

Technical Cooperation (TC) Document

I. Basic Information

▪ Country/Region:	REGIONAL/LAC
▪ TC Name:	Enhancing climate smart and forest-friendly practices and technology in LAC
▪ TC Number:	RG-T2942
▪ Team Leader/Members:	Juliana Almeida, team leader (CSD/CCS), Alejandro Escobar, co-team leader (MIF/MSM); Viviana Alva (CSD/RND), Michael Collins, (CSD/RND), Ana Rios, (CSD/CCS), Roberto Esmeral (CCS/CCO), Barbara Brakarz (CCS/CBR), Hilen Meirovich (INO/NFP), Eugenia Saini (ORP/GCM), Taos Aliouat, (LEG/SGO), Juan Gomez (CSD/CCS), Carlos Güiza (CSD/CCS); Juan Borga (SRE/PFA)
▪ Taxonomy:	Research and Dissemination
▪ Beneficiary:	Argentina, Brazil and Colombia
▪ Executing Agency:	IDB
▪ Donors providing funding:	AgroLAC 2025 Fund
▪ IDB Funding Requested:	US\$800,000
▪ Local counterpart funding:	N/A
▪ Disbursement period:	38 months (execution: 36 months)
▪ Required start date:	April 2017
▪ Types of consultants:	Firms and other services
▪ Prepared by Unit:	CCS
▪ Unit of Disbursement Responsibility:	CSD
▪ TC Included in Country Strategy:	No
▪ TC included in CPD:	No
▪ Alignment to the Update to the Institutional Strategy 2010-2020:	Development challenge of productivity and innovation and cross-cutting theme of climate change and environmental sustainability.

II. Objectives and Justification

- 2.1 With the world's population growth predicted to hit 9-10 billion people by 2050, agricultural production must increase dramatically in the coming decades. To meet growing demand, producers are traditionally driven to expand into native habitat, and convert the ecosystems that secure water and other ecological processes that provide critical inputs for sustained agricultural production in farms and rural communities. Latin America is the world's largest net food exporting region, where expansion of the agricultural frontier is one of the main drivers of deforestation, degrading biodiversity and ecosystem services, and generating carbon emissions that accelerate global climate change. As a region where agricultural activities have historically been more extensive rather than intensive, Latin America's current challenge regarding feeding the world's growing population will place unprecedented pressure on the region's natural resources and biodiversity.
- 2.2 The Nature Conservancy (TNC), a leading organization on landscape conservation, launched an initiative called Green Growth Compact (GGCs),¹ a multi-stakeholder effort that brings together producers, governments, companies, financial institutions and other influential stakeholders to promote the alignment of conservation, production and socio-economic agendas. Its goal is to transform rural production zones into sustainable

¹ This TC intends to leverage resources from other donors to maximize the impacts for the beneficiaries. As of March 2017, the GGC has leveraged over US\$90M from different partners aimed at reaching its goals.

productive landscapes by developing agreements among stakeholders to achieve specific goals, bring science to map conservation priorities, improve land use, and align multiple interests and investments. Under the GGC TNC has identified 5 major strategic biomes for conservation, which have been under pressure by agriculture expansion and other human activities: Yucatan Peninsula and Chiapas (Mexico), Meta and Caquetá (Colombia), Para (Brazil), Chaco (Argentina and Paraguay), and Patagonia (Argentina). This project aims to leverage this effort around the GGC and focus on forest conservation in Meta (Colombia), Pará (Brazil) and Jujuy and Salta in the region of the Great Chaco (Argentina).

- 2.3 Colombia hosts almost 10% of the planet's biodiversity. Between 1990 and 2000, 59% of all deforestation in the country was taking place in municipalities with a high incidence of conflict. By 2013, this percentage increased to 75% (Colombian Institute of Environmental Studies (IDEAM, 2014)). The main sources of deforestation in Colombia are illegal mining, illicit crops, land conversion for agricultural purposes, logging, and forest fires (IDEAM, 2015). Climate change variables exacerbate the situation and increase the pressure on the Colombian forests. An increase in the average temperature between 2° and 4°C by 2070, along with modified hydrological conditions (e.g. reduced rainfall reduced in certain regions), could reduce Colombia's yields of corn, rice and potatoes by 7.4% by 2100 (DNP-IDB, 2015). IDEAM estimates 60% of the high land wetlands will disappear by 2050, a critical issue given the importance of the services provided by these ecosystems. In 2010 Colombia prepared its national Green House Gas (GHG) emissions inventory which determined that agriculture, forestry and other land uses were the highest emitting sectors (Colombia's INDC, 2015).
- 2.4 The Amazon forest, located primarily in the states of Amazonas and Para in Brazil, currently stores an estimated 120 billion tons of carbon and sucks up an astonishing 25 percent of carbon dioxide emitted from natural and human sources. Logging, slash-and-burn agriculture and oil exploration threaten to disrupt these processes that help keep the climate mostly in balance. Brazil's National Institute for Space Research (INPE) estimates that 7,989 square kilometers of land were cleared between August 2015 and July 2016 (up 29% from the previous year, and up 75% from 2012 levels). About 90% of the deforested land is used for livestock pasture (INPE, 2016).
- 2.5 Argentina has one of the highest deforestation rates in Latin America. In the last century, the country lost 70% of its native forests. Northwestern provinces of Chaco forests and Yungas (in Salta, Jujuy, Tucumán and Catamarca), which concentrated 93% of the deforestation that took place between 2001 and 2014, were the most affected. During this period the country lost about 50,000 km² of native forests.² Northwestern Argentina has become a major region for agribusiness expansion. Soy (which represents 28% of the total exports of the country³) and sugar cane expansion, have currently become major drivers for deforestation and displacement of indigenous and rural communities in Salta and Jujuy (World Bank, 2016).
- 2.6 Deforestation in traditional conflict areas surrounding the Macarena mountain range in Meta, the amazon forest in the Para State and the Chaco forest and Yungas in Salta and Jujuy is the main problem the project aims to alleviate. To achieve this goal, this Technical Cooperation proposes to support the public and private sectors in reducing deforestation while strengthening low carbon agriculture production in Colombia

² World Bank Country environmental analysis: Argentina; N°9, Informe N°11996, May 2016.

³ Per the Ministry of Agriculture, Livestock, Fishing and Foods the soy production increased 400% between 1990 and 2014, and the area cultivated tripled during this period.

(Meta), Brazil (Para), and Argentina (“Great Chaco region”, with emphasis in Salta and Jujuy provinces), based on the successful implementation of the GGC methodology in São Felix do Xingu, Brazil and the Yucatán Peninsula, Mexico.

- 2.7 The three specific objectives are: (i) increase sustainable and climate resilient productivity of targeted value chains; (ii) increase access of these value chains to regional and global markets; (iii) support policy change and an enable regulatory environment to promote landscape conservation activities while fostering the public and private dialogue in this context.
- 2.8 **Synergies and knowledge value to other IDB operations.** With the technical assistance provided to the value chains prioritized in Meta (Colombia) on climate smart and forest-friendly practices and technology, this project expects to prepare a group of farmers and producer associations to best access the resources from the Sustainable Colombia Facility (GN-2865) and the “*Colombia Sostenible*” loan (CO-L1166). In the same line, the project expects to improve the technical capacity of key value chains prioritized in Para (Brazil) to enable them to better access the funds from “*Rural Sustentavel*” (BR-X1028), an initiative that aims to increase the sustainability of agricultural production while preserving the environment and reducing carbon emissions. In Argentina, the knowledge generated will be also channeled to support the operation Forest Sustainability and Competitiveness Program (2853/OC-AR), which aims to contribute to the sustainable management and competitiveness of forest plantations.⁴ Components 3 and 4 will also capitalize on existing technologies and innovation processes that have received the support of the Regional Fund for Agricultural Technology (FONTAGRO).⁵ The regional workshop under Component 4 will disseminate the innovative climate smart technologies and practices that have been awarded in the competitions organized by FONTAGRO.
- 2.9 The TC is consistent with the Update to the Institutional Strategy (UIS) 2010-2020 (GN-2788-5) as it will generate relevant knowledge for the implementation of targeted climate smart agriculture innovations intended to spur policy improvements aimed at improving agricultural productivity. The TC also aligns with the cross-cutting theme of climate change and environmental sustainability as it intends to support the replication of best climate smart practices among the regions involved in the three countries. Additionally, the program will contribute to the Corporate Results Framework 2016-2019 (GN-2727-4) (CRF) by improving public service delivery as regional government agencies are strengthened by the adoption and replication of relevant knowledge on climate change adaptation. Finally, the TC aligns with Brazil’s country strategy (GN-2850) objective of increasing “productivity and competitiveness”; with Argentina’s country strategy (GN-2870) objective of developing “environmentally sustainable solutions and support for disaster risk management” and Colombia’s Country Strategy (GN 2832) objective of increasing “economic productivity, by spurring innovation and development in business and agriculture”.

⁴ Some of the activities in this project target Salta and Jujuy areas.

⁵ This project will add to the learning tools the material already published by Fontagro such as “*Impactful innovations: lessons from family agriculture on adaptation to climate change in Latin America and the Caribbean*”, “*Innovaciones de Impacto: Lecciones de la Agricultura Familiar en América Latina y el Caribe 2012*”; “*I&D Agropecuario en Colombia: Política, Inversiones y Perfil Institucional*”. It will also use lessons learned from the program under development called “*Programa nacional Piloto de Ganadería de carne baja en emisiones*”

III. Description of Activities and Budget⁶

- 3.1 **Component 1. Develop situational analysis (US\$24,000).** This component will finance the development of situational analysis that will include the following aspects: (i) mapping of the key value chains in the target regions, as well as involved actors and opportunities to make these value chains deforestation-free; (ii) definition of the most important areas for maintaining forest cover and the areas with the highest biophysical and socioeconomic potential for key crops/land uses; and (iii) assessment of the water demand: water as an input to guide productive activities based on water availability; and (iv) stakeholders and proposed partnership: identification and mapping of key stakeholders involved in the value chains (assessment of trends, pressures, driving forces, and responses). This assessment will build on the recently analysis developed by TNC on the drivers of deforestation across the target regions. These inputs will be used to feed the policy recommendations and training materials described in components 2 and 3 as well as to identify the target audience of the technical assistance to be provided.
- 3.2 **Component 2. Support public policies and develop training materials (US\$211,000).** The TC will support state and municipal governments and secretaries linked to the Ministries of Environment and Agriculture of the target regions to prepare conservation policies by financing the development of data, analysis and policy recommendations as part of the component 1, as well as the following additional inputs: (i) development of priority assessment for landscape conservation in Meta, Chaco and Para (detailed geographical datasets for planning production and conservation to avoid habitat loss, activities that contribute to the reduction of carbon emissions, conservation of high value areas, and agriculture intensification using sustainable practices); (ii) development of land use analysis and scenarios to balance the expansion of the major value chains included at the State Development Plan of Para ([Pará 2030](#)) with the state's net zero deforestation commitments; and (iii) development of manuals for the incorporation of climate smart agriculture practices and technologies for selected value chains as well as related investment plans needed.⁷ It will engage with private sector to include quality requirements and delineate upgrading processes of small farms into local and regional value chains. This material will be discussed and presented, through capacity building activities, with the provincial governments involved in climate change, forestry conservation and agriculture related aspects, to help guide their conservation policies. Likewise, the material will be also used in the activities described in Component 3.
- 3.3 In the case of Argentina, this TC will also support the establishment of a collaboration agreement among key stakeholders -government agencies, private companies, academia, rural communities, etc.- towards a path of sustainable growth with conservation.⁸ The collaboration agreement proposal should detail the structure, target commodities, activities for coordination and expected impact will be developed taking

⁶ The initiation of the activities to be developed in Argentina is subject to the receipt of the non-objection letter from the Government.

⁷ These include the development of climate resilient criteria and in-depth analysis of some specific value chains.

⁸ Under this approach TNC was a key facilitator for the creation of the *Sustainability Agreement for Yucatan*, including the three Yucatan peninsula states, which announced their fulfillment of the commitments defined in such document, including: (i) the definition of REDD+ and climate adaptation strategies; (ii) the establishment of a joint Commission on Climate Change; and (iii) a Peninsula-wide forest monitoring system, as well as the creation of the Yucatan Peninsula Climate Action Fund.

into account the different stakeholders' aspirations, capacity and existing sustainability legal framework (REDD+, biodiversity, restoration and resilience, among others).⁹

- 3.4 Component 3. Improve productive practices and market connection (US\$450,000).** This component will finance the following activities: (i) strengthening of hubs: a group of local producer associations and/or academic centers would be selected and trained on climate smart and forest-friendly practices and technology. These hubs will help build the capacity of farmers and agribusiness (this “train the trainers approach” is important to ensure that this knowledge can be disseminated beyond the period of this project); and (ii) technical assistance to farmers and agribusiness for the incorporation of climate smart and forest-friendly practices and technology in the form of specialized trainings using the materials developed in the Components 1 and 2. These activities would also support the agribusiness to better connect with sustainable supply chain initiatives and traders. In particular, this component will promote: (a) ranching practices exchange to share knowledge and experience among producers and catalyze changes at the farm level; (b) the incorporation of the recommendations provided in the manuals on climate smart and forest-friendly practices and technology; and (c) the awareness of the requirements to access international markets and sustainable supply chains for those products selected. Additionally, up to 40 hectares of “model farms” will be selected to receive a more in-depth technical assistance in the form of “coaching” on sustainable productive practices. The value chains will be prioritized according to the findings of the analysis carried out in Components 1 and 2 and will be based on the depth of their impact on deforestation. The “model farmers”, will be selected per the criteria defined by the IDB and TNC. The local governments will be invited to participate in activities designed to strengthen of the hub’s technical capacity to be able to replicate the trainings with other producer associations.
- 3.5 Component 4. Disseminate experiences across benefited regions (US\$70,000).** This component will finance the organization of a workshop with the key beneficiaries of the previous components from the public and private sectors in the region of Meta, Para and Jujuy. The objective of this workshop is to allow cross-fertilization among the 3 GGC supported and exchange of lessons learned and best practices on the incorporation of climate smart and forest-friendly practices and technologies and best ways to connect with sustainable supply chain initiatives. This regional workshop will be ideally organized in the location of one of the “model farms” to allow in-site tours where sustainable productive practices have been successfully implemented.
- 3.6 Monitoring reports, supervision and contingencies (US\$45,000).**

Indicative Budget

Component	IDB/AgroLAC 2025 Fund
Component 1. Develop situational analysis	24,000
Component 2. Support public policies and develop training materials	211,000
Component 3. Improve productive practices and market connection	450,000
Component 4. Disseminate experiences across benefited regions	70,000
Monitoring reports	30,000
Supervision missions of the project team ¹⁰	15,000
Contingencies	5,000
Total	800,000

⁹ This component will be developed in coordination with the Forest Sustainability and Competitiveness Program (2853/OC-AR) team to capitalize the synergies between both operations.

¹⁰ This amount is intended to cover the Project Team’s supervision mission expenses as well as missions to participate in the capacity building trainings as trainers.

- 3.7 The total estimated cost of the operation is US\$800,000 which will be financed with resources from AgroLAC 2025 Fund.
- 3.8 The expected outcomes of the project are: (i) improved government knowledge and capacity to implement landscape conservation policies; and (ii) increased capacity of farmers and agribusinesses to implement sustainable agricultural practices through the incorporation of climate smart and forest-friendly practices and technology and to connect with sustainable regional and global supply chains. Both will be measured using feedback surveys by the participants and provided by TNC. The surveys will follow defined methodologies based on good practices as well as the monitoring and evaluation experience drawn from agricultural and forest conservation projects.
- 3.9 **Intellectual Property.** The Bank authorizes TNC to use, reproduce in any media including digital, transmit, communicate, display, distribute, publicize and sub-license any of the results, products and materials produced under this TC and for the purposes established in this TC, including, but not limited to, its partners, members, related entities, on a perpetual basis. In all circumstances, the support of the Bank in developing such results, products and materials shall be expressly recognized.

IV. Executing agency and execution structure

- 4.1 This TC will be executed by the Bank and the Unit of Basic Responsibility will be the Climate Change Division (CSD/CCS). The selection and contracting of consulting services will follow: (a) the Selection and Contracting of Consulting Firms for Bank Executed Operational Work (GN-2765-1) and related Operational Guidelines (OP-1155-4), and (b) the Bank's Administrative Regulation AM-650 for individual consultants (see also detailed procurement plan). In line with GN-2765-1, the team requests the approval to hire under the modality of "single source selection" The Nature Conservancy (TNC) to provide the deliverables contemplated under components 1, 2 and 3 for an estimated amount of US\$ 715,000.00 (seven hundred and fifteen thousand dollars). To that effect, the IDB and TNC will sign a lump sum contract which will detail the products expected to be delivered, the timeframe and payment conditions.
- 4.2 The IDB will act as the executing agency, since the TC requires central coordination from the different Divisions of the IDBG involved. CSD/CCS and MIF/MSM will coordinate with members from other divisions of the Bank that participate in the project from HQ and COFs in the three beneficiary countries. Additionally, CSD/CCS will liaise with other key initiatives and stakeholders involved, such as FONTAGRO, which is based at HQ. Additionally, the execution by the Bank allows the adequately coordination of the activities across beneficiary countries and assures that synergies are created among them (Component 4 is designed to allow the exchange of experience among them).
- 4.3 TNC is the largest conservation non-profit organization in the world. Created in 1952, TNC has approximately 4,000 staff worldwide including over 600 scientists. Internationally, TNC has over 28 years of on-the-ground experience in designing and implementing conservation programs in more than 35 countries outside the United States, and experience executing successfully IDB projects (GRT/CF12631-RG, ATN/FI-12690-RG, ATN/OC-14053-RG, ATN/OC-15994-RG BK-A1830, among others) totaling more than US\$6M. The Nature Conservancy's global agriculture strategy is based on a sustainable intensification approach that will help meet a growing demand for food and water while improving soil, water, and habitat conservation in agricultural landscapes across the globe. TNC is also responsible for

the Latin America Conservation Council (LACC), an advisory group of influential corporate and development leaders in Latin America, which brings powerful advocacy, positioning, and influence to key markets for economic development relying on sustainable environmental management. The LACC Council has been working with industry leaders such as Cargill, Bunge, Walmart and Marfrig to create sustainable supply chains through partnerships.

- 4.4 Besides being the creator of the innovative Green Growth Compact Initiative, TNC has also a large and solid experience implementing complex projects with the IDB. This includes the implementation of the first phase of the Latin America Water Funds Partnership, a 5-year, \$12.6M collaboration of TNC, IDB, FEMSA and GEF that leveraged over US\$100M to implement 19 Water Funds; the second phase of the Latin America Water Funds Partnership; as well as the Early Planning Finance for Sustainable Infrastructure in Latin America (RG-T2836). TNC has been also supporting the implementation of other major initiatives in Latin America such as the Forests and Agriculture Market Initiative (5 year, coalition to eliminate deforestation in Brazil, Argentina and Paraguay); the Mexico-REDD+ Alliance (5 year, \$32M alliance to support the Mexican Government in the establishment of a REDD+ framework, strategies for low carbon agriculture, and the Climate Action Fund for the Yucatan Peninsula). In addition, TNC has led several programs funded by BNDES and Brazil's Ministry of the Environment, for US\$16M to implement the Rural Environmental Registry (CAR) to strengthen sustainable land management in the Amazon.

V. Major issues

- 5.1 Private sector reticence to comply with climate change and landscape conservation related policies and practices promoted. This TC will mitigate these risks by engaging with government officials and relevant agriculture producer organizations, farmers and agribusiness early in the process and ensuring regular dissemination of the components. TNC's would also apply its Principles of Corporate Engagement in all engagements with companies, structuring all activities in a way that ensures fluid communication with companies and government.

VI. Environmental and Social Strategy

- 6.1 According to the Environment and Safeguards Compliance Policy of the IDB (OP-703), the operation has been classified as Category 'C' (see the [Safeguards Screening Form](#) and the [Safeguards Policy Filter](#)).

Required Annexes

- [Terms of Reference](#)
- [Procurement Plan](#)
- [Results Matrix](#)

ENHANCING CLIMATE SMART AND FOREST-FRIENDLY PRACTICES AND TECHNOLOGY IN LAC

RG-T2942

CERTIFICATION

I hereby certify that this operation was approved for financing under the **AgroLAC 2025 Multidonor Trust Fund (MAG)** through a communication dated January 18, 2017 and signed by Kai Hertz (ORP/GCM). Also, I certify that resources from said fund are available for up to **US\$800,000** in order to finance the activities described and budgeted in this document. This certification reserves resource for the referenced project for a period of four (4) calendar months counted from the date of eligibility from the funding source. If the project is not approved by the IDB within that period, the reserve of resources will be cancelled, except in the case a new certification is granted. The commitment and disbursement of these resources shall be made only by the Bank in US dollars. The same currency shall be used to stipulate the remuneration and payments to consultants, except in the case of local consultants working in their own borrowing member country who shall have their remuneration defined and paid in the currency of such country. No resources of the Fund shall be made available to cover amounts greater than the amount certified herein above for the implementation of this operation. Amounts greater than the certified amount may arise from commitments on contracts denominated in a currency other than the Fund currency, resulting in currency exchange rate differences, represent a risk that will not be absorbed by the Fund.

Original Signed

Sonia M. Rivera

Chief

Grants and Co-Financing Management Unit
ORP/GCM

04/06/2017

Date

Approved:

Original Signed

Juan Pablo Bonilla

Manager

Climate Change and Sustainable Development Sector
CSD

04/10/2017

Date