

**PUBLIC - SIMULTANEOUS DISCLOSURE**

**DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK**

**BRAZIL**

**LOW-CARBON AGRICULTURE AND AVOIDED DEFORESTATION TO REDUCE POVERTY IN  
BRAZIL**

**(BR-X1028)**

**TC DOCUMENT**

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## TC Document

### BR-X1028

## Low-Carbon Agriculture and Avoided Deforestation to Reduce Poverty in Brazil

### I. Basic information

Country/Region:	Brazil
TC Name:	Low-Carbon Agriculture and Avoided Deforestation to Reduce Poverty in Brazil
TC Number:	BR-X1028
Project team members:	Simone Bauch, Project Team Leader (CCS/CBR); Gloria Visconti (INE/CCS); Anne Gander (CCS/CBR); Cristina Marzo (LEG/SGO); Leise Villela de Toledo Estevanato (CSC/CBR); Felipe de Oliveira Gordin (CSC/CBR); Carlos Lago (FMP/CBR); Juan C. Gómez (INE/CCS); Hisakhana Corbin (VPS/ESG).
Operation type	Project Specific Grant (PSG)
Donors:	Department for Environment, Food and Rural Affairs (DEFRA) of the Government of the United Kingdom
Beneficiary:	Ministry of Agriculture, Livestock, and Food Supply of Brazil (MAPA)
Executing agency and contact name:	Inter-American Development Bank (IDB or Bank,) through the Climate Change and Sustainability Division (INE/CCS). Contact: Simone Carolina Bauch
Funding requested:	US\$39.2 million
Local counterpart funding:	Not applicable.
Disbursement/execution period:	48 months
Start date:	April, 2013
Types of consultants:	Consulting firms and individual consultants
Prepared:	INE/CCS
Unit responsible for disbursement:	INE
TC included in the country strategy,	Y
TC included in the 2013 CPD:	Y
GCI-9 sector priority:	Protect the environment, respond to climate change, promote renewable energy and ensure food security.

### II. Background

- 2.1 Deforestation in Brazil has been driven largely by agricultural production, particularly livestock breeding and soybean cropping. Thanks to the availability of land, favorable weather conditions, abundant water and technological progress, the agricultural sector in Brazil has grown significantly over the last few decades, representing one of the key engines of national economic growth. Primarily, agriculture contributes to 8% of Gross Domestic Product (GDP), and agricultural products account for 30% of the country's

- exports.<sup>1</sup> Brazil is the world's leading exporter of several products such as grains (30% of soya sold worldwide) and beef (25% of global trade).<sup>2</sup>
- 2.2 On the other hand, just 8% of all agricultural properties (424,000 farms) produce 85% of total output, earning monthly incomes of over 10 times the Brazilian minimum wage.<sup>3</sup> Those farms are the chief beneficiaries of agricultural policies on price regulation, quality control, rural credit, exports, innovation and environmental conservation. In contrast, small and medium-scale producers lack support in the form of technical assistance services and credit to boost productivity, as well as to comply with the minimum environmental regulations. These farmers have great potential to improve their incomes by reaching maximum productivity in each hectare owned on a sustainable basis. To achieve this, a differentiated agricultural policy is needed for this group of producers; one that provides solutions such as adequate credit, training, the creation of cooperative systems, and government purchases of surplus output –solutions that allow for sustainable food production and poverty reduction.
- 2.3 Currently, Brazil emits the highest amount of Greenhouse Gases (GHG) in the region (52% of Latin America's emissions,) most of which, 60%, come from agriculture and forestry activities. The success of initiatives to reduce the carbon footprint of the Brazilian economy depends on improvements in carbon emissions from these sectors. On the other hand, the effects of climate change have economic consequences on the Brazilian agriculture, with effects on income and viability of the production areas.
- 2.4 Brazil has taken serious steps to reduce GHG emissions related primarily to deforestation. The main references in Brazil for the Reduction of Emissions from Deforestation and Degradation (REDD+) are the National Climate Change Plan (December, 2008) and the Law Creating the National Climate Change Policy (PNMC), passed in December, 2009. The PNMC sets forth targets and guidelines for a national approach to combating climate change; and states the voluntary national commitment to reduce emissions by 36% to 39% from current levels by 2020. Reaching these targets requires mitigation actions in key sectors, including agriculture and industry.
- 2.5 The PNMC contains sector-level plans for mitigation and adaptation to climate change, aimed at consolidating the low-carbon economy and fulfilling the voluntary national commitment to reduce emissions. In response to the PNMC, a 2010-2012 Sector Climate Change Mitigation and Adaptation Plan (the ABC Plan) has been developed to consolidate a low-carbon emission economy in the agriculture sector, which has been used as a tool to promote sustainable land use by farmers. In addition, in order to encourage producers to adopt low-carbon technologies, the ABC Program was created, which, among other initiatives, creates concessional funding lines for producers who want to adopt low-carbon technologies. Nonetheless, the first year of the program attracted little support and there is a general belief that credit supply alone is an insufficient incentive for producers to adopt production practices that would make it possible to reduce emissions.<sup>4</sup>

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<sup>1</sup> OECD (2005,) *Agricultural Policy Reform in Brazil*, Policy Brief, October 2005.

<sup>2</sup> McKinsey (2011) *ibid*.

<sup>3</sup> IPEA (2010,) *Brazilian Agriculture: Performance, challenges and prospects*.

<sup>4</sup> Zanella, M., A., and Cardoso, L., V., (2011) *Agri-environmental Policies in Brazil and Perspective for Evaluation*, OECD workshop, 21 June 2011.

- 2.6 To complement the ABC Plan, the Forest Code is considered the most important land-use regulation in the country, given its national scope and the constraints it imposes on private property for the purpose of protecting public goods such as forests and vegetation. The code requires farmers to preserve the most fragile areas of their property (Permanent Preservation Areas – APP), with an additional obligation to ensure that part of the original native vegetation is maintained on their properties (Legal Reserves –RL.)
- 2.7 The amendments made recently (2012) to the Forest Code involve the creation of the Rural Environmental Cadaster (CAR), which sets a deadline for farmers to register protected forest areas (APP and RL) on their farms, and to submit proposals for restoring their degraded areas if they are not compliant with the legislation. It is estimated that nearly 30 million hectares of APP and RL across the country require restoration to comply with the Forest Code; and currently over half of Brazilian properties (about 2.5 million farmers) are thought to be illegal. Compliance with the environmental legislation in the Forest Code is a prerequisite for small and medium producers to access rural credit available in the ABC Program.
- 2.8 A qualitative study was conducted by the British Embassy in Brasilia, based on research with rural populations in 11 Brazilian states and interviews with specialists from different interest groups (scientists, technical assistance providers, producer representatives, credit agents and public enterprises.) The following were identified as specific obstacles in relation to rural credit in the ABC Program:<sup>5</sup> (i) lack of information for farmers on the credit lines available from financial agents within the Plan; (ii) farmers’ perception of a loss of productivity and efficiency when sustainable, low carbon production methods are used; (iii) poor understanding among farmers of the technologies supported in the ABC Plan; (iv) noncompliance with environmental legislation by farmers, mainly in relation to the RL and APP; (v) the initial costs involved in coming into line with environmental legislation; (vi) the initial cost of conversion to adopt sustainable low carbon practices; and (vii) lack of technical assistance for farmers in undertaking projects using the practices supported by the ABC Plan.
- 2.9 In particular, small and medium rural producers have difficulties to access the ABC Program rural credit to adopt new sustainable agricultural practices given the environmental requirements imposed by financing entities and compounded by the lack of financial resources for such adaptation. The resources made available through the ABC Program are exclusively for rural credit and cannot be used for any other purpose. Currently there is no other source of financing on an adequate scale to overcome the obstacles faced by small and medium-scale farmers in accessing the credit available in the ABC Program.

### **III. Rationale, objective, and results of the TC**

- 3.1 Brazil is a key player for achieving the international climate stabilization goal, including reducing deforestation in developing countries by half by 2025. The country contains the largest share of the world’s primary forest (an area roughly the size of the European

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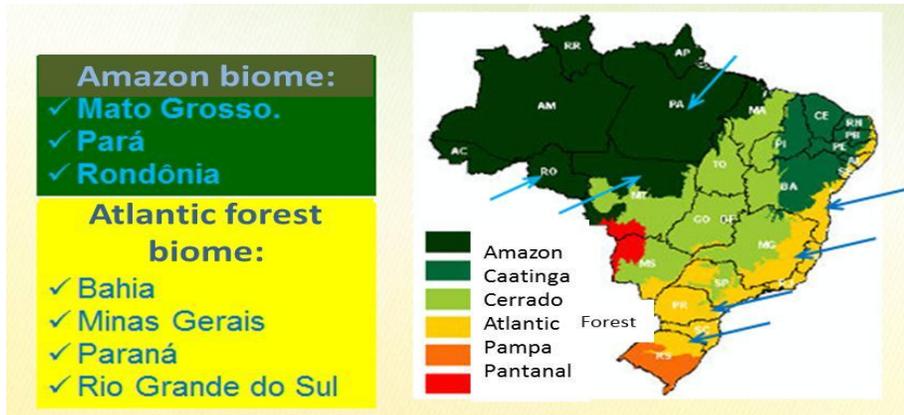
<sup>5</sup> Medrado, M., Vilcahuman, L., Medrado, R., and Medrado, M., (2011,) *Perceptions of Rural Groups on the Low Carbon Emission Agriculture Plan and Programme*, CNA Brazil.

- Union), as well as one fifth of the world's fresh water, and roughly 15%-20% of global biodiversity.<sup>6</sup>
- 3.2 The objective of this TC is to improve land use and forestry management practices among rural producers in the Amazon and Atlantic forest biomes, to promote sustainable, low carbon rural development, poverty reduction, conservation of biodiversity, and climate protection. These objectives will be achieved through the provision of financial and technical assistance activities to small and medium rural producers, which are expected to facilitate their access to the rural credit lines offered by the ABC Program. The focus on small and medium producers is justified by the difficulties they experience accessing relevant information, higher transaction costs and barriers to obtain credit, and the social benefits to be achieved.
  - 3.3 The TC will implement a wide-ranging project to recover degraded forest and pasture areas in seven strategic states in the Amazon (Mato Grosso, Pará, Rondônia) and in the Atlantic forest (Bahia, Minas Gerais, Paraná, and Rio Grande do Sul) in the process increasing the stock of carbon; and non-reimbursable financing to cover a percentage of the total cost (depending on producer category) of projects implementing low-carbon agricultural technologies and/or restoration projects. This is intended as an incentive to enable small and medium-scale rural producers to gain access to the agricultural credit available in Brazil to reduce carbon footprints.
  - 3.4 Each participating state will define the eligible municipalities to participate in the TC. The states should consider the following criteria when selecting the municipalities:
    - a. Location in the Amazon or Atlantic Forest biomes;
    - b. Have economic (transportation, communications, electricity, etc.) and social (health, education, water and sewage) infrastructure and other public or private services of professional assistance that offer attractive conditions to the producers to invest in a profitable implementation of the TC's technologies of interest;
    - c. Favorable market conditions for agricultural, cattle, and forest products to rural producers at attractive prices;
    - d. Commercial availability of inputs at competitive prices for the implementation of the supported technologies; and
    - e. Presence of industries or other large consumers of forest inputs interested or operating in the vertical integration with the rural producer using instruments such as land concessions, tender, or others.
  - 3.5 As this TC is directly related to climate change mitigation and adaptation, it is aligned with the GCI-9 objectives (one main priority of which is to "protect the environment, respond to climate change, promote renewable energy, and ensure food security") by providing a substantial increase in support for climate change projects. This TC is also aligned with the Bank's Country Strategy with Brazil 2012-2014 (document GN-2662-1.)

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<sup>6</sup> McKinsey & Company. Caminhos para uma economia de baixa emissão de carbono no Brasil. 2009 [*Pathways to a low carbon economy for Brazil. 2009*]. Available at: <http://veja.abril.com.br/40anos/ambiente/pdf/relatorio-mckinsey.pdf> Viewed on 23 January 2013. <http://www.cartacapital.com.br/sociedade/brasil-e-o-84%C2%BA-do-ranking-de-idh-da-onu/> <http://oglobo.globo.com/economia/indice-de-desenvolvimento-humano-do-brasil-melhora-mas-em-ritmo-mais-lento-3215021>

**Graph 1. Participating States and Biomes in Brazil**



- 3.6 The main expected outcomes will be: (i) a reduction of roughly 10.7 million tons in CO<sub>2</sub> emissions over 20 years; (ii) non-emission of 7 million tons of CO<sub>2</sub> as a result of avoided deforestation over the 20-year period; and (iii) higher income and reduction of poverty in the targeted rural areas. The operation will also contribute to: (i) preservation of biodiversity; (ii) conservation of bioclimatic services; and (iii) strengthening of climate-change resilience in the selected agricultural activities.

#### **IV. Description of activities/components and budget**

- 4.1 The TC has two components. The first one will supply non-reimbursable financial support to small and medium rural producers<sup>7</sup> to incentivize them to access rural credit from the ABC Program and other financing lines available. For this purpose, the first component will compensate rural producers for environmental services (including carbon storage and reduced emissions) produced as a consequence of the implementation of sustainable practices and low carbon production technologies, and will finance technical consultancy services to improve production, protection and management of the rural property. The second component will finance training, capacity building and knowledge transfer activities to improve the technical capacity of producers to implement sustainable, low carbon land use management and forest management and environmental protection measures. This component will finance technical assistance to offer useful tools to producers and training technical assistance providers to support producers directly. The third component will finance monitoring and evaluation activities. All components are described below, and a more detailed description is contained in the TC's preliminary Means of Verifications Matrix (Optional Electronic Link [\(OEL\) 7.](#)) The operational details of the TC are contained in the Operational Manual, a preliminary version of which, subject to future revisions and alterations, is attached ([OEL 4.](#))

##### **A. Component 1: Financial support for producers**

- 4.2 The objective of this component is to provide non-reimbursable financial resources, through a transfer of conditional payments to small and medium rural producers to create incentives for them to access rural credit from the ABC Program. This component will provide financial support to these rural producers for environmental services provided due to the implementation of projects that include sustainable, low carbon

<sup>7</sup> The TC beneficiaries will be 1,810 small-scale and 1,540 medium-scale producers.

production agricultural technologies and practices and implementation of environmental compliance measures. Additionally, the first component will finance the hiring of consultancy services by small and medium producers in certain areas such as: (i) the implementation of sustainable agricultural production practices and environmental compliance measures; and (ii) the contracting of assistance services in specific areas, such as the preparation of business and property plans, production with low-carbon technologies and environmental protection; as well as legal, financing, accounting and marketing issues. The rural producer's projects that will receive financial assistance with resources from this TC will have the objective to provide environmental services accruing from the use and implementation of selected low carbon technologies,<sup>8</sup> aligned with the objectives of the ABC Plan<sup>9</sup> on land use and forestry management for climate protection.

- 4.3 The low-carbon farming technologies can include crop-livestock-forestry integration systems (agro-forestry and forestry-grazing systems); commercial forest plantations (to restore degraded areas and increase the stock of carbon); and sustainable forestry management of native forest remnants (that would reduce carbon emissions). This component will also support the restoration and/or management of APP and RL linked to the Forest Code, since conformity with the latter is a prerequisite for accessing the rural credit lines under the ABC Program.
- 4.4 Financial support will be offered to rural producers based on a technical cooperation agreement that will formalize the financial transfers for: (i) compensate producers for environmental services provided accruing from the use of rural low carbon agricultural practices; and (ii) hiring technical assistance consultancy by rural producers. The Bank, as the executing agency, will hire a firm to manage individual projects, which will be in charge of preparing technical cooperation agreements with rural producers, and take care of the respective payments. These contracts will be valid for up to two years and the terms will be detailed in the Operations Manual.
- 4.5 To be considered an eligible project for financial support from this TC, an individual project proposal should: (i) fulfill eligibility criteria for the property, beneficiary producers; of the nature of the activities to be carried out; and of the technical assistance; and (ii) have obtained a higher than minimum required grade and be among highest graded projects considering the budgetary limitations that will be established in the Call for Proposals to be published by the Bank.
- 4.6 Specifically, these eligibility criteria are:
  - a. The property should: (i) be located in a municipality selected by the participating state; (ii) fulfill environmental compliance, be in the process to obtain it, or be interested in obtaining it with the support of the TC; and (iii) have an area of  $\leq 20$  fiscal modules.
  - b. The beneficiary producer proposing the individual project should: (i) be a rural producer classified as a rural household production unit or an individual active in

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<sup>8</sup> The technologies promoted by the project were developed and tested by the Brazilian Agricultural Research Corporation (EMBRAPA.)

<sup>9</sup> The ABC Plan supports the following technologies: (i) recovery of degraded grazing areas; (ii) crop-livestock-forestry integration; (iii) direct planting; (iv) biological nitrogen fixing; (v) commercial forest planting; and (vi) treatment of animal waste.

rural production; (ii) have legal possession of the rural property as owner, leaseholder, tenant, partner, concessionary of the National Agrarian Reform Technical Cooperation (PNRA), or grantee of public areas; and (iii) be a beneficiary of official rural credit,<sup>10</sup> or have a pre-approved rural credit and fulfill the criteria of one of the types of producer indicated in Table 1 below.

**Table 1 – Type of Eligible Producers to participate in the TC**

Type of beneficiary producers	Definition*	Benefits	Generic description
<b>Type Ia</b>	MCR-1-4. Except items 2 and 6.	20% financial support	-Other rural producers, individuals or firms. -Gross annual income ≤ R\$250K -Area ≤ 20 (twenty) fiscal modules
<b>Type Ib</b>	MCR-10-2-1 MCR-10-2-2 “a” III MCR-10-2-2 “b” II a IV MCR-10-2-3 “a” and “c”	40% financial support	-PRONAF beneficiary. Gross - Gross annual household income ≤ BRL\$160K - Area ≤ 4 (four) fiscal modules
<b>Type II</b>	MCR-10-2-3 “b”	100% financial support	Beneficiary of PRONAF Productive Rural Micro Credit. Gross annual household income ≤ BRL\$10K

\*According to the Rural Credit Guide (refer to the Consultation Coding Instructions MCR)

- c. The individual project should: (i) be a new operation; (ii) have co financing from the official rural credit system, supported by any authorized financial agent, making necessary, sufficient, and adequate resources available for the success of the project; (iii) have a budget, technical plan or project, demonstrating its financial, technical, legal and commercial viability;<sup>11</sup> (iv) have an Internal Rate of Return higher than the threshold defined for each Call for Proposals (see Manual of Operations<sup>12</sup>); and (v) have the objective to implement at least one of the following technologies supported by the TC:<sup>13</sup> (a) agroforestry systems; (b) commercial forest plantations to recover degraded lands; (c) forest management of native forest, sustainable management of extractive products, management plan and forest management, including the costs related to the implementation and maintenance of the enterprise; and (d) restoration, management, and/or maintenance of Permanent Preservation Areas and/or Legal Reserves or recovery of degraded areas, that assure legal environmental compliance.
- d. Present a proposal to hire needed consultancy services (technical, financial, fiscal, legal and/or accounting) to prepare a property management plan to be implemented in part or totally through the financing of the Individual Project and that apply the following methodologies: (i) property aptitude zoning; (ii) land use and cover

<sup>10</sup> The official rural credit is the rural credit from the ABC Program and other rural financing lines, such as the National Program to Strengthen Household Agriculture (PRONAF) and credit lines available in the private sector.

<sup>11</sup> The criteria to define financial, technical, legal and commercial viability of individual projects will be defined by the TC’s Consultative Committee and reflected in the Operations Manual of the TC.

<sup>12</sup> The importance of the IRR criteria in the classification of proposals will vary according to the State and the agricultural technology to be used by the producer.

<sup>13</sup> The following activities will not be financed with resourced from this TC: (i) Acquisition of cattle, sheep and goats for breeding, growing and slaughtering, and semen, ova and embryos of these species; (ii) the purchase of machines, implements and equipment, including the installation of irrigation systems for agriculture and livestock, digesters, machines and equipment to carry out the composting and energy production and storage; and (iii) construction and modernization of improvements and facilities in the rural property.

planning; (iii) preparation of a business plan; and (iv) preparation of the Individual Project.

- e. Present a proposal to hire consultancy services (technical, financial, fiscal, legal and/or accounting) to implement, monitor and evaluate the Individual Project and that apply the following methodologies: (i) midterm review of the property management plan; (ii) supervision of the Individual Project implementation; and (iii) preparation of monitoring and evaluation reports.

### 1. Thresholds for Financial Support of Individual Projects

- 4.7 The TC defines thresholds to support individual projects selected according to the type of beneficiary producer and establishes ceilings for professional technical consultancy related to property planning by beneficiary producer, and for the supervision and monitoring and evaluation of the execution of the individual project. Table 2 below summarizes these thresholds.

**Table 2 – Thresholds for Financial Support to Individual Projects**

Types of beneficiary producers	Threshold of financial support per individual Project [i]	Ceiling cost for investment in implementation (USD1,00/ha) [ii]	Ceiling cost for professional assistance (USD1,00/beneficiary) [iii]
Type Ia	-20% of the cost up to the ceiling per hectare [ii]	1,000	-780 for Planning -1.400 for Implementation
Type Ib	-40% of the cost up to the ceiling per hectare [ii]		-780 for Planning -1.600 for Implementation
Type II	-100% of the cost up to the ceiling per hectare [ii]		-780 for Planning -1.800 for Implementation

\*Costs co-financed by official rural credit to cover expenses to implement individual projects

### 2. Selection Process of Individual Projects

- 4.8 The IDB will conduct a Selection Process of Individual Projects for financial support from the TC, which entails the following steps: (i) annual publication and dissemination of the procurement notice asking rural producers to submit proposals for individual projects to be financially supported by the TC; (ii) receipt of proposals; (iii) eligibility assessment of proposals; (iv) ranking of proposals according to their financial viability (Internal Rate of Return –IRR<sup>14</sup>); (v) selection of best proposals according to the availability of TC funds; and (vi) negotiation and signature of TC agreements with producers for implementation of approved projects.

### 3. Supervision and monitoring of Individual Projects

- 4.9 Supervision of compliance with the terms of the technical cooperation agreement to be signed with each producer will take place in two main ways. The first is based on the inspection carried out by the financial institution that co-finances the individual project also supported by the TC. To ensure the fulfillment of commitments to the financial intermediary, the IDB requires that the beneficiary producer submit a document on a semiannual basis produced by the financial institution, certifying that the producer is properly fulfilling her commitments to the bank in relation to the individual project supported by the operation.

<sup>14</sup> Relevance of IRR criteria in proposal classification will vary on a State and an agricultural technology used basis.

- 4.10 The rural producer will also provide IDB with a semiannual report about the execution of the individual project. This report should be prepared (in accordance with the specifications set out in [OEL 2](#)) by the provider of professional assistance services contracted by the beneficiary producer with TC funding
- 4.11 The individual project reports from the co-financing financial institution and the technical consultant report will be submitted to the IDB via the TC's Internet portal.<sup>15</sup>

**B. Component 2: Technical support for producers**

- 4.12 This component will define, promote, and operate ways to improve producers' technical capacities, by financing relevant training actions within the TC, providing useful tools, and enabling assistance service providers to support producers directly. The technical support provided to producers will be made available through six products: (i) implementation of demonstration units with a view to giving producers a chance to verify on-site the application of the available technologies, and business and property management techniques; (ii) training for producers and technical assistance service providers. Producers will be given training on low-carbon technologies and business and property management tools. Assistance service providers will be given opportunities for training and skills certification enabling them to provide relevant services to the TC's beneficiary producers; (iii) support educational activities for sustainable development; (iv) tools and models to be made available to producers and technical assistance service providers; (v) activities to promote and disseminate information and guidance to producers and suppliers; and (vi) creation of a web portal for the TC.<sup>16</sup>

**1. Identification and Implementation of Demonstration Units**

- 4.13 The support offered by the TC for the identification and/or implementation of demonstration units aims at establishing a network of properties in each participating State that can be visited by TC beneficiaries to get to know the application of property planning and management methods, as well as the technologies supported by this TC. Each municipality selected by the States should identify demonstration units of the supported technologies within its area. When such demonstration units exist (they may have been implemented by another project or by the owner's individual choice,) these properties will serve as a model for the diffusion of technologies, low carbon practices and property management methods. In the hypothesis that there are no demonstration units in a given municipality or that the existing ones do not wish to participate, the Bank will hire consultancy services to identify properties with potential to serve as demonstration units and provide the services to implement and operate the demonstration units, as established in the Operational Manual of the TC. (See [OEL 2](#).)
- 4.14 The Technical Cooperation sets out thresholds for support to the establishment of demonstration units according to the type of demonstrator producer, the type of professional assistance required, and the establishment stage. Table 3 summarizes these thresholds.

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<sup>15</sup> The Internet portal will follow IDB's policies set out in Manual AN-325 and policy GN-1831-36 (information access.)

<sup>16</sup> The aims of creating the Internet portal are to: (i) disseminate tools, TC processes, training and support material; (ii) organize in-person training for producers and technical assistance suppliers; (iii) organize visits to demonstration units; (iv) organize procedures for applying for rural credit; (v) organize procedures relating to conditional cash transfers; and (vi) organize procedures relating to the submission of reports on the status of individual projects by the beneficiaries.

**Table 3 – Thresholds for Support to the Establishment of Demonstration Units**

<b>Types of demonstrator producers</b>	<b>Assistance to planning (USD1,00/ demonstrator)</b>	<b>Assistance to establishment – operation (USD00/ demonstrator)</b>	<b>Establishment (USD1,00/ ha)</b>
<b>Type Ia</b>	850	3,630	800
<b>Type Ib</b>	850	3,960	800
<b>Type II</b>	850	4,620	1,000

\* Costs that exceed these thresholds will be financed by the demonstrator producer. The obligation to this financing is part of the Contract for the Establishment of Demonstration Units.

- 4.15 The Bank will select the demonstration units considering the following criteria, as described in the Operations Manual of the TC: (i) eligibility of the property and respective producers, as per criteria established for individual projects in Component 1 of the TC; (ii) ranking of proposals according to its IRR; and (iii) selection of the best proposals according to funding available from the TC and the need to count with demonstration of the different technologies of interest.<sup>17</sup>

## **2. Training of producers and technical advisory services**

- 4.16 Component 2 will finance training and capacity building activities for rural producers, through courses, workshops and provision of educational material, as set forth in the Operations Manual. The following producers may benefit from the support for training and the capacity-building with TC funding: (i) beneficiaries of Component 1 with individual projects approved; (ii) beneficiaries who have technical cooperation agreements in force with the IDB; and (iii) demonstrators selected for the establishment of demonstration units and who hold contracts in force with the IDB.

## **3. Education for rural sustainable development activities**

- 4.17 This subcomponent will finance educational activities for rural sustainable development through the selection of at least two pilot states (one in the Amazon biome and another in the Atlantic Forest biome,) where education programs will be developed in schools located in rural areas. The objective will be to work with young people to make them the protagonists of economic and social development process of the area where they live, thus turning them into multipliers of the TC and protagonists of municipal agricultural development. The details of the activities to be financed by this subcomponent will be described in the Operations Manual.

## **4. Tools and models to be made available to producers and technical advisory service providers**

- 4.18 The TC will finance the hiring of consultancy services for the preparation of support tools, analysis models, investment simulations and form for the many steps of rural property management. These materials will be made available to rural producers, advisory service providers and other interested stakeholders on the TC's internet portal and will be used as teaching material for courses to train beneficiary and demonstrating producers, as well as technical advisory service providers.

## **5. Promotion and information dissemination**

- 4.19 This subcomponent will finance the hiring of consultancy services to prepare, implement and evaluate the Communications Action Plan for the TC, which has the

<sup>17</sup> The criteria to define financial, technical, legal and commercial viability of individual projects will be defined by the TC's Consultative Committee and reflected in the Operations Manual of the TC.

aim to disseminate the TC activities, including its results and achieved benefits. The details of this action plan are described in the Operations Manual of the TC, and in the terms of reference for consultancy services.

**6. Creation of the TC internet portal**

4.20 The TC will also finance the hiring of consultancy services to create an internet portal about the TC. Design, implementation, hosting in IDB’s or other servers, publishing, maintenance and updating services during the execution period of the project and additional 3 years after its conclusion.

**C. Component 3: Execution, management, monitoring, and evaluation activities**

4.21 This component will finance the hiring of a support firm and three individual consultant to carry out activities to support the Bank in the management and execution of the TC, such as: (i) support in procurement, management of contracts and payments to ensure that the goods and services, as well as consulting firms and individual consultants, are contracted on a timely basis and adequately supervised; (ii) preparation of reports and filing in accordance with the requirements and information needs of the Bank, DEFRA, MAPA, and the participating states; and (iii) support the Bank in monitoring and evaluation activities to ensure that the status of project implementation can be supervised and verified; that timely corrective measures can be adopted where necessary; and good practices and lessons can be identified, described, and systemized (the Means of Verification Matrix is shown in [OEL 7](#)).

4.22 The table below shows the amounts necessary to achieve the expected outcomes in each component. The table also shows that there is no local counterpart funding for the operation.

**Table 4: Indicative Budget (US\$)**

OUTPUTS	Source of financing		TOTAL	%
	IDB – Great Britain	Parallel and co-financing		
<b>Financial support for producers</b>	<b>21,648,000</b>		<b>21,648,000</b>	<b>55%</b>
Environmental services/ low carbon technology	13,453,000	-	13,453,000	34%
Hiring of technical advisory services	8,195,000	-	8,195,000	21%
<b>Technical support for producers</b>	<b>12,500,842</b>	<b>-</b>	<b>12,500,842</b>	<b>32%</b>
Demonstration units implemented	6,847,400	-	6,847,400	17%
Training and educational activities	5,207,442	-	5,207,442	13%
Support forms, tools, and models	114,000	-	114,000	0%
Promotion and dissemination	112,000	-	112,000	0%
Internet portal developed and operational	220,000	-	220,000	1%
<b>Execution and management of the TC</b>	<b>4,052,000</b>	<b>-</b>	<b>4,052,000</b>	<b>10%</b>
Support in Procurement, management of contracts and payments	1,516,000	-	1,516,000	4%
Preparation of reports	112,000	-	112,000	0%
Monitoring and evaluation activities	464,000	-	464,000	1%
IDB administration fee	1,960,000	-	1,960,000	5%
<b>Contingencies</b>	<b>999,158</b>	<b>-</b>	<b>999,158</b>	<b>3%</b>
<b>TOTAL</b>	<b>39,200,000</b>	<b>-</b>	<b>39,200,000</b>	<b>100%</b>

## **V. Executing agency and implementation arrangements**

- 5.1 In response to the justified request by the beneficiary (MAPA) (see Required Electronic Link [\(REL 1\)](#)), the Bank will act as executing agency of the TC. The Bank has wide-ranging and notable experience in the area of climate change, which will be useful for achieving the TC's expected outcomes. As the executing agency, the Bank will be responsible for all procurement processes and technical and financial management audits, to fulfill the operation's objectives.
- 5.2 According to the Administrative Agreement signed between the Bank and DEFRA on December 19, 2012, the Bank will charge an administrative fee of five percent (5%) of the total DEFRA contribution. This fee will be distributed to the Climate Change and Sustainability Division responsible for the execution of the project (based on an execution cost estimate) and to the offices of the Bank supporting the operation (based on the average estimated costs from the cost-recovery trust funds.)
- 5.3 The Bank will contract a firm to support the TC execution in Brasilia together with three specialized individual consultants. They will support the Bank in procurement processes and managing the respective goods and consulting service contracts, pursuant to the Bank's procurement policies (documents GN-2349-9 and GN-2350-9.) It is important to note that the activities to be carried out by the firm and the individual consultants are exclusive to the execution of this TC, and none of its staff will be engaged in the Bank's routine, regular activities. Besides, the Bank will hire a project management firm to support the execution of Component 1 and Subcomponent 2.1, as described in Section IV above.
- 5.4 To facilitate collaboration and guidance among the project's main participants, two advisory committees will be set up. The first will be the TC Consultative Committee and will include the main stakeholders and financing groups from the Brazilian government, represented by MAPA, and from the United Kingdom (UK/DEFRA,) represented by British entities related to the International Climate Fund (ICF) as well as the Bank as the TC executing agency. This board will discuss TC implementation issues. A state-level board will also be created, to include representatives from the participating states, their agencies, and other project stakeholders. This second committee will include a representative from each participating state and will focus on coordination of the state's stakeholders and effective implementation of the project in its respective jurisdiction ([OEL 6](#) – TC execution structure.) The details of the constitution and functioning of these committees will be included in the Operations Manual.
- 5.5 A Means of Verification Matrix and a Results Matrix were prepared for the operation ([OEL 7](#) and [OEL 8](#).) These include the project's outcomes and outputs with baseline values, and intermediate and final targets by year, which will facilitate the monitoring and evaluation processes of the TC.
- 5.6 In addition to this, the climate change specialist in Brasilia will serve as a Bank focal point for implementation of the TC.
- 5.7 The monitoring and evaluation budget item will be supplemented by USD\$320,000 from the IDB administration fee, raising the total for monitoring and evaluation activities to 2% of the overall indicative budget. That amount will be allocated

specifically to impact evaluation activities, as specified by the procurement plan, in the Bank's administration fee spreadsheet.

- 5.8 The final amount of funding in dollars will depend on the exchange rate prevailing on the date on which the resources are received and converted into dollars by the Bank, under the terms of the administrative agreement signed between DEFRA and the Bank. If the final value of the contribution when converted into dollars differs from the dollar value envisaged in this budget, owing to a fluctuation in the exchange rate, the budget will be adjusted accordingly. An up-to-date budget will be prepared on the basis of the final exchange rate applied to the contribution.
- 5.9 The project funding will be received from DEFRA and transferred to the Bank through a Project Specific Grant (PSG.) The resources for the project will be released according to the terms and conditions signed in the administrative agreement, which states that the DEFRA commitment of £24,900,000, equivalent to US\$39,200,000 based on an exchange rate of US\$0.63 on October 1 2012, will be fulfilled in the form of two promissory notes to be paid to the Bank. The PSG is managed by the Bank in accordance with the "Report on COFABS, Ad-Hocs and CLFGS and a proposal to unify them as Project Specific Grants (PSG)" (document SC-114). Pursuant to the terms of the agreement between DEFRA and the Bank, and following these procedures, the DEFRA commitment was defined through a separate administrative agreement between DEFRA and the Bank. In addition, the Bank will commit the financing only if it receives sufficient funds from DEFRA to cover the respective commitment(s).
- 5.10 Under the administrative agreement, the resources for this project will be administered by the Bank; and the latter will charge an administration fee of 5% of the total contribution, as indicated in the project budget. This fee will be distributed to the project execution division (based on an estimate of execution costs) and to the Bank's offices supporting the operation (based on the average costs estimated from cost recovery funds).
- 5.11 Notwithstanding paragraphs 5.2 – 5.10 above, and as specified in the administrative agreement, the use of DEFRA funding for the project is subject to the Bank formalizing all of its necessary internal approvals, including the authorization requested from the Board of Executive Directors. Should such approvals not be forthcoming, DEFRA will cancel the promissory notes, as stipulated in the administrative agreement, and the Bank will confirm that no objection or complaint will be made against such action. If the authorization requested is granted, the Bank will receive payment of the contribution against the promissory notes.

## VI. Key issues

- 6.1 **Procurement.** The TC procurement will follow Bank policies (documents GN-2350-9, GN-2349-9, and GN-2303-20) and will adhere to the TC procurement plan (Annex I.) Individual consultants will be contracted under the rules of the Bank's human resources policy. Consulting firms will continue to be contracted according to the Bank's policies on the selection and contracting of consultants (document GN-2350-9;) the contracting of non-consulting services (e.g. seminars) will observe the Bank's Corporate Procurement Policies (document GN-2303-20.) The detailed Acquisitions Plan for the initial disbursement and the first 18 months of

implementation are contained in the electronic links ([OEL 1.](#)) The procurement plan will be updated annually or whenever substantial changes need to be made.

- 6.2 **Operational Manual.** A detailed Operational Manual has been prepared and will be upgraded and finalized before the start of TC implementation ([OEL 2.](#)) It will include special considerations on fiduciary issues, with a detailed description of contracting procedures, administrative oversight and accounting procedures, reporting to the Bank, and technical evaluation of the TC.

## VII. Monitoring and evaluation of the TC

- 7.1 **Status reports.** Quarterly reports will be produced and distributed to the advisory board, describing the project's progress over the last quarter and the activities planned for the next one. Annual status reports and action plans for the following year will be analyzed by the advisory board with a view to recommending any necessary adjustments.
- 7.2 The Bank will provide DEFRA with any reports it may require, including an unaudited annual financial report on the TC and financial statements of the bank account containing the resources transferred by DEFRA, no later than April 30 each year for the period ending December 31 of the previous year. The first of these statements will be delivered in 2015, covering the fiscal year ending December 31, 2014. The preparation costs of such reports will be included in the 5% administration fee, as indicated in the cost table.
- 7.3 **Evaluation.** The TC will be evaluated by independent consultants after the 24<sup>th</sup> month of execution; and its proceeds will finance an independent evaluation of the operation once fully implemented. An impact evaluation for the TC's actions will be performed at specific sites (by sampling participants in selected municipalities and in comparison with nonparticipants). The impact evaluation is described in [OEL 3.](#)
- 7.4 **Monitoring.** The TC's financial transfers for individual projects will be monitored through: (i) quarterly implementation status reports prepared by the technical assistance agents hired and by the producers; (ii) a letter from financing banks "providing evidence of the producers' fulfillment of the loan terms"; and (iii) annual forest coverage monitoring reports. The monitoring system will take account of the key ICF performance indicators, as well as the TC's specific indicators. Further details on the monitoring and evaluation system are contained in [OEL 3.](#)

## VIII. Risk management

- 8.1 The main project risks and key measures envisaged to manage them are described in the table below. ([OEL 4](#) shows the risk management plan.)

**Table 5: Main risks and management measures of the TC**

Description of main risk	Action proposed
Risk related to the Bank's execution of the TC.	The Climate Change and Sustainability Division of the Bank has the technical capacity to carry out the TC execution. Execution risks will be mitigated by hiring individual consultants, as well as a consultancy firm.
The growing demand for agricultural land to produce food and biofuels for the domestic and export markets is a powerful driver of deforestation	The TC will divert demand for agricultural land towards areas already opened up, by restoring degraded grazing areas. It will also support the implementation of environmental policies on the restoration of public forests.
The chance of producers failing to invest in environmental and/or productivity improvements on the property.	To be eligible to receive cash transfers, the producer will sign a contract defining the environmental and productivity improvements to be made on the property. The transfers will be authorized when the producer files a report on the activities undertaken.
Given the political importance of the TC, Brazilian institutions at the federal and state levels could dispute roles.	The TC defines management arrangements including a wide-ranging advisory board to include the main stakeholders and a state committee with local management groups.
Inadequate application of environmental safeguards, owing to a lack of environmental information/ data. This could have unintended environmental consequences.	Clear definition of environmental safeguards developed since the start of the project, including implementation plans.
The project's broad scope (2 biomes, 7 states) makes implementation more complex.	The establishment of the state-level committee enabling state stakeholders to interact and share best practices, reporting to the Bank and the TC Consultative Committee.

### **IX. Exceptions to Bank policy**

9.1 There are no exceptions to Bank policies in this operation.

### **X. Environmental and social strategy**

- 10.1 Based on the Bank's Environment and Safeguards Compliance Policy (OP-703,) and taking account of the objectives, impacts, and risks of this TC, this is classified as a category B operation. (See [OEL 10.](#))
- 10.2 Based on a summary of the impacts/risks obtained from the environmental safeguards analysis, the intervention could negatively alter land use, but any associated adverse impacts will be small to moderate.
- 10.3 This TC's potential adverse impacts relate to leakages, or the shifting of negative land-use or forestry practices that would have occurred on the properties covered by the project towards areas outside its remit. To fulfill the Bank's safeguard policy, this risk will be monitored through an impact evaluation to assess the TC's success and impacts. The latter will also be mitigated through careful selection of investment proposals from participants, with a view to choosing those who are already in compliance with the legal and environmental requirements or are taking steps to fulfill them.
- 10.4 Following implementation of the TC, the project will be re-evaluated to address the concerns of the various stakeholders. An environmental and social management system will be included to deal specifically with social and environmental issues. The monitoring and evaluation structure will be reviewed to include environmental and social indicators for the purpose of preventing leakages and protecting the most vulnerable populations.

Annexes	
Annex I	<a href="#">Procurement plan</a>

Electronic Links
Required
1. Client's Request Letter <a href="#">Required Electronic Link 1</a>
2. Terms of Reference <a href="#">Required Electronic Link 2</a>
Optional
1. Plan of activities and disbursement for the first 18 months of implementation <a href="#">Optional Electronic Link 1</a>
2. Operational Manual <a href="#">Optional Electronic Link 2</a>
3. Monitoring and evaluation system (including impact evaluation) <a href="#">Optional Electronic Link 3</a>
4. Financial structure and risk management <a href="#">Optional Electronic Link 4</a>
5. Consulting services report <a href="#">Optional Electronic Link 5</a>
6. TC execution structure <a href="#">Optional Electronic Link 6</a>
7. Means of verification <a href="#">Optional Electronic Link 7</a>
8. Results Matrix <a href="#">Optional Electronic Link 8</a>
9. TC Checklist <a href="#">Optional Electronic Link 9</a>
10. Environmental and Social Safeguards <a href="#">Optional Electronic Link 10</a>

PROCUREMENT PLAN FOR NON-REIMBURSABLE TECHNICAL COOPERATIONS										
Country: Brazil					Executing agency: Inter-American Development Bank			Sector: Public		
Project number: BR-X1028					Title: Low Carbon Agriculture and Avoided Deforestation to Reduce Poverty in Brazil					
Period covered by the plan: First 18 months of execution										
Threshold for ex post review of procurements: N/A					Goods, services (US\$):		Consulting services(US\$):			
Item No.	Ref. AWP	Description (1)	Estimated contract cost (US\$)	Procurement Method (2)	Review of procurement (ex-ante or ex-post) (3)	Source of financing and percentage		Estimated date of the procurement notice or start of the contract	Technical review by the PTL (4)	Comments
						IDB/GB %	Local / other %			
<b>1</b>		<b>Component 1 - Financial support to producers</b>	<b>5,730,750</b>							
		<b>Consulting services</b>	<b>425,000</b>							
		Consulting service 1 (develop an Extranet site to support the management of individual projects (Component I) and implement the demonstration units (output 2.1))	25,000	QCBS	NA	100		Apr-13	NA	
		Consulting service 2 (to hire the Individual Project Manager to execute component I and output 2.1)	400,000	QCBS	NA	100		Apr-13	NA	
		<b>Grants transfers</b>	<b>5,305,750</b>	NA	NA	100		2013	NA	
<b>2</b>		<b>Component 2 - Technical support to producers</b>	<b>9,899,802</b>							
		<b>Non consulting services</b>	<b>6,782,122</b>						NA	
		Service 1 (to hire 1 firm for each participant state to establish demonstration units)	4,844,000	QCBS	NA	100		Apr-13	NA	
		Service 2 (to hire 1 firm for each participant state to undertake a total of 256 face-to-face courses)	921,600	QCBS	NA	100		Apr-13	NA	
		Service 3 (to hire 1 firm for each participant state to undertake a total of 11.070 visits to demonstration units)	906,522	QCBS	NA	100		Jun-13	NA	
		Service 4 (design and implement: Communications Action Plan)	100,000	QCBS	NA	100		Jun-13	NA	
		Service 5 (To evaluate the effectiveness of the Communication Action Plan)	10,000	QCBS	NA	100		May-14	NA	
		<b>Consulting services</b>	<b>2,507,400</b>							
		Consulting service 1 (to hire 1 firm for each participant state to identify interested producers and provide advisory services to implement 1.505 demonstration units)	2,003,400	QCBS	NA	100		Apr-13	NA	
		Consulting service 2 (to produce 20 training courses and supporting materials)	200,000	QCBS	NA	100		Jun-13	NA	
		Consulting service 3 (to prepare 12 "How-to-notes"*)	84,000	QCBS	NA	100		May-13	NA	
		Consulting service 4 (To design, publish, update, and maintain the TC's Internet Portal)	220,000	QCBS	NA	100		May-13	NA	
		<b>Individual consultants</b>	<b>42,000</b>							
		Consultant 1 (To prepare business plan templates and samples)	15,000	IICQ	NA	100		May-13	NA	
		Consultant 2 (To prepare individual project templates and samples)	15,000	IICQ	NA	100		May-13	NA	

Item No.	Ref. AWP	Description (1)	Estimated contract cost (US\$)	Procurement Method (2)	Review of procurement (ex-ante or ex-post) (3)	Source of financing and percentage		Estimated date of the procurement notice or start of the contract	Technical review by the PTL (4)	Comments
		Consultant 3 (To prepare bidding documents and assist in the procurement of the Communication Action Plan)	2,000	IICQ	NA	100		May-13	NA	
		Consultant 4 (To update the Project's Operations Manual and train UECT's professionals)	10,000	IICQ	NA	100		Nov-14	NA	
		<b>Grants transfer</b>	<b>498,280</b>							
		To undertake face-to-face courses for advisory services providers through the distribution of scholarships to 1.120 qualifying professionals	140,000	NA	NA	100		Nov-13	NA	
		To undertake face-to-face courses for producers through the distribution of scholarships to 1.122 beneficiary producers	129,030	NA	NA	100		Nov-13		
		To pay for opportunity costs of demonstrators' time during 998 visits	229,250	NA	NA	100		Sep-13		
		<b>Operating expenses</b>	<b>70,000</b>							
		To promote training and certification of the advisory services providers in each participating states	70,000	PC	NA	100		Jun-13	NA	
<b>3</b>		<b>Component 3 - TC Execution and Management</b>	<b>2,599,000</b>							
		<b>Goods</b>	<b>10,000</b>							
		Good 1 (equipment, materials, etc.)	10,000	PC	NA	100			NA	
		<b>Individual consultants</b>	<b>2,502,500</b>							
		Management and Consulting Unit	2,502,500	QCBS	NA	100		Apr-13	NA	
		<b>Operating expenses</b>	<b>86,500</b>							
		Travel expenses (air tickets, car rental, per diem)	30,000	PC	NA	100			NA	
		To establish and support the Consultative Committee	4,000	PC	NA	100			NA	
		To establish and support the States' Consultative Committee	30,000	PC	NA	100			NA	
		To undertake the digital and physical archiving of project documentation	7,500	PC	NA	100			NA	
		To monitor the execution activities and take corrective measures as needed	15,000	PC	NA	100			NA	
<b>Total</b>			<b>15,630,597</b>	<b>Prepared by: Simone Bauch, CCS/CBR</b>						

(1) Grouping together of similar procurement is recommended, such as computer hardware, publications, travel, etc. If there are a number of similar individual contracts to be executed at different times, they can be grouped together under a single heading, with an explanation in the comments column indicating the average individual amount and the period during which the contract would be executed. For example: an export promotion project that includes travel to participate in fairs would have an item called "airfare for fairs", an estimated total value of US\$5,000, and an explanation in the Comments column: "This is for approximately four different airfares to participate in fairs in the region in years X and X1".

(2) **Goods and works:** CB: Competitive bidding; PC: Price comparison; DC: Direct contracting.

(2) **Consulting firms:** CQS: Selection Based on the Consultants' Qualifications; QCBS: Quality and cost-based selection; LCS: Least Cost Selection; FBS: Selection under a Fixed Budget; SSS: Single Source Selection; QBS: Quality Based selection.

(2) **Individual consultants:** IICQ: International Individual Consultant Selection Based on Qualifications; SSS: Single Source Selection.

(3) **Ex ante/ex post review:** In general, depending on the institutional capacity and level of risk associated with the procurement, ex post review is the standard modality. Ex ante review can be specified for critical or complex process.

(4) **Technical review:** The PTL will use this column to define that procurement he/she considers "critical" or "complex" that require ex ante review of the terms of reference, technical specifications, reports, outputs, or other items.