TC ABSTRACT

I. Basic Project Data

▪ Country/Region:	BRAZIL/CSC - Southern Cone
▪ TC Name:	Low Carbon Agriculture and Avoided Deforestation to Reduce Poverty in Brazil Phase II - Sustainable Rural Development in the Cerrado
▪ TC Number:	BR-T1409
▪ Team Leader/Members:	DAMIANI MARTI, OCTAVIO JORGE (CSD/RND) Team Leader; BRAKARZ, BARBARA (CSD/CCS) Alternate Team Leader; DA CRUZ, ADRIANA ALMEIDA (CSC/CBR); CARPIZO RIVA PALACIO, CARLOS IGNACIO (VPC/FMP); SALAZAR, DAVID AGUSTIN (VPC/FMP); CELESTE MARZO, CRISTINA (LEG/SGO); DE OLIVEIRA SANTOS, LORAYNE (CSC/CBR); VALENTE LINS, PAULA (CSC/CBR); MAEKAWA, YUKA (CSC/CBR); VALLE PORRUA, YOLANDA (CSD/RND)
▪ Taxonomy:	Client Support
▪ Number and name of operation supported by the TC:	N/A
▪ Date of TC Abstract:	02 Nov 2018
▪ Beneficiary:	Ministry of Agriculture, Livestock and Supply
▪ Executing Agency:	INSTITUTO BRASILEIRO DE DESENVOLVIMENTO E SUSTENTABILIDADE
▪ IDB funding requested:	$ 15,000,000.00
▪ Local counterpart funding:	$ 0.00
▪ Disbursement period:	48 months
▪ Types of consultants:	Individuals; Firms
▪ Prepared by Unit:	Env, Rural Dev & Disaster Risk
▪ Unit of Disbursement Responsibility:	Country Office Brazil
▪ TC included in Country Strategy (y/n): ▪ TC included in CPD (y/n):	No No
▪ Alignment to the Update to the Institutional Strategy 2010-2020:	Environmental sustainability

II. Objective and Justification

2.1 The objective of the operation is to mitigate Greenhouse Gas (GHG) emissions and increase small and medium farmers income in the Cerrado biome by promoting their adoption of low carbon technologies.

2.2 Covering 207 million hectares that represent 22% of Brazilian territory, the Cerrado (or Brazilian Savanah) is the country's biome most important beef and grain producer, having experienced significant changes in land-use and land-coverage. In 2015, deforestation rates in the Cerrado were four times greater than in the Amazon, and over the next decade 15 million hectares could disappear to make space for new pastures and crops. From 2000 to 2016, land used for agriculture in the Cerrado biome nearly tripled, going from 7.4 million to 20.5 million hectares. In 2015, the Cerrado was responsible for 21% of land-use change emissions, behind the Amazon, which was responsible for 52%. In addition to climate implications, the Cerrado is a global biodiversity hotspot. It is home to three of South America's major river basins (the Amazon/Tocantins, São Francisco and Prata), to 11,627 registered native plant species; 199 mammal species; 1,200 fish species, and 150 amphibian species. While the Cerrado remains an important agricultural region for Brazil, it faces a different

challenge than when it was transformed into a grain and beef producing region in the 1970s. It needs to address inefficiencies in the use of land and water resources, growing biodiversity loss, and vulnerability to climate change. For example, a rise in temperature of more than 3.5 degrees could have substantial impact on crop production. In addition, the 60 million hectares of pastures include mainly degraded land. According to a mapping elaborated by Embrapa, 60% of pastures in the Cerrado suffer degradation. Through sustainable agricultural practices, such as crop rotation, properties in the Cerrado could increase productivity and income. The use of low carbon agricultural technologies, such as ICLF could increase the number of cattle per hectare. A 2011 study by the Brazilian Agriculture Confederation (CNA) showed a low understanding of low carbon agriculture technologies by farmers. This includes; deficient technical assistance to implement low carbon agriculture projects and high costs to deploy these technologies.

III. Description of Activities and Outputs

3.1 Project activities will be organized into three components:

3.2 **Component I. Strengthening Local Capacity in Low Carbon Agriculture Technologies.** This component will build local capacity in sustainable agricultural technologies by providing targeted training to rural farmers, public and private technical experts and managers from local environmental agencies. It will include:

a) Building Technical Capacity, which will provide formal qualification and training on selected low carbon agriculture technologies and environmental management practices to farmers, technicians from government and private agencies.

b) Social Empowerment through Rural Associations, which will include lectures, capacity building sessions, awareness raising and production of technical support material (e.g. print, digital and videos) for farmer organizations aimed at increasing their participation in the production of low carbon agriculture products.

c) Mainstreaming Sustainable Agriculture for youth, which will introduce sustainable agriculture concept and practices into formal and informal education through the engagement with teachers and directors, including the elaboration of printed and digital material for each targeted audience, field days with rural families, and lectures and discussions with teachers in municipal schools.

3.3 **Component II. Adoption of Low Carbon Technology and other Sustainable Practices.** This component will promote the adoption of low carbon technologies among farmers, including:

a) Implementation of Demonstration Units (DUs) and Multiplying Units (MUs) that will receive technical assistance and support for the implementation of the technologies.

b) Improving management of rural properties through the provision of technical assistance to farmers focused on energy efficiency measures, water management, improvement of productive processes and preservation and recovery of native vegetation.

c) Research and Development (R&D), consisting of the development of a monitoring system to measure emission mitigation in the Cerrado.
d) Promoting access to financing, which will focus on raising awareness and better access to information about existing credit lines, and by supporting farmers in the preparation of technical proposals to access them; and
e) Good Practices Award, which will encourage farmers and technicians to work with low carbon technologies and other sustainable agricultural practices by offering cash prizes.

3.4 **Component III. Development of value chains and access to markets.** This component will foster economic incentives and create non-financial support mechanisms for rural farmers and local organizations to strengthen the development of low-carbon based value chains and promote access to markets. It will include:

a) Support to collective investments.

b) Certification and labeling of Low Carbon Agricultural Products.

3.5 **Component IV: Project administration.** Project administration, financial execution, monitoring of project activities, auditing.

IV. Budget

Indicative Budget (US$)

Activity/Component	IDB/Fund Funding	Counterpart Funding	Total Funding
Strengthening Local Capacity in Low Carbon Agriculture Technologies	2,155,000	0	2,155,000
Adoption of Low Carbon Technology and other Sustainable Practices	5,600,000	0	5,600,000
Development of value chains and access to markets	5,295,000	0	5,295,000
Project administration	1,950,000	0	1,950,000
TOTAL	15,000,000		15,000,000

V. Executing Agency and Execution Structure

5.1 The executing agency will be the Brazilian Institute of Development and Sustainability (IABS), a non-governmental organization (NGO) based in Brasilia, specialized in the fiduciary and operational management of environmental projects. For the project execution, a Project Management Unit (PMU) will be created at IABS comprised of four full-time technical staff. The project includes research activities that will be executed by the Brazilian Agricultural Research Corporation (EMBRAPA) and technical assistance, training, and other field activities that will be implemented in partnership with local institutions. To implement technical assistance activities, IABS will make a call for proposals to select local institutions that will carry out mobilization and awareness raising activities, select project beneficiaries, implement Demonstration Units and Multiplication Units, organize training and technical assistance activities, and assist farmer organizations in preparing and implementing proposals for investments focused on strengthening value chains. Each local institution will be in charge of technical assistance activities in their specific area, with the technical monitoring and support from IABS and Embrapa. In addition, IABS will work in partnership with the ICLF Network, a public-private partnership that includes EMBRAPA and private companies to promote the wide adoption of integrated crop-livestock-forest systems by rural producers, which will perform monitoring and reporting activities on the adoption of technologies. A steering committee will be created to guide interventions proposed in this TC, which will include representatives from DEFRA, IDB, MAPA, Embrapa and IABS. Finally, technical state committees will also be created including relevant rural development institutions at the local level (both government and non-government), such as NGOs, government extension agencies, and municipalities.

5.2 Founded in 2003, it has implemented over 265 projects, many of them financed by international organizations. IABS has substantial know-how on rural development and social technologies, having built over 15,000 rainwater catchment cisterns and promoted low carbon agriculture and social technologies in rural properties in the semiarid Northeast.

VI. Project Risks and Issues

6.1 The main risks faced by the project are: (i) low interest and participation from rural producers in other project activities; and (ii) potential difficulties in the access of farmers to financing necessary for adopting low-carbon technologies.

VII. Environmental and Social Classification

7.1 The ESG classification for this operation is "undefined".