



Project Information Document (PID)

Concept Stage | Date Prepared/Updated: 26-Mar-2020 | Report No: PIDC27985

**BASIC INFORMATION****A. Basic Project Data**

Country Brazil	Project ID P172497	Parent Project ID (if any)	Project Name Sustainable Multiple use Landscape Consortia in Brazil (P172497)
Region LATIN AMERICA AND CARIBBEAN	Estimated Appraisal Date Aug 20, 2020	Estimated Board Date Mar 10, 2021	Practice Area (Lead) Agriculture and Food
Financing Instrument Investment Project Financing	Borrower(s) Serviço Nacional de Aprendizagem Rural	Implementing Agency Ministry of Agriculture, Livestock, and Food Supply, Ministry of Environment	GEF Focal Area Multi-focal area

Proposed Development Objective(s)

To strengthen the adoption of low-carbon emission agricultural and environmental conservation and restoration practices, and sustainable policies for livestock-soybean value chains, in selected landscapes in Brazil.

PROJECT FINANCING DATA (US\$, Millions)**SUMMARY**

Total Project Cost	24.58
Total Financing	24.58
of which IBRD/IDA	0.00
Financing Gap	0.00

DETAILS**Non-World Bank Group Financing**

Trust Funds	24.58
Global Environment Facility (GEF)	24.58

Environmental and Social Risk Classification

Concept Review Decision



Moderate

Track II-The review did authorize the preparation to continue

Other Decision (as needed)

B. Introduction and Context

Country Context

- 1. After rapid growth and social progress between 2001 and 2010, Brazil's economy first stumbled and then fell into deep recession.** Sound macro policies and a favorable external environment contributed to fast economic and social progress between 2001 and 2010. However, the deterioration in both factors led to a steady decline in growth after 2010. Growth declined from an average of 3.7 percent per year between 2001 and 2010 to 2.4 percent between 2011 and 2014, followed by contractions of 3.5 percent in 2015 and 3.3 percent 2016. While external factors triggered the slowdown, an expansionary policy response led to rapidly rising fiscal disequilibria and, with rising domestic political uncertainty, to a loss of confidence and a sharp drop in investment. The economic recovery remains weak with 1.1 percent growth in 2017 and 2018, with 1.1 percent growth projected in 2019 and 2.0 percent in 2020. Nevertheless, given population growth of about 0.8%, growth remains relatively low in per capita terms.
- 2. Agriculture (including livestock production) is crucial component of Brazil's economic growth and generates a large share of Brazil's exports.** The sector contributes to eight percent of Gross Domestic Product (GDP), account for 30 percent of the country's exports and for 19 percent of its employment. Brazil ranks third among the world's major agricultural exporters, fourth for food production and second for bio-ethanol production. It has the second largest cattle herd and is the world's largest exporter of poultry, sugar cane and ethanol. Much of that agricultural growth has taken place in the Cerrado biome, the savanna-forest mosaic located in central Brazil, south and east of the Amazon region, covering almost one quarter, or 2.04 million km², of the country. The Cerrado has been the stage for an expansion of agricultural production, primarily through cattle ranching since the 1940s, and, since the 1970s, through mechanized commercial production of soybean, maize and cotton. Presently, the Cerrado is responsible for 70 percent of Brazil's agricultural production. It accounts for 95 percent of the total cotton, 54 percent of soybean, 55 percent of beef, and 43 percent of sugarcane produced in Brazil.
- 3. The expansion of agriculture production has reshaped the Cerrado landscapes with environmental costs, including significant land degradation and agriculture productivity loss.** Cerrado forests are important due to the substantial amount of carbon stored in its biomass and soils. Brazilian Cerrado has lost 88Mha (46%) of its native vegetation cover and accounts for 26 percent of Brazilian emissions from land-use change¹, mainly to agricultural activities. Agricultural expansion in the Cerrado has increased the area of severe erosion, occasioning agricultural productivity decrease and soil nutrient depletion. The annual soil loss rate increased from 10.4 (2000) to 12.0 Mg ha⁻¹ yr⁻¹ (2012). Agricultural productivity loss occurred in more than 3 million hectares of crops and silviculture in 2000 and in more than 5.5 million hectares in 2012. Severely eroded areas lost between 13.1 and 25.9 times

¹ Rajão, R. & Soares-Filho, B.S. (2015). Science 350, 519–519.



more nutrients than areas with low and moderate soil loss rates². 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.

4. **Brazil has made progress to curb deforestation and land degradation impacts in the Cerrado, however to achieve its Nationally Determined Contributions (NDCs) sustainable agriculture and environmental policies must be coordinated and scaled-up.** Brazil has committed, under the Paris Agreement, to reduce greenhouse gas emissions by 37% below 2005 levels by 2025 and 43% below 2005 levels by 2030. Deforestation in the Cerrado is about 20 percent of the 2001-2004 levels but has maintained a constant trend in the last 3-4 years. Sustainable agriculture and forest-protection policies, such as the National Forest Code and the Sector Plan for Low Carbon Emission Agriculture (ABC Plan), have helped to advance with those targets, however at a low pace implementation. Moreover, the current economic crisis is rekindling conflicts over land and natural resources, especially in Brazil's Amazon and Cerrado biomes, highlighting the challenges the country faces in meeting its NDC commitments.

Sectoral and Institutional Context

5. **The agricultural sector plays a crucial role in achieving Brazil's climate commitment in a 10-year timeframe.** As one of the larger emitters, the sector is expected under the NDCs to restore 15 million hectares of degraded pasture areas and 5 million hectares of crop-livestock-forest integration system. The "Sector Plan for Mitigation and Adaptation to Climate Change for the Consolidation of a Low Carbon Emissions Agriculture Economy"³, also known as the ABC Plan and the Forest Code⁴ are important policy instruments to promote a behavior change of rural producers conciliate a sustainable agricultural growth with natural resources conservation.
6. **The ABC Plan is expected to reduce pressure on forests by increasing agricultural productivity and promoting sustainable management practices.** To achieve its objectives the ABC plan promotes six technologies that have a proven effect on the reduction of GHG emissions and increase of carbon sequestration by the agriculture sector: as no-till agriculture; restoration of degraded pasture; integration of crops, livestock and forest; planting of commercial forests; biological nitrogen fixation; and treatment of animal wastes. The ABC Plan offers a credit initiative called the ABC Program, which provides low-interest loans for the adoption of sustainable agricultural practices. Originally, the GoB estimated that nearly US\$ 40 billion (via credit lines or producers' own resources) would be required between 2011 and 2020 to finance low-carbon investments to achieve NDC targets. Since its launch in 2011, GoB provided US\$ 5 billion under ABC Program to stimulate the adoption of low-carbon practices and has disbursed US\$ 3.4 billion, most of it was used to restoration of degraded pasture and no-till agriculture. There remain a few other hurdles for ABC technology adoption. Most importantly, there is a lack of knowledge and understanding among farmers of the technologies promoted. Second, some technologies require strong farm management skills, and adequate training and technical assistance for farmers and ranchers.
7. **The Forest Code, on the other hand, provides a unique opportunity for Brazil to protect its remaining forests and also accelerate the modernization of agriculture.** The Forest Code requires rural landowners both to maintain

² Gomes, L., Simões, S. J., Dalla Nora, E. L., de Sousa-Neto, E. R., Forti, M. C., & Ometto, J. P. H. (2019). Agricultural expansion in the Brazilian Cerrado: increased soil and nutrient losses and decreased agricultural productivity. *Land*, 8(1), 12.

³ Decree No.9,578/2018

⁴ Law No. 12,651/2012



the most fragile areas (Permanent Preservation Areas – APP), and to ensure the preservation of part of the original native vegetation (Legal Reserve – RL) in their properties. requires rural property owners both to maintain the most fragile areas (Permanent Preservation Areas – APP), and to ensure the preservation of part of the original native vegetation (Legal Reserve – RL) in their properties. The amendments made in 2012 to the Forest Code include the creation of the Rural Environmental Cadaster (CAR), which requires landholders to register APPs and RLs on their farms, and to submit proposals for restoring their degraded areas if they are not compliant. A large number of producers in the Cerrado are registered in the CAR, however, the tool has been underused for land-use planning and environmental restoration given the complexity of its process and for depending on federal and state-levels to implement it.

8. **Along with the implementation constraints, the policies fell short in prioritize areas and coordinate actions to revert highly degraded land, maximize agriculture productivity gains and environment benefits in order to accelerate the achievement of NDC’s targets by 2030.** To tackle those systemic challenges, the proposed project will support MMA and MAPA to identify those degraded areas and introduce the Integrated Landscape Management (ILM) approach to mobilize key stakeholders 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.

Relationship to CPF

9. **The proposed project is fully aligned with the World Bank Group's Country Partnership Framework (CPF) for Brazil FY18-FY23** (Report #113259-BR, discussed by the Executive Directors on July 13, 2017). Under the CPF Focus Area 2: Private sector investment and productivity growth, the project aims to induce beef and soybean producers to adopt low-carbon practices and link to private actors who are committed in pursuing sustainability, reducing reputational risk, and creating the transformational market conditions towards environmental benefits beyond business as usual. Under the CPF Focus Area 3: Inclusive and Sustainable Development, the proposed project aims to support the achievement of Brazil’s NDC focusing particularly on land use and promotion of socioeconomic development of small and medium rural producers.

C. Proposed Development Objective(s)

10. To strengthen the adoption of low-carbon emission agricultural and environmental conservation and restoration practices, and sustainable policies for livestock-soybean value chains, in selected landscapes in Brazil.

Key Results (From PCN)

11. The achievement of the project development objective would be measured through the following proposed indicators:
 - (a) Land area under sustainable landscape management practices (CRI)
 - (b) Farmers adopting improved agricultural technology in selected value chains (CRI)
 - (c) Off-farm investments executed (to be detailed during preparation);
 - (d) Sustainable market linkages enhanced.



D. Concept Description

12. **Strategic Approach.** The proposed US\$24.57 million grant will support the Ministry of Environment (MMA) and the Ministry of Agriculture, Livestock and Food Supply (MAPA), to jointly promote an Integrated Landscape Management (ILM) approach to scale-up the adoption of low-carbon emission agricultural and environmental conservation and restoration practices on areas with highly intensified agriculture and pasture lands associated with erosion that have negative impacts on environmental assets with national and global relevance, such as major freshwater-producing basins and important endemic species. 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 (i.e.: Forest Code) and programs (i.e.: ABC Program) 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.
13. At the landscape level, synergies and capacities among relevant stakeholders 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 and under implementation through the Brazilian Investment Plan, supported by the CIF/FIP⁵ program (Sustainable Agriculture Production - P143184 and Integrated Landscape Management in the Cerrado - P164602). These approaches include knowledge and technical assistance provision of sustainable low-carbon emission 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.
14. The project's strategy for off-farm investments 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 off-farm infrastructure, the project will mobilize national, state and municipal governments to include those investments in the landscape planning and promote their implementation.
15. 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

⁵ <http://fip.mma.gov.br/plano-de-investimento-do-brasil-para-o-fip/>



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. During preparation the team will engage with IFC to learn from their portfolio experiences, working in these sectors and areas.

16. **Priority areas.** Overall, the project would focus on three areas (**Annex 2**) 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 phytophysionomies, 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, 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.
17. Within the land area covering the selected 3 landscapes (28.2 million ha), the project aims to be implemented in 1,700,000 ha. The project will need to be very selective in the choice of States and the target population. The project will be carried out in States and Municipalities where the farmers and agribusiness are judged to be most ready for adoption of climate smart technologies (areas known for innovation and early adoption of technologies). During project preparation a number of criteria to measure "ILM readiness" will be developed. The criteria will take into consideration areas with: high occurrence of land degradation processes, importance of local environmental features, high incidence of endemic species, presence of farmer organizations, enterprises and leaders with a vision for a more sustainable agriculture and livestock as well as the capacity of the implementing agency to carry out the capacity building programs.
18. **Main beneficiaries.** The main project beneficiaries are rural producers and local communities who benefit from the selected landscape's natural resources. These farmers and ranchers are targeted because their production units form the bulk of total agricultural land use in the Cerrado. By increasing the sustainability and productivity of their agricultural systems, indirect project benefits would be reflected in increased levels of employment and food security (through improved supply and resilience). It is expected that support about 10,000 rural producers, of which 2,000 women, will be benefit from technical assistance activities. The estimation is conservative and based on the proportion of landholdings owned by women in the three selected areas (around 15 percent 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.
19. Other direct beneficiaries include national and local institutions. At the national level, the project will strengthen and help sustain cross-sectoral collaboration among the Brazilian Agricultural Research Corporation (*Empresa*



Brasileira de Pesquisa Agropecuária, EMBRAPA); the National Rural Learning Service (Serviço Nacional de Aprendizagem Rural, SENAR); and other to be identified during project preparation.

20. The project will be structured within 4 components:
21. **Component 1. Development of Integrated Landscape Management (ILM) Systems:** The application of the ILM approach requires thorough and careful knowledge of the action's focus area. An understanding of land use, trade market and local production are essential for having a strategic vision and creating scenarios for the future of the agriculture and the conservation. 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.
22. **Main outcome:** *Sustainable landscape management plans formulated using ILM approach and adopted to guide interventions*
23. **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).
24. **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*
25. **Component 3. Conservation and restoration of natural habitats:** This component will finance activities to support the steps for environmental compliance of Forest Code requirements of rural landholdings through the Rural Environmental Cadaster (CAR⁶, in Portuguese) to promote reforestation, restoration and protection of natural habitats within private landholdings (Permanent Preservation Areas - APPs, Legal Reserve - RLs), aiming to re-establishment of biological and hydrological flows; reconnection of fragmented habitats; and restoration of multiple ecological processes.
26. **Main outcomes:** *Area of forest and forest land restored; Area of landscapes under improved management to benefit biodiversity*

⁶ The Rural Environmental Cadaster (CAR) sets a deadline for farmers to electronically register fragile areas (Permanent Preservation Areas – APP) and part of the original native vegetation (Legal Reserve – RL) in their properties, and to submit proposals for restoring their degraded areas if they are not compliant.



27. **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.
28. **Main outcome:** *Integrated knowledge management, coordination and collaboration to capture lessons learned for replication in other areas.*

Other Design Aspects

29. **Stakeholder Engagement and Gender Integration.** The proposed 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, nonthreatening 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.
30. **Grievance Redress Mechanism (GRM).** SENAR has already in place several channels for receiving and redressing complaints. These channels include a website, and telephone lines. On top of this, SENAR, MMA and MAPA have an Ombudsman Office (with a dedicated free phone line, website, and e-mail address). The project's GRM would rely as much as possible on these structures, processes, and procedures that are already in place in the implementing agency. The institutional capacity assessment will consider the adequacy and efficiency of SENAR's GRM. Measures may be proposed to improve it and would be described in the project's Environmental and Social Framework (ESF). The RPF may also define specific processes, procedures, and channels to be locally operated to attend to the demands of project-affected persons.
31. **Environmental and Social Impact Analysis (ESIA) and a Stakeholder Engagement Plan (SEP).** 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.
32. **Screening for climate change and disaster risks.** The Project will be screened for climate change and disaster risks once the Project Appraisal Document (PAD) is ready for the Decision Meeting. As climate change may increase the frequency and severity of adverse hydrometeorological events, the proposed project, by supporting the rural producers and communities to deal with these impacts, will have significant climate adaptation benefits. The Task



Team and Client have engaged in the design of a project in which overall objective and investments will contribute from both a mitigation and adaptation perspectives.

Legal Operational Policies	Triggered?
Projects on International Waterways OP 7.50	No
Projects in Disputed Areas OP 7.60	No

Summary of Screening of Environmental and Social Risks and Impacts

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APPROVAL

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