmental risk assessed for high slope, cliff edges, hilltops and other environmental fragile areas.			
		1.2. Strategic Knowledge Management & Communications effectively implemented				
		1.3. Policy & Value Chain actors effectively and regularly engaged	Market and food security assessed for commodities production landscapes			
2. Promotion of sustainable food production	Investment	2.1 Improved land use practices and restoration activities in major production	Conditions for landholding protocol certification enabled	GEFTF	LD 3,946,000 BD 2,975,000	116,170,000.00

practices & responsible commodity value chains		landscapes adopted and scaled up 2.2 Governance structures & tools improved to reorient stakeholder practices toward sustainable productive use and restoration	Traceability tools developed		FOLU IP 2,805,000	
			Environmental Sustainability Index accessed and monitored on-farm			
			Technical Assistance on low-carbon emission agricultural practices (RPD, iLPF, SAF, SPD) provided to landholders			
			Training on SLM practices delivered			
			Assistance for Access to Sustainable and Innovative Credit Lines provided			
			Landholders trained in best practices for sustainable production			
			Connectivity & Agriculture 4.0 innovative practices introduced for potential early-adopters			
			Knowledge Management & Communication Action Plans implemented			
3. Restoration of natural habitats	Investment	3.1 Sustainable land use practices and restoration activities scaled up in target landscapes and beyond 3.2 Partners, value chain actors, financiers and investors regularly convened, motivated and influenced to encourage responsible & sustainable production, sourcing & marketing	Degraded pastures recovered	GEFTF	BD 6,255,000.00 FOLU IP 1,540,000.00	60,000,000.00
			Native vegetation recovered for environmental services provision			
			Productivity gains related to land and native vegetation restoration assessed and monitored			
			Soil carbon stock assessed and monitored			
			Avoided GHG emissions monitored			
4. Program Coordination, Collaboration,	Technical Assistance	4.1 Management, coordination & M&E effectively implemented	Project's Technical and Administrative management	GEFTF	FOLU IP 1,389,862.60	10,580,000.00

and Capacity Building			On and off-farm biodiversity monitored			
			Safeguards monitored			
Subtotal				GEFTF	23,407,602	199,000,000.00
Project Management Cost (PMC)				GEFTF	1,170,380	
Total Project Cost					24,577,982	199,000,000.00

For multi-trust fund projects, provide the total amount of PMC in Table B, and indicate the split of PMC among the different trust funds here: ()

C. INDICATIVE SOURCES OF CO-FINANCING FOR THE PROJECT BY NAME AND BY TYPE, IF AVAILABLE

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Investment Mobilized	Amount (\$)
Recipient Country Government	ABC Program	Loan	Investment mobilized	54,000,000.00
Recipient Country Government	MMA	Public Investment	Recurrent expenditures	2,500,000.00
Recipient Country Government	MAPA	Public Investment	Recurrent expenditures	2,500,000.00
Private Sector	Producers	In-kind	Investment mobilized	90,000,000.00
Donor Agency	FIP-BIP	Grant	Investment mobilized	50,000,000.00
Total Co-financing				199,000,000.00

Describe how any "Investment Mobilized" was identified.

ABC Program (Low Carbon Agriculture) is a GoB credit line available for producers based on the following programming directions: Recovery of Degraded Pastures; Crop-Livestock-Forest Integration (iLPF) and Agroforestry Systems (SAFs); No-Tillage System (SPD); Biological Nitrogen Fixation (BNF); and Planted Forests. It is expected that the direct beneficiaries of the Vertentes Project will access blended finance including ABC Credit line, in order to achieve environmental regulation compliance as well as productivity gains. Technical assistance provided by the project will allow producers to better prepare project finance proposals for ABC Program.

The Brazil Investment Plan (BIP) is an initiative of the federal government for the Forest Investment Program (FIP) to support the implementation of national plans and programs that have focused on reducing deforestation and land use change pressure in the Cerrado region, the second largest biome in Brazil. Currently, the BIP-FIP portfolio comprises 8 projects, accounting for more than US\$ 80 million dollars.

Based on FIP- ABC (Forest Investment Program – Low Carbon Agriculture) project results, the resources invested by the project were leveraged 8 times with contributions by the producers (a ratio of 1:8), meaning that for every US\$1 invested by the project, the producers invested 8 US\$ to adopt improved agricultural and restoration practices. This represents a significant potential for beneficiary financial contribution to the FOLUR Child Project results, which contributes to the project sustainability.

D. 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	(in \$)		
					GEF Project Financing (a)	Agency Fee (b)	Total (c)=a+b
WB	GEFTF	Brazil	Biodiversity	BD STAR Allocation	9,981,651	898,349	10,880,000

WB	GEFTF	Brazil	Land Degradation	LD STAR Allocation	6,403,670	576,330	6,980,000
WB	GEFTF	Brazil	Incentive approved	IP FOLU	8,192,661	737,339	8,930,000
Total GEF Resources					24,577,982	2,212,018	26,790,000

E. PROJECT PREPARATION GRANT (PPG)

Is Project Preparation Grant requested?

Yes If yes, PPG funds **have to be requested via the Portal** once the PFD is approved

No If no, skip this item.

F. PPG AMOUNT REQUESTED BY AGENCY(IES), TRUST FUND, COUNTRY(IES) AND THE PROGRAMMING OF FUNDS

GEF Agency	Trust Fund	Country/ Regional/Global	Focal Area	Programming of Funds	(in \$)		
					PPG (a)	Agency Fee (b)	Total c = a + b
WB	GEFTF	Brazil	Biodiversity	BD STAR Allocation	74.518	6.707	81.225
WB	GEFTF	Brazil	Land Degradation	LD STAR Allocation	47.806	4.302	52.108
WB	GEFTF	Brazil	Incentive approved	IP FOLU	61.162	5.505	66.667
Total PPG Amount					183.486	16.514	200.000

G. PROJECT'S TARGET CONTRIBUTIONS TO GEF 7 CORE INDICATORS

Provide the relevant sub-indicator values for this project using the methodologies indicated in the Core Indicator Worksheet provided in Annex B and aggregating them in the table below. Progress in programming against these targets is updated at the time of CEO endorsement, at midterm evaluation, and at terminal evaluation. Achieved targets will be aggregated and reported at any time during the replenishment period. There is no need to complete this table for climate adaptation projects financed solely through LDCF and SCCF.

Project Core Indicators		Expected at PIF
1	Terrestrial protected areas created or under improved management for conservation and sustainable use (Hectares)	
2	Marine protected areas created or under improved management for conservation and sustainable use (Hectares)	
3	Area of land restored (Hectares)	250,800 hectares
4	Area of landscapes under improved practices (excluding protected areas) (Hectares)	1,700,000 hectares
5	Area of marine habitat under improved practices (excluding protected areas) (Hectares)	
	Total area under improved management (Hectares)	=#3+#4Y = 1,950,800
6	Greenhouse Gas Emissions Mitigated (metric tons of CO ₂ e)	21,709,687 tCO ₂ e _q
7	Number of shared water ecosystems (fresh or marine) under new or improved cooperative management	
8	Globally over-exploited marine fisheries moved to more sustainable levels (metric tons)	
9	Reduction, disposal/destruction, phase out, elimination and avoidance of chemicals of global concern and their waste in the environment and in processes, materials and products (metric tons of toxic chemicals reduced)	

10	Reduction, avoidance of emissions of POPs to air from point and non-point sources (grams of toxic equivalent gTEQ)	
11	Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment	8,215 male 2,242 female

Provide additional explanation on targets, other methodologies used, and other focal area specifics (i.e., Aichi targets in BD) including justification where core indicators targets are not provided.

Preliminary estimates for Green Gas Emissions are mainly based on the country level use of Ex-Ante Carbon-balance Tool (EX-ACT) and others. The methodology measures carbon-balance defined as the net balance from all greenhouse gases (GHGs) expressed in CO₂equivalent emitted or sequestered due to potential project implementation vis-à-vis the business-as-usual scenario.

Transforming food and agriculture landscapes and value chains will also contribute critically to achieving the 2030 Agenda and the SDGs, in particular SDG2, SDG13, SDG15 and SDG1.

F. PROGRAM TAXONOMY.

Please fill in the table below for the taxonomic information required of this program. Use the GEF Taxonomic Worksheet provided in Annex C to help you select the most relevant keywords/topics/ themes that best describe this program.

Level 1	Level 2	Level 3	Level 4
Influencing models	Convene multi-stakeholder alliances		
Stakeholders	Stakeholder engagement		
Capacity, knowledge and research	Knowledge generation and exchange		
Gender Equality	Gender mainstreaming		
Focal Area/Theme	Integrated programs		
Rio Markers	Climate Change Mitigation 1		

PROJECT DESCRIPTION

1. a) Country Context (*maximum 500 words*)

Describe the country's relevant environmental challenges and strategic positioning relative to the systems transformation proposed for the program, including relevant existing policies, commitments, and investment frameworks, how are these aligned with the proposed approach to foster impactful outcomes with global environmental benefits?

Brazil has experienced impressive agricultural growth in the past four decades, emerging as a global leader in agricultural commodity production. Brazil is the world's largest beef exporter, providing close to 20 percent of total global beef exports, and soybean exporter (83 million metric tonnes exported in 2018). Most of this growth has taken place in the Cerrado biome. The rich and diverse Cerrado is a congregate of landscapes that are strategic for economic and environmental reasons as well as for food security. It covers approximately 200 million hectares (ha) of the Brazilian Central Plateau (24% of the country's total land area), rainwater falling in its highlands runs off in all directions, a phenomenon called the "umbrella effect"¹, feeding the three major river basins – Tocantins, São Francisco and Paraná – a large geographic

¹Jorge Enoch, "Situation on prospects for the Cerrado Waters". 2011.

area that contains significant carbon stocks and substantial biodiversity. Agriculture, which occupies around 22 million ha, involves mechanized farming on large tracts of land and the widespread use of chemical inputs to correct soil acidity and enhance fertility. The Cerrado houses an estimated 50 million head of cattle, nearly 33% of the national herd, on 54 million ha of grassland, and comprises more than half (52%) of the soybean produced in Brazil. However, the expansion of agriculture production has reshaped the Cerrado landscapes with environmental costs, including significant loss of native vegetation and environmental and land degradation. On those anthropized areas, the prolonged use of grasslands for conventional beef cattle production diminishes the soil productivity capacity for agriculture and vegetation regeneration. In this context, the main development challenge for Brazil is to find the best way to sustainably manage those natural and productive landscapes, increasing food production while restoring degraded land and conserving natural characteristics of the Cerrado for its biodiversity and ecosystem services.

To change this trajectory, Brazil has historically developed a strong policy framework to foster sustainable agriculture and forest-protection, including the National Policy of Water Resources (Law No. 9,433/1997), the National Policy on Climate Change (Law 12.187/2009); the Sector Plan for a Low Carbon Economy in Agriculture – ABC Plan (Decree No.9,578/2018), the National Plan for the Promotion for Socio-Biodiversity Value Chains (Resolution No. 239/2009), the Forest Code (Law No. 12,651/2012), the National Policy to Combat Desertification (Law No. 13,153/2015), among others.

Additionally, Brazil is signatory to the United Nations Convention to Combat Desertification (UNCCD), United Nations Framework Convention on Climate Change (UNFCCC), Convention on Biological Diversity (CBD), Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). Brazil is also engaged in such multilateral sustainability initiatives as Tropical Forest Alliance, Consumer Goods Forum, Roundtable on Responsible Soy, Food and Land Use Coalition. In 2017, Brazil signed the Soil Degradation Neutrality Strategy - LDN during UNCCD COP 13, whose self-determined goal is currently under construction and quantification.

Brazil has also submitted its Nationally Determined Contribution (NDC) to the UNFCCC, committing to reducing greenhouse gas (GHG) emissions by 37 percent below 2005 levels by 2025 and, as a subsequent indicative contribution, to reducing GHGs by 43 percent below 2005 levels by 2030.

In terms of investment framework, the Brazil Investment Plan (BIP), endorsed by the Forest Investment Program (FIP), represents an important portfolio for achieving Brazil's NDC commitments in the Cerrado biome. The BIP seeks to improve sustainable land use and forest management in the Cerrado to contribute toward reducing pressure on the remaining forests, reducing GHG emissions, and increasing carbon dioxide (CO₂) sequestration. FIP investments and learning are contributing knowledge and good practices to the current design, as well as co-financing.

Brazil is strategically positioned to contribute to the transformational change proposed by the FOLUR IP by: a) promoting sustainable food systems for soybean and beef cattle value-chains and catalyzing investment opportunities to scale-up production models with environmental and social benefits; b) promoting low-carbon commodities by making available incentives and market mechanisms for sustainable production of soybeans and beef cattle and other food systems, and implementing a socio-environmental business model (e.g., EMBRAPA's Carbon Neutral Meat Protocol); c) ensuring the legal protection of natural ecosystems on private lands; and d) restoring degraded lands by making financial incentives (e.g., favorable credit and access to markets) and technical assistance available to producers to support the implementation landscape management tools. This will be framed within an integrated

landscape management (ILM) approach with the necessary institutional and governance capacities, and land use planning tools to enable implementation. Multiple environmental benefits are expected to result from implementing this strategy in selected productive landscapes, such as: increase productivity on anthropized agricultural and pasturelands; reduce land degradation; increase carbon sequestration and lower GHG emissions; and improved habitat for key biodiversity species.

2. Project Overview and Approach (maximum 1250 words)

a) Provide a brief description of the geographical target(s), including the details of systemic challenges, and the specific environmental threats and associated drivers that must be addressed;

The project is focused on three areas (**Figure 1**) covering approximately 28.2 million ha. The selected landscapes are important for soybean and beef cattle production and located in major freshwater-producing basins, featuring Cerrado phytophysiognomies, including elements of the Pantanal, Caatinga and Atlantic Forest biomes. The three macro areas encompass important biodiversity hot spots, being a strong center of evolution and speciation of both flora and fauna. Since in these consolidated production areas there is minimum room for further legal vegetation suppression (municipal deforestation rate under the 3 macro areas are presented in a complementary document), the proposed intervention conduces to improved productivity at commodity areas, and consequent improvement of the local economy, increasing environmental perception and value, and contributing to these hot spots' viability. Moreover, those areas are characterized by arid climate spectrum and ecological transition hotspots, ecotones and occurrence of important endemic species, some already threatened.



Figure 1. Project proposed coverage. Colors represent great Brazilian river basins. Project's interventions would be deployed on Tocantins-Araguaia basin (yellow), as well as its adjacent watersheds Pantanal (light orange), Paranaíba/Paraná (light yellow) and São Francisco (greyish blue)

The three areas were selected based on hydrographic, edaphological, agricultural, and land use typologies criteria. The overall characteristics of selected intervention areas under the Vertentes Project are:

Area 1 is located in the Araguaia-Taquari watershed in the States of Goiás, Mato Grosso and Mato Grosso do Sul, covering 20 municipalities with an area of 10.7 million hectares and 362,315 habitants. This area has 15,136 rural properties (with 15% owned by women). Soybean production reached, in 2017, nearly 2.5 million metric tonnes (in 761,301 hectares of which 89% are under no-till planting) and total cattle herd comprises 4.6 million heads. Grasslands cover an area of 4.9 million hectares of which 39% presents some degree of pasture degradation.

Area 2 is located in the Tocantins and Paranaíba watersheds in the States of Goiás and Federal District, covering 8 municipalities occupying an area of 3.1 million hectares and 3.4 million habitants. This area has 14,819 rural properties (with 18% owned by women). In 2017, soybean production reached 1.3 million metric tonnes, in 384,300 hectares of which 84% use no-till planting. Total cattle herd reached 973,161 heads, in 953,404 hectares of grassland of which 68% presents some degree of pasture degradation.

Area 3 is located in the Tocantins, São Francisco and Paranaíba watersheds in the States of Bahia and Minas Gerais, covering 32 municipalities with 14.4 million hectares and 813,527 habitants. The area has 55,118 rural properties (with 16% owned by women). In 2017, soybean production reached 3.7 million metric tonnes in 1.1 million hectares of planted area of which 99% are under no-till planting. Total cattle herd reached 2.1 million heads under 3.3 million hectares of grassland of which 62.5% presents some degree of pasture degradation.

It is noteworthy the high adoption of no-tillage techniques for soy production on the 3 selected areas (from 84% to 99%), indicating an opportunity for the Project to move a step forward on the direction of crop-livestock-forest integration (ILPF), certification and traceability within the supply chain. Beef cattle production, on the other hand, shows high levels of degraded pastures (almost 50% of grassland area), which represents a challenge but also great opportunities for productivity gains and implementation of improved practices. Experiences in the Cerrado area show that degraded pasture areas, once recovered, may in part be used in agriculture, allowing existing soybean producers to expand the planted area (incorporated from areas already in use, pastures recovered without deforestation).

Recovered pasture areas allow the adoption of ILPF in both cases: being partially converted for agricultural use or remaining fully used for beef production. The degraded pasture area can be recovered with agriculture allowing immediate use with agriculture (soybean/corn) followed by off season temporary pasture (sowed before grain harvest) and in the next season grain again (integration crop-livestock). In case of recovered area for main use as pasture the option (pasture-forest) and/or (crop-pasture-forest), with parts of pasture being regularly recovered with agriculture (2-3 seasons) can be applied.

Within the selected 3 macro areas (28.2 million ha), the project aims to be implemented in 1,700,000 ha, under 9 pre-selected productive landscapes (PLs), based on high occurrence of land degradation processes, importance of local environmental features and high incidence of endemic species (**Table 1**). Although the implementation area is targeted in the selected 60 municipalities (**complete list on Annex 2**), the design will be flexible enough to incorporate surrounding municipalities, if needed, to achieve economy of scale and to consolidate ecological corridors.

The proposed target to intervene in 1.7 million ha of landscape area under improved areas was based on evidence provided by the FIP/WB financed Sustainable Agriculture Production Project – Projeto ABC Cerrado (P143184) – closing in November 20, 2019, where with US\$10.62 million enabled the adoption of sustainable practices in more than 700,000 hectares. Another scope indicative was the FIP/WB financed Integrated Landscape Management in the Cerrado Project (P164602), which targeted to reach 1,200,000 hectares of landscape under improved practices with US\$ 21 million grant.

Table 1. Environmental and biodiversity features of selected productive landscapes

Productive landscapes (PL)	Biome coverage	Environmental features	Endemic species
Under Area 1:			
I - Emas – Alto Taquari	Cerrado combined with elements of Pantanal Atlantic Forest	Araguaia, Taquari and do Peixe River/Paranaiba springs; Serranópolis thermal waters; archaeological sites; Salto do Sucuriú Falls	Alipiopsitta xanthrops (Papagaio do Cerrado); Tolypeutes mataco (Tatu-bola ocidental); Cattleya walkeriana; Butia purpurascens (Butiá vermelho); Byrsonima cordifolia; Hippeastrum leucobasis

II - Quedas do Araguaia – Couto Magalhães	Cerrado combined with elements of Pantanal, Cocais Woods and Amazonia	Couto Magalhães Falls; Araguaia's river beaches and islands; Marimbondo Waterfall; Sonora Canyons, Serra de Sonora; Serra do Roncador; Serra de Itiquira; Barra do Garças thermal waters; ebb lakes and ponds	Inia araguaiensis (Boto do Araguaia); Cattleya araguaiana; Potamotrygon henlei (Arraia do Araguaia); Hyphessobrycon amandae (Tetra Foguinho)
Under Area 2:			
III - Serra Geral de Goiás	Cerrado; Caatinga; ecotone	Serra Geral de Goiás; Paranã Canyon (hand gliding free flight sites); Chapada dos Veadeiros; Serra Geral Rock Cliffs; Buraco das Araras (dolina); Terra Ronca and other caves; Salto do Itiquira Falls and other waterfalls; Carste de Mambaí; areões da serra; Paranã meteoric depression; Funil gorge and waterfall; thermal waters; lakes; scenic rivers	Mergus octocetaceus (Pato Mergulhão); Kerodon acrobata (Mocó da Chapada); Tolypeutes tricinctus (Tatu-bola oriental); Pyrrhura pfrimeri (Tiriba Vermelha); Bauhinia malacotrichoides; Cattleya walkeriana; Podocarpus brasiliensis (Pinheiro de Brasília); Cattleya nobilior; Podocarpus barretoii (Pinheiro da Chapada); Vellozia albiflora (Canela-de-ema Branca); Cavanillesia umbellata (Barriguda); Chorisia glaziovii (Paineira Branca)
IV - Goyáz Velho	Cerrado, combined with elements of Atlantic Forest and Cocais Woods	das Almas, Tocantinzinho; Corumbá, dos Bois, and Verde rivers watersheds; Serra Dourada; Serra dos Pireneus; Serra do Pouso Alegre; historical cities; Chapada da Vendinha; Chapada de Brasília; dos Ecos and other caves;; Salto do Corumbá Falls; Morro do Cabeludo Hill; Morro do Rodeador Hill; Contagem Canyon; archaeological and paleontological sites; lakes; waterfalls; Serra Dourada Rocky Cliffs.	Cattleya walkeriana; Podocarpus brasiliensis (Pinheiro de Brasília); Cattleya bicolor; Phagnipedium vittatum (orquídea Sapatinho de Vênus); Juscelinomys kandango (roedor primitivo); Cinolebias boitonei (Pirá-brasília); Rivulus brasiliensis (Rivulo do Planalto); Mesosetum longiaristatum; Tibouchina papyrifera; Otachyrium piligerum; Vochysia haenkeana (Pau Dourado); Scitalopus novacapitalis (Tapaculo de Brasília); Brycon orbignyanus (Piracanjuba); Taoniscus nanus (Inhambú Carapé)
Under Area 3:			
V - Acaba-Vida	Cerrado, combined elements of Caatinga	Corrente, Grande and Santa Maria rivers watersheds; Cataratas do Acaba-Vida Falls; Redondo Waterfall; Ondas river; scenic rivers; Chapada das Barreiras; Cuesta da Serra Geral	Cattleya nobilior; Mauritiella armata (Buritirana); Claravis pretiosa (Pomba Pararú); Cavanillesia arborea (Barriguda)
VI - Geraes da Bahia	Cerrado, com elementos da Caatinga	scenic rivers; Geraes; historical cities; cuesta da Serra Geral; Cavanillesia umbellata Woods; waterfalls	Cattleya nobilior; Mauritiella armata (Buritirana); Cavanillesia arborea (Barriguda); Claravis pretiosa (Pomba Pararú); Chorisia glaziovii (Paineira Branca); Cavanillesia arborea (Barriguda)
VII - Geraes do Grande Sertão-Veredas	Cerrado; Caatinga; ecótono	Plateaus; Serra das Araras; Peruaçu and other caves; Geraes; scenic rivers; archaeological and paleontological sites; historical cities; rocky cliffs; river beaches	Charitospiza eucosma (Mineirinho); Cattleya nobilior; Mauritiella armata (Buritirana); Cavanillesia arborea (Barriguda); Claravis pretiosa (Pomba Pararú); Chorisia glaziovii (Paineira Branca); Cavanillesia arborea (Barriguda); Nothura minor (Codorna mineira); Nothura boraquira (Codorna buraqueira)
VIII - Paracatu do Príncipe	Cerrado, com elementos de Caatinga e Mata Atlântica	Paracatu river watershed; serra dos Cristais; serra dos Topázios; caves; Geraes; river beaches; lakes; ebb ponds; chapadas; historical cities; archaeological and paleontological sites	Cattleya walkeriana; Podocarpus brasiliensis (Pinheiro de Brasília); Cattleya bicolor; Phagnipedium vittatum (orquídea Sapatinho de Vênus); Juscelinomys kandango (roedor primitivo); Mesosetum longiaristatum; Otachyrium piligerum; Vochysia haenkeana (Pau Dourado); Scitalopus novacapitalis (Tapaculo de Brasília); Taoniscus nanus (Inhambú Carapé); Nothura minor (Codorna mineira); Nothura boraquira (Codorna buraqueira)
IX - Lenda do Abaeté	Cerrado; com elementos da Mata Atlântica	Abaeté river watershed; Serra da Canastra northwest face; waterfalls; caves; archaeological and paleontological sites; medicinal waters; lakes	Mergus octocetaceus (Pato Mergulhão); Vochysia haenkeana (Pau Dourado); Scitalopus novacapitalis (Tapaculo de Brasília); Taoniscus nanus (Inhambú Carapé); Nothura minor (Codorna mineira)

The main systemic challenges for these landscapes are worsened by the growing demand for food commodities. Another specific challenge at landscape level is the integration of natural areas – required by the Brazilian legislation – from different rural producers in a way that they can become relevant for biodiversity and for production. In order to address those challenges, the project will be designed to face several barriers: (i) uncoordinated planning and landscape management processes at subnational and local levels; (ii) misaligned existing policies and incentives to promote sustainable agriculture value chains and forest protection; (iii) weak processes for stakeholder engagement and for knowledge transfer and technical assistance provision; and (iv) weak private sector engagement in financing and on sustainability issues.

b) Describe the existing or planned baseline investments, including current institutional framework and processes for stakeholder engagement and gender integration;

National government is investing in several programs to support the implementation of the Sector Plan for a Low Carbon Economy in Agriculture – ABC Plan (Law No 12,187/2009 and Decree No.9,578/2018), the Forest Code (Law No. 12,651/2012), and the National Policy to Combat Desertification (Law No. 13,153/2015) with the objective to promote sustainable land use and forest management improvements in the Cerrado. The key baseline programs and institution frameworks are under the Brazil Investment Plan (BIP), endorsed by the Forest Investment Program (FIP) Subcommittee on May 18, 2012 and managed by the World Bank:

- ***Environmental Regularization (P143334)*** supports the rural environmental cadaster in selected municipalities and enhance the capacity of the Brazilian Forest Service (SFB) and nine state environmental agencies to receive, analyze and approve rural environmental registries, as well as to link them to the National Rural Environmental Registry System (SICAR). In these municipalities, the project will support research, mapping and georeferencing of land use and rural properties. The investment amount is US\$ 32.48 million, benefiting 57,942 registered rural families. The FOLUR CP will benefit from the base of land use planning and mapping already established in the SICAR, which identifies legal reserve deficits for native vegetation, to focus and scale-up land recovery activities.

- ***Sustainable Agriculture Production (P143184)*** works in collaboration with the Ministry of Agriculture, Livestock and Food Supply (MAPA), the National Rural Learning Service (SENAR) and the Brazilian Agricultural Research Corporation (EMBRAPA). The aim is to promote the adoption of sustainable and low carbon agricultural technologies - advocated by the national Low Carbon Agriculture policy (Plan ABC) among medium-sized producers in the Cerrado region. The investment amount is US\$10.62 million, benefiting over 13,000 farmers. The FOLUR CP will tap into this network of farmers and further multiply the adoption of best practices for food production and land management. Additionally, the FOLUR CP will incorporate the lessons learned from this project operational approach to plan and develop the best interventional actions for its target areas.

- ***Forest Fire Prevention Systems and Monitoring of Vegetation Cover in the Brazilian Cerrado (P143185)*** supports the design and implementation of a monitoring system, including annual deforestation mapping and near-real time deforestation detection. It also helps to improve the forest fire risk information system and the estimation of greenhouse gas emissions from forest fires. Includes a hands-on training program on the application of fire hazard modeling tools. This project is in collaboration with the Ministry of Science, Technology and Innovation (MCTIC). The investment amount is US\$9.25 million, benefiting agencies from the three spheres of government, as well as actors involved in monitoring and conservation of the Cerrado Biome, such as protected area managers, academic and educational institutions, civil society organizations, and farmers. The FOLUR CP will have reduced risks because of the investment in fire detection and prevention, a factor of significant economic and environmental loss in the Cerrado. The

accurate information produced on land use change, will also benefit the responsible production chains image to be consolidated with traders and consumer markets.

- ***Integrated Landscape Management in the Cerrado (P164602)*** aims to promote the adoption of environmental conservation and restoration practices, as well as low carbon agricultural techniques in selected Cerrado watersheds. To this end, it will support land use mapping, studies and institutional strengthening activities of the Ministry of Agriculture, Livestock and Food Supply (MAPA), Brazilian Forest Service (SFB), National Institute for Space Research (INPE), EMBRAPA and SENAR. It will also provide technical assistance to landowners, monitor landowner performance and support the forest restoration supply chain. The investment amount is US\$ 21 million, benefitting over 4,000 farmers. With a similar approach, the FOLUR CP will deploy increased ambition regarding the integrated landscape management in productive landscapes, exploring synergies with common actors as well as new actor engagement for biodiversity conservation and sustainable use.

- ***Forest Information Oriented Management for Conservation and Use of Forest Resources of the Cerrado by Public and Private Sectors - IFN Project*** aims to implement and consolidate policy instruments that produce quality information on forest resources of the Cerrado, to support the formulation of policies and projects by the public and private sectors and contribute to the mitigation of greenhouse gases. In order to achieve that the project has trained 200 professionals in technical and project interest specialties; conducted biophysical and socio-environmental data collection in 3817 sampling points of National Forestry Inventory; processed and analyzed data from 6457 carbon stock samples; and will release in 2020 a Cerrado estimated carbon stock report. The FOLUR CP will boost from already in place soil carbon estimates being built to assesses and monitor stock levels during degraded land recovery activities; and forest inventory data to guide environmental recovery plans.

Also, Brazil joined the Initiative 20x20 in 2016 with a pledge to restore 22 million ha of degraded land by 2030. The pledge was made through MAPA and MMA. Under its primary restoration policy (Proveg), the National Plan for the Recovery of Native Vegetation (Planaveg) plans to restore 12 million ha through forest restoration, reforestation, and natural regeneration by 2030 as part of Brazil's NDC to the Paris agreement. The other 10 million ha will be restored as part of the Ministry of Agriculture, Livestock and Supply's Low Carbon Agriculture Program (ABC Plan), which runs from 2010-2020. The ABC Plan will restore 5 million ha of land through two programs, Livestock-Forestry Integration and Agroforestry Systems. The restoration of the remaining 5 million ha will be achieved through recovery of degraded pasture. The Planaveg document states that financing for the restoration plan can come from sources including the government, national and multilateral financing institutions, funds like the GEF, bilateral government agreements like Brazil's agreement with Norway, the private sector, and foundations.

At the FOLUR CP level, these initiatives have built up participatory processes to coordinate executors and local collaborators and to mobilize potential beneficiaries, including specific strategies to incentivize and create equal opportunities for both men and women's participation. Enhancing the existing processes for stakeholder engagement and gender integration are key factors for effective Integrated Landscape Management (ILM) outcomes.

The FOLUR CP level will build on the experience gathered with the BIP projects to promote the private sector participation and the beneficiaries' access to finance to promote sustainable initiatives, and also on the knowledge generated from studies of the rural credit system. Results from the Sustainable Agriculture Project have shown great sustainability of the project's investment, considering that when the farmers see the results of the sustainable agriculture, they are willing to invest their own money or request additional funds to continue with the intervention.

The Vertentes Project will elaborate a strong communication strategy to reach out to key stakeholders to facilitate a common understanding of the vision, values and landscape needs through a neutral, non-threatening and constructive forum. Also, the project will conduct a gender assessment and design a gender strategy to encourage the equitable gender participation in the activities and eventual generation of income and work resulting from the interventions. The assessment of social impacts and benefits will incorporate a gender-sensitive lens and would propose specific actions to close identified gender gaps as well as indicators to monitor actions designed to address or narrow these gaps, such as communication strategy, specific training, facilitated participation in formal and informal decision-making structures and governance processes related to the equitable provision of inputs for restoration.

During project preparation an Environmental and Social Impact Analysis (ESIA) and a Stakeholder Engagement Plan (SEP) will be prepared as required by the World Bank’s Environmental and Social Standards (ESSs) 1 and 10. The ESIA will assess the presence or not of Indigenous Peoples within the selected areas. It is worth mentioning that (i) a preliminary assessment pointed out that there are no Indigenous Lands within the selected areas (this information will be checked during the preparation of the ESIA) and (ii) the project is targeted at private farmers and landholders as they are the main responsible for commercial agricultural production as well as land degradation and deforestation. If Indigenous Peoples are present in the area, the ESIA will assess the potential indirect impacts and benefits that project activities may have on them as well as propose measures to promote their participation and the opportunities to increase their access to benefits.

Table 2. Stakeholder role and project engagement

Stakeholders	Role and project engagement
Other Federal Government institutions	Will harmonize national policies and guidelines. Improve policy-practice interactions. Give overall strategic advice.
State and municipal level governments	Directly involved at the project implementation and local articulation. Will be engaged at landscape planning and other project activities, such as the “off-farm” improvements.
National representatives of productive sector	Identification and mobilization of local actors. Technical assistance provision. Will cooperate on community capacity building actions. Strengthen the dissemination of climate smart agriculture benefits.
Commercial farmers and local communities.	Commercial farmers will be the agents of transformational change. The local communities will act as a social control to secure support, involvement and benefits from project-related activities.
Environmental and agricultural research institutions	Validation of technical material. Collaboration at Project technologies dissemination. Monitoring of implementation and results.
Agroindustry, traders and exporters	Will be the main transformational change stakeholders to foster sustainable landscape economy and mainstream sustainable practices along the value-chain. Improve traceability and security throughout the value-chain.
Financial institutions	Assist farmers in preparing on -farm investments proposals in order to access credit resources

c) Describe how the integrated approach proposed for the child project responds to and reflects the Program’s Theory of Change, and as such is an appropriate and suitable option for tackling the systemic challenges, and to achieve the desired transformation with multiple global environmental benefits; and

The project will apply an ILM approach in the areas presented in item 2.1 to maximize the IP objectives for sustainable food systems and landscape restoration. Those anthropized/consolidated productive areas have historically applied, mainly for beef cattle production and in a lesser extent for agriculture, conventional practices with low rates of technological adoption, resulting in environmental degradation processes and productivity losses. To tackle those systemic challenges, the project will mobilize key stakeholders (farmers and their representative organizations, state and municipal governments, local financial and technical assistance agencies, NGOs, buyers and investors) and build on existing policies, programs and initiatives at the landscape level that are currently being implemented in an uncoordinated and fragmented fashion to establish a multi-disciplinary coalition of actors (consortiums) to catalyze investments and collectively enable an integrated and transformative business environment. The added value of the project is to build the synergy of the already installed actors, policies and initiatives to achieve proposed goals. The project design aims to integrate, complement and amplify the implementation of key sustainable policies as the ABC Plan and CAR, rather than stand-alone activities. The project will be managed by the Ministry of Environment (MMA) and the Ministry of Agriculture, Livestock and Food Supply (MAPA), which are the policy executors with the administrative and operational support of an executing agency (to be determined). These elements of the institutional set up were carefully considered to guarantee the continuity and sustainability of activities after the project lifecycle.

At the landscape level, synergies and capacities will be enhanced allowing the formulation of a comprehensive land-use planning and governance for the implementation of on- and off-farm investments. To escalate innovation and increase farms' beef cattle productivity, the project will be built from tested and successful on-farm interventions applied in the FIP program (Sustainable Agriculture Production - P143184 and Integrated Landscape Management in the Cerrado - P164602). These tested approaches include knowledge and technical assistance provision of sustainable ABC agriculture practices (soil and water conservation practices; integrated crop, livestock and forest systems; recovery of degraded pasture land; cultivated commercial forests, etc.); forest protection and restoration practices (environmental compliance, soil and water conservation, etc.); associated with technical assistance to access credit for adoption of those practices.

The Project focus would be on areas with highly intensified agriculture and associated erosion and water quality issues. To that end, the project off-farm strategy would combine actions to build the capacity and awareness of the rural population about integrated natural resources management, strengthening public support services and infrastructure (research and innovation, land regularization, and rural roads rehabilitation and maintenance), and support for sustainable business initiatives of groups of small producers to foster their greater integration with remunerative value-chains. Despite not directly financing the following infrastructure interventions, the project will promote their implementation, and will aggregate innovative elements by mobilizing national, state and municipal governments to include in the landscape planning the rationale² for off-farm investments. While this initial list of activities provides a range of options, the component remains open to new initiatives which will be determined by landholders and other stakeholders in the selected areas.

Regarding agrochemicals, since the major premise of the Project is to coordinate existing policies and programs at the landscape level, the project will partner with the NGO inpEV (*Instituto Nacional de Processamento de Embalagens Vazias*) through the *Programa Campo Limpo* to intervene in identified areas where requires handling of agrochemical packaging used in agricultural production. As a baseline, inpEV

² The project will not finance all this infrastructure, but rather will encourage its inclusion into spatial and rural development plans.

conducted the environmentally sound disposal of more than 144,000 tons of pesticide packages in 2018. An assessment is being carried out to estimate the potential benefit from these activities and it will be reported in the Project Concept Note.

Supported by leading Government agencies, the engagement with the private sector will play a key role in implementing and consolidating a socio-environmental business model conducive to environmental traceability and mainstream sustainable efforts made by farmers in their production systems, such as applying standards enabling them to meet the EMBRAPA's meat carbon neutral protocol. The project will identify the main local buyers, slaughterhouses, and traders to create a forum of discussion to understand the demand side and market needs, risks and harness their commitment to promote productive alliances with local farmers. When suitable, traceability will be an important tool to engage with key value-chain players. The project aims to assess, at the landscape level, production base configuration and whether buyers (traders and slaughterhouses) would be interested in partnering in sustainable commercial arrangements. Traceability needs and costs will be assessed and how they can be offset by market access and premiums. The project will use the national system SISBOV - Brazilian System Identification and Certification of Bovine and Bubaline Origin (*Sistema Brasileiro de Identificação e Certificação de Origem Bovina e Bubalina*), managed by the Ministry of Agriculture. During preparation the team will engage with IFC to learn from their portfolio experiences, working in these sectors and areas.

The main beneficiaries are rural producers with small to medium sized farms (production area between 4 up to 70 fiscal units³), their associations and communities who benefit from the landscape's natural resources. These farmers and ranchers are targeted because: (i) small to medium-sized production units form the bulk of total agricultural land use in the Cerrado; and (ii) large farmers can access the technological know-how without government assistance. By increasing the sustainability and productivity of agricultural systems, indirect project benefits would be reflected in increased levels of employment and food security (through improved supply and resilience). The project aims to support 10,457 rural producers, of which 2,242 women. The estimation is conservative and based on the proportion of landholdings owned by women in the three selected areas (around 15% according to the latest data available through the 2017 Agrarian and Livestock Census). The project will incorporate lessons learned with the implementation of the FIP/WB financed Sustainable Agriculture Production Project – Projeto ABC Cerrado (P143184) with regards to participation of women on capacity building / technical assistance activities, which have been incorporated on FIP Landscapes Gender Action Plan.

The combination of these interventions will enable the supported productive landscapes to achieve the following global environmental benefits: (i) beef cattle and soybean value chains more sustainable; (ii) on- and off-farm land and water sustainably managed; (iii) on- and off-farm biodiversity conserved; (iv) waste and chemical pollution managed; and (v) GHG emissions mitigated. The adoption of more sustainable productive practices makes it also possible to increase production and income.

d) Describe the project's incremental reasoning for GEF financing under the program, including the results framework and components.

The GEF7 financing will build on and complement the ongoing investments in sustainability being made by government and private sector at the national and landscape level, with the support of development partners including the World Bank and the CIF/FIP. It will specifically support the incremental costs of interventions aimed at achieving a large-scale, transformational shift and GEBs. The landscape approach

³ A fiscal unit covers 5 and 100 ha depending on the municipality.

incentivized by the GEF-FOLUR will enhance the inter-institutional coordination and integrate the implementation of sustainable agriculture (ABC Plan) and environmental (Forest Code) policies, shifting towards sustainable development in rural areas, reversing the current business-as-usual (BAU) in the Cerrado biome and ecotones of land degradation, productivity and biodiversity losses. Project interventions will be designed to be aligned and respond to multiple socioeconomic and environmental challenges.

To achieve the desired landscape transformational impact the project aims to integrate the GEF-FOLUR and co-financing efforts to reach:

Table 3. Description of project targets by indicator

Indicator	GEF-FOLUR targets	Co-financing targets	Total targets
Area of land restored (ha)	150,000	100,800	250,800
Area of landscape under improved practices (excluding protected areas) (ha)	900,000	800,000	1,700,000
GHG emissions mitigated tCO ₂ eq	12,984,263	8,725,424	21,709,687*
Direct beneficiaries disaggregated by gender as co-benefit of GEF investment	4,000 male 1,000 female Total = 5,000	4,215 male 1,242 female Total = 5,457	8,215 male 2,242 female Total = 10,457

* In the proposed Project has the potential of sequestering 21,709,687 tons, of carbon within 20 years of accounting (5 years of implementation phase and 15 years of capitalization phase), considering 250,800 hectares of LUC from degraded land to grassland.

The project will be executed under 4 components:

Component 1. Development of Integrated Landscape Management (ILM) Systems: The component will build the necessary capacity and knowledge to support the planning, governance and main investments and develop ILM action plans at the pre-selected productive landscape areas. To this end, the component interventions will: (i) carry out communication campaign to inform stakeholders about the project's goals, scope and rules; (ii) strengthen key stakeholders' ILM capacities and governance to actively participate in the consortiums; (iii) harmonize existing policies, programs and land-use planning in the intervention area; (iv) identify potential on and off-farm investment needs; (v) identify market players and opportunities; and (vi) environmental risk assessments..

Main outcome: Jurisdictional sustainable landscape management plans formulated using ILM approach and adopted to guide interventions

Component 2. Promotion of sustainable food production practices and responsible value chains: This component will finance the implementation of: (i) training and technical assistance to farmers on sustainable agriculture practices and technologies; (ii) mobilize key stakeholders to catalyze off-farm investments; (iii) mobilize local financial agents to assist farmers in preparing on-farm investments proposals in order to access credit resources; and (iv) mobilize local private sector to participate and develop a socio-environmental business model conducive to environmental sustainability (jointly design traceability tools and productive linkages with benefited farmers).

Main outcomes: Area of degraded grassland restored; Area of landscapes under sustainable land management in production systems; Off-farm investments executed (to be detailed during preparation); Sustainable market linkages enhanced

Component 3. Conservation and restoration natural habitats: This component will finance activities to support the environmental regularization of rural landholdings through CAR to promote restoration and protection of critical habitats within private landholdings (APPs, RLs), including re-establishment of

biological and hydrological flows; reconnection of fragmented habitats; and restoration of multiple ecological processes.

Main outcomes: Area of forest and forest land restored; Area of landscapes under improved management to benefit biodiversity

Component 4. Project Management and M&E: This component will focus on coordination, cooperation, and monitoring and evaluation (M&E), including knowledge generation and dissemination nationally and internationally, as further detailed on Section 3 of this proposal.

Main outcome: Integrated knowledge management, coordination and collaboration to capture lessons learned for replication in other areas.

3. Engagement with the Global / Regional Framework (maximum 500 words)

Describe how the project will align with the global / regional framework for the program to foster knowledge sharing, learning, and synthesis of experiences. How will the proposed approach scale-up from the local and national level to maximize engagement by all relevant stakeholders and/or actors?

The Project will engage through the FOLUR global platform and the UNDP Green Commodities Program with countries and platforms outside of the country to scale results and impact the broader food system. Additionally, the Project will connect with similar country projects within FOLUR based on similar commodities and approaches to share resources for combined and collective knowledge management products. These products can then contribute to FOLUR wide knowledge products. Moreover, the Project will connect to global level commodity and food supply chain initiatives and networks, primarily through UNDP's Green Commodities Programme and Good Growth Partnership, as well as through other means offered by FOLUR global platform. These connections will facilitate the project linking to global buyers interested in sourcing from jurisdictions advancing towards sustainable commodity production and to learn latest best practice and policy of the global markets. Successful experiences will be disseminated through specialized and thematically relevant forums within the Rio Conventions, and also within the World Forest Forum and the World Soil Alliance.

The Project's proposed approach has the potential to be implemented in other areas, as it will make use of existing local structures to identify regional resource-gaps and address these issues through participatory methodologies which will lead to custom local solutions. Thus, engagement of all relevant stakeholders is imperative to the Project's success.

The private sector will act as an important catalyst for the Project's approach to be scaled-up. The project executor will work closely with public and private sectors to build knowledge on the necessary means to develop the required institutional framework (e.g., setting up standards or voluntary guidance by the private sector) for the Project's approach to be implemented at different locations. This will enable the Project's approach to be expanded as a service of the private sector, independently of public financing, as it is done on other projects under the BIP Projects in Brazil, a private sector-oriented institution that has the needed capacity works as a implementing partner of the project.

At a national level, the Brazilian Government is strongly committed to incentivize low carbon agriculture through the ABC Plan, which provides the financial and technological means to scale-up the Project's approach. Also, with the achievement of Project's results, it will be possible for the Brazilian Government to confirm its benefits, implement the necessary improvements and include similar methodologies in investment plans focused on agriculture, such as the yearly rural financing policy (Plano Safra).

Annex 1. GEF 7 Core Indicator Worksheet

Use this Worksheet to compute those indicator values as required in Part I, item F to the extent applicable to your proposed project. Progress in programming against these targets for the project will be aggregated and reported at any time during the replenishment period. There is no need to complete this table for climate adaptation projects financed solely through LDCF and SCCF.

Core Indicator 1	Terrestrial protected areas created or under improved management for conservation and sustainable use				<i>(Hectares)</i>		
	<i>Hectares (1.1+1.2)</i>						
	<i>Expected</i>			<i>Achieved</i>			
		PIF stage	Endorsement	MTR	TE		
		To be calculated before submission					
Indicator 1.1	Terrestrial protected areas newly created						
Name of Protected Area	WDPA ID	IUCN category	Hectares				
			Expected		Achieved		
			PIF stage	Endorsement	MTR	TE	
			(select)				
		(select)					
		Sum					
Indicator 1.2	Terrestrial protected areas under improved management effectiveness						
Name of Protected Area	WDPA ID	IUCN category	Hectares	METT Score			
				Baseline		Achieved	
					Endorsement	MTR	TE
				(select)			
		(select)					
		Sum					
Core Indicator 3	Area of land restored				<i>(Hectares)</i>		
	<i>Hectares (3.1+3.2+3.3+3.4)</i>						
	Expected			Achieved			
		PIF stage	Endorsement	MTR	TE		
		250,800					
Indicator 3.1	Area of degraded agricultural land restored						
			Hectares				
			Expected		Achieved		
			PIF stage	Endorsement	MTR	TE	
			126,000				
Indicator 3.2	Area of forest and forest land restored						
			Hectares				
			Expected		Achieved		
			PIF stage	Endorsement	MTR	TE	
			124,000				
Indicator 3.3	Area of natural grass and shrublands restored						
			Hectares				
			Expected		Achieved		
			PIF stage	Endorsement	MTR	TE	
Indicator 3.4	Area of wetlands (including estuaries, mangroves) restored						
	Hectares						

			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Core Indicator 4	Area of landscapes under improved practices (hectares; excluding protected areas)				(Hectares)	
			Hectares (4.1+4.2+4.3+4.4)			
			Expected		Expected	
			PIF stage	Endorsement	MTR	TE
			1,700,000			
Indicator 4.1	Area of landscapes under improved management to benefit biodiversity					
			Hectares			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Indicator 4.2	Area of landscapes that meet national or international third-party certification that incorporates biodiversity considerations					
Third party certification(s):			Hectares			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Indicator 4.3	Area of landscapes under sustainable land management in production systems					
			Hectares			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
			1,700,000			
Indicator 4.4	Area of High Conservation Value Forest (HCVF) loss avoided					
Include documentation that justifies HCVF			Hectares			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Core Indicator 6	Greenhouse gas emission mitigated				tCO₂e	
			Expected metric tons of CO ₂ e (6.1+6.2)			
			PIF stage	Endorsement	MTR	TE
		Expected CO ₂ e (direct)	21,709,687			
		Expected CO ₂ e (indirect)				
Indicator 6.1	Carbon sequestered or emissions avoided in the AFOLU sector					
			Expected metric tons of CO ₂ e			
			PIF stage	Endorsement	MTR	TE
		Expected CO ₂ e (direct)	21,709,687			
		Expected CO ₂ e (indirect)				
		Anticipated start year of accounting	2025			
		Duration of accounting	20 years			
Indicator 6.2	Emissions avoided Outside AFOLU					
			Expected metric tons of CO ₂ e			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
		Expected CO ₂ e (direct)				
		Expected CO ₂ e (indirect)				
		Anticipated start year of accounting				
		Duration of accounting				
Indicator 6.3	Energy saved					

			MJ			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Indicator 6.4	Increase in installed renewable energy capacity per technology					
		Technology	Capacity (MW)			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
		(select)				
		(select)				
Core Indicator 11	Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment					(Number)
			Number			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
		Female	2,242			
		Male	8,215			
		Total	10,457			

Annex 2. List of selected municipalities under the three macro areas

Municipality	Macroregion	Microregion	Population (hab)	Total Area (ha)
Nova Crixás	GO - Noroeste	S. Miguel do Araguaia	12791	730223
Caiapônia	GO - Sul	Sudoeste de Goiás	18715	863513
Crixás	GO - Noroeste	S. Miguel do Araguaia	16852	466117
Piranhas	GO - Noroeste	Aragarças	10501	204777
Jussara	GO - Noroeste	Rio Vermelho	18587	408536
Aruanã	GO - Noroeste	Rio Vermelho	9635	305529
S. Terezinha de Goiás	GO - Norte	Porangatu	8931	120225
Barra do Garças	MT - Nordeste	Médio Araguaia	60661	907929
Araguaiana	MT - Nordeste	Médio Araguaia	3119	642297
Serranópolis	GO - Noroeste	Aragarças	8445	552672
Mineiros	GO - Sul	Sudoeste Goiás	66801	903877
Figueirão	MS - Centro-Norte	Alto Taquari	3044	488287
Coxim	MS - Centro-Norte	Alto Taquari	33516	640922
Pedro Gomes	MS - Centro-Norte	Alto Taquari	7666	365118
Costa Rica	MS - Centro-Norte	Alto Taquari	20496	416412
Alto Araguaia	MT - Sudeste	Alto Araguaia	18703	539929
Itiquira	MT - Sudeste	Rondonópolis	13163	865991
Alto Garças	MT - Sudeste	Tesouro	11868	386692
Tesouro	MT - Sudeste	Alto Araguaia	3786	428571
Guiratinga	MT - Sudeste	Rondonópolis	15035	504414
Luziânia	GO - Leste	Entorno do DF	208299	396110
Formosa	GO - Leste	Entorno do DF	127617	581179
Brasília	Distr. Federal	Brasília	2974703	578000
Cristalina	GO - Leste	Entorno do DF	58997	616209

Monte Alegre de Goiás	GO - Norte	Chapada Veadeiros	8527	311981
Iaciara	GO - Norte	Vão do Paranã	13808	155038
Guarani de Goiás	GO - Norte	Vão do Paranã	3940	122915
Flores de Goiás	GO - Norte	Vão do Paranã	16100	370943
Brejolândia	BA - Extr. Oeste	Cotegipe	10557	224721
S. Félix do Coribe	BA - Extr. Oeste	S. Maria da Vitória	15391	175436
Correntina	BA - Extr. Oeste	S. Maria da Vitória	32137	1149217
Côcos	BA - Extr. Oeste	S. Maria da Vitória	18777	1014057
Coribe	BA - Extr. Oeste	S. Maria da Vitória	14194	265712
São Desidério	BA - Extr. Oeste	Barreiras	33742	1511640
Serra Dourada	BA - Extr. Oeste	S. Maria da Vitória	17386	159225
Santana	BA - Extr. Oeste	S. Maria da Vitória	26614	190935
Baianópolis	BA - Extr. Oeste	Barreiras	13877	332072
Santa Maria da Vitória	BA - Extr. Oeste	S. Maria da Vitória	39845	198491
Jaborandi	BA - Extr. Oeste	S. Maria da Vitória	8385	999448
Montalvânia	MG - Norte	Januária	15689	150376
Buritizero	MG - Norte	Pirapora	28251	721840
Várzea da Palma	MG - Norte	Pirapora	38838	222028
Lassance	MG - Norte	Pirapora	6663	320422
João Pinheiro	MG - Noroeste	Paracatu	48472	1072747
Paracatu	MG - Noroeste	Paracatu	91724	822960
Lagamar	MG - Noroeste	Paracatu	7797	147456
S. Gonçalo do Abaeté	MG - Noroeste	Paracatu	6840	269217
Presidente Olegário	MG - Noroeste	Paracatu	19536	350374
Brasilândia de Minas	MG - Noroeste	Paracatu	15921	250969
Unai	MG - Noroeste	Unai	83448	844808
Icaraí de Minas	MG - Norte	Januária	11736	62566
Ponto Chique	MG - Norte	Montes Claros	4236	60280
S. Francisco	MG - Norte	Januária	56619	330810
Januária	MG - Norte	Januária	68420	666159
Arinos	MG - Noroeste	Unai	18232	527942
Santa Fé de Minas	MG - Norte	Pirapora	3997	291745
Urucuia	MG - Norte	Januária	15833	207694
Buritís	MG - Noroeste	Unai	24524	522519
Riachinho	MG - Norte	Pirapora	8283	171927
Pintópolis	MG - Norte	Januária	7563	122874