Funding Proposal

FP048: Climate-Smart Agriculture (CSA) Risk Sharing Facility for MSMEs

Guatemala and Mexico | Inter-American Development Bank | B18/08

2 November 2017
Funding Proposal

Version 1.1

The Green Climate Fund (GCF) is seeking high-quality funding proposals.

Accredited entities are expected to develop their funding proposals, in close consultation with the relevant national designated authority, with due consideration of the GCF’s Investment Framework and Results Management Framework. The funding proposals should demonstrate how the proposed projects or programmes will perform against the investment criteria and achieve part or all of the strategic impact results.

Project/Programme Title: Climate-Smart Agriculture (CSA) Risk Sharing Facility for MSMEs

Country/Region: Guatemala and Mexico.

Accredited Entity: Inter-American Development Bank

Date of Submission: 21 April 2017
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Section B  FINANCING / COST INFORMATION
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Note to accredited entities on the use of the funding proposal template

- Sections A, B, D, E and H of the funding proposal require detailed inputs from the accredited entity. For all other sections, including the Appraisal Summary in section F, accredited entities have discretion in how they wish to present the information. Accredited entities can either directly incorporate information into this proposal, or provide summary information in the proposal with cross-reference to other project documents such as project appraisal document.
- The total number of pages for the funding proposal (excluding annexes) is expected not to exceed 50.

Please submit the completed form to:
fundingproposal@gcfund.org

Please use the following name convention for the file name:
“[FP]-[Agency Short Name]-[Date]-[Serial Number]”
## A.1. Brief Project / Programme Information

<table>
<thead>
<tr>
<th>A.1.1. Project / programme title</th>
<th>Climate-Smart Agriculture (CSA) Risk Sharing Facility for MSMEs</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.1.2. Project or programme</td>
<td>programme</td>
</tr>
<tr>
<td>A.1.3. Country (ies) / region</td>
<td>Guatemala, Mexico.</td>
</tr>
</tbody>
</table>
| A.1.4. National designated authority (ies) | Guatemala  
Ministry of Environment and Natural Resources  
His Excellency Mr. Sydney Alexander Samuels Milson  
Minister  
Mr. Carlos Fernando Coronado Castillo  
Deputy Minister for Natural Resources and Climate Change  
Mexico  
Ministry of Finance  
Ms. María de los Ángeles González Miranda  
Chief of the International Affairs Unit |
| A.1.5. Accredited entity        | Inter-American Development Bank (IDB)                        |
| A.1.5.a. Access modality        | ☐ Direct ☒ International                                      |
| A.1.6. Executing entity / beneficiary | Executing Entities:  
Financial Intermediaries and anchor corporations in the climate-smart agricultural and agroforestry sectors¹.  
The selected financial intermediaries represent some of the most sophisticated players in Latin America for the channeling of climate finance towards climate-smart agriculture, sustainable land use and forestry projects, and have a successful and demonstrable track record of working with MSMEs and small holders in the targeted countries and in the region. Executing entities involved in the Proposal will receive firsthand exposure to GCF requirements and procedures that will be instrumental for potential direct accreditation with the GCF.  
Beneficiaries: MSMEs² and rural families in the climate-smart land use sector. |
| A.1.7. Project size category (Total investment, million US$) | ☐ Micro (≤10) ☒ Medium (50<x≤250) ☐ Large (>250) |
| A.1.8. Mitigation / adaptation focus | ☐ Mitigation ☐ Adaptation ☒ Cross-cutting |
| A.1.9. Date of submission       | 07 July 2017                                                  |

¹ Preliminary consultations have taken place with the Financial Intermediaries listed in this section during the preparation of this funding proposal. The pipeline provided as attachment of this funding proposal, although based on these consultations, is to be intended as illustrative and may be subject to change during the following stages of the set up and implementation of the Facility.

² For the purposes of this funding proposal, MSMEs will be defined in accordance with the definitions provided by the national regulations of the countries selected. In case no clear definition was to be provided in national legislation, the MSME definition of the International Finance Corporation, as included in GCF document FP 2016/PSF/001 “Micro-, small- and medium-sized enterprise pilot programme - Request for funding proposals from qualified financial institutions”, will be used.
### A.1.10. Project contact details

| Contact person, position       | Mr. Gregory Watson  
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Ms. Gloria Visconti</td>
</tr>
<tr>
<td>Organization</td>
<td>Inter-American Development Bank (IDB)</td>
</tr>
</tbody>
</table>
| Email address                 | gregoryw@iadb.org   
|                               | gloriav@iadb.org   |  
| Telephone number              | +1 202 623 3360     |  
| Mailing address               | 1300 New York Ave NW, Washington DC 20577 |  

### A.1.11. Results areas (mark all that apply)

**Reduced emissions from:**

- ☐ Energy access and power generation  
  (E.g. on-grid, micro-grid or off-grid solar, wind, geothermal, etc.)
- ☐ Low emission transport  
  (E.g. high-speed rail, rapid bus system, etc.)
- ☐ Buildings, cities and industries and appliances  
  (E.g. new and retrofitted energy-efficient buildings, energy-efficient equipment for companies and supply chain management, etc.)
- ☒ Forestry and land use  
  (E.g. forest conservation and management, agroforestry, agricultural irrigation, water treatment and management, etc.)

**Increased resilience of:**

- ☒ Most vulnerable people and communities  
  (E.g. mitigation of operational risk associated with climate change – diversification of supply sources and supply chain management, relocation of manufacturing facilities and warehouses, etc.)
- ☒ Health and well-being, and food and water security  
  (E.g. climate-resilient crops, efficient irrigation systems, etc.)
- ☐ Infrastructure and built environment  
  (E.g. sea walls, resilient road networks, etc.)
- ☐ Ecosystem and ecosystem services  
  (E.g. ecosystem conservation and management, ecotourism, etc.)
A.2. Project / Programme Executive Summary (max 300 words)

Please provide a brief description of the proposed project/programme, including the objectives and primary measurable benefits (see investment criteria in section E). The detailed description can be elaborated in section C.

Agriculture is one of the sectors most vulnerable to climate change and is at the same time a driver and mitigant of the underlying causes of climate change. Therefore, moving the needle on climate change in the LAC region means working in sustainable and low-carbon agricultural and forest landscapes. The concept and practice of Climate-Smart Agriculture offers a fitting toolbox to achieve mitigation and adaptation objectives in the agro-forestry sector in LAC.

According to the United Nations’ Food and Agriculture Organization (FAO), CSA can be defined as a practice that “contributes to the achievement of sustainable development goals. It integrates the three dimensions of sustainable development (economic, social and environmental) by jointly addressing food security and climate challenges. It is composed of three main pillars: (i) sustainably increasing agricultural productivity and incomes, (ii) adapting and building resilience to climate change; and (iii) reducing and/or removing greenhouse gases emissions, where possible”3

CSA projects in LAC often have difficulty securing financing for innovation or growth because the financial intermediaries that service this sector do not offer products tailored to the needs of agricultural producers experimenting with new processes or expanding from small, grant-funded pilots.

The proposed solution is the establishment of a risk sharing Facility that will unlock innovative and scalable financial instruments to support CSA investments, targeting, during an initial first phase, Mexico and Guatemala. The Facility will leverage funding from companies, financial service providers and equity funds. In conjunction with loans and grants from the IDB Group, and with substantial leverage of partner funds, the Facility will provide guarantee funds, anchor equity investments, long term and low-cost debt funding and technical assistance grants to be channeled by the Executing Entities to the sub-projects.

The Facility will target agricultural and agro-forestry enterprises that demonstrate innovative and environmentally sustainable practices and support them to engage lenders for longer-term loans needed for climate smart investments. It is estimated that the needs of these enterprises are between US$ 100,000to US$ 5 Million in longer-term capital to transform smallholder farming from an environmental threat to a conservation strategy. Sub-projects to be financed by the Facility are tailored to national contexts and selected on a demand-basis based on country and farmer needs. Through a combination of increased access to capital and technical assistance, they will seek to improve farmer productivity and to implement mitigation activities such as energy efficiency, agroforestry systems, and reduction of pressure on forested land for agricultural use, and adaptation activities such as drip irrigation systems, resistant seed substitution, diversification, and changes to agricultural cycles.

The causal link between improved agro-forestry practices and climate impacts is clear for the following reasons. First, in the target countries, poor practices in commodity crop production (e.g. coffee, cocoa, avocado) are important drivers of deforestation. Unsustainable production, exacerbated by climate change, drives down productivity and results in increased forest conversion. Application of best management practices improves productivity, while certification and access to preferred markets can increase MSMEs’ income. Increased access to low-cost capital and tailored technical assistance are key enabling conditions towards such outcomes.

Second, in most communities in the target countries, both forestry and agroforestry activities are important for community livelihoods as alternative income streams. To optimize avoided deforestation results, the project must work to both increase the economic logic of keeping the forest standing, while simultaneously working to reduce threats from poor commodity crop production. Third, agroforestry MSMEs that manage multiple value chains tend to be more resilient and competitive, and are better able to produce more benefits for a wider group of stakeholders. Finally, by working in both forestry and agroforestry value chains, impacts can be achieved at the landscape scale, which is especially important in areas where high forest blocks are fragmented.

The calculation of GHG emission reductions, which was carried out for each sub-project as described in the project profiles annexed to this Funding Proposal, takes into account this complex interplay of land-use factors. The proposed initiative is expected to mitigate 9.2 million tons of CO2e and implement climate-smart activities on an area of approximately 200,000 hectares during the lifetime of the Facility. The total number of direct beneficiaries is estimated to exceed 800,000

people, who will benefit directly from the adoption of diversified, climate resilient livelihood options and risk mitigation instruments. The increase in farm productivity (yield/hectare) is expected to be in the region of 10%. It is expected that at least 15 additional firms operating alongside the CSA value chain will benefit indirectly from the provision of services related to the implementation of the sub-projects, including providers of CSA technology, seeds and agricultural extension services.

Although there is significant private capital that can be deployed into climate-smart agriculture projects in LAC, the perceived risk of these investments requires public-sector long-term resources and guarantees. It is expected that with a limited amount of tailored financial resources, significant additional private capital can be channeled to sustainable land use mitigation and adaptation activities. By sharing with the IDB Group the risk of piloting early-stage, innovative financial mechanisms in the CSA space, the GCF involvement will allow the opportunity to demonstrate to national and regional financial institutions that CSA projects are viable and profitable, that perceived risks in this type of projects can be understood and mitigated, ultimately increasing private sector confidence in the structuring and deploying ad-hoc financial instruments for this market segment.

### A.3. Project/Programme Milestone

| Expected approval from accredited entity’s Board (if applicable) | 31/01/2018⁵ |
| Expected financial close (if applicable) | On project-by-project basis |
| Estimated implementation start and end date | Start: 01/06/2018  
End of Repayment Period: 31/06/2033 |
| Project/programme lifespan | 15 years. |

### B.1. Description of Financial Elements of the Project / Programme

Please provide:

- an integrated financial model in Section I (Annexes) that includes a projection covering the period from financial closing through final maturity of the proposed GCF financing with detailed assumptions and rationale; and a sensitivity analysis of critical elements of the project/programme
- a description of how the choice of financial instrument(s) will overcome barriers and achieve project objectives, and leverage public and/or private finance

The GCF Proceeds will be used to create a risk sharing Facility that will unlock innovative and scalable financial instruments for CSA in Latin America. This section presents an overview of the main financial mechanisms that are proposed to address the identified barriers, and which will be structured and deployed by the IDB’s strategic partners, working across Mexico and Guatemala in their role of channeling agents and aggregation platforms. The blending of resources from the IDB Group, the GCF and the local partners will support the implementation of innovative financial instruments including the following ones, which will be piloted through the sub-projects supported by the Facility.

**i. Long term and low cost debt funding.** Agroforestry and forestry investments often require long tenors from debt investors to account for the maturity cycle of trees and related crops. In addition, key sectors (such as coffee under shade) require significant funds for renovation, re-habilitation, and maintenance of the productive assets. In addition, low emission technologies (e.g. cook stoves, bio digesters and irrigation systems) are often perceived either as high-risk investments, or alternatively, are simply not considered as strengthening the long-term repayment capacity of the farm business in any meaningful way. They therefore do not provide any credit enhancement to the loan that would allow for cheaper pricing or better longer repayment terms. Long term and

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⁴ For more information, please refer to section E.1.
⁵ This approval will depend on the date of the effectiveness of the Accredited Entity Master Agreement (AMA)
low-cost funding will support intermediaries and corporates to provide appropriate financial products for agroforestry, forestry and new low emission and adaptation technologies for CSA in Latin America. The Facility would be exposed to the credit risk of the intermediaries, who would undergo typical IDB due diligence procedures.

ii. Anchor equity investments. In order to scale mitigation finance in land use, as well as support climate resiliency in business models, innovation by the capital markets and insurance industries is necessary. The proposed anchor equity investments will support selected partners in the design and launch of a scaled-up landscape restoration equity fund, as well as in the development of a regional re-insurance business model focused on MSME’s catastrophic risk such as droughts, storms, frost and earthquake, and in so doing increase the adaptive capacity of agricultural MSMEs in the region. Any equity investment will be developed with a clear exit strategy and will be time limited.

iii. Guarantee funds. Financial intermediaries working as “climate-smart champions” in Latin America are facing important barriers to access private funding and increase the number of MSMEs receiving finance. Many funds and financial institutions are simply unwilling to take the “farmer risk,” a catch-all category that generally refers to the risk of agricultural failure with a borrower with few non-productive assets and/or collaterals. Partial credit guarantee products allow financial intermediaries focused on supporting CSA models, to increase the volume of funding to MSMEs and community based operations by lowering risk exposure in the lender’s agricultural portfolio. First loss partial credit guarantees allow financial intermediaries to both increase their ability to raise capital, and to increase their ability to finance more MSMEs at appropriate and financially sustainable terms.

iv. Grants. Grants may be needed for four purposes.

a. Up to US$ 200,000 of grants will be allocated to cover legal costs that arise in the structuring of individual operations when those costs are proportionally large relative to the size of a transaction, or when the Borrower does not have the financial means to pay legal costs, and in either case they threaten the economic rationale of the transaction. It is the IDB Group’s experience that legal costs do not scale down very well, and that although operations with high innovation content tend to be small relative to the average IDB Group transaction, that same innovation may necessarily require more legal effort.

b. Up to US$ 200,000 of grants will be made available for an impact evaluation and other knowledge activities including (i) case studies; (ii) an impact evaluation, (iii) a final publication on the results of the Facility; and (iv) infographics or presentations as needed to communicate the Facility’s goals and achievements.

c. Up to US$ 300,000 will be made available to assist and strengthen the EE selected for specific sub-projects, with the view of exposing them to the necessary learning process which would be key for such entities to eventually seek direct accreditation with the GCF. More specifically, this envelope will be used for:

   i. Gender action plan. Provide the FIs selected as EE for each specific subproject assistance in mainstreaming gender-related activities and implement the Facility’s gender action plan.

   ii. Environmental and social management systems. Most of the prospective EEs have already worked with the IDB Group in the past, and their social and environmental management systems have already been vetted. However, in case specific needs were to be highlighted in the context of the final design of specific subprojects, also considering the evolving landscape of GCF safeguard policies and possible future policy updates, technical assistance resources will be tailored to address such specific FIs’ needs;

d. The remainder of grant funds (up to US$ 2,580,000 of blended GCF and IDB/MIF funds) will be used to support Facility clients with specialized CSA-related technical assistance. This component of the technical assistance package will be executed by the Facility’s EEs, with the support and under the supervision of the IDB Group specialists. Technical assistance grants will be designed in the context of subprojects and will be co-financed by the Facility and the specific implementing partner. Wherever possible, local extension agents/consultants will be used and trainings will take place in cooperation with agricultural cooperatives already active on the specific sub-project’s geography. Specific activities that will be carried out may include one, or a combination of more of one, of the following categories: (i) agricultural extension services for MSME producers; (ii) training to increase productivity and incorporate climate-smart practices and technologies; (iii) feasibility studies for climate-smart
interventions in the processing or warehousing of agricultural products; (iv) specialized financial product design by financial institutions; (v) linkage to high-value markets or to value chain actors; (vi) certification (such as Forest Stewardship Program (FSC), various “organic” certifications, etc); (vii) limited funds may be used to support capacity development for the installation of decentralized small scale renewable energy and efficiency generation systems and/or adaptation technologies such as more efficient irrigation systems.

The financial model and the sub-project profiles presented with this proposal are built based on real demand identified by the IDB Group in targeted countries at the time of the design of the Facility. It should be noted, however, that the pipeline is to be intended as indicative, and represents possible, but not yet secured, underlying sub-projects. In accordance with the Facility’s eligibility criteria, the IDB Group will seek the most innovative sub-projects and will look to prioritize transactions entering the Facility’s pipeline based on the degree of potential climate benefit, taking into consideration the most appropriate technology. As other opportunities are found and evaluated, any of the sub-projects currently included in the tentative pipeline could be substituted in the pipeline with more attractive ones under both climate benefit and/or financial considerations.

For illustrative purposes, the tentative list of underlying projects currently included in the Facility’s pipeline is provided in Table 1 below.

Table 1. CSA Facility Tentative Pipeline. REDACTED DUE TO COMMERCIAL CONFIDENTIALITY CONCERNS

The total potential demand identified during the preparation stages could accommodate nearly US$ 40 million of potential GCF funding. Given maximum actual availability expressed by GCF to the proponent as part of the GCF Secretariat’s call for proposals for projects focusing on MSMEs, the financial model was adjusted to require US$ 20 million funding from the GCF. It is important to note that a second phase is feasible, and demand has been identified for additional funding from the GCF to the proposed Facility. Table 2 below presents a summary of the Facility’s expected funding by component and contributors.

Table 2. CSA Facility funding breakdown by component.

<table>
<thead>
<tr>
<th>Components</th>
<th>GCF</th>
<th>IDB/MIF</th>
<th>Total</th>
<th>Activities/Outputs contributing to</th>
</tr>
</thead>
<tbody>
<tr>
<td>Component 1. CSA Facility Financial Products</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Loans</td>
<td>17,860,000</td>
<td>8,860,000</td>
<td>26,720,000</td>
<td>1, 2.1, 2.2, 2.4</td>
</tr>
<tr>
<td>Guarantees</td>
<td>5,360,000</td>
<td>4,360,000</td>
<td>9,720,000</td>
<td>1, 2.1, 2.2, 2.4</td>
</tr>
<tr>
<td>Equity</td>
<td>1,500,000</td>
<td>1,500,000</td>
<td>3,000,000</td>
<td>1, 2.1, 2.2, 2.4</td>
</tr>
<tr>
<td>11,000,000</td>
<td>3,000,000</td>
<td>14,000,000</td>
<td></td>
<td>1, 2.1, 2.2, 2.4</td>
</tr>
<tr>
<td>Component 2. Technical Assistance Grants</td>
<td>2,140,000</td>
<td>1,140,000</td>
<td>3,280,000</td>
<td></td>
</tr>
<tr>
<td>a - Local legal costs (up to 30 individual contracts of $20,000 on an as needed basis) (legal firms)</td>
<td>200,000</td>
<td>-</td>
<td>200,000</td>
<td>2.2, 2.4</td>
</tr>
<tr>
<td>b - Impact evaluation design and implementation (consulting firm)</td>
<td>150,000</td>
<td>-</td>
<td>150,000</td>
<td>4.4</td>
</tr>
<tr>
<td>c - Results publication (consulting firm)</td>
<td>90,000</td>
<td>-</td>
<td>90,000</td>
<td>5</td>
</tr>
<tr>
<td>d - Infographics and presentations (consulting firm)</td>
<td>10,000</td>
<td>-</td>
<td>10,000</td>
<td>5</td>
</tr>
<tr>
<td>e - ESG monitoring training and systems development (individual consultant, multi-year)</td>
<td>150,000</td>
<td>-</td>
<td>150,000</td>
<td>2.3</td>
</tr>
<tr>
<td>f - Social and Gender activity design expert for training and systems development (individual consultant, multi-year)</td>
<td>150,000</td>
<td>-</td>
<td>150,000</td>
<td>2.3</td>
</tr>
<tr>
<td>g - Individual technical assistance projects</td>
<td>1,390,000</td>
<td>1,140,000</td>
<td>2,530,000</td>
<td>2</td>
</tr>
<tr>
<td>TOTAL</td>
<td>20,000,000</td>
<td>10,000,000</td>
<td>30,000,000</td>
<td></td>
</tr>
</tbody>
</table>

Potential leverage from partners: Blended finance from IDB and GCF would reach a total of US$ 30 million, leveraging an expected investment from partners of approximately US$ 128 million. From a GCF perspective, this will represent an investment of US$ 20 million, leveraging US$ 138 million (ratio 1:6.9).

B.2. Project Financing Information
<table>
<thead>
<tr>
<th>Financial Instrument</th>
<th>Amount</th>
<th>Currency</th>
<th>Tenor</th>
<th>Pricing</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Total project financing</td>
<td>(a) = (b) + (c)</td>
<td>$158 million USD ($)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(b) GCF financing to recipient</td>
<td>(i) Senior Loans</td>
<td>$5.4 million USD ($) (8-12 years)</td>
<td>4.5-5 %</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(ii) Equity</td>
<td>$11 million USD ($) (7-14 years)</td>
<td>7-10 % IRR</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(iii) Guarantees</td>
<td>$1.5 million USD ($) (15 years)</td>
<td>3-5 %</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(iv) Grants</td>
<td>$2.1 million USD ($) (3 years)</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Total requested (i+ii+iii+iv)</td>
<td>$20 million USD ($)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Financial Instrument</th>
<th>Amount</th>
<th>Currency</th>
<th>Name of Institution</th>
<th>Tenor</th>
<th>Pricing</th>
<th>Seniority</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grant</td>
<td>$1.1</td>
<td>million USD ($)</td>
<td>IDBG</td>
<td>3-4 yrs</td>
<td>N/A</td>
<td>pari passu</td>
</tr>
<tr>
<td>Equity</td>
<td>$3</td>
<td>million USD ($)</td>
<td>IDBG</td>
<td>11-14 yrs</td>
<td>7-10%</td>
<td>pari passu</td>
</tr>
<tr>
<td>Guarantee Loans</td>
<td>$1.5</td>
<td>million USD ($)</td>
<td>IDBG</td>
<td>15 yrs</td>
<td>3-5 %</td>
<td>pari passu</td>
</tr>
<tr>
<td>Co-financing</td>
<td>$4.4</td>
<td>million USD ($)</td>
<td>IDBG</td>
<td>8-12 yrs</td>
<td>4.5 %</td>
<td>pari passu</td>
</tr>
<tr>
<td></td>
<td>$128</td>
<td>million USD ($)</td>
<td>FIs, Corp., Private Investors</td>
<td>8-14 yrs</td>
<td>N/A</td>
<td>pari passu</td>
</tr>
</tbody>
</table>

Lead financing institution: IDB Group

| (d) Financial terms between GCF and AE (if applicable) | Proceeds from the GCF will be passed directly to the selected Financial Intermediaries selected to act as Executing Entities (EES) for individual sub-projects. As part of the preparation of each sub-project, each EE will undergo IDB financial management and regulatory compliance due diligence in before being deemed eligible to receive IDB and / or GCF financing. Financial conditions of each specific financial instrument offered by the Facility at sub-project level will be determined on a case-by-case basis at the time of the sub-project structuring, in line with the GCF interim risk policy for private sector operations and with the principle of minimum concessionality. |

B.3. Financial Markets Overview (if applicable)

Please provide an overview of the size of total banking assets, debt capital markets and equity capital markets which could be tapped to finance the proposed project/programme. Please provide an overview of market rates (i.e. 1-year T-Bill, 5-year government bond, 5-year corporate bond (specify credit rating) and 5-year syndicate loan. Provide examples or information on comparable transactions.

The market analysis for the countries covered by this proposal was based on the following sources, which includes:

1) A Questionnaire. The survey questionnaire was sent to several potential Financial Intermediaries which are active in, and have significant experience with, promoting innovative financing and business models for CSA. The survey asked to provide information on current and expected pipeline of financing opportunities in the CSA sector, assessment of market gaps and preferred instruments menu that would be appealing to them if offered by IDB and GCF;

2) Project submissions from potential project partners;

3) Sector analysis at country level developed in the context of the Forest Investment Program (FIP- a program of the Climate Investment Funds) and the Design and Implementation of national REDD+ Strategies;

4) IDB/MIF analysis. The project team conducted an internal assessment of deals and pipeline opportunities in this area, using field staff expertise, existing publications, and the IDB network of contacts in the target countries. Most of this documentation has been provided as annexes and summarized in the Funding Proposal.

The market analysis consistently indicated that both in Guatemala and in Mexico access to credit and, more generally, access to innovative financial instruments for MSMEs in the agro- and agro-forestry business is very limited. In particular, the assessment of the market highlighted the following key conclusions:

- Notwithstanding the key importance of the land use sector for the country economy, in Guatemala MSMEs continue to face significant barriers in access finance for agroforestry upgrades and expansions. Tenors
A more detailed analysis of market conditions for the land use sector in the countries considered is provided below.

**Mexico**

**Financial Sector Overview.** In Mexico, the banking sector is small and deposits and credit are lower compared to other countries. Financial intermediation, capital-markets activities, insurance and pensions only make up 3.3% of GDP in 2015, according to the Instituto Nacional de Estadística y Geografía (the National Statistics Institute). According to the Economist Intelligence Unit⁷, although Mexico has the second-largest economy in the region, penetration of financial services is low, even by comparison with other Latin American markets. One of the main factors explaining the dearth of credit is informality among the many small firms operating in Mexico. Nearly three-quarters of all microenterprises are informal, which constrains their access to the financial sector and consequently results in just 5.6% of them obtaining formal credit, according to 2014 data from the CNBV. By contrast, 45.3% of small firms access bank credit, as do 13.2% of medium firms. Geography is another limiting factor, with rural areas frequently devoid of the services that are available in cities; in mid-2015 as many as 82% of rural municipalities did not have a local bank branch, 92% had no ATM, and 78% lacked any establishment with a point-of-sale terminal. Numerous rural municipalities had no existing credit contracts.

Recent financial reforms however, are helping the private sector making credit more available, which is also helped by an increase in the number of branches of financial institutions. The financial reform is supporting credit growth and increased competition in the banking sector is resulting in increased access to credit for small and medium enterprises. CNBV data show that commercial banks’ credit grew by 13.7% in the 12 months to September 2016. Nevertheless, the share of business credit that micro-enterprises and SMEs receive remains very small. Only about one-fifth of such firms have access to commercial credit, and the majority continues to resort to their suppliers or to the informal market for their financing needs.

**Agro-Forestry Sector Overview.** Mexico’s small and medium agricultural producers face similar challenges to those seen in other developing countries: lack of capital, no credit histories, insufficient financial information, and concerns about commercial viability (Budar, 2013). Mexico’s ejido system also presents unique challenges for traditional lending in that farmers’ parcels on these communal lands cannot be sold or used as collateral to secure credit (Saldana Rosas, 2014). Mexico’s small and medium producers are also spread out across vast rural expanses, making it difficult to reach them cost-effectively with financial services. These rural areas have been, and continue to be underserved by the financial sector.

According to the 2014 MIF Report “Financing Agricultural Value Chains in Latin America: Barriers and Opportunities in Mexico, Peru and Honduras”, “Bank lending to the agricultural sector in Mexico declined drastically following the peso crisis of the mid-1990s. Medium and large agro-processors and exporters were forced to step in to finance their
small supplier producers directly. New entrants to the financial services sector, such as Bankaool and Finterra, as well as existing banks, such as Banamex, are capitalizing on these existing agricultural value chain financing arrangements by using medium and large agro-processors as intermediaries for lending transactions with their small producer suppliers. These models often utilize the agro-processor to identify potential borrowers, originate and distribute loans, and collect payments. Although these models have been somewhat successful in filling the space left vacant after the mid-1990 crisis, the scalability of supplier finance in the absence of financial intermediaries remains scarce.

The Mexican Bankers Association estimates that total financing to agribusiness in Mexico is around US $10 billion (Saldana Rosas, 2014). Market research by Mexican financial institution FinTerra suggests that actual demand for credit from agricultural producers may be upwards of US $18 billion annually.

This high level of demand is supported by Mexico’s 2012 Agricultural Census, which showed that one in five producers saw access to credit as a significant constraint to development (INEGI, 2012). The challenge, is that the majority of demand for credit comes from the more than 4.4 million micro producers who need around USD 1,600 per year per farm for investment and working capital. Spread out over a very large territory, in a country without a well-developed financial network, the challenge is reaching these smallholders cost-effectively.

At the end of 2012, Mexico’s financial sector included 289 financial institutions. Still, according to the 2012 Agricultural Census, only 7.7 percent of producers said they had access to credit (INEGI, 2012). Of those producers who had received financing, 35 percent said they had accessed loans through financial cooperatives and popular finance companies (Sociedades Financiera Populares, or SOFIPOS, as they are known by their Spanish acronym). Financial cooperatives and SOFIPOS fall into the category of popular savings and loans entities under Mexico’s current regulatory structure. The vast majority of cooperatives are not regulated, operate on a local level, and have limited scale. An exception to this is Caja Popular Mexicana, Mexico’s largest financial cooperative, with more than US $1.3 billion in outstanding loans. Caja Popular offers a productive credit line for financing agriculture, livestock breeding, and aquaculture. The loan is a one-size-fits-all product with an annual interest rate of 20.73 percent and terms of 24 months (Caja Popular Mexicana, 2014).

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9 Ibid, pg. 29.
To complete the demand analysis for products to be offered by the Facility, in addition to the market players questionnaire/survey mentioned above, the project team relied on information from studies developed in the context of the Forest Investment Program (FIP) Investment Plans and related projects, as well as on information compiled in the context of the preparation of the country’s REDD+ strategy.

In Mexico, consultations took place both in the context of the design of the FIP Investment Plan and in the design of the two projects executed by IDB/MIF. During the design of the IDB/MIF projects a market study was developed that included consultations in the states of Campeche, Jalisco, Oaxaca, Quintana Roo y Yucatán. The consultations focused on the potential demand by local smallholders, mainly organized in the form of ejidos, to engage in sustainable agroforestry practices and their “appetite” to access ad hoc credit lines, micro-credit and technical assistance. The answers from stakeholders revealed that in the absence of ad hoc financial instruments, such as longer-tenure credit lines or de risking instruments such as guarantees, investments relied mainly on informal/unregulated credit, with high interest rates and higher degrees of uncertainty.

More recently, additional consultations have been finalized for the design of the Mexican National Strategy on REDD+ (ENAREDD+) where specific types of interventions have been identified to address the need of strengthening ad hoc financial support for agroforestry business, particularly for MSMEs. Also in the design of the REDD+ national strategy specific questions have been addressed by stakeholders confirming that the situation has not changed since the design of the FIP investment Plan in 2011.

Finally, a MIF market study is about to be finalized for the State of Quintana Roo, also in the context of a potential FIP project, where MSMEs and local financial institutions have been interviewed on current bottlenecks for strengthening investments in low carbon agriculture in the State.

The feedback received highlighted the following four needs:

- Access to credit that reflects the agribusiness project cycle (longer tenor and adequate grace periods)
- Access to financial instruments to mitigate residual production risks, such as an insurance that would cover extreme and catastrophic climate events.

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10 FIP Investment Plan Mexico. Available at: [http://www-cif.climateinvestmentfunds.org/sites/default/files/FIP%205%20Mexico%20IP.pdf](http://www-cif.climateinvestmentfunds.org/sites/default/files/FIP%205%20Mexico%20IP.pdf)

11 Financing Low Carbon Strategies in Forest Landscapes, Alejandro Guevara Sanginės (Consultor Principal) José Alberto Lara Pulido (Consultor Asociado) Gabriela Estrada Díaz (Consultora Asociada). Available at: [https://www-cif.climateinvestmentfunds.org/sites/default/files/Approval_by_Mail_FIP_Mexico_Support_for_Forest_Related_Micro_Small_and_Medium_Sized_Enterprises_MSMEs_in_Ejidos_IDB_Market_Study_0.pdf](https://www-cif.climateinvestmentfunds.org/sites/default/files/Approval_by_Mail_FIP_Mexico_Support_for_Forest_Related_Micro_Small_and_Medium_Sized_Enterprises_MSMEs_in_Ejidos_IDB_Market_Study_0.pdf)

12 Ejidos is a word that identifies a piece of land farmed communally under a system supported by the state. Available at: [http://www.conafor.gob.mx:8080/documentos/docs/35/6462Estrategia%20Nacional%20para%20REDD_%20para%20consultas%20para%20El%20Abierto%202015.pdf](http://www.conafor.gob.mx:8080/documentos/docs/35/6462Estrategia%20Nacional%20para%20REDD_%20para%20consultas%20para%20El%20Abierto%202015.pdf)

14 Ibidem, pag 47.

15 Propuesta de instrumento financiero para promover la inversión en actividades productivas bajas en carbono en Quintana Roo, México, February 2016. (To be finalized).
• Better link with the processing industry and the end markets, through a better organized value chain approach. This includes also the possibility to certify products with internationally recognized certification schemes.

• Tailored assistance for legal and administrative requirements, which are disproportionally onerous for small actors.

The financial challenges identified focused mainly on the overall weak offer of adequate financial products for the agroforestry sector. More specifically:

• Relative to Financial Intermediaries:
  
o Weak knowledge of type and benefits of climate-smart agribusiness projects. This generates inefficiencies in two ways: (i) local banks do not offer products that match the financing needs of the projects at hand and (ii) reduced climate risk exposure is not taken in consideration when assessing the risk profile of the beneficiary MSME that is requesting the financing.

  o The point above determines a vicious circle whereby not enough projects with demonstrative potential are carried out, and no lessons learned and evidence bases are generated to allow for a sound justification for MSMEs to request longer-tenor and adequate risk sharing solutions from local agricultural lenders.

• Relative to MSMEs:
  
o Delayed projects cash flows, more frequent under increased climate variability scenarios, require for strong equity base and/or long grace periods for loan financing. For some species it takes over 6-7 years from planting until the start of commercial harvesting. Even longer times are necessary for plantation forests for timber products.

  o MSMEs might lack a commercial track record and resulting challenges to raise equity and meet loan requirements.

  o Collateral requirements: some banks could require up to 125% of collateral for loan amount as in some cases tree plantations are not considered as an adequate collateral and MSMEs do not have other forms of collateral. In other cases, productive land is typically rented from other smallholder farmers and land ownership is therefore not a suitable form of collateral in the project set-up.

This analysis concerning the market demand and market barriers, highlights the need to focus on the offering of financial solutions that can support both MSMEs and Financial Intermediaries along the following lines:

• Longer tenor and grace periods for loans when the nature of the project determines late breakeven points, a stretched cashflow recovery structure and a longer payback.

• Development of guarantee solutions within suitable local financial institutions to address risks typical of agroforestry projects. A guarantee instrument could give confidence to lenders when MSMEs are short of adequate collaterals. Small-scale projects should also benefit from standardized procedures to access guarantee funds to reduce transaction costs.

• Provision of risk mitigation instruments for additional climate risk, such as parametric climate insurance tools, to cover for catastrophic scenarios.

• Development of awareness and capacity building program for financial institutions and other financial actors.

Guatemala

Financial Sector Overview. Capital markets in Guatemala remain rather weak and inefficient, though there has been some consolidation and restructuring as a result of financial sector regulatory reforms approved in 2002\(^{16}\). Overall, the banking system remains stable. According to information from the Superintendence of Banks (SIB), the Guatemalan banking system comprises 17 commercial banks, which held an estimated US$ 34.6 billion in assets in 2015. The five largest banks control about 82 percent of total assets. In addition, there are fourteen non-bank financial

institutions specializing in investment operations, three licensed exchange houses, twenty eight insurance companies, six credit card issuers, fourteen bonded warehouses, and six offshore banks which, by law, are affiliated with domestic financial groups. The Superintendence of Guatemalan Banks is responsible for regulating the financial services industry.

Agro-Forestry Sector Overview. In the recent Expression of Interest to participate in the Forest Investment Program (FIP) the Government of Guatemala has underlined the lack of financial products tailored to climate smart agriculture, agroforestry and sustainable forestry. In fact, the financing of agroforestry activities in the country is responsible for a very small part of the total financing provided at the country level. According to the Superintendence of Guatemalan Banks, as of December 2015, only 1.54% of the issued loans by Guatemalan banks went to the agricultural sector, representing 5.5% of the total value of credit finance nationally. Reported figures were even lower for the forestry sector, which between 2010 and 2015 represented only between 0.3% and 0.5% of total loans granted annually.

The private sector, mainly constituted by MSMEs, plays an important role within Guatemala’s agro-forestry sector, contributing with 49,400 ha of reforestation and to the conservation of 38,300 ha natural forest. However, many, if not all, of the MSMEs’ access-to-finance problems highlighted above for neighboring Mexico, are also found in Guatemala. Credit for forestry and agroforestry is typically more difficult to obtain in comparison with other productive activities. This is generally due to the low familiarity of financial institutions and intermediaries with small scale activities and project structuring in this sector. On average, compared to other productive sectors, the cost of financing remains high.

At the corporate level (involving relatively large firms with good access to the formal financial system), two of the largest banks in the country indicated offering interest rates between 12 to 16% per year, with mortgage guarantee and terms of up to 15 years in safer activities such as plantations Rubber (Hevea brasiliensis). For MSMEs however, which still operate within certain levels of informality access to finance is more difficult and the differences with credit conditions granted to larger companies are generally significant. MSMEs are therefore typically served by microfinance departments the microfinance market segment, which has rates and terms which are not useful for SME needs (with much less favorable conditions. The microfinance sector typically has higher rates and shorter terms, with lending rates starting at above start at 17% per year, with average rates near 60% (CGAP).

Forest Incentive Programs. Guatemala has promoted active participation of the private sector in land use and forestry projects through its forestry incentive programs. Such programs have achieved a good private sector leverage ratio, with private sector investment of US$1.85 for every dollar invested by the government, encouraging a significant participation of the private sector and increasing the contribution of forests to national economy, which currently stands at around 3% of the GDP. In some cases, smaller producers have been able to obtain financing to establish plantations based on the possibility to apply to forest incentive programs. Recently however, the main forest incentive scheme has no longer been seen as attractive by financial intermediaries. This is due to the sometimes significant delays in obtaining the incentive payments and the limited availability of funding for the incentive mechanism that has hampered its potential to increase access to finance for small producers. In some other cases, it was indicated that some financial institutions are applying significant discounts to the face value of the forest investment certificates accepted as collateral for the financing.

Currently, the National Institute of Forestry (INAB, acronym in Spanish) has developed a strategy to link forest, industry and market aiming to strengthen the development of regional clusters through chain value and international commerce; it also represents one of the main tools to create enabling conditions for the private sector. Additionally, forestry incentives also promote the participation of the private sector, especially through agroforestry systems mainly private smallholder targets. In protected areas, forestry concessions mainly community, encourage the participation of the private sector in timber and non-timber businesses that generate a direct income of an annual US$6million.

In addition, Guatemala is finalizing the design of the FIP Investment Plan (IP) and, in this context, the agroforestry sector has been analyzed at length. Consultations have taken place both at national and regional level (El Quiche, Peten, Alta Verapaz y Zacapa) between the second half of 2016 and January 2017 with representatives of MSMEs,
rural cooperatives, local communities, indigenous people and civil society to prioritize the interventions to be funded by the FIP.\textsuperscript{17}

In this context, MSMEs representatives highlighted the barriers represented by current financial system in terms of:

- Limited availability of and/or access to financial instruments from the formal financial system with the adequate conditions (short tenor especially continue to que quoted as a main limitant) for agroforestry interventions.
- Excessive requirements for collaterals and inability for local banks to consider plantation timber as collateral.
- Requirements from client of formalized track records to process loan requirements which are often not available for micro and small-sized farms.

The impact of these limitations is reflected by the scarce innovation levels found in small producers’ operations and by the missing opportunity in strengthening the products value chain. A specific example is the unexploited potential to give higher value to row materials in the wood industry through for example sustainability certification. One of the main consequence is the export of raw/basic material to external market.

Similar findings have been reflected in the FIP Expression of Interest of Guatemala as well as in the consultations developed at national and regional level in the context of the REDD+ Process.\textsuperscript{18}

\section*{C.1. Strategic Context}

\textit{Please describe relevant national, sub-national, regional, global, political, and/or economic factors that help to contextualize the proposal, including existing national and sector policies and strategies.}

\textbf{Mexico}

Mexican agriculture is quite diverse, from simple subsistence farming to technologically advanced, export-oriented crop production. Agriculture is an important part of the Mexican economy, employing approximately 13 percent of working adults and accounting for 4.1 percent of GDP (INEGI, 2012). When you include agroindustries (e.g., food processing) and production of drinks and tobacco, agriculture and agribusiness accounts for 7 percent of Mexican GDP (Banco de Mexico, 2013).

Land tenure in Mexico is based on the communal ejido system. Most land owners (73\%) are smallholders that own 5 or fewer hectares. Medium-sized land owners (representing 22\% of all land owners) own up to 20 hectares and only 5\% of landholders own more than 20 hectares. The small size of plots impedes economies of scale, unless effective farmer’s organizations are in place. Low productive scales impede financial eligibility and reduction of production costs. Where farming in small plots is isolated, productivity and competitiveness are compromised.

Mexico's large landmass is marked by a wide variety of geological features and climates. It encompasses a vast array of geographical sub-regions, soil types, climates, and microclimates, ranging from high, arid pasturelands in the north to temperate, well-watered farmlands with rich soil in the mid-section of the country and hot, humid, tropical zones in the south. These varied features allow Mexico to produce a variety of agricultural products. In fact, data from Mexico's ministry of agriculture (the Secretaría de Agricultura, Ganadería, Desarrollo Rural, Pesca y Alimentación, or SAGARPA) shows that the country produces more than 350 distinct varieties of farm products each year. Mexico encompasses four main agricultural regions: irrigated, maize–bean, dryland-mixed, and coastal plantations. The two systems with the largest land area are the irrigated region (north) and the maize–bean region (central and southwest). The main agriculture products in the country are corn, wheat, soybeans, rice, beans, cotton, coffee, fruit, tomatoes; beef, poultry, dairy products; wood products.

\textsuperscript{17} From the draft FIP IP “Financial flows for forestry activities (forestry, industry and wood products, including furniture) by the Guatemalan financial system has been very low, representing in the period 2010 to 2013 between 0.3\% and 0.5\% of the total credit issued at country level. These data reflect the marginal attention received by the sector, mostly due to the lack of sector knowledge in local banks. In the analysis of investment opportunities and consultations, it was determined that one of the constraints to the development of the sector is the lack of attractive financial alternatives. On the other hand, the cost of credit in the market is high, between 16 to 22\%/year for medium-sized companies, decreasing for larger-sized and more formal companies and with sounder financial capacities”

\textsuperscript{18} Guatemala FCPF Readiness Fund: 
Evaluation Expression of Interest FIP Guatemala (pag 71)
https://www-cif.climateinvestmentfunds.org/sites/default/files/meeting-documents/fip_14_5_report_of_the_expert_group_to_the_fip_sub_committee_on_selection_of_new_pilot_countries_0.pdf
Guatemala

Guatemala is a lower middle-income country with a GDP per capita of USD 3,331/year in 2012. Almost half of the population is rural (49.7 percent) and indigenous account a large stake of the population (over 40 percent of total). Guatemala has the highest level of poverty among Latin American countries. Chronic malnutrition among children is also alarmingly high (49.8 percent), being the highest in the region and among the highest in the world.

The agricultural sector is vital for economic and social development, with about 70 percent of total land area dedicated to agricultural and forestry activities. About 45 percent of all land holdings are smaller than 0.7 ha in size. Bananas, sugar, coffee, and palm oil are some of Guatemala’s main agricultural exports, although export of nontraditional products has grown significantly during the period.

Agriculture’s contribution to Guatemala’s GDP is 14% . In terms of Land use, agricultural land accounts for 41.2%, arable land 14.2%, permanent crops 8.8%, permanent pasture 18.2%, while 6.3% —or about 3,938,000 hectares—of Guatemala is forested. Of this, 49.7% —or roughly 1,957,000 hectares—is classified as primary forest, the most biodiverse form of forest. Around 43% of Guatemala’s land is used for agriculture (30% for pasture and 13% for cultivation), with forestry occupying 36% of the land in the country (WDI, 2005). According to a FAO report, bananas, sugar, coffee and palm oil are some of the country’s main agricultural exports. Other agricultural exports include snow peas, green beans, mini-vegetables and fruits.

In Guatemala, small farmer agriculture produces 70% of the food that comes to the table, occupying 38% of the labor force (1.9 million people). About 1.2 million rural families are dependent on agricultural activity, 890,000 hectares are used in annual crops (maize, beans, rice) and approximately 5 million people directly benefit from this activity.

Agriculture, Climate Change, and the Intervention Rationale

Agriculture is one of the sectors most vulnerable to climate change, which disrupts value chains and reduces productivity and incomes, particularly for small holders. Similarly, agriculture can be both a driver and mitigant of the underlying causes of climate change. Conversion of forests to other uses, mainly agriculture, was the main source of greenhouse gas emissions in the Latin America and Caribbean (LAC) region between 2001 and 2010, averaging 1.9 billion tons of CO2e. At the same time, forests in the LAC region act as important carbon sinks, sequestering 440 million tons of CO2 equivalents.

In LAC, moving the needle on climate change means working in agricultural and forest landscapes. While many countries have recognized this reality in their national climate change initiatives (NAMAs, REDD+ strategies, NDCs under the Paris Agreement), countries often do not have the proper instruments to meet their goals, especially in terms of financing and technical assistance.

In Latin America, MSMEs represent the bulk of about 14 Million agricultural producers who, either individually or as members of a cooperative, participate in local markets and in complex global supply chains. With global food production estimated to increase by at least 60% to meet the demands of a 9 billion population by 2050, MSMEs in the region will need to address the low productivity cycles they are often stuck in. Between 1961 and 2007, the total annual agricultural productivity growth rate in the region was only 1.9 percent – lower than the 2.4 percent estimated for OECD countries. In Central America and Caribbean countries, where limited land availability is a key determinant of production expansion, the growth rate for the same time period was even lower: 1.1%.

As productivity remains stagnant, the expansion of the agricultural frontier, the indiscriminate use of fertilizers/pesticides or the use of water-intensive production methods pose a new challenge for MSMEs and ecosystems alike. With the exception of a few sectors which have access to improved crop varieties and yields, through enhanced seeds and irrigation, most agricultural MSMEs still operate within low tech - low investment contexts. Through increased support from various stakeholders (multilateral banks, NGOs and key private sector actors, among others), MSMEs working in certain crops have been able to receive training and financing with transformative results. With strengthened internal structures and access to key inputs and technology, some MSMEs in the region are creating long-term commercial arrangements with purchasers (as is the case with coffee), increasing productivity and breaking into other value-adding activities (as is the case of stevia) and tapping into organic and specialty markets through a combination of new tree varieties, improved harvest techniques and access to credit (for example, in the case of cocoa and mangoes).
Agriculture-generated growth can be up to four times more effective in reducing poverty than growth generated by other sectors. For the region, an array of opportunities can be unlocked through improved access to medium and long-term credit, investments in technology and innovation; wider adoption of sustainable practices that simultaneously increase productivity and focus on climate change adaptation and mitigation; and the construction of partnerships that enable change and promote the transfer of knowledge.

An increasingly important factor in agricultural productivity has been the degree to which climate-smart activities are implemented during production. The concept of Climate-Smart Agriculture (CSA) involves improving the integration of agricultural development and responsiveness to climate change to achieve food security and poverty reduction, among other development goals, in the face of constant changes in climate and increasing demand for food. Projects that promote agricultural systems that encourage the efficient use of non-renewable inputs such as fertilizers, water or energy; reduce CO2 emissions, and/or include metrics that help reduce vulnerability to climate change can be considered climate-smart.

Climate-smart agriculture projects in the LAC region often have difficulty securing financing for innovation or growth because the financial intermediaries that service this sector (MDBs/commercial banks/equity funds/insurance companies) do not offer products tailored to the needs of agricultural producers experimenting with new processes or expanding from small, grant-funded pilots. The issue is not always one of liquidity, as several of the intermediaries for this sector have sufficient funds to support a more aggressive lending/investment strategy. Rather, in many cases, risk-sharing mechanisms are needed to reduce the risk of investing in innovation or to support the longer-term loans that agricultural and forestry activities generally require. For example, MSMEs have difficulty securing financing for plot renovation, diversification of crops, installation of drip irrigation or greenhouse systems and other adaptation activities, and also face barriers finding credit to fund the installation of renewable and energy efficiency technologies such as wind or solar water pumps, efficient chillers, and other machinery.

Agroforesty and silvipastoral system finance is similarly constrained. In most cases this is because the cost and tenor that FIs serving MSME farmers can access on the capital markets often do not match the needs of the end beneficiaries. The risks of landing to smallholders in the agro-forestry sector is perceived as high and successful models that can serve as reference for market participants remains few and scarcely visible. Further, FIs have limited knowledge of CSA technologies and innovations, and limited experience with assessing – and often limited appetite with assuming - risks linked to financing activities in this sector.

With limited or no access to bespoke credit tools, farmers are stuck in traditional, low-productivity models and cannot invest in new technologies that increase the resilience of their existing crops, help diversify and increase productivity on their plots without recurring to further expansion of the agricultural frontier. Financial intermediaries in the region need support to step up and design financial products that allow farms to secure machinery, ensure adequate working capital and facilitate increases in productivity to ensure farmers can make value chain linkages.

In sum, from both the analysis in Guatemala and Mexico, the need for tailored financial instruments for agro-forestry is clear. This should be considered together with the need for a certain degree of flexibility in deploying financial tools with different combinations and modalities to test and compare different models and generate lessons to be learned for the local context and the wider public. The key factor of the Proposal, that reflects the strategy put forward by IDB, is to offer through the Facility a menu of financial tools that can be tailored to the sub-project’s needs. Sector experience and market consultations suggest that MSMEs typically need longer-than-usual tenors, often coupled with credit-enhancing instruments, such as guarantee, to make up for the lack of sufficient collateral and improve their risk profile with the view of becoming “bankable” clients for local financial institutions.

In addition, long-term experience with projects in the agricultural sector has also highlighted that targeted technical assistance often play a key role to enable changes, both in terms of adapting agro-forestry practices to a changing climate, improving and/or maintaining productivity levels, as well as in increasing business practices to enhance resilience to shocks and adopting more sustainable and lower carbon practices.

Technical assistance and access to finance can be combined to address the technology gaps identified in the market study, namely the need for enhanced irrigation systems, information dissemination capacity for farmers on new resilient
varieties of crops and climate-resilient productive processes, linkages to high-value markets to increase resilience, improved access to climatic data, and improved processing technology.

Similarly to what happened in other low carbon sectors, such as for example Wind Energy in Mexico with the Clean Technology Fund, it is expected that the sub-projects financed through the proposed Facility will have a strong demonstration effect. This, in turn, will contribute to lower the risks perceived by local financial institutions and intermediaries, eventually making them more comfortable to meet the demand from small actors in the land use sector.

In terms of paradigm shift, it is also worth noting here that the IDB team is planning to organize workshops in both Mexico and Guatemala, in collaboration with the GCF Secretariat, to share lessons learned and expose local financial institutions to the financial innovations promoted through this Facility. The workshops will also give local financial institutions the possibility to familiarize with the GCF both in terms of project funding and institutional accreditation. As for other GCF Proposals presented by IDB through Financial Intermediaries, the Bank is providing a constructive and low-risk environment for smaller institutions to test GCF requirements and build their own capacities to proceed through the project design and implementation cycle. Such direct exposure to the GCF project cycle will be key in case any of the implementation partners were to decide to pursue direct accreditation with GCF.

Table 3 below presents the main content of the targeted countries' National Determined Contributions (NDCs) as related to Climate Smart Agriculture, forestry and land use.

<table>
<thead>
<tr>
<th>Country</th>
<th>NDC Scope</th>
<th>Actions to be implemented</th>
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| Mexico    | The NDC of Mexico has two components, one for mitigation and one related to adaptation. In turn, the mitigation portion includes two types of measures: unconditional and conditional. The unconditional set of measures are those that Mexico will implement with its own resources, while the conditional actions are those that Mexico could develop if a new multilateral climate regime is adopted and if additional resources and transfer of technology are available through international cooperation. | • Meet 0% deforestation rate target by the year 2030  
• Improve forestry management  
• Drive the sustainable technification of the agriculture and livestock sectors  
• Promote the use of bio-digesters in livestock farms;  
• Enhance recuperation of grasslands. |
| Guatemala | Guatemala sets out the country's unconditional intended contribution of reducing its GHG emissions by 11.2% relative to its 2005-2030 business-as-usual (BAU) scenario, and an additional conditional 22.6% reduction subject to the provision of international technical and financial assistance. The emission reductions are intended to be achieved in the forestry, agriculture and transport sectors. The INDC covers the following GHGs: CO2, CH4 and N2O. The INDC also sets out the country's adaptation priorities, including measures on agriculture and food security, coastal zone management, water resource management, protected areas, soil protection and disaster risk reduction (DRR). | Use and Change of Land Use and Forestry:  
• Implementation of the Strategy for Reducing Emissions from Deforestation and Forest Degradation - REDD + - currently under development, coupled with a vision of improvement and integration of public policy instruments in the forestry sector.  
• Implementation of the Climate Change Agendas of public institutions related to compliance with Art. 20, of the Framework Law on Climate Change, mainly with the Implementation of the Biodiversity and Climate Change Strategy.  
Agriculture:  
• Agricultural Policy to strengthen the National System of Extension Rural -SNER-, among other programs linked to the Action Plan for Implementation of the National Policy for Integral Rural Development. |

C.2. Project / Programme Objective against Baseline

Describe the baseline scenario (i.e. emissions baseline, climate vulnerability baseline, key barriers, challenges and/or policies) and the outcomes and the impact that the project/programme will aim to achieve in improving the baseline scenario.
As described in the market assessment document, emissions from agriculture and forestry in each country are as follows: Guatemala 61%, Mexico 25%, and the global trend forecasted shows an increasing trend at the regional level. The IPCC Agriculture Assessment states “In Latin America and the Caribbean, agricultural products are the main source of exports. Significant changes in land use and management have occurred, with forest conversion to cropland and grassland being the most significant, resulting in increased GHG emissions from soils (CO2 and N2O). The cattle population has increased linearly from 176 to 379 Mhead between 1961 and 2004, partly offset by a decrease in the sheep population from 125 to 80 Mhead. All other livestock categories have increased in the order of 30 to 600% since 1961. Cropland areas, including rice and soybean, and the use of N fertilizers have also shown dramatic increases (FAOSTAT, 2014). Another major trend in the region is the increased adoption of no-till agriculture, particularly in the Mercosur area (Brazil, Argentina, Paraguay, and Uruguay). This technology is used on ~30 Million hectares every year in the region, although it is unknown how much of this area is under permanent no-till.

While it is difficult to disaggregate the share of GHG emissions from agriculture, land use, and forestry from the MSME sector, 80% of farms in the region are smallholder farms, and these 80% occupy 35% of all farmland.

Activities that may be financed include financing machinery and equipment for low or no-till agriculture, financing to increase the productivity of existing plots while reducing the need for expansion of the agricultural frontier and the pressure on nearby forests, implementation of renewable or energy efficient technologies in the farming and/or processing of agricultural products, livestock management, and the installation of agroforestry systems, among others.

With regard to adaptation, the same IPCC Fourth Assessment Report projects that the mean warming for Latin America to the end of the century ranges from 1 to 6 degrees Celsius depending on the scenario. The report also forecasts increased changes in precipitation, a net increase in water stress, increasing numbers of people at risk of hunger. While directly comparable data does not exist as a baseline for the two countries selected, indicative climate impact data is available.

In Mexico, the IPCC has stated that “Mexican agriculture appears to be particularly vulnerable to climate-induced changes in precipitation because most (about 85%) of its agricultural land is classified as arid or semi-arid. Recent national assessments of the impacts of climate change indicate that the northern and central regions of Mexico are most vulnerable in the agricultural sector (Conde, 1999) and that in these regions, the area of land that is unsuitable for rainfed maize production would expand under climate change (Conde et al., 1997). On average, more than 90% of losses in Mexican agriculture are caused by drought (Appendini and Liverman, 1995). Using five GCM-based scenarios, it was estimated that potential evaporation may increase by 7-16% and the annual soil moisture deficit could increase by 18-45% in important maize-growing regions in eastern Mexico (Liverman and O'Brien, 1991).” This is particularly important, as corn is a primary agricultural product in Mexico.

In Guatemala, the Global Climate Risk Index 2014 ranks Guatemala 10th in terms of countries with the highest climate change risk for 1993-2012. Risks include droughts, flooding in lowlands, and increased vulnerability of crops such as coffee, corn, and cacao to rainfall variability.

In terms of adaptation outcomes, the goal of this Facility is to achieve increased access to adaptation technologies to smallholders, by improving access to finance for these interventions. It is expected that a combination of drip irrigation, resistant seeds, crop diversification, and other adaptation measures can help smallholders avoid a portion of productivity losses due to climate change.

This Facility will unlock innovative and scalable financial instruments for CSA and will be structured and deployed by the IDB’s strategic partners working across Mexico and Guatemala in their role of channeling agents and aggregation platforms. The blending of resources from the IDB Group and the GCF will support the implementation of innovative financial instruments which will be piloted through the sub-projects supported by the Facility.

Specifically, the Facility will address the constraints above discussed in the following manner:

1. To address the issue of lack of suitable financial products the Facility will:

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20 Ibid.


C.3. Project / Programme Description

Describe the main activities and the planned measures of the project/programme according to each of its components.

Provide information on how the activities are linked to objectives, outputs and outcomes that the project/programme intends to achieve. The objectives, outputs and outcomes should be consistent with the information reported in the logic framework in section H.

Objective: The proposed solution would be second-floor Facility designed to catalyze and unlock private sector lending and investment consistent with individual country national climate strategies (REDD+ strategies, NAMA facilities, Country INDC commitments under the Paris agreement).

Description: The GCF Proceeds will be used to create a risk sharing Facility available to complement and leverage funding from financial intermediaries and providers of financial services, anchor companies, and equity funds. In conjunction with loans and grants from the Multilateral Investment Fund (MIF) of the IDB, and with substantial leverage of partner funds, the Facility would provide diversified financial products such as liquidity instruments, subordinated debt, funding for long-term loans, guarantees, and equity for specialized CSA equity funds. Interventions would be undertaken on an individual country and sector basis and they would be diversified across a number of sub-sectors and best available CSA technologies. All sub-projects would contribute to measurable climate impacts and fit within relevant GCF focal areas, as listed above. The reflow period would be 15 years, as a way to address the barrier of the limited availability of long-tenor funding instruments that the types of transactions targeted by the Facility need to be financially viable. The sub-projects will also include a gender perspective. A portion of the technical assistance non-reimbursable resources will be used to provide capacity development opportunities to women farmers on agricultural planning and climate data literacy, as well as on general financial and business management skills.

Theory of Change: Imperfect information and economies of scale limit the access to financial resources by agricultural MSMEs, resulting in underinvestment of the targeted beneficiaries in climate adaptation and mitigation technologies. This, coupled with the expected increased incidence of the impacts of climate variability, in terms of rainfall,
temperatures, pests, water availability and frequency and intensity of extreme climate events, contributes to significantly increase the vulnerability of the targeted MSMEs to climatic changes.

The causal link between improved agro-forestry practices and climate impacts is clear for the following reasons. First, in the target countries, poor practices in commodity crop production (e.g. coffee, cocoa, avocado) are important drivers of deforestation. Unsustainable production, exacerbated by climate change, drives down productivity and results in increased forest conversion. Application of best management practices improves productivity, while certification and access to preferred markets can increase MSMEs’ income. Increased access to low-cost capital and tailored technical assistance are key enabling conditions towards such outcomes.

Second, in most communities in the target countries, both forestry and agroforestry activities are important for community livelihoods as alternative income streams. To optimize avoided deforestation results, the project must work to both increase the economic logic of keeping the forest standing, while simultaneously working to reduce threats from poor commodity crop production. Third, agroforestry MSMEs that manage multiple value chains tend to be more resilient and competitive, and are better able to produce more benefits for a wider group of stakeholders. Finally, by working in both forestry and agroforestry value chains, impacts can be achieved at the landscape scale, which is especially important in areas where high forest blocks are fragmented.

The proposed Facility would, in partnership with aggregators which have an informational advantage and can achieve economies of scale, provide targeted lending, investment and tailored technical assistance to agricultural MSMEs, with the aim of increasing resilience and productivity, improving income and generating livelihood alternatives to the conversion of standing forest. Figure 3 below presents a diagrammatic representation of the problems the proposed intervention aims to address, in their relations with causes and main effects.

Figure 3. Problem Tree.

Following the causes-problems-effects analysis presented in the figure above, the diagram below outlines the theory of change of the proposed intervention.

Figure 4. Theory of Change.
**Currency:** Financial products offered by the Facility will be denominated in US dollars.

**Sub-project size:** GCF funds will constitute between US$ 1.5M and US$ 8.5M of the total of each Underlying Sub-Project.

**Sub-projects eligibility criteria:** Sub-projects seeking to enter the Facility’s portfolio will be considered for financing if they:

- Directly benefit MSMEs, with specific attention to gender-sensitive approaches, where possible;
- Demonstrate contributions to addressing climate change adaptation; challenge, or result in mitigation of, the drivers of climate change, including through the adoption of innovative technologies or management practices;
- Prove a need for concessional support to make the project viable;
- Show a potential for replicability and scalability;
- Contribute to other IDB Group development priorities including improving local livelihoods;
- Comply with IDB Environmental and Social safeguards and credit risk due diligence; and
- Not be classified as Category “A” according to the IDB E&S risk categorization policies.

**Eligible activities** to be financed under this Facility will include those aimed at reducing vulnerability to climate change and/or increasing the productivity of the MSME ultimate beneficiaries and incorporating adaptation and/or mitigation activities in relation to agriculture, forestry and land use. Eligible activities, which are aligned with the scope of the definition of Climate Smart Agriculture as outlined in the 2015 *Joint Report on Multilateral Development Banks' Climate Finance*, will include the following types of intervention: 26

i. **Agricultural activities that improve existing carbon pools** (e.g. rangeland management, collection and use of bagasse, rice husks, or other agricultural waste, reduced tillage techniques that increase carbon contents of soil, rehabilitation of degraded lands, peatland restoration, etc.).

   ➔ A typical example of this type of activity is represented by sub-project 527, included in the current Facility’s pipeline. The sub-project will offer a credit enhancement tool aiming at increasing MSMEs farmers’ and processors’ ability to access capital and make climate-resilient investments. The guarantee would cover a

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25 MSME definition to be determined on a country-by-country basis.
26 2015 Joint Report on Multilateral Development Banks’ Climate Finance. Available at: [https://publications.iadb.org/handle/11319/7807](https://publications.iadb.org/handle/11319/7807)
27 Please see the table “CSA Facility – Tentative Pipeline”, pag 5 of this Funding Proposal, and Annex II - Financial Information for the Indicative Pipeline, pag 64 of this Funding Proposal (confidential version).
portion of potential first-losses to reduce lenders’ credit default risks, thereby mobilizing medium-to-long-
term commercial capital.

ii. **Afforestation (plantations), reforestation, and sustainable forestry.**

> A typical example of sub-project that will be focusing on this area is represented by the equity Facility
investment in the land-use specialized Fund (sub-project 2), currently included in the tentative pipeline.
The Fund typically invests in sustainable forestry and cattle ranching silvo-pastoral schemes with the
ultimate goal of promoting ecosystem restoration, carbon sequestration and increase farm productivity.

iii. **Livestock or other agricultural activities that reduce methane or other GHG emissions** (manure
management with biodigesters, etc.).

> Examples of this type of activity are represented by the Facility’s proposed sub-project 1, which will provide
capital to a Guatemalan FI to finance rural low emission technologies, and sub-project 3, which will extend
senior loans to financial intermediaries in Mexico for on-lending to SMEs farms to support the installation
of infrastructure and equipment to sequester methane and generate energy from biogas. The project will
help farmers to satisfy part of their own energy demand and to sell surplus energy to the local grid, reducing
GHG emissions in 26 livestock farms.

iv. **Supplemental and improved irrigation, multi-cropping systems, levelling and other approaches** and
technologies that reduce risk of crop failures;

v. **Adoption of sustainable aquaculture** techniques to compensate for the reduction in local fish supplies;

vi. **Activities aimed at reducing climate variability** risk for agro-forestry MSMEs, including insurance against
extreme and catastrophic climate events.

> An example of this type of activity is the Facility’s anchor equity investment in a small insurance company
(Sub-Project 4), a company still operating at pilot level that provides coverage for extreme climatic events
risks such as droughts, floods and earthquakes to agricultural MSMEs. The project will offer affordable
protection against natural catastrophes to vulnerable MSMEs and low-income segments of the population,
as an adaptation strategy of last-resort. The proposed anchor equity investment will allow for the
establishment of a re-insurance business line and for the expansion of the firm within the geographical
scope of the two selected countries.

No activity included in the IDB **List of Excluded Activities for Non-Sovereign Guaranteed Operations** will be eligible to
receive funding from the proposed Facility.

As highlighted in the **Gender Strategy and in the Action Plan**, the Facility will provide ad hoc support to the FIs
selected as Executing Entities to adopt and implement gender sensitive approaches, promoting access to their financial
products to women and women-led enterprises. Many of the potential partners have long experience in gender
mainstreaming. Gender weaknesses will be classified in the diagnostic carried out on each partner at the time of sub-
project design. Should a partner need reinforcement in gender activities they will receive specific funding to hire
specialized consultants to integrate gender approaches in the proposed activities. The IDB will review and approve the
terms of reference for these consultancies and will provide inputs based on IDB group reports on best practices in
lending to female clients.

For additional information on the proposed financial instruments see section B.1.

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**C.4. Background Information on Project / Programme Sponsor (Executing Entity)**

Describe the quality of the management team, overall strategy and financial profile of the Sponsor (Executing Entity) and how it
will support the project/programme in terms of equity investment, management, operations, production and marketing.

The **IDB will be the Accredited Entity** for this Programme. The IDB is a public international organization, the purpose
of which is to contribute to the acceleration of the process of economic and social development of its regional developing
member countries in Latin America and the Caribbean, individually and collectively. The CSA Facility will be managed
by the IDB, through its Multilateral Investment Fund (MIF), in collaboration with the Climate Change and Sustainability
Division (CCS).

The IDB will rely on a number of **Executing Entities**, which will be originating, structuring and executing the specific
transactions entering included in the Facility’s portfolio. The Executing Entities will be required to provide adequate co-
financing, in line with the sub-projects’ eligibility criteria, in the form of equity, loans and guarantees. The IDB has
undertaken a demand analysis to develop a potential pipeline of sub-projects for the Facility. In doing so, several

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28 The “IDB List of Excluded Activities for Non-Sovereign Guaranteed Operations” is available here:
strategic partners have been identified. These partners have past experience working with the IDB group in the target countries and have scoped potential sub-projects for the Facility.

It is important to note that these are potential sub-projects which have been used for the purpose of demonstrating demand and modeling the potential Facility. Because the Facility will seek the best sub-projects in the two target countries, with the best possible impacts and use of technology, this pipeline may change. No matter the partners chosen for final sub-projects, all partners will undergo normal IDB Group capacity and risk assessments, will be subject to normal IDB group due diligence and risk review processes, and will be required to ensure downstream compliance with all IDB Group and GCF requirements through the subsidiary agreements to be signed with the IDB at the time of approval of each sub-project.

At the time of the preparation of this Funding Proposal, advanced discussions had taken place with, and the interest in participating in as Executing Entity has been registered from a number of Financial Intermediaries, private firms, as well as a number of other anchor corporations in the CSA and agroforestry sectors. These financial intermediaries represent some of the most sophisticated players in Latin America for the channeling of climate finance towards climate-smart agriculture, sustainable land use and forestry projects, and have a successful and demonstrable track record of working with MSMEs and small holders in the targeted countries and in the region.

It is important to underline that it is expected that the international financial institutions identified as potential Executing Entities, will engage and work closely with local financial institutions in each country. This will not only ensure a more capillary presence in local markets, but will also contribute to strengthen the capacity of local financial actors exposing them to new and innovative climate smart agriculture practices and technologies, as well as to the GCF as major provider of climate finance.

Various partners have been identified as potential sources of pipeline for the Facility. In almost all cases, the IDB, in particular through the MIF, has already worked with these partners and is comfortable with their capacity. As these partners are second-tier institutions, they in turn fund local financial institutions, cooperatives, and producer groups. The MIF has over 20 years of experience working with these groups and local microfinance organizations. The MIF will leverage this network to ensure that the best local partners are recipients of Facility funds through the partner FIs. Please see specific project profiles on each potential pipeline project, with additional information, in Annex 3.

C.5. Market Overview (if applicable)

Describe the market for the product(s) or services including the historical data and forecasts.

Describe the competitive environment including the list of competitors with market shares and customer base and key differentiating factors (if applicable).

Provide pricing structures, price controls, subsidies available and government involvement (if any).

The Facility will target “climate-smart champions,” meaning agricultural enterprises that demonstrate environmentally sustainable practices and are located in or near biodiversity hotspots. At present, close to 70% of businesses in the MIF’s agricultural based client portfolio, work in environmental degradation and/or climate change hotspots, and these clients are often aggregators who can provide services and or market the production of thousands of small holder farmers. Too often, smallholder farmers (managing up to 5 hectares on average) lack the capacity and resources to adopt climate-smart practices that conserve and sustainably use natural resources. As a result, their yields stagnate and they often resort to survival measures such as illegal logging and slash-and-burn agriculture that contribute to global warming and generate a cycle of ecological degradation. Compounding this challenge is the increasingly variable climate, which has produced observable and widespread effects across the globe. Events like the recent outbreak of coffee leaf rust (or “roya” in Spanish) highlight the fact that smallholders—many of whom have lost their crops, their income, and ultimately, their livelihood to the disease—are often most exposed, most vulnerable, and least-equipped to respond.

Agricultural enterprises can bridge the resource gap that smallholders face by providing the market linkages, agronomic training, and access to inputs required to help small-scale farmers invest in climate-smart practices (e.g., diversified organic production, agroforestry, irrigation, blue water capture, soil fertility and carbon capture, etc.) that will increase income and productivity and have important carbon sequestration impacts. While these enterprises can easily access short term finance for working capital and pre export needs, they often fail to engage lenders for longer term loans needed for climate smart investments. The MIF estimates that the needs of these enterprises are between US$1 Million to US$5 Million in longer term capital to enable the offering of sustainable finance to transform smallholder farming from
This is why grants for technical assistance both from MIF and GCF funding are proposed as part of this Facility. It is envisaged that the technical assistance envelope will be used, inter alia, to support capacity development for smallholders, strengthening of value chain links, and certification activities such as organic, carbon-neutral and FSC certified, that offer market premiums. In many cases local financial intermediaries are already working with local agricultural extension agents and certification bodies as part of their normal operations. In other cases specialized technical assistance may be warranted to bring in global certification experts such as Rainforest Alliance, FSC, and others.

Over the next 15 years, the Facility will enhance credit and advisory services to push the frontier of agricultural lending by providing a range of financial products to rural small and growing businesses, filling a void left by local commercial lenders and contributing to make rural financial markets more competitive.

Four examples of possible areas of intervention include: (i) the market for irrigation systems, (ii) forestry and agro-forestry, (iii) the market for coffee and cocoa, and (iv) silvopastoral systems. The market for micro irrigation systems in LAC is growing rapidly, estimated to reach US$1.32 billion in 2016. Demand for micro irrigation systems more than doubled over the last ten years. The market for these technologies is dominated by several large companies, including Netafim, Jain Irrigation Systems, The Toro Company, Valmont Industries, among others. According to Micro Irrigation Systems Market Trends published by Global Industry Analysts Inc., key market drivers of global demand include high energy and water costs, better results from advanced irrigation methods, adoption of precision farming techniques, increased mechanization of farming practices, as well as government subsidies. Based on industry estimates, the total market size for drip irrigation in Latin America and the Caribbean is approximately US$600M as of 2015.

Forestry. A study prepared for the MIF/IDB in the context of its project with the Forest Investment Program in Mexico (Guevara et al.), found that the Mexican forestry sector has had limited access to financial services and loans, representing 0.01% of total loans by the banking sector. The main difficulty in forming a forestry business was a lack of finance (45%) followed by technical capacity (41%). Many, if not all, of the MSMEs’ access-to-finance problems highlighted above for neighboring Mexico, are also found in Guatemala. Credit for forestry and agroforestry is typically more difficult to obtain in comparison with other productive activities. This is generally due to the low familiarity of financial institutions and intermediaries with small scale activities and project structuring in this sector. On average, compared to other productive sectors, the cost of financing remains high. At the corporate level (involving relatively large firms with good access to the formal financial system), two of the largest banks in the country indicated offering interest rates between 12 to 16% per year, with mortgage guarantee and terms of up to 15 years in safer activities such as plantation Rubber (Hevea brasiliensis). For MSMEs however, which still operate within certain levels of informality, access to finance is more difficult and the differences with credit conditions granted to larger companies are generally significant. MSMEs are therefore typically served by the microfinance market segment, which has rates and terms which are not aligned to SME needs (lending rates start at 17% per year, with average rates near 60% (CGAP). There are significant opportunities to link technical assistance for certification, improvement of efficiency and productivity, and value chain linkages with access to finance through financial intermediaries for the strengthening of sustainable forestry in the target countries. There are also significant opportunities to link with national REDD+ initiatives on the efficient use of forest resources such as firewood, with an aim at reducing deforestation. With regards to coffee and cocoa, the needs for rehabilitation and renovation are also quite high. Only in the Latin American region it is estimated that 1 Million farmers need to renovate at least 2 million hectares of coffee over the next 5 years, bringing the total finance needed to close to US$ 4 Billion. Coffee and cocoa trees decline in productivity over time and need periodic renewal to maintain yields. They are also vulnerable to pests, diseases and climate change, and require ongoing maintenance. Such maintenance and renewal requires upfront investments that can be followed by a period of reduced or no income, and returns to such investments only arise after a period of several years. These estimates for the demand of finance have been confirmed by recent renovation efforts in Central American countries, where the leaf rust disease has hit hard in the past three years. While some government initiatives are seeking to address the needs through public financial schemes and subsidies, the fragmentation and perceived risk of the sector make it difficult for these programs to reach the scale of the demand. Rural enterprises, traders and cooperatives have become key actors in the supply chains of coffee and cocoa and are potential candidates and clients of the Facility being proposed.
There is demand for intervention in **silvopastoral systems**. Potential partners have shown pipeline for projects in emissions reduction through pasture management and reforestation on cattle ranches in Mexico, using proven emissions reduction models from award-winning projects in Brazil, and through the innovative deployment of biogas systems, for the first time, in Mexico.

These examples allow the identification of needs for the region’s MSMEs. In section C, financial estimations are built over real demand delivered to MIF from financial intermediaries, fund managers and reinsurers that are targeting this type of beneficiaries, as well as in crops such as native rubber in the Americas, native peppers, reduction of firewood as source of deforestation, and other market-driven sources of identified demand. In other cases, by improving the productivity of small farmers, sub-projects will seek to reduce deforestation by reducing the need for farm expansion. Reforestation may also occur in the installation of silvopastoral or agroforestry systems for coffee, cacao, or livestock. In many cases the MIF working in these sectors setting up alliances with global corporates and champion climate smart financial institutions. These partners have significant needs to fund, design and implement, scale up and/or de-risk existing investments. Technical assistance will be provided in hand with financial products, where necessary, to train farmers, develop land management plans, improve productivity, and link producers to markets. Where possible, local providers of these services will be used and contracted by the FI or the Facility in the context of each sub-project and executed with local farmer organizations.

The table below shows the identified potential pipeline projects, their link to the problems identified in the market study, the demand indicated above, and the link to the technologies identified in section E.6.4.

**Table 4. Pipeline, problem, demand and technology nexus.**

<table>
<thead>
<tr>
<th>Potential pipeline project</th>
<th>Problem/sector</th>
<th>Demand</th>
<th>Technology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guarantee</td>
<td>Lack of financial products; poor access to CSA techniques/low productivity; lack of access to technology; poor value chain links</td>
<td>Coffee, cocoa, irrigation, agroforestry</td>
<td>Drip irrigation, agroforestry systems, sustainable soil management, climate smart crop production, rehabilitation/replacing with disease resistant cultivars</td>
</tr>
<tr>
<td>Biogas Senior Loan</td>
<td>Lack of financial products; lack of access to technology</td>
<td>Silvopastoral systems</td>
<td>Small-scale biogas</td>
</tr>
<tr>
<td>Land-use Climate Fund</td>
<td>Lack of financial products; poor access to CSA techniques/low productivity; lack of access to technology; poor value chain links</td>
<td>Silvopastoral systems, agroforestry</td>
<td>Small-scale biogas, agroforestry</td>
</tr>
<tr>
<td>Agroforestry Lending and Technical Assistance</td>
<td>Lack of financial products; poor access to CSA techniques/low productivity; lack of access to technology; poor value chain links</td>
<td>Coffee, cocoa, irrigation, agroforestry</td>
<td>Drip irrigation, agroforestry systems, sustainable soil management, climate smart crop production, rehabilitation/replacing with disease resistant cultivars</td>
</tr>
<tr>
<td>REDD+ Loan Guatemala</td>
<td>Lack of financial products; lack of access to technology</td>
<td>Agroforestry</td>
<td>Agroforestry, efficient cookstoves</td>
</tr>
<tr>
<td>Micro Insurance Investment</td>
<td>Lack of financial products; lack of access to technology; poor access to CSA techniques.</td>
<td>Not sector specific</td>
<td>Climate-smart crop production</td>
</tr>
</tbody>
</table>

**C.6. Regulation, Taxation and Insurance (if applicable)**

Provide details of government licenses or permits required for implementing and operating the project/programme, the issuing authority, and the date of issue or expected date of issue. Describe applicable taxes and foreign exchange regulations. Provide details on insurance policies related to project/programme.

All sub-projects selected for this Facility will be implemented with financial intermediaries that are licensed and registered with the appropriate authority for the type of organization. Considering the variety of regulatory circumstances that will have to be considered when assembling the Facility’s pipeline, the general context with regards to climate change-related financing is discussed in the paragraphs below for each of the two interested countries.
Guatemala

Guatemala began to regulate the use of land, forest resources management and protection of biodiversity in 1989 when the Protected Areas System was established through the Protected Areas Law. In 1996 the Forestry Law was enacted with the objective to reduce deforestation, promote reforestation protect ecosystems and increase the productivity of forests. The law also mandated the establishment of economic incentives for reforestation and forest management for a period of twenty years. Accordingly, the Forestry Incentive Program (PINFOR) for landowners and the Incentive Program for Small Possessors of Forest or Agro-Forest Land (PINPEP) were created. It has been estimated that these Programs have allowed reforestation and agroforestry activities in 430,000 ha and have benefitted circa 900,000 people. In 2015, the PROBOSQUE Law was enacted to give continuity to the Incentives Programs.

The 2011-2015 Agriculture Policy identifies the development of adaptive technologies to climate change as a strategic action. This Policy is in accordance with the Framework Law for Vulnerability Reduction and Mandatory Adaptation to the Impacts of Climate Change and Mitigation of Greenhouse Gases (2013) which seeks to establish the regulatory framework for preventing and planning actions for the impacts of climate change. In addition, Guatemala is currently developing its National REDD+ Strategy which aims at establishing how the country intends to implement REDD+. The Strategy addresses land tenure issues, forest governance, safeguards and gender considerations. Other national polices and laws relevant for forest management and CSA include: the Forestry Policy, the National Forestry Agenda, the Policy and Strategy on Biological Diversity, the System for Preventing Forests Fires, the Plan for Preventing and Reducing Illegal Logging, the National Strategy for Sustainable use of Wood, the National Strategy for Landscapes Restoration, among other.

Mexico

Mexico’s government involvement in climate smart land use activities is particularly significant. This is coupled with commitments and global leadership in climate action which are reflected in international strategies and programs such as the National Strategy of Climate Change and an aspirational goal of GHG emission reductions of 20% by 2020 and of 50% by 2050. Mexico has well-defined land property rights that recognize communal property and establish institutional frameworks for conflict resolution. Climate-smart land use is a national priority for Mexico, which has established multiple platforms to ensure effective coordination amongst relevant agencies such as the National Forest Commission (CONAFOR), the Ministry of Environment and Natural Resources of Mexico (SEMARNAT), and the Ministry of Agriculture, Livestock, Rural Development, Fisheries and Food (SAGARPA). CONAFOR coordinates efforts with SEMARNAT through policy instruments that include support regulation to enable REDD+ activities, such as: the Forest Development Plan, the Information System and the Forest Registry, the National Inventory of Forests and Land, the forest zoning, and the Annual Satellite Assessment of Forest Changes. SAGARPA has implemented measures aimed at reducing pressure on forests, such as the installation of wood efficient stoves and the promotion of planned grazing and reforestation in marginal corn-fed production areas. These measures create a good enabling environment for land use investment activities, which makes Mexico a good candidate to be included in the proposed CSA risk sharing Facility.

C.7. Institutional / Implementation Arrangements

Please describe in detail the governance structure of the project/programme, including but not limited to the organization structure, roles and responsibilities of the project/programme management unit, steering committee, executing entities and so on, as well as the flow of funds structure. Also describe which of these structures are already in place and which are still pending. For the pending ones, please specify the requirements to establish them.

Describe construction and supervision methodology with key contractual agreements.

Describe operational arrangements with key contractual agreements following the completion of construction. If applicable, provide the credit analysis of key counterparties of key contractual agreements and/or structural mitigants to cover the counterparty risks.

29 Climate Investment Funds: Forest Investment Program for Mexico (https://www-cif.climateinvestmentfunds.org/sites/default/files/meeting-documents/fip_5_mexico_ip_0.pdf)
Proceeds from the GCF will be used to establish a Risk Sharing Facility managed by the IDB. This Facility will be used to finance sub-projects to be presented by partner FIs (Executing Entities) with experience in the climate-smart agricultural business in the target countries. Prospective Executing Entities will include private companies, financial institutions, equity funds, and insurance companies. It is expected that the Facility will support approximately 5 to 8 sub-projects.

The Facility will be governed by a Steering Committee in charge of key activities including pipeline origination, evaluation of sub-project proposals from Executing Entities and development/structuring of individual sub-projects using, IDB, GCF, and local partners’ resources. The Steering Committee will include one Investment Specialist from the IDB’s MIF, one Climate Change Specialist from the IDB’s Climate Change Division and the Facility Coordinator. The investment Specialist will oversee the financial evaluation of any sub-project presented by a partner Financial Intermediary looking to enter the Facility’s portfolio and to obtain financing from the Facility.

The Climate Change Specialist will be in charge of checking, confirming and signing off the assessment of the climate mitigation and/or adaptation potential of the proposed sub-project. In case the project was not considered to meet the IDB standards on either financial or climate impacts potential, the investment Specialist and the Climate Change Specialist will be able to make recommendations for improvements or to reject the sub-project’s request for financing.

The Facility Coordinator will oversee the day-to-day activities necessary for the management of the Facility and will be responsible for validating investments match with the Facility’s eligibility criteria, ensuring that the Facility’s transactions demonstrate climate benefits and financially additionality, in line with the principle of minimum concessionality. Responsibilities of the Coordinator will also include liaising with the Executing Entities to obtain all information necessary to track Facility’s sub-projects, verify the portfolio’s climate and social impacts, monitor the expected rate of return, and prepare portfolio management reviews and development effectiveness documents. The Facility Coordinator will be selected through a competitive process, following IDB policies. Basic operating procedures will be established for the Facility and its Steering Committee. However, Facility and Steering Committee will operate following IDB due diligence and project assessment procedures and will not be subject to a separate credit manual.

The IDB, as Accredited Entity, will maintain the responsibilities of the Programme to the GCF as per the terms to be agreed between IDB and GCF in the Accredited Entity Master Agreement (AMA) and Funded Activity Agreement (FAA). The Executing Entities will execute the implementation of the specific sub-projects to be co-financed with Facility resources, including the structuring and deployment of IDB and GCF capital into the Facility’s portfolio sub-projects. The Executing Entities will be subject to compliance with the Accreditation Master Agreement to be entered into between the GCF and the IDB and/or such other relevant arrangements. Supplementing this, at the sub-project level, rights and responsibilities of project sponsors, lenders, and other sub-project parties will be defined under the sub-project contracts, completing the governance structure of the Facility.

Contracts to be entered into by the IDB, with resources of the Facility for the execution of the proposed Facility will include:

(i) an FAA, which will cover in separate sections the different financial instruments to be used under this Facility;
(ii) Loan Agreements will be signed between the IDB and each individual EE for the execution of each individual loan sub-project;
(iii) Guarantee Agreements will be signed between the IDB and each individual EE for the execution of each individual guarantee sub-project;
(iv) Investment Agreements will be signed between the IDB, and each individual EE for the execution of equity investments;
(v) Technical Cooperation Agreements will be signed between the IDB, and each individual EE for the execution of each individual technical assistance sub-project.

The IDB Group has developed over the years vast experience in blended finance through the implementation of programs with other climate funds (e.g. GEF, CIF, Canadian Climate Fund for the Private Sector in the Americas), and

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30 Preliminary consultations have taken place with the Financial Intermediaries listed in this section during the preparation of this concept note. The pipeline provided as attachment of this concept note, although based on these consultations, is to be intended as illustrative and may be subject to change during the following stages of the project design.
will resort to such expertise to ensure adequate and effective utilization of Facility resources to promote investments with climate value. The structure of the proposed intervention is shown in the Figure 5, below.

*Figure 5. Flow of funds.*
**Expected timetable:**

<table>
<thead>
<tr>
<th>2018 H1</th>
<th>2018 H2 - 2030</th>
<th>2026-2033</th>
<th>2030-2033</th>
</tr>
</thead>
<tbody>
<tr>
<td>Set up Facility in IDB Group.</td>
<td>Investment Period.</td>
<td>Repayment from Facility to GCF will happen in three bullet payments on year 9, 12 and 15 from the start of the Programme.</td>
<td>No new investments are envisaged.</td>
</tr>
<tr>
<td>Engage financial intermediaries and agribusinesses.</td>
<td>Reflows available in the Facility may be reinvested in further sub-projects during this period.</td>
<td></td>
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<tr>
<td>Request sub-project proposals from FIs (ongoing through investment period).</td>
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</tbody>
</table>
C.8. Timetable of Project/Programme Implementation

Please provide a project/programme implementation timetable in section I (Annexes). The table below is for illustrative purposes. If the table format below is used, please refer to the activities as numbered in Section H. In the case of outputs, please mark when all the required activities will be completed.

<table>
<thead>
<tr>
<th>TASK</th>
<th>Y1</th>
<th>Y2</th>
<th>Y3</th>
<th>Y4</th>
<th>Y5</th>
<th>Y6</th>
<th>Y7</th>
<th>Y8</th>
<th>Y9</th>
<th>Y10</th>
<th>Y11</th>
<th>Y12</th>
<th>Y13</th>
<th>Y14</th>
<th>Y15</th>
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</thead>
<tbody>
<tr>
<td><strong>Output 1. Risk Sharing Facility</strong></td>
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<tr>
<td>Activity 1.1. Set up Risk-Sharing Facility in IDB Group</td>
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<tr>
<td>Activity 1.2. Engage financial intermediaries and agribusinesses</td>
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<tr>
<td><strong>Output 2. Sub-projects Investments and Technical Assistance</strong></td>
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<tr>
<td>Activity 2.1. Sub-Projects pre-feasibility assessment - eligibility of partner’s proposals</td>
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<tr>
<td>Activity 2.2. Structuring and approval of sub-projects</td>
<td></td>
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<td>X</td>
<td>X</td>
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<tr>
<td>Activity 2.3. Identification of needs of Technical Assistance packages for selected sub-projects and structuring and approval of TA packages</td>
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<tr>
<td>Activity 2.4. Execute arrangements/contracts/ LP agreements and manage repayments to Facility</td>
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<td><strong>Output 3. Sub-projects implementation support</strong></td>
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<tr>
<td>Activity 3.1. Manage compliance and reporting</td>
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<td>Activity 3.2. Manage disbursement</td>
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<td>Output 4. Monitoring and evaluation</td>
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<tr>
<td>Activity 4.1. Design and set up programme monitoring system at Facility level (the Facility Monitoring System)</td>
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<tr>
<td>Activity 4.2. Performance monitoring from sub-projects to Facility</td>
<td>x</td>
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<td>4.3. Carry out mid-term and final evaluations (implementation progress)</td>
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<td>4.4. Assess feasibility of performing impact evaluation and carry it out if feasible.</td>
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</table>

<table>
<thead>
<tr>
<th>Output 5. Knowledge products, sustainability and scalability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activity 5.1. Identify knowledge products to allow business models scalability or replicability</td>
</tr>
<tr>
<td>Activity 5.2. Generate Scalability and replicability strategies and knowledge products</td>
</tr>
<tr>
<td>Activity 5.3. Diffusion of new business models and create alliance for scalability</td>
</tr>
</tbody>
</table>
D.1. Value Added for GCF Involvement

Please specify why the GCF involvement is critical for the project/programme, in consideration of other alternatives.

As described in the market analysis section, there is significant private capital that can be deployed into climate-smart agriculture projects. However, the perceived risk of these investments requires public-sector long-term resources and guarantees. It is expected that with a limited amount of guarantees and loans, significant additional private capital can be channeled to agriculture mitigation and adaptation activities. The importance of these types of risk sharing mechanisms has been proven in the IDB Group's implementation of CIF resources, where CIF funds have allowed the IDB to develop private sector FIP, SREP, and CTF projects that would otherwise not have been approved by the Bank's risk department. External partners, such as the ones listed in the indicative pipeline, have reported similar results.

By sharing the risk of piloting early-stage, innovative financial mechanisms in the CSA space, GCF funding will allow for the opportunity to demonstrate to national and regional financial institutions that CSA projects are viable and profitable, increasing private sector confidence in structuring and deploying ad hoc financial instruments for this market segment.

In addition, sub-projects entering the portfolio should demonstrate to the clients of the Facility that these investments are viable without guarantees. GCF funding will also allow the IDB to make the case to other investors that projects such as those to be funded under the Facility are good bets, thus attracting future private capital.

Finally, GCF funding will also have a catalytic effect beyond the LAC region in making other MDBs and IFIs increasingly confident that CSA projects are viable and profitable.

D.2. Exit Strategy

Please explain how the project/programme sustainability will be ensured in the long run, after the project/programme is implemented with support from the GCF and other sources, taking into consideration the long-term financial viability demonstrated in E.6.3. This should include a description of strategies for longer term maintenance of physical assets (if applicable).

**Sustainability** is to be viewed at both the sub-project and Facility scale. At the sub-project scale, sustainability is ensured through a) investment or credit evaluation by the IDB Group of the sub-project’s ability to deliver a sustainable equity return and sustainable cash flows to pay any debt service, b) a technical design package to ensure they apply climate smart strategies and technologies and other crop specific best practices to the new productive assets, and c) in some cases, technical assistance to the Executing Entity to ensure their ability to appropriately analyze and manage the provision of long term credit to producers, d) as well as provide or evaluate technical assistance support packages for producers. Taken together, these strategies are meant to ensure the technical and financial success of the sub-project over its investment horizon, but the intent in all cases is establish technical, financial, and environmental sustainability of productive agricultural assets over entire long-term life of the assets even after the sub-project formally ends.

At the Facility scale, the goal of this initiative is to incentivize private sector actors to deploy capital to climate-smart agriculture activities. By reducing the risk of the projects implemented in the Facility it is expected that private sector partners, investors, and the IDB Group's own risk management departments and credit committees become more knowledgeable of the structure, benefits, and terms of CSA projects and understand the actual risks of these projects instead of relying on perceived risks. In many some cases the repayment performance of first mover transactions will generate the requisite statistics to appropriately assess actual credit risk in future transactions. Over time, these actors should become comfortable with the longer tenors and terms of these types of investments and make further investments without public guarantees or support. Programme results (both environmental and financial) will be disseminated widely to increase the impact of this demonstration effect.

**Exit strategy from relative to the Facility’s financial products**

Once capitalized with GCF Proceeds, the Facility is designed to have a revolving nature, meaning that the reflows which will be received from each underlying loan will be deposited into the Facility account at the IDB and will be re-used to finance additional sub-projects until the end of the investment period (expected to end at year 12, when no new investments will be made).
From an operational and financial management point of view, this will be implemented through a Trust Fund (the “Facility trust account”) managed by IDB. This account will provide funding for underlying loans, guarantees and equity investments. Reflows from those transactions will be deposited in the same Facility trust account (principal plus interest, fees and capital gains). Cumulative liquidity earned by the Facility trust account will be used to finance new sub-projects that comply with Facilities’ criteria, providing the Facility with its revolving nature.

The revolving nature of the Facility will end at the end of year 8 from the Facility’s inception. From year 9, the Facility will start providing reflows to GCF and IDB/MIF, based on availability of cumulative reflows received from underlying loans, guarantees and investments at the Facility trust account. Following this scheme, three bullet repayments are envisaged from the Facility account to GCF and MIF respectively, which will be occurring in years 9, 12 and 15.

**Equity:** Based on the experience developed over the years by the MIF as Limited Partner (LP) in more than 80 equity funds in Latin America, the project team understands that LAC capital markets have a low degree of sophistication. In addition, stock markets are underdeveloped in many LAC countries. Even where present, the land use sector is not often targeted, so that exit strategies are generally oriented to seeking acquisitions by local or regional family offices rather than towards securitization. Another expected scenario is to provide mezzanine capital that allows the design of straightforward exits based on fix term, net free cash flow, preferred return payment and upstream bullets at final exit.

**Loans:** Loans will be repaid quarterly by the borrowers to the Facility. Interest and fees earned will be held in the Facility trust account at the IDB. Grace periods are expected to be longer and will be design based on the case-by-case needs of the borrower. Exits strategy will consist in recovering principal, plus interests and any fee at the end of loan tenor.

**Guarantees:** The Guarantee fees earned will be held in the Facility trust account at the IDB. It is expected that Guarantee funding will be allocated in trust escrow accounts, or trust funds, depending on best suitable instrument in accordance to local laws and regulations of each target country. Exit strategies of principal funding provided will be executed at the end of guarantee tenor. Tenor will be defined case by case during the design process of each underlying project. Guarantee escrow account (or trust fund) will be instructed from its constitution to be liquidated through one bullet payment to the Facility trust account.
In this section, the accredited entity is expected to provide a brief description of the expected performance of the proposed project/programme against each of the Fund’s six investment criteria. Activity-specific sub-criteria and indicative assessment factors, which can be found in the Fund’s Investment Framework, should be addressed where relevant and applicable. This section should tie into any request for concessionality made in section B.2.

E.1. Impact Potential
Potential of the project/programme to contribute to the achievement of the Fund’s objectives and result areas

E.1.1. Mitigation / adaptation impact potential

Specify the mitigation and/or adaptation impact, taking into account the relevant and applicable sub-criteria and assessment factors in the Fund’s investment framework.

When applicable, specify the degree to which the project/programme avoids lock-in of long-lived, high emission or climate-vulnerable infrastructure.

**Mitigation:**
- Expected tons of carbon dioxide equivalent (t CO2e) reduced: **9,166,601 tCO2e** (total over the lifetime of the Facility)
- Hectares of land or forests under improved and effective management that contributes to CO2 emission reductions: according to a preliminary analysis, the proposed Facility will finance land restoration and/or CSA activities covering at least **47,033 hectares**.

Table 5 below, presents the estimated emission reductions by sub-project.

### Table 5. Estimate of program’s emission reductions.

<table>
<thead>
<tr>
<th>Subproject name and country</th>
<th>GCF financing</th>
<th>Total project financing</th>
<th>Estimated total emission reductions over project lifetime</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small Insurance Company (Mexico and Guatemala)</td>
<td>1,675,000</td>
<td>5,350,000</td>
<td>n/a</td>
</tr>
<tr>
<td>Sr. Loan SME Biodigesters program (Mexico)</td>
<td>1,860,000</td>
<td>6,720,000</td>
<td>1,408,920</td>
</tr>
<tr>
<td>Land-use and Climate Equity Fund (Mexico and Guatemala)</td>
<td>9,500,000</td>
<td>120,000,000</td>
<td>3,361,270</td>
</tr>
<tr>
<td>Sr. Loan REDD+ Program (Guatemala)</td>
<td>2,200,000</td>
<td>8,900,000</td>
<td>2,297,125</td>
</tr>
<tr>
<td>Guarantee CSA debt portfolio (Mexico and Guatemala)</td>
<td>2,025,000</td>
<td>9,650,000</td>
<td>789,900</td>
</tr>
<tr>
<td>Sr. Loan CSA MSMEs Regional (Mexico and Guatemala)</td>
<td>1,990,000</td>
<td>6,380,000</td>
<td>1,309,386</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>19,250,000</strong></td>
<td><strong>157,000,000</strong></td>
<td><strong>9,166,601</strong></td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>USD / tCO2e at Facility Level</td>
<td>2.10</td>
<td>17.13</td>
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</tbody>
</table>

**Adaptation:**
A significant part, if not all, of the activities to be financed under the proposed Facility will be related to increasing crop resilience, through improved agricultural technologies such as irrigation systems and resistant species. (See section on technology). Other interventions may improve the productivity of land under cultivation so as to reduce deforestation pressure on adjacent lands.

**Number of direct and indirect beneficiaries.**
- Number of direct beneficiaries expected: approximately 802,980;
Number of males and females benefiting from the adoption of diversified, climate resilient livelihood options: 50% females & 50% males (est. symmetric gender distribution);

Increase in productivity (yield/hectare) as a proxy for increase in income or avoidance of lost income, so that MSME producers are better able to cope with the adverse effects of climate vulnerability and change 10% increase in yield/hectare31.

Number of indirect beneficiaries: at least 15 firms acting as providers of CSA technology, seeds and agricultural extension services to the Facility’s sub-projects.

The number of the programme’s direct beneficiaries was estimated using inputs and assumptions described in Table 6, below.

Table 6. Estimate of program’s direct beneficiaries.

<table>
<thead>
<tr>
<th>Subproject name and country</th>
<th>Estimated total beneficiaries (people) Mex</th>
<th>Estimated total beneficiaries (people) Guate</th>
<th>Estimated beneficiaries (farms) Mexico</th>
<th>Estimated beneficiaries (farms) Guate</th>
<th>Estimated Hectares (Mex)</th>
<th>Estimated Hectares (Guate)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small Insurance Company (Mexico and Guatemala)</td>
<td>TBD</td>
<td>219,000</td>
<td>TBD</td>
<td>219,000</td>
<td>TBD</td>
<td>54,750</td>
</tr>
<tr>
<td>Sr. Loan SME Biodigesters program (Mexico)</td>
<td>130</td>
<td>n/a</td>
<td>26</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Land-use and Climate Equity Fund (Mexico and Guatemala)</td>
<td>500</td>
<td>2,500</td>
<td>100</td>
<td>500</td>
<td>10,000</td>
<td>3,500</td>
</tr>
<tr>
<td>Sr. Loan REDD+ Program (Guatemala)</td>
<td>n/a</td>
<td>558,000</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Guarantee CSA debt portfolio (Mexico and Guatemala)</td>
<td>n/a</td>
<td>n/a</td>
<td>25</td>
<td>22</td>
<td>19,617</td>
<td>11,979</td>
</tr>
<tr>
<td>Sr. Loan CSA MSMEs Regional (Mexico and Guatemala)</td>
<td>16,100</td>
<td>6,750</td>
<td>35</td>
<td>15</td>
<td>70,000</td>
<td>30,000</td>
</tr>
<tr>
<td>Total</td>
<td>16,730</td>
<td>786,250</td>
<td>186</td>
<td>219,537</td>
<td>99,617</td>
<td>100,229</td>
</tr>
<tr>
<td>Grand Total</td>
<td>802,980</td>
<td>219,723</td>
<td>199,846</td>
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</table>

E1.2. Key impact potential indicator

Provide specific numerical values for the indicators below.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Annual</th>
<th>Lifetime</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expected tonnes of carbon dioxide equivalent (t CO2 eq) to be reduced or avoided (Mitigation only)</td>
<td>916,660 tons / CO2e</td>
<td>9,166,601 tons / CO2e</td>
</tr>
</tbody>
</table>

GCF core indicators

- Expected total number of direct and indirect beneficiaries, disaggregated by gender (reduced vulnerability or increased resilience);
- Number of beneficiaries relative to total population, disaggregated by gender (adaptation only)

| Total | For adaptation: approximately 802,980 (est. symmetric gender distribution).
| Number of indirect beneficiaries: at least 15 firms acting as providers of CSA technology, seeds and agricultural extension services.
| Percentage (%) | This number will be provided during the reporting phase, when the individual sub-projects will reach financial closing and their respective areas of influence and total population will be known.

- Number of hectares under CSA principles

| Total | Approximately 199,846 hectares. |

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31 One purpose of the facility is to improve productivity of farms on existing plots so as to reduce deforestation pressure on adjacent land. In cases of expansion of areas under production, this will only be undertaken on degraded lands where the installation of new agroforestry or silvipastoral systems will increase forest coverage rates.

32 For conservativeness, a program lifetime of 10 years has been used, even though the proposed investment period of the Facility is 13 years.
### Number of farmers adopting CSA practices (disaggregated by gender)

| Total | Approximately 802,980 farmers, 50% females and 50% males. |

| Percentage % (average, disaggregated by project) | 10% |

Describe the detailed methodology used for calculating the indicators above.

Considering that the proposed intervention involves the creation of a financing Facility, whose projects will be eventually secured based on an evaluation of their fit with the Facility’s proposed eligibility criteria listed in this Funding Proposal, the methodology used to estimate the emission reduction/avoidance potential does inevitably involve a degree of ex-ante approximation.

For each one of the specific sub-projects included in the tentative pipeline, a specific methodology for the ex-ante calculation of the expected emission reduction and/or avoidance/sequstration potential was used, depending on the project type. A description of the methodology used for each one of the sub-projects is provided in the sub-project profiles included as Annex II of this Funding Proposal.

Describe how the project/programme’s indicator values compare to the appropriate benchmarks (i.e. the indicator values for a similar project/programme in a comparable context).

The MIF has executed many investments, loans and grants in the Climate Smart Agriculture space, including implementing 10 projects cofinanced with the Climate Investment Funds (CIFs). These projects, as well as global calculations, have been used to determine indicator values. Two examples of MIF projects with similar clients/targets are highlighted below.

- **Implementation of the Forest Investment Program in Brazil:** In this project, currently being designed, the MIF is channeling a US$3m FIP equity investment and is investing US$1M of its own funds in a reimbursable grant to INOCAS, a company developing a silvipastoral Macauba tree system in Brazil. The project creates new revenue streams for smallholder farmers and harvest workers, while also sequestering carbon. Indicators are: 300,000 tons of CO2 emissions reduced or avoided in 1,600 hectares of land, 45% sales growth from implementation of the silvopastoral system per farm, 33% increase in harvest worker income.

- **In 2011 the MIF approved US$4.9 Million for a loan and technical assistance operation to support the extension of a specialized land-use and CSA financial intermediary’s credit and financial management models to small farmer organizations working in higher-value agricultural markets in Central America.** Given the severity of the coffee leaf rust (“roya”) outbreak that devastated Central America coffee production in 2013, the MIF responded by working with the Financial Intermediary to provide comprehensive financing and technical support to smallholder farmers that were affected by this fungus:
  - A US$3 Million loan (10-year tenor with a 3-year grace period and a fixed annual rate of 2.5%) was provided to Root for farmer on-lending (long-term renovation lending and short-term trade credit) through coops and farmer organizations in Mexico, Honduras, Guatemala, Nicaragua, and El Salvador.
  - A US$2.49 Million technical assistance was approved for (i) supporting cooperatives with multi-faceted support, including financial training, extension services, creation of renovation plans and agronomic advisory services; and (ii) exploring diversification alternatives (animal husbandry, honey or short-cycle crops (e.g. maize, dried beans) for cash, consumption or to invest in renovation.
  - Through June of this year, the project had disbursed US$ 4 Million for coffee renovation and rehabilitation in 1,260 hectares of land. 37 smallholder farmer organizations strengthening their internal credit systems. On the technical assistance side, 22 organizations received agronomic advisory services. In total, the farmer organizations that participate in the project represent around 29,000 smallholder farmers.
### E.2. Paradigm Shift Potential

Degree to which the proposed activity can catalyze impact beyond a one-off project/programme investment

**E.2.1. Potential for scaling up and replication (Provide a numerical multiple and supporting rationale)**
Potential for scaling-up and replication.

As agriculture and land use activities are some of the sectors with deepest projected climate change impacts across the LAC region, many Latin American and Caribbean countries have prioritized climate smart agriculture as one of the national priorities on both adaptation and mitigation agendas, as well as in their NDCs. The project team considers therefore that this proposal is highly scalable throughout the LAC region, both within the initially proposed countries and through a potential second stage that could entail the introduction of additional LAC countries.

Expected scale mechanisms include:

- **The IDB Group**: This Facility will offer important insights on the risk profile of CSA investment portfolios. This is expected to provide the IDB risk department with more inputs to assess this type of investment and determine the appropriate level of risk tolerance for these kinds of agricultural investments. It is expected that, if successful, IDB and MIF Boards will increase its portfolio in this class of investments.

- **Implementing partners**: As partner financial intermediaries implement projects, their own internal risk departments should begin to better understand the risks associated with such projects and may begin to lend without guarantees. Similarly, other providers or concessional and non-concessional climate finance may gain important insights by assessing the Facility’s results eventually deciding to contribute additional funds for project activities in this sector across and beyond Central and Latin America. This applies also to the local financial institutions that will be directly and indirectly involved in the implementation of the sub-projects, exposing them to the design and implementation of innovative financial products targeted to climate smart agriculture and contributing to create capacity for the future as climate finance channeling agents.

- **Value chain actors**: As technical assistance and financial products may be used to facilitate the access of MSME producers to markets through value chain linkages, it is possible that these value chain actors may seek to support project activities past the time of this Facility. The MIF has seen evidence of this in other projects where, once proven, anchor companies seek to implement financing and technical assistance strategies related to climate within their supply chains.

- **Other actors (national and international)**: As described below, the Facility will pursue a knowledge agenda to share lessons learned and impacts widely. It is hoped that these activities will provide other actors, not directly participating in this Facility, with the tools needed to replicate these projects elsewhere. As typical for initiatives such as the proposed Facility, lessons learned and knowledge products will be disseminated through IDB Group events, by the Facility’s clients, and through GCF and other relevant events.
E.2.2. Potential for knowledge and learning

Describe how the project/programme contributes to the creation or strengthening of knowledge, collective learning processes, or institutions.

Potential for knowledge and learning.

Opening up opportunities for the private sector in the adaptation space has proven to be challenging so far. Even though extensive literature already exists on how to increase private sector investment in adaptation, there is still a limited number of practical examples of successful use of climate finance for private sector adaptation purposes across LAC. For this reason, this Facility could generate important learnings to be used in successive scaling-up activities. On the mitigation side, the project team expects that the proposed Facility will generate useful lessons learned and knowledge inputs for future private sector climate-smart land use programs, in particular on large scale investments on recuperation of degraded land through silvopastoral systems, efficient use of animal waste, sustainable timber and forestry operation, among other areas. This, in turn, is expected to increase financial intermediaries’ and anchor companies’ confidence in climate smart investments, therefore resulting in a reduction in the perceived investment risk, and a potential increased investment flow, in this sector.

The Facility will collect knowledge in a number of ways. First, IDB Group project management systems and project midterm and final evaluations will collect lessons learned and results and impacts throughout the implementation of each sub-project funded under the Facility. These lessons, results, and impacts will be collected into a final publication that outlines the overall knowledge created by the Facility and provides suggestions on how to consolidate gains and mainstream climate smart agricultural finance in the private sector without public support. The Facility will develop infographics, reports, and presentations as needed to be disseminated at GCF, IDB, and other appropriate regional fora throughout the life of the Facility.

E.2.3. Contribution to the creation of an enabling environment

Describe how proposed measures will create conditions that are conducive to effective and sustained participation of private and public sector actors in low-carbon and/or resilient development that go beyond the program.

Describe how the proposal contributes to innovation, market development and transformation. Examples include:

- Introducing and demonstrating a new market or a new technology in a country or a region
- Using innovative funding scheme such as initial public offerings and/or bond markets for projects/programme

The project team expects that the initial ground work that will be done - including through technical assistance - to support the selected local implementing agencies in their efforts to reach out to their small-scale client base with tailored financial products to respond to the climate threat (and/or take advantage of climate-related business opportunities) will strengthen the enabling environment for CSA-related investments. This will include public sector stakeholder engagement in the selected countries, and increased dialogue between private and public sector with the view of ensuring the best possible conducive environment to scale up private sector investments in climate-smart land use.

E.2.4. Contribution to regulatory framework and policies

Describe how the project/programme strengthens the national / local regulatory or legal frameworks to systematically drive investment in low-emission technologies or activities, promote development of additional low-emission policies, and/or improve climate-responsive planning and development.

Although the proposed programme does not have a specific component aimed at supporting the generation or revision of specific regulatory frameworks or policies, it is expected that the lessons learned through its implementation will constitute important potential inputs for any specific legislative or regulatory update process that was to be held in any of the proposed host countries.

As described in section C6 ambitious strategies and policies are in place in all the countries considered. The Facility will be instrumental to translate into practice this strategic approach and to make available tailored resources for the required investments.
E.3. Sustainable Development Potential
Wider benefits and priorities

E.3.1. Environmental, social and economic co-benefits, including gender-sensitive development impact

The proposed programme will generate **economic co-benefits** through its implementation that include the expected generation of jobs and the strengthening of the economic performance of the land use sector (including agriculture, forestry, ranching, animal waste management, etc) in the countries where it will be implemented. Considering the early stage of this proposal, it is not possible to indicate a precise estimate of job creation potential, as the weight of the different activities that may be financed under the Facility may vary depending on the final pipeline of the implementing agencies. Previous similar IDBG projects, however, have generated (or helped maintain, in the case of adaptation-focused operations) jobs in the region of 200 jobs per US$1 million invested.

**Social co-benefits** expected from the implementation of the Facility’s sub-projects will include enhanced technical and business management skills for the management and staff of the MSMEs, with a special attention being given to women needs, which will benefit from the financing and technical assistance components of the project.

**Environmental co-benefits** are also expected to be significant. Together with the strengthening of the economic performance and competitiveness of the MSMEs operating in the agriculture and land use sector, environmental co-benefits are another key objective of this initiative. The extent of their reach will be more precisely estimated during the preparation stage. However, at this stage it is safe to mention that the project team expects that the implementation of the Facility’s sub-projects will result in reduced vulnerability of watersheds to erosion and flash floods, stabilization and enrichment of soil, preserved or increased biodiversity, improved environmental services such as aquifer recharge, pollination, sustainability of the provision of forest goods, and in general improvement and/or conservation of ecosystem services at all levels.

This Facility is also expected to generate positive impacts on women. Many of the activities that the proposed Facility is expected to support or enable are carried out by women, who in LAC rural settings are often in charge of processing and transformation of agricultural and forest products, including food crops. A **Gender Action Plan** is included as an annex to this funding proposal. A more detailed assessment of the gender-sensitive development impacts of the proposed Facility will be conducted during the preparation of individual sub-projects under the Facility; and gender specific activities or outcomes will be included in the sub-projects as a requirement for funding as appropriate.

E.4. Needs of the Recipient
Vulnerability and financing needs of the beneficiary country and population

E.4.1. Vulnerability of country and beneficiary groups (Adaptation only)
Describe the scale and intensity of vulnerability of the country and beneficiary groups, and elaborate how the project/programme addresses the issue (e.g. the level of exposure to climate risks for beneficiary country and groups, overall income level, etc).

Guatemala.

Challenges to agriculture in Guatemala’s Dry Corridor, one of the country’s most vulnerable geographies will include extreme weather events, such as prolonged droughts, erratic rainfall, frost, land degradation and water scarcity, in addition to poor land management strategies. The Global Climate Risk Index 2016 ranks Guatemala 10th in terms of countries with the highest climate change risk for 1995-2014. Risks include droughts, flooding in lowlands, and increased vulnerability of crops such as coffee, corn, and cacao to rainfall variability. According to a 2015 study, in the Guatemalan dry corridor alone, there are 300,000 household affected by climate adverse scenario and reduction in crops yield and a 55-100% reduction in maize and beans production.

Mexico.

Mexico is the country most exposed to extreme weather events in Latin America. This general situation is exacerbated by the current and projected impacts of climate change. Smallholder farmers in particular are highly vulnerable to increased climate variability and changes in rainfall patterns, and have fewer mechanisms to adapt to climate change. According to the IPCC, “Mexican agriculture appears to be particularly vulnerable to climate-induced changes in precipitation because most (about 85%) of its agricultural land is classified as arid or semi-arid. Recent national assessments of the impacts of climate change indicate that the northern and central regions of Mexico are most vulnerable in the agricultural sector (Conde, 1999) and that in these regions, the area of land that is unsuitable for rainfed maize production would expand under climate change (Conde et al., 1997). On average, more than 90% of losses in Mexican agriculture are caused by drought (Appendini and Liverman, 1995). Using five GCM-based scenarios, it was estimated that potential evaporation may increase by 7-16% and the annual soil moisture deficit could increase by 18-45% in important maize-growing regions in eastern Mexico (Liverman and O’Brien, 1991).”

E.4.2. Financial, economic, social and institutional needs

33 Prioritizing Investments in Climate-Smart Agriculture in Guatemala – CIAT, 2016. http://ciat-library.ciat.cgiar.org/articulos_ciat/biblioteca/Prioritizing_Investments_in_Climate_Smart_Agriculture_in_Guatemala_POSTERS.pdf
Describe how the project/programme addresses the following needs:

- Economic and social development level of the country and the affected population
- Absence of alternative sources of financing (e.g. fiscal or balance of payment gap that prevents from addressing the needs of the country; and lack of depth and history in the local capital market)
- Need for strengthening institutions and implementation capacity.

Climate-smart agriculture projects in the LAC region often have difficulty securing financing for innovation or growth because the financial intermediaries that service this sector (MDBs/commercial banks/equity funds/insurance companies) do not offer products tailored to the needs of agricultural producers experimenting with new processes or expanding from small, grant-funded pilots. The issue is not always one of liquidity, as several of the intermediaries for this sector have sufficient funds to support a more aggressive lending/investment strategy. Rather, in many cases, risk-sharing mechanisms are needed to reduce the risk of investing in innovation or to support the longer-term loans that agricultural and forestry activities generally require.

Too often, smallholder farmers (managing 5 hectares on average) in the target countries lack the capacity and resources to adopt climate-smart practices that conserve and sustainably use natural resources. As a result, their yields stagnate and they often resort to survival measures such as illegal logging and slash-and-burn agriculture that contribute to global warming and generate a cycle of ecological degradation. Compounding this challenge is the increasingly variable climate, which has produced observable and widespread effects across the globe. Events like the recent outbreak of coffee leaf rust (or “roya” in Spanish) highlight the fact that smallholders—many of whom have lost their crops, their income, and ultimately, their livelihood to the disease—are often most exposed, most vulnerable, and least-equipped to respond.

Agricultural enterprises can bridge the resource gap that smallholders face by providing the market linkages, agronomic training, and access to inputs required to help small-scale farmers invest in climate-smart practices (e.g., diversified organic production, agroforestry, irrigation, blue water capture, etc.). While these enterprises can easily access short term finance for working capital and pre-export needs, they often fail to engage lenders for longer term loans needed for climate smart investments. The IDB Group estimates that the needs of these enterprises are between US$1 million to US$5 million in longer term capital to enable the offering of sustainable finance to transform smallholder farming from an environmental threat to a conservation strategy. Furthermore, in response to crises like roya, rural enterprises have demonstrated an ability to facilitate solutions by channeling vital services and resources, such as agronomic extension, to smallholders, in addition to financial services.

E.5. Country Ownership

Beneficiary country (ies) ownership of, and capacity to implement, a funded project or programme

E.5.1. Existence of a national climate strategy and coherence with existing plans and policies, including NAMAs, NAPAs and NAPs
Please describe how the project/programme contributes to country’s identified priorities for low-emission and climate-resilient development, and the degree to which the activity is supported by a country’s enabling policy and institutional framework, or includes policy or institutional changes.

As indicated in section E.4 above, the two countries included in the proposal are expected to be impacted negatively and considerably by climate change, and such impacts are expected to be severe in the agriculture and forestry sectors. Both Mexico and Guatemala have therefore all implemented regulatory frameworks and set national priorities that are very much aligned with the promotion of a climate-smart use of the territory. The two countries draw significant portions of their national GDP from agriculture, forestry and agro-processing activities, and it can be concluded that the proposed Facility is very much aligned with national country strategies and priorities, spanning both the adaptation and mitigation scopes. Moreover, both Mexico and Guatemala have given significant priority to land use activities, including CSA and forestry, in their National Determined Contributions (NDCs)

Considering the private sector nature of this proposal, it is important to ensure that the capacity of the proposed Executing Entities to carry out the proposed activities is analyzed and assessed.

The IDB Group undertook a review of the portfolios and needs of potential intermediary clients in August 2016. Through interviews with these implementing partners the project team identified the estimated financing volumes, returns, and impacts presented in this concept note. The Executing Entities being considered for the implementation of this Project all have a strong track record of implementation of activities in the CSA realm; in addition, they will undergo a full due diligence process in advance of the approval of each individual sub-project, following the standard IDB/MIF assessment for implementing agencies. A more in-depth analysis of the proposed implementation mechanism and agencies is included in section C.4.

E.5.2. Capacity of accredited entities and executing entities to deliver

Please describe experience and track record of the accredited entity and executing entities with respect to the activities that they are expected to undertake in the proposed project/programme.

The CSA Facility will be managed by the IDB, through its Climate Change and Sustainability Division (CCS) and its Multilateral Investment Fund (MIF). MIF and CCS have a strong track record of collaborating on several initiatives and are highly complementary in their respective mandates and areas of expertise. IDB will house the Facility coordinator, providing general administration services to the resources included in the Facility and supporting the MIF in identifying and structuring the deals to be included in the Facility’s pipeline. The IDB’s MIF is part of the Non-Sovereign Guaranteed (private sector) windows of the IDB Group. As such, the MIF has an extensive network of senior specialists based in Mexico and Guatemala, as well as in all countries where a future program scale up could take place. These specialists will provide support in deal origination, structuring and supervision, complementing and strengthening the Facility governance which will include the Steering Committee, the Facility coordinator and a number of financial consultants.

The MIF is the innovation lab for the IDB Group. It conducts high-risk experiments to test new models for engaging and inspiring the private sector to solve economic development problems in Latin America and the Caribbean, addressing poverty and vulnerability by focusing on emerging businesses and smallholder farmers with the capacity to grow and create economic opportunities. It has over 20 years of experience working with MSMEs and financial institutions in the agriculture space, and Climate-Smart Agriculture (CSA) is one of its strategic focus areas. The MIF focuses on three key aspects of CSA: (i) Improving Productivity; (ii) Climate Mitigation; and (iii) Climate Adaptation. Overall the MIF approves $85M of grant, loan, and equity projects each year, co-financing each one with a local partner.

The key strengths of the MIF include its high risk tolerance, a mandate for innovation and extensive experience with non-reimbursable grant funding, as well as unsecured lending to non-bank financial institutions, cooperatives and small-holder producers’ associations.

As examples of MIF experience, the following two projects have been facilitated by external climate funds:

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34 Also see NDC analysis under section C.1.
• Investment in INOCAS, a Brazilian agroforestry system. MIF is investing Forest Investment Program (FIP) equity into a company that implements an innovative agroforestry system with significant environmental benefits on the lands of smallholder farmers. This project would not have been possible without the long term patient capital of the FIP.

• Guarantee fund for forestry operations in Mexico. With FIP funds, this project lends to community and small forest enterprises in Mexico. External funds are being used lend, couples with grant resources from the MIF.

Additional MIF experience follows, first, with MIF experience managing facilities, then with selected examples of individual MIF agricultural projects:

**MIF Facilities**

**ECOMICRO**

EcoMicro has been one of the leading Technical Cooperation Programs in Latin America, focused on “Green Financial Products” and managed and deployed by the Inter-American Development Bank’s Multilateral Investment Fund (MIF). In collaboration with Global Affairs Canada, the MIF and Nordic Development Fund, the Facility has secured USD 17 million in funding and allocation.

EcoMicro partners with Financial Institutions to create Green Finance Products that build resilience of MSMEs and low-income households to Climate Change. This is an innovative approach to developing products that facilitate access to sustainable, low-cost adaptation technologies for MSMEs and low-income households. The approach considers the affordability, reliability and commercial viability of a particular technology for the end-user client.

In the program, the MIF funds projects for financial intermediaries who for the most part have an exposure to the agricultural sector, in which they receive technical assistance to design products such as:

• productive loans for those interested in becoming suppliers/retailers of energy efficiency, adaptation products and/or services and climate smart agriculture investments.

• consumer loans that promote the increased adoption and use of these technologies.

• financing for farms that are installing climate-smart technologies.

• providing micro-insurance for MSME asset protection including crop insurance for smallholder farmers.

EcoMicro was selected as a “2014 Lighthouse Activity” by the UNFCCC’s Momentum for Change Initiative that highlights examples of climate solutions. To date, the ECOMICRO facility has executed 13 projects 4 of which have been completed successfully. By 2020 it is expected that the facility will have approved an additional 15-10 projects. So far EcoMicro has also leveraged an additional USD 2.1 million in loan portfolio from local FIs in the 4 projects closed so far.

Some financial institutions that have received EcoMicro support include: Caja Arequipa in Peru, FDL Nicaragua, Apoyo Integral El Salvador, and Te Creemos Mexico. In the case of Te Creemos, after the pilot was concluded, the financial institution expanded green lending to become 15% of their total portfolio. This Mexican institution has also attracted close to USD 10 million in additional investment to expand the model they tested with EcoMicro.

**PROADAPT**

PROADAPT was launched in 2013 by the Multilateral Investment Fund (MIF) of the Inter-American Development Bank (IDB) in partnership with the Nordic Development Fund (NDF). The NDF and the MIF contributed EUR 3,500,000 and USD 5,000,000 to PROADAPT, respectively. PROADAPT was launched as a Facility to improve climate resilience among micro, small and medium sized firms and to promote business models, financial, tools and market knowledge that foster opportunities in climate resilience. By the second quarter of 2017 PROADAPT had approved 10 technical assistance projects in 14 countries: Argentina, Bahamas, Belize, Bolivia, Brazil, El Salvador, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay and Saint Lucia. The program has funded market assessments within sectors such as agriculture, fisheries, water and sanitation, and transportation. PROADAPT has also supported an ongoing market study (co-financed by NDF) in three regions (Colombia, South Africa and the Philippines) on the market for climate resilience solutions, a study on the monitoring and evaluation of climate resilience projects, the development of a tool for financial institutions to evaluate the financial costs of climate risks and financial benefits of greater resilience in their portfolios, and
an inquiry into gender and climate resilience. To date, PROADAPT has committed over USD 10 million in technical assistance and leveraged a total of USD 21 million in the region.

SAFE
The Sustainable Agriculture, Food and Environment (SAFE) Platform is a multi-stakeholder alliance initiated by the MIF, coordinated by Hivos and co-founded by private sector participants, donors and non-governmental organizations that share a common vision: improving business processes, addressing the challenges of sustainable agriculture while including smallholder farmers in global value chains. Platform leverages existing knowledge, expertise, and resources from all its members in order to implement a series of projects that pilot or scale up innovative value chain approaches. The platform works with coffee and cocoa producers, and later will include other crops with replication potential. The two sub-regions that the project initially focuses on are Central America and the Andean region, where the founding members and the MIF believe interventions can achieve greater impact. The Platform counts among its members companies such as Starbucks, Kuerig Green Mountain, ECOM, S&D Coffee and Tea, and Farmers Brothers.

The Platform works through the implementation of strategic projects with capacity to disseminate knowledge, scale or provide critical finance. Up to date 4 projects have been approved for a total of $13 million including a combination of grants and loans and investments. The Platform has committed USD 45 million for five years. The projects approved so far include:

Safe Project Example: Blue Harvest. This flagship project of SAFE promotes water resource and landscape management with a focus on water-smart agricultural approaches to coffee watersheds in Central America. The implementing partners are Keurig Green Mountain and Catholic Relief Services and the direct beneficiaries are 2,500 small farmers and 1,000 local actors. By the end of the project it will reach 60,000 indirect participants, which include family members of farmers and people from the communities who use water from targeted water sources. The project is executed in Honduras, El Salvador and Nicaragua.

MIF Project Examples:

Agroforestry: In 2017 the MIF funded a project, executed by the Financial Institution FAMA and Rainforest Alliance to support MSMEs in four agroforestry value chains in diverse regions of Honduras. The objective of the project, which consisted of a $1M loan to FAMA and a $1M grant to Rainforest Alliance, is to build the capacity of forest enterprises to receive and execute loans through greater access to bank financing, with the aim of increasing sales, strengthening the sustainable management of natural resources against the threat of deforestation, and improving resilience with climate-smart practices.

The project will develop financial products tailored to the MSMEs specific needs, with a view to facilitating credit. It will also provide technical assistance to 30 MSMEs in four production chains—i.e. forestry, coffee, cocoa, and rambutan—to improve their organizational, administrative, financial, business, and productive processes, implementing good management practices for accessing preferential markets, through certification with the Forest Stewardship Council and the Sustainable Agriculture Standard of the Sustainable Agriculture Network.

The project will be implemented by the Rainforest Alliance in conjunction with Asociación Familia y Medio Ambiente (FAMA), a financial institution. Several partners will be involved in scaling the project: the Honduran Institute for Cooperation and Self-development (ICADE); the Government of Republic of Honduras, and other local partners. The project will reduce CO2 emissions, increase productivity, and help improve the socioeconomic conditions of communities located in highly vulnerable regions. It will also support processes to strengthen social development and sustainable management in indigenous territories that have been recently titled by the Honduran State, and preserve areas rich in biodiversity under threat from deforestation.

Farmer Loan Program with Starbucks: This project contributes to the economic and social empowerment of 2,000 small coffee producers in the departments of Antioquia and Chocó. Through a set of technology tools, field agents and financial services, the project seeks to improve quality, productivity and sustainability in the coffee crops owned by Small Holder Farmers (SHF’s). By developing individual Farm Management and Investment Plans, each farmer will be implementing commitments conducive to improving and adopting Good Agricultural Practices (GAP’s) in their farms. The project will also be testing the Alternative Risk Evaluation Tool (ARET), to unlock access to credit opportunities through a different credit analysis approach, based on farming practices rather than the usual financial requirements such as collateral.
The project includes an investment of USD 4 million from MIF and Starbucks to the implementing partner De Los Andes Cooperativa for on lending to farmers. The loan program will enable 2,000 small-scale growers (1,019 of which are women), who own farms between 0.1 and 5 hectares of land, to make investments in renovation and improved water processing equipment for depulping. The project takes place in the regions of Antioquia and Chocó in Colombia in the Municipalities of: Andes, Jardín, Betania, Hispania, Ciudad Bolívar and Carmen de Atrato.

In addition to MIF and CCS staff, additional support and local knowledge will be provided by the Executing Entities, which will play a key role in the sourcing, structuring, implementation and supervision of the deals entering the Facility’s portfolio. The identified partners are all very well established and recognized players in the agricultural business in the targeted countries, and will provide the necessary linkages between the provision of financing and the local end-beneficiaries.

E.5.3. Engagement with NDAs, civil society organizations and other relevant stakeholders

Please provide a full description of the steps taken to ensure country ownership, including the engagement with NDAs on the funding proposal and the no-objection letter. Please also specify the multi-stakeholder engagement plan and the consultations that were conducted when this proposal was developed.

As also reported in Section C, potential demand for this Facility has been identified and estimated by the IDB Group, through a market survey and an internal assessment. In order to identify demand and structure an adequate response strategy, consultation and joint analysis took place and/or is ongoing with potential the partners that have been identified in the initial stages of conceptualization, including FIs and potential Fund Managers, governmental agencies, institutions and authorities, and civil society. Some examples of such engagement processes are provided below:

a) Catastrophic climate events parametric insurance: for this product, the first design and approval process by the National Banking Authority occurred in Guatemala during 2015-2016. More recently, during Q4 of 2016, the first regional conference for LAC Governments on this issue took place in Guatemala, where IDB/MIF and MiCRO established a dialogue on first experience and market readiness in Guatemala, and future replication potential in different countries of LAC, assessing opportunities and challenges, sharing knowledge and early best practices, as the same as how those can be replicated in neighboring countries. The need of the first reinsurer for such market instrument is one of the key gaps identified.

b) Financing biodigesters and efficient cook stoves in Guatemala. This potential financing opportunity is complementary to a firewood demand management NAMA initiative, which was structured through an active consultation process, involving multiple stakeholders and Government institutions, and taking into account inputs and support from the Ministries of Environment and Economy. This potential Facility sub-project would support the National REDD+ Strategy, which has been drafted with extensive consultations during last two years in Guatemala. Firewood is one of the main national deforestation drivers. One of the key identified gaps was the scarcity of adequate support for financing efficient and clean technologies to reduce firewood consumption in Guatemala.

c) Equity and long term finance is one of the key absent pieces to increase investments in restoring landscapes aligned to national NDCs and REDD+ National strategies in targeted countries. The Governments of Guatemala and Mexico are also informed that future support from this proposed GCF funding would help support such investments in said countries.

Examples provided show that the Accredited Entity worked very closely with the governments, private sector and civil society of the countries where sub-projects to be financed with Facility’s resources will be implemented. The design team has engaged directly with the NDAs of the countries included in this proposal, to present its objectives, its structure and its expected impacts and to incorporate any feedback into the Facility design. Furthermore, the concept design has benefitted by current and recent national and regional consultations with relevant stakeholders, including local communities, carried out in the interested countries within the Forest Investment Program (FIP) and Forest Carbon Partnership Facility (FCPF) context.

As far as Guatemala is concerned, for example, the IDB in collaboration with the Government of Guatemala has organized a national consultation on this area of forest-related activities, as well as four consultations at sub-national level. All these consultations, which will be reflected in the FIP Investment Plan of Guatemala, have consistently highlighted the need of tailored financial instruments for climate smart agriculture and sustainable forestry. In Mexico, both the national consultations under the preparation of the national REDD Strategy (“Estrategia Nacional de Reducción de Emisiones por Deforestación y Degradación Forestal”), as well as the outcomes of the meetings on the implementation of FIP projects
hosted by the Mexican National Commission on Forests (Conafor), which were held in Oaxaca last June have all highlighted similar needs.

In addition to the above, the design team have further sought to uphold the principle of country ownership by leveraging their respective internal governance structures, which include country representation of all the countries included in this proposal. This was done through engagement and consultation with the Country Representatives on the IIC and IDB’s respective Board of Directors.

NGOs and CSOs will be consulted in the development of individual sub-projects under the Facility, and, in some cases, may be recipients of technical assistance funds either as beneficiaries or as service providers (as agricultural extension agents, business skills training, or other services).

Furthermore, IDB is organizing, in collaboration with the GCF Secretariat, a workshop for local financial institutions in the Facility's target countries. The objective of this workshop would be to strengthen local financial institutions' knowledge and understanding on GCF policies and procedures. IDB is promoting local financial institutions exposure to GCF both including them in the execution of projects where the Bank is the accredited entity, or helping those institutions who are seeking direct accreditation to perform a first gap analysis vis a vis GCF performance standards.

E.6. Efficiency and Effectiveness
Economic and, if appropriate, financial soundness of the project/programme

E.6.1. Cost-effectiveness and efficiency

Describe how the financial structure is adequate and reasonable in order to achieve the proposal’s objectives, including addressing existing bottlenecks and/or barriers; providing the least concessionality; and without crowding out private and other public investment.

Climate-smart agriculture investments face a number of barriers. Investments in climate-smart practices are longer term and require additional working capital, which is often in short supply for agricultural companies. Pay back for such investments typically takes place over years rather than months and requires longer loan tenors than are typically available. Finally, there are significant information and capacity barriers fueling perceptions that climate-smart agriculture investments are higher risk. As a result, climate-smart agriculture opportunities are often missed. The Facility is designed to address these barriers by first loss collateral partial guarantees, anchor equity investments, concessional debt financing and grants to catalyze climate-smart agriculture investments from the private sector, commercial lenders and IDBGs own capital.

The Facility is designed to deploy resources on a concessional basis to overcome credit and risk barriers and “crowd in” the private sector to projects that otherwise might not materialize. The Facility’s resources for sub-projects will be allocated based on a case-by-case basis to address specific barriers identified in each sub-project. The criteria of least concessionality will be applied in the structuring of sub-projects. Accordingly, concessional terms will only be made available when necessary for any sub-project to be financially viable and will not be greater than the minimum needed to realize the intended investment. The type, amount and terms of the Facility investment will be determined through an analysis of the cost and risk barriers of the sub-project.

Please describe the efficiency and effectiveness, taking into account the total project financing and the mitigation/adaptation impact that the project/programme aims to achieve, and explain how this compares to an appropriate benchmark. For mitigation, please make a reference to E.6.5 (core indicator for the cost per tCO2eq).

The following effectiveness and efficiency ratios are expected for the Facility:

- Estimated cost per tCO2e (total investment cost/expected lifetime emission reductions): US$ 17.1 / tCO2e
- Estimated cost per tCO2e for the GCF funding: US$ 2.1 / tCO2e

E.6.2. Co-financing, leveraging and mobilized long-term investments (mitigation only)

Please provide the co-financing ratio (total amount of co-financing divided by the Fund’s investment in the project/programme) and/or the potential to catalyze indirect/long-term low emission investment.

Total co-financing leverage ratio: 1:6.9

Private Sector leverage ratio: 1:6.4

Financial Institutions, Corporates and Private Equity Irs are expected to co-finance individual underlying sub-projects, beginning at the time when each individual sub-project is approved. EEs receiving Technical Assistance funds will be expected to co-finance TA packages at a 1:1 ratio. They will also be expected to leverage their balance sheets for on-lending and investment. The indicative pipeline has been built based on information received from potential partners, who have demonstrated their interest in participating in the Facility. That said, letters of commitment have not been sought, as these projects have not yet received eligibility from IDB management (the first step for individual sub-project approval) and the team does not want to create unreasonable expectations.

E.6.3. Financial viability

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35 Each GCF dollar is expected to leverage US$ 6.9 in co-financing.
Please specify the expected economic and financial rate of return with and without the Fund’s support, based on the analysis conducted in F.1. Please describe financial viability in the long run beyond the Fund intervention. Please describe the GCF’s financial exit strategy in case of private sector operations (e.g. IPOs, trade sales, etc.).

Expected financial return of the funding provided to the Facility will depend on the type and distribution of the financial instruments to be supported. The following table presents the expected return associated with the three financial instruments proposed:

<table>
<thead>
<tr>
<th>Financial instrument</th>
<th>Annual Interest rate / fee (%)</th>
<th>Annual internal rate of return (%)</th>
<th>Tenor (years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senior long term loan</td>
<td>4.5</td>
<td>3-4</td>
<td>8-12</td>
</tr>
<tr>
<td>Equity investments</td>
<td>N/A</td>
<td>7-10</td>
<td>7-14</td>
</tr>
<tr>
<td>Guarantees</td>
<td>3</td>
<td>3-4.5</td>
<td>15</td>
</tr>
</tbody>
</table>

The focus of the proposed CSA risk sharing Facility is to catalyze investments that would otherwise not occur, demonstrating the viability of new products and models. Thus, the concessionality of GCF and IDB/MIF funding is not necessarily directed toward reducing the interest rate of clients, but rather is focused on:

1) Designing, validating and piloting innovative specific climate land use financial products, such as catastrophic parametric MSMEs insurances and equity funds;

2) Serving as an anchor investor to leverage private sector funding into climate-smart long term investments and, thus, developing a first-of–its-kind private equity industry in the region for Land use Climate investments;

3) De-risking long term debt on lender’s balance sheets, so that they can increase the size (in many cases from a baseline of zero) of their long-term land use related portfolio, having less capital provisions (role of Guarantees);

4) Demonstrating that these projects can be profitable, and that the risk level is tolerable in a non-concessional environment, so that future products are available from the market;

5) Influencing policy makers on the broad range of de-risking financial instruments and structures that can be developed to unlock climate finance for land use sector.

Sustainability is based on the following assumptions:

a) De-risking mechanisms proposed in this initiative are demand-driven as all of them came from a selection of experienced regional private financial market participants. From these preliminary EEs alone, demand from for these financial products is significantly higher than the amounts requested in this proposal;

b) The performance record of financial instruments/products offered through sub-projects under this Facility will be positive in terms of financial margins and reflows/debt payment, creating momentum for replication and scale.
### E.6.4. Application of best practices

Please explain how best available technologies and practices are considered and applied. If applicable, specify the innovations/modifications/adjustments that are made based on industry best practices.

Climate-Smart Agriculture (CSA) is an integrated approach to mitigate climate change and build resiliency to adverse climate impacts while at the same time improving agricultural productivity. According to the United Nations’ Food and Agriculture Organization (FAO), CSA can be defined as a practice that “contributes to the achievement of sustainable development goals. It integrates the three dimensions of sustainable development (economic, social and environmental) by jointly addressing food security and climate challenges. It is composed of three main pillars: (i) sustainably increasing agricultural productivity and incomes, (ii) adapting and building resilience to climate change; and (iii) reducing and/or removing greenhouse gases emissions, where possible”\(^{36}\).

The application of CSA technologies and practices will differ from project to project in the two focus countries, depending on the specific challenges and opportunities as well as climatic conditions and other factors. CSA can range from agroforestry, improved livestock management, efficient irrigation, integrated pest management to the promotion of silvopastoral systems and is based on the sustainable management of ecosystem services including soil and water. Both Mexico and Guatemala face specific challenges in the agricultural sector and each sub-project will be carefully analyzed to ensure that best state-of-the-art technologies and practices are used, depending on the local context, to contribute to climate change mitigation and/or adaptation, as well as to productivity gains.

For illustrative purposes, the list below presents a non-exhaustive review of Best Available Technologies (BATs) that will be considered on a case by case basis depending on the needs of each one of the Facility’s sub-project:

**Micro (drip) irrigation systems.** Such systems have been proven successful in the past to help agricultural producers with a high-water footprint and costs to mitigate the dependency on water, especially in arid regions/regions experiencing water scarcity as a consequence of climate change. Technical assistance within the sub-projects could look at cost-benefit of installing micro irrigation systems and the optimal setup depending on factors such as soil, irrigation water, location, type of crop etc.

**Agroforestry systems.** A combination of different land use systems, can provide a solution to increasing productive and sustainable land use by enhancing soil fertility and water conservation, contributing to climate change adaptation and mitigation. Agroforestry systems also provide an alternative to traditional slash-and-burn agriculture. Depending on the type of system and geography, trees are combined with crops (agrisilvicultural systems), pasture/animals are combined with trees (silvopastoral systems) or animals, trees and crops are combined together\(^{37}\) Possible applications of agroforestry systems in sub-projects will depend on factors such as location, agroecological zone, land tenure, etc.

**Sustainable soil management.** Climate change effects soil health through erratic rainfall, drought, storms and increased temperatures. These lower the water and nutrient capture in soil, lead to erosion and higher mineralization. There are successful examples of soil management practices such as integrated soil-crop-water management to enhance nutrition retention, water use efficiency and irrigation, soil restoration to improve carbon sequestration and conservation (e.g. vegetative cover, contour farming, trees etc).

**Climate smart crop production.** Success and failure of crops depend on environmental factors and is vulnerable to negative climate change impacts. Mechanisms that enhance and conserve ecosystem services such as soil conservation, integrated pest management in combination with use of high yielding varieties etc., will contribute to efficiency gains while at the same time providing ecosystem benefits. Other examples for sustainable production of crops include organic agriculture, crop diversification or land fragmentation. \(^{38}\)

**Rehabilitation/Replanting with disease-resistant cultivars.** Climate change can cause harvest losses from plant diseases. Diseases like the coffee rust fungus for example are exacerbated by climate change and threaten the livelihoods of many farmers. Rehabilitation/replanting disease affected plantations with disease resistant cultivars will be among the BATs considered for funding within this Facility.

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\(^{38}\) [http://www.fao.org/docrep/018/i3325e/i3325e.pdf](http://www.fao.org/docrep/018/i3325e/i3325e.pdf)
**Small-scale biogas**: Small-scale biogas generation from agricultural, forestry and/ or cattle waste will be considered for funding within the Facility.

**Efficient Cookstoves**: Efficient cookstoves and other clean technologies, which are integrated into national REDD+ schemes to reduce deforestation will be considered.

### E.6.5. Key efficiency and effectiveness indicators

<table>
<thead>
<tr>
<th>GCF core indicators</th>
<th>Estimated cost per t CO2 eq, defined as total investment cost / expected lifetime emission reductions (mitigation only)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Total programme financing (millions)</td>
<td>US$158</td>
</tr>
<tr>
<td>(b) Requested GCF amount</td>
<td>US$20</td>
</tr>
<tr>
<td>(c) Expected lifetime emission reductions overtime</td>
<td>9.2 million tCO2eq</td>
</tr>
<tr>
<td>(d) Estimated cost per tCO2eq ( (d = a / c) )</td>
<td>US$17.1 / tCO2eq</td>
</tr>
<tr>
<td>(e) Estimated GCF cost per tCO2eq removed ( (e = b / c) )</td>
<td>US$2.1 / tCO2eq</td>
</tr>
</tbody>
</table>

*Describe how the project/programme’s indicator values compare to the appropriate benchmarks (i.e. the indicator values for a similar project/programme in a comparable context).*

Please refer to the answer to the same question included in Section E.1.2. of this Funding Proposal.

**Expected volume of finance to be leveraged by the proposed project/programme and as a result of the Fund’s financing, disaggregated by public and private sources (mitigation only)**

Blended finance from IDB and GCF would reach a total of US$30 million, including US$20 million from the GCF and US$10 from the IDB, expected to be approved as part of each sub-project. This is expected to leverage an investment from private sector partners of approximately US$128 million.

**GCF total co-financing ratio (including funds from IDB)**: each 1 GCF US$ will leverage US$6.9 in co-financing.

**GCF private sector leverage rate**: each 1 GCF dollar will leverage US$6.4 from the private sector.
F.1. Economic and Financial Analysis

Please provide the narrative and rationale for the detailed economic and financial analysis (including the financial model, taking into consideration the information provided in section E.6.3).

The analysis was carried out at the Facility level. The Facility is expected to fund several sub-projects that include long term loans, equity investments, guarantees and grants. Given that, there are important financial differences between such instruments. The following sections provide narrative and rationale for the financial analysis carried out, related to different financial instruments. It is important to note that as the Facility’s pipeline is at the time of the approval of the programme only tentative, all figures have to be intended as indicative and for illustrative purpose only.

a) Long term Loans

This type of financial instrument is provided to intermediaries which are CSA champions supporting MSMEs in rural areas of prioritized countries. As such, the financial analysis took in consideration the average interest rate that the MIF/IDB provides to intermediaries from its Social Entrepreneurship program, as well as actual and past MIF Loans provided to financial intermediaries having land use as target sector, which are focused on providing rural community based credit in targeted countries (Libor 180 days + 3 basis points first case, Libor 180 days + 3.5 basis points for second case), 4.5% - 5 % yearly interest rate over disbursed funds).

Financial Intermediaries are lacking long term funding to expand the number of MSMEs financed for CSA implementation and accessing better markets. Besides that, the Facility would be providing funding to intermediaries that are lacking funding for financing mitigation actions based on rural adapted technologies, such as, biodigestors and efficient cook stoves, both unknown credit technologies for MSEMs specialized intermediaries, but having great impact reducing deforestation in Guatemala and improving Cattle value chain mitigation actions in Mexico.

The Facility is conceptually projected to provide US$9.72 million in long term loans to intermediaries. The IDB/MIF would finance US$4.36 million; GCF would provide US$5.36 million. Financial intermediaries are expected to contribute US$14.75 million, collateral and additional funding to the Facility, whenever those get funded from it. These long term senior loans were also projected to have maximum two years of grace period on principal payment, and were divided into two disbursements, one per year after execute loan contract. Final internal rate of return for this type of long term loan is expected to be close to 4.5 -5.6%.

b) Equity Investments

Equity operations included in this proposal are conceptualized as anchor investments that would be time limited and include an exit strategy at the time of approval. These would be first of its kind equity investments that would unlock additional international and private finance on a regional landscape restoration climate equity fund, which is expected to be first of its kind focused on Latin American countries. For example, one of the deals included in the tentative pipeline include the establishment of the first re insurer supporting MSMEs on transferring climate catastrophic risk, incorporating lessons from previous market pilot tests of such kind of insurances supported by the IDB/MIF and other donors in Guatemala. This will be of great importance to promote private financial markets participants engaging in a process of building adaptation and resilience in rural MSMEs in Latin America.

The IDB/MIF is a well-recognized early developer of the private equity in Latin America and the Caribbean. The MIF alone has supported more than 80 venture capital funds in the region; more than 50 are still active. MIF investment in such funds have been catalytic to other multilaterals and bilaterals to co invest in those funds. Equity investments from the Facility will be focused on maximizing the awareness raising potential around the innovative nature of the supported business models with the view of increasing their visibility and long term sustainability.

Expected Internal rate of return from equity investments in private equity fund is expected to be 7-10%, having long term positions between 8 and 11 years including 1 year structuring period, 2-3 years of investment period and 5-6 years reflows, and 1 year of exit strategy. Specific investment in supporting the foundation of first catastrophic re-insurance company is expected to be 7-10 years tenor and 7% internal rate of return.
Total blended (IDB/MIF and GCF) equity investments to be done by the Facility are envisaged in the region of US$14 million, with US$11 million from GCF and US$3 million from IDB/MIF. Total additional equity investments to be lever from partners are expected to be US$111 million, which shows strong anchor functionality of GCF/IDB-MIF funding as a key catalytic factor to unlock climate equity investments from private sector in the region.

c) Guarantees

Total funding for Guarantees is expected to be US$3.0 million blended funding from IDB/MIF and GCF. Guarantee provided is collateral to financial intermediaries’ debt portfolio on sustainable agroforestry. Guarantee flat return is projected to be 0.5%. Guarantee mechanism is expected to be structured in greater detail, so improvements are possible in terms of return.

Guarantees are expected to leverage finance at a factor of 1:4 for less risky transactions and 2:5 for higher-risk transactions. This structure will allow the local financial intermediaries to take farmer risk on their own balance sheets, which is expected to unlock long-term funding for Agroforestry MSMEs in corporate value chains. The long term goal is to demonstrate to both agrocorporates and financial intermediaries that long term loans to farmers for natural assets are viable. GCF funding is providing a strong catalytic role in the sector in helping to create and expand portfolios of MSMEs working on agro forestry, forestry and sustainable crops.

d) Grants

Total blended grant funding in the Facility is expected to be US$ 3.28 million. Out of that, US$1.14 million will be funded by the MIF and US$2.14 million by the GCF.

Grants will be provided for two main purposes. First, they will provide much needed financing to fund technical assistance activities for the Facility’s end beneficiaries. Beneficiaries will receive technical assistance to improve land use practices oriented to sustainability principles, training in production, and improvement of business skills is necessary, so end beneficiaries can access and manage credit in a sustainable way. Second, grants will support technical assistance activities to the benefit of Executing Entities, whenever their business model is incipient and need support to successfully reach the clients and/or their financial instruments are not yet available on the targeted markets. Technical assistance in these cases is traditionally used to support the development and operationalization of specific instruments and products (technical, financial, legal design), as well as for activities such as approval with local banking authorities and market readiness.

Besides that, whenever the financial product/instrument is innovative, communication and awareness rising to consumers and local stakeholders is necessary to catalyze pilot demand and product validation.

*Based on the above analysis, please provide economic and financial justification (both qualitative and quantitative) for the concessionality that GCF provides, with a reference to the financial structure proposed in section B.2.*

**Concessionality and Economic Impact**

Blending of GCF resources with IDB/MIF funding will allow for the Facility to offer instruments that support financial intermediaries in overcoming some of the barriers identified above in this Funding Proposal. The concessionality of funds will allow for the Facility to support pilots which would otherwise be considered too risky by the financial intermediaries and therefore to validate first-of-its kind financial products for low emission technologies. Once such financial mechanisms are established at market place, and a successful track record is established, local partners are expected to be properly equipped to scale them up at market conditions and without the need of concessional funds. Concessionality from the GCF may not necessarily reflect itself in lower interest rates, but will more likely express its benefits in terms of allowing financial intermediaries to offer longer term capital, to more risky clients to those they would otherwise finance in the absence of the GCF/IDB funding. Another important aspect of the GCF participation is the fact that it will allow the Facility to reach a minimum scale and justify its transactional costs.

**Pricing for the Facility’s products**

For all sub-projects of the Facility, the interest rate and/or fees will be set at the time of closing, on a case-by-case basis, taking into account prevailing market conditions and following the principle of minimum concessionality. Pricing
will be established using market information in the respective country, as well as comparable transactions, taking into account the differences in structure, risk, tenor, and timing and specific needs of the sub-project that justify differentiated terms and conditions such as longer tenors, lower rates and distinct repayment profiles.

F.2. Technical Evaluation

Please provide an assessment from the technical perspective. If a particular technological solution has been chosen, describe why it is the most appropriate for this project/programme.

Climate-Smart Agriculture is an integrated approach to mitigate climate change and build resiliency to adverse climate impacts while at the same time improving agricultural productivity. Climate-Smart Agriculture does therefore not consist of a set of a BATs that can be universally applied and this proposal is not limited to one technology. Approaches, measures and technologies for Climate Smart Agriculture investments will be analyzed on a case-by-case basis, taking into consideration specific challenges, local context, climatic conditions and many other factors.

Drip irrigation for example is a proven technology to improve water efficiency, reduce costs and decrease the dependency on the ecosystem service water. Different forms of agroforestry systems can be used to enhance productive and sustainable land use, improve soil fertility and conserve conservation. These systems contribute to both mitigation and adaptation. In order to choose the most appropriate system, factors such as location, microclimate, land tenure or agroecological zone are taken into consideration. The sustainable management of soil will both help to mitigate the negative impact of climate change on soil health, increase nutrition retention and improve carbon sequestration, among other benefits. There are different approaches for climate smart crop production, which increases productivity while providing ecosystem benefits. Conservation agriculture, cover cropping, alterations in cropping patterns and crop rotation, integrated pest or weed management are some of the approaches that can be explored based on the specific location context.\(^39\) Climate change can exacerbate certain plant disease such as the coffee rust fungus and the replanting with disease resistant cultivars is a climate change adaptation measure to be considered as one of the BATs for this proposal. Small-scale biogas generation from agricultural, forestry and/or cattle waste will be considered for funding within the Facility.\(^40\) For more details on technologies please also see section E.6.4. (Application of best practices).

F.3. Environmental, Social Assessment, including Gender Considerations

Describe the main outcome of the environment and social impact assessment. Specify the Environmental and Social Management Plan, and how the project/programme will avoid or mitigate negative impacts at each stage (e.g. preparation, implementation and operation), in accordance with the Fund’s Environmental and Social Safeguard (ESS) standard. Also describe how the gender aspect is considered in accordance with the Fund’s Gender Policy and Action Plan.

Environmental and social considerations.

Based upon the nature of this Facility, there may be moderate direct environmental, social or health and safety (ESHSS) and labor risks and impacts. To that end, specific environmental due diligence is required on each Financial Intermediary under the Facility. The potential key ESHS and labor risks and impacts associated with this Facility are those related to the recipient FIs: (i) financial, legal and reputational credit risks associated with existing finance activities; and (ii) direct ESHS risks and impacts related to financing activities associated with IDB’s funds.

As per the standards of the IDB Environmental and Safeguards Compliance Policy and other IDB Policies, all FIs acting as EEs for this programme will be required to develop and implement an Environmental and Social Management System commensurate to the risks, and approved by the IDB Group prior to first disbursement. The development of each bank’s ESMS will include incorporation of a policy, set of basic procedures, categorization guide, training, and inclusion of specific legal environmental and social clauses for sub-borrowers to ensure application of the IDB Exclusion List, application of local law, and management of any particular high risk impacts. Additionally, IDB Group will make available to FI borrowers the Global Forest Watch Finance platform, a tool developed for FIs to screen individual operations for deforestation risk, manage and report on operations at the portfolio level, and track individual action


\(^{40}\) The described areas are examples of CSA approaches and technologies and should not be considered as exhaustive list.
plans. Only sub-projects that are qualified as category B and C under IDB policies will be funded by the Facility. No category “A” transaction will be eligible for funding under this programme.

For a more detailed description, please refer to the Environmental and Social Management Report.

**Gender Considerations.**

As already described under E.3., the Facility is expected to generate positive impacts on women. To ensure the Facility’s effectiveness in achieving gender-related objectives, its design included the preparation of a gender assessment and a Gender Action Plan (GAP), outlining the key components of the programme’s gender strategy. An assessment of the gender-sensitive development impact potential will be conducted during the preparation of individual sub-projects under the Facility. Each sub-project will have to adopt a standard approach to monitoring gender–disaggregated indicators, as to ensure each sub-project can feed into the Facility’s overall indicators system. In addition to funding the activities described above, to support FIs in developing women-friendly products, technical assistance resources will also be used to provide women farmers training in financial and non-financial skills to improve the way they manage their farms, as well as training in access and usage of climate and weather data to support farm-planning activities. The eligibility criteria and selection methods to identify and select the participants to the women-focused training activities will be defined by the specific consulting activities to be financed with the TA envelope.

**F.4. Financial Management and Procurement**

*Describe the project/programme’s financial management and procurement, including financial accounting, disbursement methods and auditing.*

Financial resources from the GCF will be managed according to the general provisions of the AMA between the GCF and the IDB. For this operation, a Trust fund (the “GCF Account”) will be established and managed by IDB to receive the GCF Proceeds under this programme. GCF resources will be transferred to the GCF Account at the IDB, based on the forecast of expected approval and disbursement requests of sub-projects, with sufficient anticipation to ensure disbursement obligations under the respective loan/guarantee/equity agreements can be properly met. Based on such sub-project disbursement requests, the IDB will request, for each underlying transaction, commitment of GCF resources held in the GCF Account to a specific sub-project. GCF funds will be held in trust by the IDB and will not be commingled with the IDB’s funds, nor are they to be included in the assets of the IDB.

The GCF Account will provide funding for underlying loans, guarantees and equity investments. Reflows from those transactions will be deposited in the same Facility trust account (principal plus interest, fees and capital gains). Cumulative liquidity earned by the GCF Account will be used to finance new projects that comply with Facilities’ criteria, providing the Facility with its revolving nature. The revolving nature of the Facility will end at the end of year 8 from the programme’s inception. From year 9, the Facility will start providing reflows to GCF and IDB/MIF, based on availability of cumulative reflows received from underlying loans, guarantees and investments to the GCF Account. Following this scheme, three bullet repayments are envisaged from the Facility account to GCF and MIF respectively, which will be occurring in years 9, 12 and 15.

Disbursements into individual sub-projects will be made according to the eligibility criteria established in the FAA, to include the size of the transaction, tenor, and certain debt-to-equity criteria, among other. Reflows (in the form payments of principal, interest or fees) will be made from sub-projects to the Facility’s payment account at the IDB, and from there to the GCF account held by IDB, and subsequently, following any AMA and FAA provisions, to the GCF.

At the sub-project level, GCF loans, guarantees and equity investments will be recorded in the IDB/MIF’s financial products’ administration system, and as well at the IDB for accounting purposes. Amounts due will be calculated and invoiced to the borrowers, and the value and transactions of equity investments and/or guarantees will be closely monitored by MIF investment specialists. Any operations with arrears or other issues are included in a monthly loan portfolio report and followed-up by investment/portfolio officers. As part of a monthly closing process, reports are generated detailing the amounts committed, disbursed, and repaid for the month for each transaction. In terms of financial reporting obligations from sub-projects, annual delivery of financial statement is an information covenant in
agreements for each sub-project, and thus contractually required from borrowers. Annual Investment Supervision reports are also prepared for each transaction.

IDB will require the Executing Entities’ compliance with supervision responsibilities in accordance with the AMA with regard to each sub-project. A single IDB project team will represent the interests of both IDB and GCF in negotiating their participation in the financing, as well as in the execution, project supervision and portfolio management of the financing, including the exercise of any remedies in connection with any defaults or workouts. At the sub-project level, relevant IDB environmental and social safeguards standards will be applied in accordance with the AMA and/or such other arrangements to be entered into by the parties.
**G.1. Risk Assessment Summary**

Please provide a summary of main risk factors. Detailed description of risk factors and mitigation measures can be elaborated in G.2.

There are operational, financial, social and environmental risks related to sub-projects to be executed under the Facility. The risks range from information risk, policy risk, financial viability risk to risk related to environmental and social safeguards, which are detailed in the section below. The longstanding experience by the IDBG in managing those risks in its transactions will allow the IDB and its executing partners to successfully mitigate them in sub-projects of the Facility by, among other things, providing technical assistance to sub-projects, proactive communication with policy makers and utilizations of IDBGs wide network of country specialists in the field, application of project due diligence and use of IDBs social and environmental risk procedures.

Mitigating climate change risks in the LAC region will be the major added-value of the Facility. The IDB Group has made climate change adaptation and mitigation its priority in recognition of this threat and the proposed Facility will enable final beneficiaries to become more resilient to identified threats.

**G.2. Risk Factors and Mitigation Measures**

Please describe financial, technical and operational, social and environmental and other risks that might prevent the project/programme objectives from being achieved. Also describe the proposed risk mitigation measures.

<table>
<thead>
<tr>
<th>Selected Risk Factor 1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Information risks (high):</strong> The benefits of climate-smart agriculture technologies and practices are not well understood by some private sector companies and investors. Additionally, project developers sometimes do not have fully-developed business plans, making their project unbankable.</td>
</tr>
<tr>
<td><strong>Risk category</strong></td>
</tr>
<tr>
<td>Other</td>
</tr>
</tbody>
</table>

**Mitigation Measure(s)**

Please describe how the identified risk will be mitigated or managed. Do the mitigation measures lower the probability of risk occurring? If so, to what level?

MIF will support sub-projects with technical assistance resources to help quantify benefits to companies and to develop business plans, as well as deliver capacity building programs.

<table>
<thead>
<tr>
<th>Selected Risk Factor 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Policy risks (low):</strong> Unforeseen shifts in local or national policies regarding land use could adversely affect investment economics. There is no history in the countries targeted of instances where payments in US$ to foreign accounts have been endangered or otherwise temporarily or permanently suspended through executive action.</td>
</tr>
<tr>
<td><strong>Risk category</strong></td>
</tr>
<tr>
<td>Other</td>
</tr>
</tbody>
</table>

**Mitigation Measure(s)**
Please describe how the identified risk will be mitigated or managed. Do the mitigation measures lower the probability of risk occurring? If so, to what level?

A mitigant to this risk is the information that will be generated on the positive benefits of these CSA investments, and communicated to and shared with national policy-makers that could help to reduce negative policy shifts.

**Selected Risk Factor 3**

<table>
<thead>
<tr>
<th>Description</th>
<th>Risk category</th>
<th>Level of impact</th>
<th>Probability of risk occurring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insufficient demand (medium): Given the innovative nature of investments supported by this proposed Facility, there is a risk of insufficient bankable projects.</td>
<td>Technical and operational</td>
<td>Medium (5.1-20% of project value)</td>
<td>Low</td>
</tr>
</tbody>
</table>

Mitigation Measure(s)

Please describe how the identified risk will be mitigated or managed. Do the mitigation measures lower the probability of risk occurring? If so, to what level?

IDB Group has already contacted several possible implementation partners and has developed a pipeline of possible investments. In addition the IDBG will use its wide network of country specialists in the field to seek projects and will provide technical assistance resources to identify and develop projects, mitigating this risk.

**Selected Risk Factor 4**

<table>
<thead>
<tr>
<th>Description</th>
<th>Risk category</th>
<th>Level of impact</th>
<th>Probability of risk occurring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial viability of projects (low): if projects are not financially successful, it would potentially undermine environmental and social benefits generated by the investments.</td>
<td>Financial</td>
<td>High (&gt;20% of project value)</td>
<td>Low</td>
</tr>
</tbody>
</table>

Mitigation Measure(s)

Please describe how the identified risk will be mitigated or managed. Do the mitigation measures lower the probability of risk occurring? If so, to what level?

In order to address this risk, IDB Group will apply its regular financial due diligence process to every project under the Facility.

**Selected Risk Factor 5**

<table>
<thead>
<tr>
<th>Description</th>
<th>Risk category</th>
<th>Level of impact</th>
<th>Probability of risk occurring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excluded activities risks (low): Agricultural projects can imply environmental risks such as land use change, negative biodiversity impacts, and work in high-risk value chains. And Indigenous peoples risk (low): Projects may be implemented in areas with high concentrations of indigenous peoples.</td>
<td>Social and environmental</td>
<td>Low (&lt;5% of project value)</td>
<td>Low</td>
</tr>
</tbody>
</table>

Mitigation Measure(s)
Please describe how the identified risk will be mitigated or managed. Do the mitigation measures lower the probability of risk occurring? If so, to what level?

Mitigation measures for excluded activities risks: Because this Facility is designed to support climate-smart agriculture, sub-projects will be selected based on their ability to have a positive impact on environmental indicators. In addition, all sub-projects will be screened and classified according to IDB social and environmental risk procedures (see http://www.iadb.org/document.cfm?id=39430535).

Mitigation measures for Indigenous peoples risk: The IDB Group has significant experience implementing projects in indigenous areas. The MIF is currently implementing a FIP project in communally held lands in Mexico with a high degree of success. Sub-projects with potential to impact indigenous populations will include measures to ensure that consultations with local communities are held during project design.

Other Potential Risks in the Horizon

No other potential risks expected in the horizon.

* Please expand this sub-section when needed to address all potential material and relevant risks.
H.1. Logic Framework.
Please specify the logic framework in accordance with the GCF’s Performance Measurement Framework under the Results Management Framework.

### H.1.1. Paradigm Shift Objectives and Impacts at the Fund level

<table>
<thead>
<tr>
<th>Paradigm shift objectives</th>
<th>Expected Result</th>
<th>Indicator</th>
<th>Means of Verification (MoV)</th>
<th>Target</th>
<th>Assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Shift to low-emission sustainable development pathways</strong></td>
<td><em>Total number of direct beneficiaries</em></td>
<td>Facility Monitoring System42</td>
<td>0</td>
<td>400,000 direct beneficiaries</td>
<td>Aggregate of beneficiaries from project profiles of sub-projects. In cases where beneficiaries were calculated as farms, with no associated estimate of individuals, a proxy of 5 individuals to a farm was used. In the case of the guarantee fund, no estimate was made of individuals, as guarantees would go to farms.</td>
</tr>
<tr>
<td><strong>Increased climate-resilient sustainable development</strong></td>
<td><em>Total number of indirect beneficiaries (technology providers, extension services, value chain actors.)</em></td>
<td>Firm service providers are reported by projects in reporting system.</td>
<td>0</td>
<td>6 firms (CSA service providers)</td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>Volume of finance leveraged by Fund</em></td>
<td>Facility Financial Information System</td>
<td>0</td>
<td>US$60 MM</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>US$128 MM</td>
<td></td>
</tr>
<tr>
<td></td>
<td>M4.1. Tons of carbon dioxide equivalent (tCO2eq) reduced or avoided (including)</td>
<td>Facility Monitoring System43</td>
<td>0</td>
<td>4MM tCO2eq</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>9.2MM tCO2eq</td>
<td></td>
</tr>
</tbody>
</table>

41 Information on the Fund’s expected results and indicators can be found in its Performance Measurement Frameworks available at the following link (Please note that some indicators are under refinement): [http://www.gcfund.org/fileadmin/00_customer/documents/Operations/5.3_Initial_PMF.pdf](http://www.gcfund.org/fileadmin/00_customer/documents/Operations/5.3_Initial_PMF.pdf)

42 Each Executing Entity will collect sub-project level data leveraging their existing data collection and monitoring systems or establishing new data collection and monitoring systems at sub-project level. Each sub-project will have a specific Result Matrix/Logical Framework, which will include the core Facility indicators presented in this funding proposal, and any additional project specific indicator with potential to provide information on the climate and development impacts of the specific sub-project. The data for each core Facility indicator monitored at sub-project level will be fed into the Facility monitoring system, which will use existing IDB systems (Convergence project monitoring system, MIF Project Monitoring System) for monitoring projects. The monitoring system will be directly linked to the Facility level reporting system.

43 Ibidem.
<table>
<thead>
<tr>
<th>sustainable forest management and conservation and enhancement of forest carbon stocks</th>
<th>increased removals) as a result of Fund-funded projects/programmes-forest and land-use sub-indicator</th>
<th>Facility Monitoring System(^{44})</th>
<th>0</th>
<th>125,000 beneficiaries</th>
<th>244,850 beneficiaries</th>
<th>Increase in productivity (yield/hectare) will be used as a proxy for increase in income or avoidance of lost income, so that MSME producers are better able to cope with the adverse effects of climate vulnerability and change. However, the exact geographic area of the intervention will be defined in detailed investment strategies to be finalized at a later stage. All portfolio except senior loan REDD+ Guatemala and Sr. Loan Biodigestors.</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1.0 Increased resilience and enhanced livelihoods of the most vulnerable people, communities and regions</td>
<td>A.1.2 Number of males and females benefiting from the adoption of diversified, climate-resilient livelihood options (including fisheries, agriculture, tourism, etc.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\(^{44}\) Ibidem.
### H.1.2. Outcomes, Outputs, Activities and Inputs at Project/Programme level

<table>
<thead>
<tr>
<th>Expected Result</th>
<th>Indicator</th>
<th>Means of Verification (MoV)</th>
<th>Base-line</th>
<th>Target</th>
<th>Assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Project/programme Outcomes</strong></td>
<td>Outcomes that contribute to Fund-level impacts</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M9.0 Improved management of land or forest areas contributing to emissions reductions</td>
<td>M9.1 Hectares of land or forests under improved and effective management that contributes to CO₂ emission reductions</td>
<td>Facility Monitoring System⁴⁵</td>
<td>0</td>
<td>100,000 hectares</td>
<td>Aggregate of hectares from project profiles.</td>
</tr>
<tr>
<td>Improved farm productivity</td>
<td>Average percentage increase in farm productivity, against the baseline, across all end-beneficiary farms. (average across sub-projects)</td>
<td>Facility Monitoring System⁴⁶</td>
<td>0</td>
<td>10%</td>
<td>Productivity can be impacted by exogenous factors such as management changes in the farm, weather, disease.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>10%</td>
<td></td>
</tr>
<tr>
<td><strong>Project/programme outputs</strong></td>
<td>Outputs that contribute to outcomes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.Risk-Sharing Facility</td>
<td>Volume of funds made available through Facility</td>
<td>Facility Financial Information System</td>
<td>0</td>
<td>US$40 MM</td>
<td>20MM GCF funding 60MM leveraged from other partners</td>
</tr>
</tbody>
</table>

---

⁴⁵ Ibidem.  
⁴⁶ Ibidem.
<table>
<thead>
<tr>
<th>Sub-projects Investments and Technical Assistance</th>
<th>Number of investments</th>
<th>Facility Financial Information System</th>
<th>0</th>
<th>3 (at least)</th>
<th>5 (at least)</th>
<th>NOTE: Number of investments will be defined in detailed investment strategies to be finalized at a later stage. It is however expected that the Facility will finance between 5 and 8 transactions. This is a demand-based facility. While significant scoping has been done with potential partners, market conditions could reduce the number of investments and volume of funds deployed. The team will seek to replace any project that falls off the pipeline with a similar project to be identified.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volume of funds invested through Facility</td>
<td>0</td>
<td>US$40MM</td>
<td>US$80MM</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of Technical Co-operations (TCs) implemented</td>
<td>0</td>
<td>2</td>
<td>4 (at least)</td>
<td>NOTE: Number of TCs will be defined at the time of the finalization of the investment pipeline. See market risk above. In addition, some projects may not require TC funds. TC fund usage will be determined during project design.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Volume of funds devoted to TCs</td>
<td>0</td>
<td>-</td>
<td>$2.92 MM</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Sub-projects implementation support</td>
<td>Percentage of disbursements from IDB to sub-projects processed on-time</td>
<td>Facility Financial Information System</td>
<td>0</td>
<td>100%</td>
<td>100%</td>
<td>Disbursement requests processed on the basis of FIs’ disbursement request and covenant compliance check returns positive result.</td>
</tr>
<tr>
<td>4. Monitoring and Evaluation</td>
<td>Percentage of relevant indicators reported</td>
<td>Facility Monitoring System and Financial Information System</td>
<td>0</td>
<td>100%</td>
<td>100%</td>
<td>IDB monitoring and reporting systems are in place, and are used across the institution. These systems will be applied to this facility. Some indicators will be self-reported by clients/executeors. The Facility team will validate project status reports, but may not be able to independently validate all indicators.</td>
</tr>
</tbody>
</table>
5. Knowledge products, sustainability and scalability

| Number of final evaluations carried out | IDB/MIF Systems | 0 | - | 3 | It may be difficult to capture all data for knowledge products in reporting systems. Knowledge products may require in-situ visits by the knowledge team. |

### Activities

**Output 1. Risk Sharing Facility**

1.1. Set up Risk-Sharing Facility in IDB Group

<table>
<thead>
<tr>
<th>Description</th>
<th>Inputs</th>
<th>Reference to spending category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organize internal structure of facility</td>
<td>Terms of Reference of coordinator Inter-institutional workflow arrangements</td>
<td>n/a</td>
</tr>
</tbody>
</table>

1.2. Engage financial intermediaries and agribusinesses

<table>
<thead>
<tr>
<th>Description</th>
<th>Inputs</th>
<th>Reference to spending category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investment officers and coordinator reach out to pipeline and other potential partners</td>
<td>Communicaton materials Disseminated through IDB country offices and key investment officers</td>
<td>n/a</td>
</tr>
</tbody>
</table>

**Output 2. Sub-projects Investments and Technical Assistance**

2.1. Sub-Projects pre-feasibility assessment - eligibility of partner's proposals

<table>
<thead>
<tr>
<th>Description</th>
<th>Inputs</th>
<th>Reference to spending category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concept notes for individual projects approved by IDB management</td>
<td>Concept Note Investment team reviews proposals and prepares initial project concept note</td>
<td>g.</td>
</tr>
</tbody>
</table>

2.2. Structuring and approval of sub-projects

<table>
<thead>
<tr>
<th>Description</th>
<th>Inputs</th>
<th>Reference to spending category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project documents, budgets, and indicators are approved by relevant IDB Board. Financial projections, indicators, project descriptions. IDB project templates.</td>
<td>Investment team prepares individual project documents.</td>
<td>a.; g.</td>
</tr>
</tbody>
</table>

2.3. Identification of needs of Technical Assistance packages for selected sub-

<table>
<thead>
<tr>
<th>Description</th>
<th>Inputs</th>
<th>Reference to spending category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical Co-operations approved by relevant IDB Board TC components in investment documents.</td>
<td>Investment team prepares TC component (if</td>
<td>e.; f.; g.</td>
</tr>
</tbody>
</table>

---

47 The letters listed under this column indicate the correspondent spending category as identified under component 2 “Technical Assistance Grants” of Table 2, section B.1 of this Funding Proposal “CSA Facility funding breakdown by component”. Items marked as n/a are to be funded with sources other than the technical assistance cash resources listed in Table 2, namely in-kind and own human resources from IDB Group and/or the Project Partners/EEs.
<table>
<thead>
<tr>
<th>projects and structuring and approval of TA packages</th>
<th>to support selected projects/partners as appropriate.</th>
<th>necessary) based on needs analysis.</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2.4. Execute arrangements/ contracts/ LP agreements and manage repayments to Facility</td>
<td>Legal contracts signed with individual projects. Standard IDB repayment processes followed.</td>
<td>Legal contracts Payment requests</td>
<td>Legal team prepares contract. Finance team manages reimbursements.</td>
</tr>
</tbody>
</table>

**Output 3. Sub-projects implementation support**

<table>
<thead>
<tr>
<th>3.1. Manage compliance and reporting</th>
<th>IDB reporting systems completed on bi-annual basis by projects.</th>
<th>MIF Project Status Report System IDB Convergence system</th>
<th>Individual projects report to facility. Results validated by Facility team.</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.2. Manage disbursement processes to Sub-projects</td>
<td>Finance department disburses upon certification by team that all covenants are met, and with a disbursement request from project executor.</td>
<td>Disbursement request from executor. Covenant compliance checklist completed by IDB Team Leader.</td>
<td>Disbursement request. Financial statements. Executor report.</td>
</tr>
<tr>
<td>3.3. Performance supervision and support implementation</td>
<td>IDB reporting systems completed on bi-annual basis by projects.</td>
<td>MIF Project Status Report System IDB Convergence system</td>
<td>Individual projects report to facility. Results validated by Facility team.</td>
</tr>
<tr>
<td>3.4. Manage refloows to Facility</td>
<td>Finance department requests reimbursement in schedule with signed legal contract with executor.</td>
<td>Payment request</td>
<td>n/a</td>
</tr>
<tr>
<td>3.5. Follow exit strategies and possible upstreams</td>
<td>Facility Coordinator and Finance Department implement exit strategies as outlined in project contracts.</td>
<td>Project contracts.</td>
<td>n/a</td>
</tr>
</tbody>
</table>

**Output 4. Monitoring and evaluation**

<table>
<thead>
<tr>
<th>4.1. Design and set up programme monitoring system at Facility level (the</th>
<th>Facility entered into IDB monitoring systems (Convergence, MIF Project Status Report system)</th>
<th>Facility Coordinator ensures all indicators included.</th>
<th>Validated by Team Leader.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facility Monitoring System</td>
<td>IDB reporting systems completed on bi-annual basis by projects.</td>
<td>MIF Project Status Report System IDB Convergence system</td>
<td>Individual projects report to facility. Results validated by Facility team.</td>
</tr>
<tr>
<td>---------------------------</td>
<td>-------------------------------------------------</td>
<td>-------------------------------------------------</td>
<td>-------------------------------------------------</td>
</tr>
<tr>
<td>4.2. Performance monitoring from sub-projects to Facility</td>
<td>Evaluations contracted at intervals indicated in the timeline. Final report drafts shared.</td>
<td>TOR for evaluation. Consultant selection.</td>
<td>Evaluations will utilize all data and information systems of the facility and may include project site visits, as needed.</td>
</tr>
<tr>
<td>4.3. Carry out mid-term and final evaluations (implementation progress)</td>
<td>Assess impact evaluation feasibility in first quarter of execution of facility. If impact evaluation is feasible, include relevant indicators, execution clauses in project documents.</td>
<td>TOR for impact evaluation.</td>
<td>Co-designed with firm selected for evaluation.</td>
</tr>
<tr>
<td>4.4. Assess feasibility of performing impact evaluation and carrying it out if feasible.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Output 5. Knowledge products, sustainability and scalability

| 5.1. Identify knowledge products to allow business models scalability or replicability | Facility team designs knowledge strategy. Knowledge products are either contracted independently or included in individual projects, as needed. | Knowledge product list created. TOR developed. | Facility team to oversee. | c., d. |
| 5.2. Generate Scalability and replicability strategies and knowledge products | Individual scalability strategies included in each project. Knowledge products designed to extract lessons for scale. | Scalability sections of project approval documents. TORs. | Overseen by Facility Coordinator. Individual project teams to analyze with clients and include in documents. | c., d. |
| 5.3. Diffusion of new business models and create alliance for scalability | Facility team disseminates knowledge in IDB, GCF, and other for a. Knowledge products shared with interested audiences. | Audience mapping. Alliance building with relevant partners. | |

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48 Each Executing Entity will collect sub-project level data leveraging their existing data collection and monitoring systems or establishing new data collection and monitoring systems at sub-project level. Each sub-project will have a specific Result Matrix/Logical Framework, which will include the core Facility indicators presented in this funding proposal, and any additional project specific indicator with potential to provide information on the climate and development impacts of the specific sub-project. The data for each core Facility indicator monitored at sub-project level will be fed into the Facility monitoring system, contributing to the Facility level reporting system. The EE will then report sub-project level data to the Facility coordinator. The Facility coordinator will use IDB reporting system to feed data from sub-projects onto the Facility data.
H.2. Arrangements for Monitoring, Reporting and Evaluation

Besides the arrangements (e.g. semi-annual performance reports) laid out in AMA, please provide project/programme specific institutional setting and implementation arrangements for monitoring and reporting and evaluation. Please indicate how the interim/mid-term and final evaluations will be organized, including the timing.

Monitoring, reporting and evaluation arrangements will comply with requirements established between GCF and IDB in the AMA. Every sub-project supported by the Facility will undergo the full IDB Group project cycle, including identification, eligibility review, due diligence evaluation, credit review, approval, pre-closing review, financial closing, disbursement, supervision, project closing (i.e. once debt has been fully repaid) and evaluation. As part of the approval process, every investment supported by the GCF will be subject to an ex-ante assessment on the rationale for the project, its expected development impact and the additionality of IDBG and the GCF’s support. Such assessment will normally include an economic analysis of the main benefits associated with each specific sub-project.

Monitoring and evaluation of the proposed Facility will be managed according to the applicable IDB procedures. As such, Executing Entities will be responsible for the monitoring and reporting of sub-project specific indicators, with the framework defined by the IDB Group. Each Executing Entity (EE) will collect sub-project level data leveraging their existing data collection and monitoring systems or establishing new data collection and monitoring systems at sub-project level, as needed. The EE will then report sub-project level data to the Facility coordinator. The Facility coordinator will use IDB/MIF reporting system to feed data from sub-projects onto the Facility monitoring system. All indicators will be gender-disaggregated.

The monitoring and evaluation of the Facility execution will be managed by MIF’s Climate-Smart Agriculture Unit (CSA) in collaboration with the selected FIs. The MIFs Corporate Results Framework (CRF) will provide each investment with a results framework for monitoring development impact. The MIF CSA Unit will be responsible for tracking the impact of investments supported by GCF according to the indicators included in the CRF. The implementation progress will be tracked using the MIFs Project Status Report (PSR), a web-based tool which allows its clients and partners to actively participate in the process of reporting progress in the implementation of its projects, together with MIFs specialists in charge of supervision.

A mid-term review at year 7 will include all parameters recommended by the GCF, and will verify information gathered through the GCF tracking tools, as relevant. The mid-term review will, inter alia:

a. review the effectiveness, efficiency and timeliness of Facility implementation;

b. analyze effectiveness of implementation and Executing Entities arrangements;

c. identify issues requiring decisions and remedial actions;

d. identify lessons learned about Facility design, implementation and management;

e. highlight technical achievements and lessons learned;

f. propose any mid-course corrections and/or adjustments to the implementation strategy as necessary; and

g. verify actual direct and indirect leverage ratios. Direct relates to the Facility level, whereas indirect to the Executing Entities.

Similarly, a final evaluation will take place at the end of the Facility implementation. The final evaluation will review Facility impact, analyze sustainability of results and discuss whether the Facility has achieved its ultimate objectives. The purpose of the evaluation will be to assess if sub-projects have reached the expected results set at approval stage in several dimensions, based on the information collected from all sub-projects financed under the Facility. The final evaluation of the Facility will be performed following the guideline of the Evaluation Cooperation Group - Good Practice Standards (ECG-GPS) which requires an expanded supervision report (XSR) of the transaction once it reaches early operating maturity (EOM), at approximately 18 months after technical completion date of the investment. The evaluation will furthermore provide recommendations for follow-up activities.
As for the programme outcomes, an assessment of the programme contribution to business performance, economic development and environmental & social aspects will be performed. In particular, and to the extent possible, for each sub-project the calculation of the sub-project's Financial and Economic Rates of Return (FRR and ERR) will be completed, as much as possible, following the methodology employed ex ante, based on updated data. In order to perform these calculations, client-provided information will be used, such as updated financial model and statements. All ratings will be based on the criteria contained in the Expanded Project Supervision Report (XSR) guidelines.

Finally, IDB/MIF development effectiveness specialists will also explore the feasibility of carrying out an experimental impact evaluation to gather actionable business intelligence by robustly parametrizing the risk of the proposed financial instruments, and generate rigorous evidence about the effectiveness of each of the financial instruments to support different types of CSA MSMEs in the intervention area. For example, if excess demand for funding from the Facility is observed from one or more MSMEs segments, a “partial lottery” could be conducted to determine eligibility for funding. In this setting, the IDB Group and its partners would use objective criteria (e.g. a tailored scoring model) to classify applicants for funding in three categories:

1. The first category would be composed by those applicants for funding deemed to be eligible for funding, according to the established criteria. All applicants classified in this category would receive funding.

2. The second category would be composed by those applicants for funding deemed to be ineligible for funding, according to the established criteria. No applicants classified in this category would receive funding.

3. The third category would be composed by those applicants for funding for which the established criteria do not yield a conclusive decision regarding their eligibility. A lottery would be conducted to determine final eligibility for funding among applicants classified in this category. Winners of the lottery would receive funding, and their average outcomes would be compared with applicants in this category which did not win the lottery to robustly estimate the risk and impact of each instrument in this context.

By creating and tracking a comparable control group (counterfactual), this type of experimental impact evaluation would allow to robustly identify the changes in indicators at all levels which is solely attributable to the Facility, in isolation from potential contextual confounding factors (such as, for example, the evolution of economic indicators during the intervention period).
I. Supporting Documents for Funding Proposal

- NDA No-objection Letter
- Feasibility Study
- Integrated Financial Model that provides sensitivity analysis of critical elements (xls format, if applicable)
- Confirmation letter or letter of commitment for co-financing commitment (If applicable)
- Project/Programme Confirmation/Term Sheet (including cost/budget breakdown, disbursement schedule, etc.) – see the Accreditation Master Agreement, Annex I
- Environmental and Social Impact Assessment (ESIA) or Environmental and Social Management Plan (If applicable)
- Appraisal Report or Due Diligence Report with recommendations (If applicable)
- Evaluation Report of the baseline project (If applicable)
- Map indicating the location of the project/programme
- Timetable of project/programme implementation

* Please note that a funding proposal will be considered complete only upon receipt of all the applicable supporting documents.
Annex I – Location of Mexico and Guatemala
## ANNEX II - Indicative Sub-Project Pipeline

<table>
<thead>
<tr>
<th>#</th>
<th>Indicative Project</th>
<th>Brief Description</th>
<th>GCF Indicative funding (US$ M)</th>
<th>IDB/MIF Indicative Funding (US$ M)</th>
<th>Expected p.sec. co-financing (US$ M)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Efficient Use of Firewood in Indigenous and Rural Communities of Guatemala</td>
<td>This transaction would provide capital to a specialized Financial Intermediary in Guatemala and technical assistance. The partner FI will use the proceeds from the GCF/IDB to finance a portfolio of small loans for MSMEs to reduce deforestation and promote the use of efficient cook stoves in the country. Expected outcomes include reduced need and more efficient use of forest wood as well as reduced CO2e emissions.</td>
<td>2.20</td>
<td>1.45</td>
<td>5.25</td>
</tr>
<tr>
<td>2</td>
<td>Equity Investment in Specialized Fund</td>
<td>This transaction would consist in an equity investment into a specialized equity fund, which is focused on land use activities, and has the ultimate goal of ecosystem restoration on degraded land. Sectors of focus include agroforestry (coffee &amp; cacao under shade, native rubber, xate palm, vanilla, black pepper, cardamom), sustainable cattle ranching and forestry (sustainable and community forest management). The IDB/GCF investment would be the anchor investment to draw additional investors to a total fund size of $100 million. This fund would be transformational, as there are few landscape funds active in Latin America. IDB/GCF participation would enhance credibility of the fund and support loans and investments to small farmers. IDB/GCF funds will be used only to support projects in Mexico and Guatemala.</td>
<td>9.5</td>
<td>2.5</td>
<td>108</td>
</tr>
<tr>
<td>3</td>
<td>Biogas Senior Loans in Mexico</td>
<td>This transaction would consist in senior loans to financial intermediaries for on-lending to support the installation of infrastructure and equipment to generate energy from biogas in rural farms. The project will help farmers auto-generate energy, sell energy to the local grid, reduce GHG emissions in 26 sites, including livestock producers. Producers will receive technical assistance on biogas generation.</td>
<td>1.86</td>
<td>1.36</td>
<td>3.5</td>
</tr>
<tr>
<td>4</td>
<td>Equity Investment in a small insurance company to provide extreme &amp; catastrophic climate event insurance to MSMEs</td>
<td>The proposed deal would consist in an anchor investment in a company focused on providing coverage for extreme climatic events and natural catastrophe risks like such as: droughts, excess rain, and hurricanes. The company will offer affordable protection against natural catastrophes to low income segments of the population, as an adaptation strategy of last-resort. The proposed anchor equity investment will allow reinsurer foundation and expansion in selected Project’s beneficiary countries.</td>
<td>1.675</td>
<td>0.675</td>
<td>3</td>
</tr>
<tr>
<td>5</td>
<td>Regional Agroforestry Lending Project for MSMEs</td>
<td>This project will support MSMEs in diverse agroforestry value chains in Guatemala and Mexico such as timber, honey, coffee, cacao, avocado, and others to build their capacity to receive and execute loans through greater access to bank financing, with the aim of increasing sales, strengthening the sustainable management of natural resources against the threat of deforestation, and improving resilience with climate-smart practices. Financial intermediaries will develop lending products for forest MSMEs. TA providers will incubate businesses so that they develop market linkages, improve efficiency, reduce losses, and become creditworthy. Additionally, they will ensure that forest MSMEs are following good forest management principles. This will facilitate lending by the financial intermediaries.</td>
<td>1.99</td>
<td>2.39</td>
<td>2</td>
</tr>
<tr>
<td>6</td>
<td>Partial guarantee to Financial Intermediary to support on-lending to climate-resilient agro-businesses</td>
<td>The project will consist of a guarantee to support lending to businesses that are climate champions, as defined as MSMEs that are located in regions where agriculture is expected to be severely impacted by climate change and that are 1) actively working to mitigate climate change, and/or 2) working to build farmer capacity to adapt to changing conditions. Activities to be financed would include agroforestry in crops such as coffee, cocoa, and cashew; reforestation; avoided deforestation; and building adaptive capacity through providing training in best agricultural practices, support for income diversification, and the provision of weather/climate information.</td>
<td>2.025</td>
<td>1.625</td>
<td>6</td>
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<tr>
<td></td>
<td><strong>TOTAL</strong></td>
<td></td>
<td><strong>US$ 20 M</strong></td>
<td><strong>US$ 10 M</strong></td>
<td><strong>128</strong></td>
</tr>
</tbody>
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