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GUATEMALA

SUSTAINABLE FOREST MANAGEMENT PROJECT

(GU-L1165/GU-G1005)

LOAN PROPOSAL

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ABBREVIATIONS

AFS	Agroforestry system
CATIE	Tropical Agricultural Research and Higher Education Center
CIF	Climate Investment Fund
CO_2e	Carbon dioxide equivalent
CONAP	Consejo Nacional de Áreas Protegidas [National Council for Protected Areas]
FIP	Forest Investment Program
FAO	Food and Agriculture Organization of the United Nations
FMP	Forest management plan
GCI	Grupo de Coordinación Interinstitucional [Interagency Coordination Group (Guatemala)]
GFP	Global Forest Partners
HLPE	High Level Panel of Experts on Food Security and Nutrition
IACG	UN Interagency Coordination Group on Antimicrobial Resistance
ICB	International competitive bidding
IFMS	Integrated Financial Management System
IARNA	institute of Agriculture, Natural Resources, and the Environment
INAB	Instituto Nacional de Bosques [National Forestry Institute]
ITTO	International Tropical Timber Organization
MAGA	Ministerio de Agricultura, Ganadería y Alimentación [Ministry of Agriculture]
MARN	Ministerio de Ambiente y Recursos Naturales [Ministry of the Environment and Natural Resources]
MINFIN	Ministerio de Finanzas Públicas [Ministry of Finance]
MSMEs	Micro, small, and medium-sized enterprises
NCB	National competitive bidding
NPV	Net present value
NS-REDD+	National Strategy for Reducing Emissions from Deforestation and Forest Degradation
PEU	Project execution unit
PINFOR	Programa de incentivos forestales [Forestry Incentives Program]
PINPEP	Programa de incentivos forestales para poseedores de pequeñas extensiones de tierra de vocación forestal o agroforestal [Forestry Incentives Program for Owners of Small-holder Farms Used for Forestry or Agroforestry]
PROBOSQUE	Programa de fomento al establecimiento, recuperación, restauración,manejo, producción y protección de bosques [Program to promote the establishment, recovery, restoration, management, production, and protection of forests]
QCBS	Quality- and cost-based selection
SCX	Strategic Climate Fund
SESA	Strategic environmental and social assessment
SICOIN	Sistema de contabilidad integrado [Integrated accounting system]
SPS	Silvopastoral system
TSA	Treasury single account

PROJECT SUMMARY

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<table>
<tr><th colspan="5">Financial Terms and Conditions</th></tr>
<tr><td colspan="3">Borrower and Beneficiary:</td><td colspan="2">Reimbursable FIP[a]</td></tr>
<tr><td colspan="3">Republic of Guatemala</td><td>Amortization period:</td><td>40 years</td></tr>
<tr><td colspan="3">Executing agency:</td><td>Disbursement period:</td><td>5 years</td></tr>
<tr><td colspan="3" rowspan="2">National Forestry Institute (INAB)</td><td>Grace period:</td><td>10.5 years</td></tr>
<tr><td>Repayment terms on principal:</td><td>Years 10.5 through 20: 1% semiannually[b]
Year 20.5 through 40: 2% semiannually[b]</td></tr>
<tr><td>Source [a]</td><td>Amount (US$)</td><td>%</td><td>Service charge:</td><td>0.25%</td></tr>
<tr><td>IDB (Reimbursable, FIP)</td><td>8,450,000</td><td>91.6</td><td rowspan="3">Approval currency:</td><td rowspan="3">U.S. dollar</td></tr>
<tr><td>IDB (Nonreimbursable, FIP)</td><td>775,000</td><td>8.4</td></tr>
<tr><td>Total</td><td>9,225,000</td><td>100</td></tr>
<tr><th colspan="5">Project at a Glance</th></tr>
<tr><td colspan="5">Project objective/description: The project's general objective is to help reduce the rate of deforestation and carbon dioxide equivalent (CO_2e) emissions. Its specific objectives are to: (i) improve the efficiency of public forest services; (ii) improve the effectiveness, returns, and social inclusion of incentive programs; and (iii) promote the sustainable use of forests. The project will finance services and equipment, structured in three components: (i) institutional strengthening; (ii) inclusive restoration; and (iii) forest-industry-market linkages.</td></tr>
<tr><td colspan="5">Special contractual conditions precedent to the first disbursement of both the reimbursable and nonreimbursable financing: (i) approval and entry into effect of the project Operating Regulations; (ii) formation of the project execution unit and the appointment, by INAB, of the unit's general coordinator, an official responsible for financial matters, and an official responsible for procurement; and the selection of consultants who will support the staff of the aforementioned unit in the following capacity: a technical coordinator, a technical specialist for each project component, a procurement specialist, a financial specialist, an environmental specialist, a social specialist, and a monitoring and evaluation specialist (paragraph 3.7). See other conditions included in Annex III.

Special contractual conditions for execution: (i) within 180 days of informing the borrower/beneficiary that the conditions precedent to the first disbursement have been fulfilled, the respective agreements will have been signed between INAB and the National Council for Protected Areas, the Ministry of the Environment and Natural Resources, and the Ministry of Agriculture, through which each commits to participate as project beneficiaries in procurement planning, to be carried out by the executing agency, the use and maintenance of the equipment, and all other project execution activities in which they participate, including their obligations with respect to environmental and social considerations (paragraph 3.4). See the other conditions set out in Annex B of the environmental and social management report and in Annex III.</td></tr>
<tr><td colspan="5">Exceptions to Bank policies: None</td></tr>
<tr><th colspan="5">Strategic Alignment</th></tr>
<tr><td>Challenges:[c]</td><td colspan="4">SI ☑ PI ☑ EI ☑</td></tr>
<tr><td>Crosscutting themes:[d]</td><td colspan="4">GD ☑ CC ☑ IC ☑</td></tr>
</table>

[a] Forest Investment Program (FIP) of the Strategic Climate Fund (SCX), one of the Climate Investment Funds. The SCX was approved in document GN-2604-3 and the corresponding Financial Procedures Agreement was signed with the World Bank on 17 February 2011.

[b] Under the FIP Financing Modalities, the first 20 semiannual principal repayments will be for 1% of the outstanding balance, and the remaining 40 semiannual principal repayments will amount to 2% of the outstanding balance.

[c] SI (Social Inclusion and Equality); PI (Productivity and Innovation); and EI (Economic Integration).

[d] GD (Gender Equality and Diversity); CC (Climate Change and Environmental Sustainability); and IC (Institutional Capacity and Rule of Law).

I. DESCRIPTION AND RESULTS MONITORING

A. Background, problem addressed, and rationale

1.1 **Deforestation trends in Guatemala.** Forestry activities in Guatemala accounted for 1.05% of the country's gross domestic product (GDP) in 2011 (FAO, 2015) and 2.3% of exports in 2016.[1] These figures do not reflect the real significance of Guatemala's forests, which cover 3.7 million hectares and provide fundamental ecosystem services such as: (i) regulation of the water cycle; (ii) soil formation and protection; (iii) protection against natural disasters; (iv) carbon capture;[2] (v) energy source;[3] (vi) food and medicinal plants (HLPE, 2017); (vii) key elements of the indigenous worldview (INAB, 2013); and (viii) opportunities for tourism. Nevertheless, this source of wealth is threatened by deforestation (Table 1), which, together with the degradation of the forests, generates 60% of Guatemala's greenhouse gas emissions (GCI, 2018).

Table 1. Historical deforestation trends*

Period	Territory covered by forests		Net annual deforestation	
	%	Hectares (millions)	%	Hectares
1991-2001	41.68	4.40	1.41	73,148
2001-2006	31.19	3.37	1.31	53,606
2006-2010	30.19	3.26	0.91	34,660
2010-2016	27.67	2.99	0.50	18,350

*Source: Grupo Interinstitucional de Monitoreo de Bosques y Uso de la Tierra (GIMBUT).

1.2 The primary cause of deforestation is land-use change, the main causes and agents of which include (IACG, 2018): (i) expansion of ranching activities by medium- and large-scale cattle ranchers, especially in the protected areas of Petén and Izabal, which accounts for 35% of deforestation; (ii) production of staple crops by poor small farmers, particularly in the western and eastern regions (accounting for 31%); and (iii) production of coffee, cardamom,[4] and rubber by small farmers and agroindustry (24%).

1.3 The low relative profitability of forestry activities is a significant incentive[5] for changing land use.[6] This problem is primarily due to: (i) the low price producers

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1 Bank of Guatemala.

2 Each year, Guatemalan forests capture 374,220.34 tons of carbon dioxide equivalent (tCO_2e).

3 In all, 69.6% of the population uses firewood to cover its cooking, heating, and hot water (for sanitary use) needs (INAB/IARNA/URL/FAO/GFP, 2012).

4 A spice.

5 Other causes include: (i) the needs of poor, small-scale producers in terms of their food security and need to generated immediate earnings for survival (FAO, 2012); and (ii) narcotrafficker money laundering through extensive ranching (attributable to between 15% and 30% of total deforestation, Sesnie et al., 2017). The areas where problems are prevalent are not included in the project target areas.

6 The net present value of protected forests, natural pastureland, and maize plantings is 2,565 quetzales per hectare, Q7,578 per hectare, and Q58,491 per hectare, respectively (GCI, 2018; Mesa Nacional de Restauración del Paisaje Forestal de Guatemala, 2018).

receive for their of timber products;[7] and (ii) limited volume sold (Chapas Muralles, 2013). The causes of this situation include:

a. High transaction costs of obtaining forestry licenses. Legal forest utilization is more profitable for producers (optional link 11); however, nearly all sell their timber products without a license (96% of forest timber is informally harvested, INAB/CONESFORGUA/IARNA/URL/FAO, 2015) at half the price of lawfully harvested timber. This is because intermediaries fully assume the risk, cost overruns, and market sanctions associated with unlawful harvesting. The barriers to legal forest utilization include: (i) complexity of or lack of familiarity with administrative and technical requirements (optional link 2; FAO, 2012); and (ii) the length of time required to meet those requirements: 95 days and 315 days for forests located outside and within protected areas, respectively, whereas regulations establish a maximum of 60 and 90 days, respectively. These lengthy processing times are also attributable to the complexity of procedures (institutional inefficiencies in particular), little or no automation of processes, the lack of uniform technical criteria for approving requests for incentives, and weak interagency information sharing among the lead agencies in the case of protected areas (optional link 1).

b. Poor commercial quality of forests due to: (i) low density of high-value, high-demand timber species in natural forests, since the best timber is generally harvested without species replacement or enrichment planting; (ii) limited presence of, or consideration for, nontimber species[8] that could be harvested in the short term; and (iii) quality issues, due primarily to inappropriate management practices such as thinning. This deficient, demand-driven forest management is essentially due to producer knowledge gaps regarding management techniques and in market opportunities and requirements (FAO, 2012; ITTO, 2013; optional link 3).

c. Low-value generating capacity of forestry-based processing enterprises. The forest value chain in Guatemala is characterized by its low level of producer-cooperative activity and the weaknesses of exiting producer associations in terms of their entrepreneurial, technological, and business know-how. Forestry-based processing is dispersed among micro, small, and medium-sized enterprises[9] (MSMEs), primarily cooperatives or producers associations. They have limited entrepreneurial capabilities (almost all lack business plans and knowledge of demand and market pricing) and acceptable-to-low technology efficiency ratings from the International Tropical Timber Organization (ITTO). Their focus is on processing low-value raw materials,[10] with average returns on

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7 Between US$15 and US$38 per cubic meter or real value of US$30 to US$77 per cubic meter.

8 This issue will be addressed through a complementary project administered by the World Bank (see paragraph 1.17).

9 In all, 36% process less than 10 cubic meters of timber per month, whereas 41% process between 10 and 100 cubic meters per month.

10 In all, 85% are logs, sawn wood, and pallets with returns of less than US$400 per cubic meter, whereas secondary wood products fetch returns in excess of US$1,500 per cubic meter. The potential markets are currently targeted by community forestry concessions, second tier associations, and large corporates: the United States, Europe, El Salvador, and Honduras.

primary processing of 68%.[11] This situation is due to machinery-related limitations in a context of difficult access to financing (the forestry sector receives 0.3% of loans from private banks—Office of the Bank Examiner (SIB), 2018), which is aggravated by informality (32%[12] of MSMEs) and personnel with poor technical skills in primary processing (INAB-2017; Tropical Agriculture Research and Higher Education Center (CATIE), 2018, INAB/ITTO, 2016, optional link 3).

1.4 The change in land use could be partially reversed by expanding agroforestry systems (AFS) and silvopastoral systems (SPS), which involve incorporating trees into agricultural or pasture lands. SAF and SPS enable producers to continue pursuing activities that support household food security and short-term income generation. Furthermore, the incorporation of trees has beneficial impacts in terms of increasing soil fertility and reducing animal thermal stress, thereby enhancing the overall performance and returns[13] of AFS and SPS (FAO/UNDP, 2019).

1.5 Nonetheless, the expansion of AFS and SPS faces a number of barriers, namely:

a. Lack of knowledge among producers of the technical and economic benefits of AFS/SPS and their implementation;

b. Preinvestment costs for AFS and SPS that require high-cost inputs to establish (up to US$500 per hectare, Ministry of Agriculture (MAGA), 2016), exacerbated by the fact that 72.2% of Guatemalan producers live below the poverty line (INE, 2014) and the lack of credit for the agriculture and forestry sector (paragraph 1.3(c)). However, this barrier is not present for other AFS/SPS systems, particularly those based on native species, where preinvestment costs are primarily limited to family labor.[14]

c. Maintenance costs (up to US$230 per hectare annually, MARN, 2016) and lag time for full return on the investment (minimum of seven years, Thompson and George, 2009); and

d. Lack of security and conflicts surrounding land tenancy.[15]

1.6 **Progress made by Guatemala in the fight against deforestation and promotion of forest restoration.** In recent decades, the Guatemalan government has developed policy, legal, and institutional frameworks to control deforestation. Notable among them are the Forestry Incentives Program (PINFOR, 1998-2016); the Forestry Incentives Program for Owners of Small-holder Farms Used for Forestry or Agroforestry (PINPEP, 2010-present); and the Program to Promote the

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11 Ratio of sawed lumber produced to log volume. Companies that received technical assistance achieved returns of up to 85%.

12 Sistema de Información Forestal de Guatemala [Guatemalan forest information system] (SIFGUA).

13 At least 25% higher than land planted with staple crops or pasturelands. (Mesa Nacional de Restauración del Paisaje Forestal de Guatemala [Guatemalan Forest Landscape Restoration Board], 2018).

14 Territorial model for climate adaptation of the population in Guatemala's dry corridor.

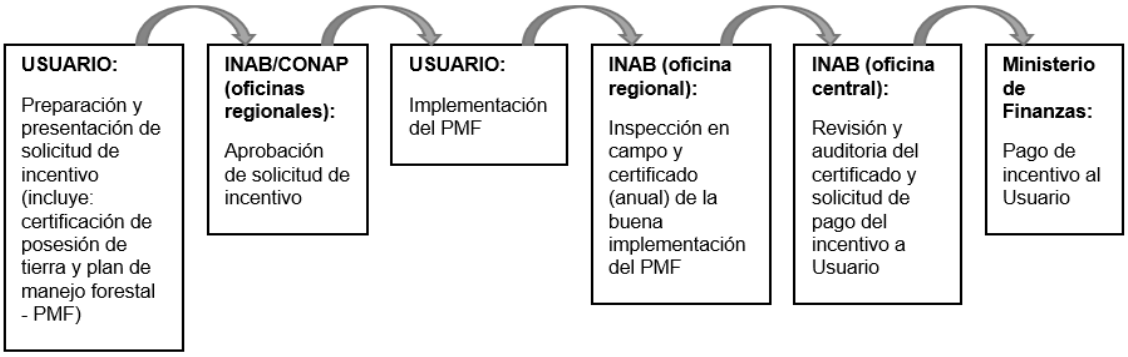
15 Guatemala's Forest Investment Plan explicitly excludes addressing this problem with resources from the Forest Investment Program (FIP) financing this operation. Accordingly, there will be no interventions in the regions presenting problems of this nature (FIP municipal prioritization). Guatemala is addressing the problem nationally by focusing on campesino and indigenous households living in poverty through the Fondo de Tierras [land fund].

Establishment, Recovery, Restoration, Management, Production, and Protection of Forests (PROBOSQUE, 2017-present).

1.7 These programs provide tax incentives or cash payments to legal entities and individuals in exchange for maintaining existing forestland. Specifically, the beneficiaries of these programs cannot fell forests under management to change their land use (natural forest management incentives), but can use the resources to invest in tree cover restoration activities (establishment of AFS/SPS or forest plantations).

1.8 These programs are administered by the National Forestry Institute (INAB) in collaboration with the National Council for Protected Areas (CONAP). The programs' mechanism of incentives is summarized in Figure 1. Their key features include: (i) granting of demand-based incentives, provided that the application submitted to the program is technically, legally, and administratively complete;[16] (ii) land title is not required for current programs: unlike previous programs, PINPEP and PROBOSQUE recognize various forms of land possession and ownership so as to incorporate a broad spectrum of stakeholders from society; (iii) annual results-based payment, which entails (a) a preinvestment by the potential beneficiaries to prepare their applications for incentives, including a forest management plan (FMP) and, if necessary, procurement of inputs for the first year; and (b) annual field visits by INAB to certify that the activities set out in the FMPs have been implemented, and to issue the certificate of compliance required by the Ministry of Public Finance (MINFIN) to issue the incentive payments.

Figure 1. Incentives mechanism



1.9 **Forestry incentive program performance.** The analysis of the PINPEP and PROBOSQUE programs suggests there may be room to improve the effectiveness, returns, and social inclusion of their incentives, as well as the efficiency of their management, as detailed below.

1.10 **Effectiveness and return of incentives.** To date, the government has paid out US$436 million in incentives on 770,800 hectares of woodlands slated for maintenance or recovery. However, no robust evaluation has been conducted to demonstrate the effectiveness of the incentive programs and, specifically, to verify

[16] Includes, *inter alia*, a forest management plan, a certificate of land possession or land title, and copy of an identity document of the applicant.

their ability to control historical deforestation trends. Consequently, we must defer to the relevant literature in this regard which suggests:

a. Payments for environmental services (a concept similar to the natural forest management modality): (a) can be effective but with marginal positive impacts not much greater than other less expensive mechanisms; (b) are not effective if the program design is not based on scientific fundamentals, if they are not effectively targeted, and if the program is executed in a context of institutional weakness; and (c) tend to provide producers with few returns and offer little in the way of sustainability, since protection of the forests ends when the payments end (Clements et al., 2010; Pattanayak et al., 2010; Börner et al., 2017). Similarly, one recent analysis suggests that incentives to promote the protection of forests would not yield returns.

b. Incentives designed to promote forest plantations face post-implementation challenges with regard to generating returns,[17] which must be addressed before promoting additional plantations.

c. Conversely, programs that offer incentives for adopting AFS/SPS modalities have proven to be effective in increasing the returns of farms that have incorporated trees and increased tree cover (De Los Santos and Bravo-Ureta, 2017; González Flores and Le Pommellec, 2019). Another study suggests that incentives under the AFS and SPS modalities can generate returns.

1.11 To date, 76% of PINPEP and PROBOSQUE incentives have been granted under the natural forest management modality; and 12% each under the forest plantation and AFS/SPS modalities (optional link 11). Going forward, the empirical evidence suggests that:

a. More incentives will need to be channeled to the AFS and SPS modalities with the aim of improving incentive program effectiveness and ensuring that, at minimum, the restoration and tree coverage objectives of such programs are met; and

b. Aside from incentive programs, other types of interventions will be needed to address the objective of maintaining the country's existing forests.

1.12 **Inclusion and diversity.** Women and indigenous peoples face barriers to participating and remaining in forestry incentive programs. These barriers include:

a. Lack of awareness of existing incentive programs (optional link 2; INAB/World Bank, 2019), in particular due to weaknesses in dissemination campaigns, which either do not reach the municipios or lack cultural relevance (linguistic gap);

b. The costs to prepare and submit an application for incentives exceed local capacity, e.g. (i) obtaining a municipal certificate of land possession[18] and an

[17] See paragraph 1.3. Chapas Muralles (2013) also found that, with respect to beneficiaries of the PINFOR program, which provided most of its incentives under the forestry plantation modality, 62% had not managed to start a forestry business after the incentives had ended.

[18] Which are different from property titles and easier to obtain from an administrative standpoint (the most significant barrier is its cost).

affidavit (US$60 on average); (ii) drafting of FMPs (US$20 per cubic meter, INAB/CONESFORGUA/ITTO, 2016); and (iii) travel to file the application with INAB's regional or subregional offices (average of six full-day visits to complete the process);[19]

c. Ability to complete incentive applications (in Spanish) in a context of high illiteracy rates: 32%, 26%, and 57.6% among indigenous peoples, women, and indigenous women, respectively, compared to the 20.9% national average (INE, 2016); and

d. Limited technical capacity to implement FMPs.

1.13 In addition to gender equity and diversity considerations, better access by these segments of the population to forestry incentives and forest utilization licenses is justified by the higher rate of poverty among indigenous peoples (73% compared to the national poverty average of 54%, INE, 2016), as it is well-known that poverty is associated with greater levels of deforestation (Loening and Markussen, 2003). Likewise, the full participation of women in public forest services can help increase sustainable forest management (Cook et al., 2019), thereby enhancing their participation in the community public arena and improving the well-being and education of their families, given that women devote a greater share of their income than men to the home and their children.

1.14 **Efficiency in management of incentives.** Many incentive regulations and processes (Figure 1) are complex and are not harmonized between the participating institutions (INAB and CONAP). The systems for managing information and processes are not fully automated or compatible, and they are not always accessible to the users when needed. Moreover, implementation of the FMPs is still verified through field visits, which account for 90% of INAB staff hours; and institutional staff do not always have the necessary skills to provide quality services. This situation results in excessive processing times. For example, the average time to approve an incentives application is 131 days and 471 days for PINPEP and PROBOSQUE, respectively, whereas regulations stipulate that processing should not exceed 60 days. INAB also considers that it should complete annual certification of 50 FMPs per week, i.e. seven times more than the current number, so as not to run the risk of delays in payment of incentives and, consequently, dissatisfaction and demotivation of the project participants (optional link 1).

1.15 **Intervention strategy and theory of change.** The project strategy consists of financing interventions that: (i) seek to channel incentives through programs based on the AFS and SPS modalities, which have better outcomes, and to gear them to segments of the population with less access to such incentives; (ii) improve public sector performance in managing incentive programs; and (iii) promote linkages with markets, especially in cases where incentive programs may not necessarily be the appropriate instrument. Specifically:

a. Focus technical assistance on the preparation of applications for incentives under the AFS and SPS modalities, which will help improve the effectiveness of incentives.

[19] According to a focus group held with the country's main community forest organizations.

b. Ensure that technical assistance and training activities are culturally sensitive and promote gender mainstreaming, thereby enabling more vulnerable population segments to participate and remain in incentive programs. A pilot experience[20] carried out in municipios with characteristics similar to those of the target municipios (see paragraph 1.24) has demonstrated that by implementing interventions to overcome barriers to participation, the project helped bring about a 17-fold increase the number of incentive projects and expanded women's participation from 3.8% to 24%.

c. Streamlining and automating the administrative processes governing public forest services through a reengineering phase, followed by the design and implementation of an information management system and computerized processes, in addition to implementing a satellite-based monitoring system to partially replace field visits, will have a direct impact on reducing application and payment processing times. Experience and evidence (Sungau et al., 2013, Malenje et al., 2014) suggest that interventions aimed at streamlining and automating processes and training personnel are effective at substantially reducing service delivery times. The above will facilitate access by producers to public licensing services for forest utilization, as well as to incentive programs.

d. Providing technical support to producers in preparing and submitting applications for forest utilization licenses will contribute to greater lawful sales of products, and ultimately, at better prices. Similarly, technical assistance in market-driven production will promote forestry management practices that produce higher quality raw materials and generate demand, thus boosting prices and sales volume.

e. Providing training and technical assistance to MSMEs in alliance-building, entrepreneurship, efficient processing technologies, and access to market information will enable the MSMEs to strengthen their operations; improve processing yields; and, consequently, increase the returns on the forestry business and the capacity to absorb current supply. Successful cases in the region (Grogan et al., 2017; CATIE, 2018; FAO, 2016) demonstrate that interventions targeting: (i) improvement in market-driven forest management, with an emphasis on increasing the commercial density of species of interest and the quality of management; (ii) organizing producers and supporting them in accessing new markets, including the establishment of contacts and alliances with buyers; (iii) improvement in technological efficiency through training of technical personnel and the acquisition of machinery to optimize yields and to increase volumes of usable wood; and (iv) providing specific information on market requirements, will all have a positive impact on the profitability of the business for owners of forest resources, doubling or tripling the price of products.

1.16 Forestry incentive programs and market linkages are key pillars of the National Strategy for Reducing Emissions from Deforestation and Forest Degradation, or REDD+ National Strategy (NS-REDD+). The purpose of that strategy is "to coordinate forest governance so as to create or apply the main existing public

[20] Modelo_territorial_de_adaptación_climática_de_la_población_del_corredor_seco_de_Guatemala.

policy instruments which, in turn, facilitate the incorporation of various stakeholders and social and productive processes in reversing the causes of deforestation and forest degradation, through recovery actions and protection of the country's forest cover."

1.17 In May 2015, the Climate Investment Fund (CIF) approved Guatemala's initial proposal to access the CIF funds allocated to support implementation of the NS-REDD+.[21] In order to access those resources, the country prepared (with the Bank's support) its Forest Investment Plan, which was approved on 9 June 2017 by the FIP Subcommittee. The investment plan, for a total of US$24 million, contributes to the objectives of the NS-REDD+ through three strategic projects (i.e. FIP 1, FIP 2, and FIP 3) to be implemented in the same regions: (i) Sustainable Forest Management (this proposal), for US$9.225 million (a loan and grant of US$8.45 million and US$775 million,[22] respectively) channeled through the IDB; (ii) Strengthening of Governance and Diversification of Means of Support (US$11.8 million channeled through the World Bank), which includes development and implementation of mechanisms for payments for environmental services associated with forests to address the current challenges associated with the effectiveness of incentives to promote natural forest management (paragraph 1.19), and support for development of value chains for nontimber products (paragraph 1.3); and (iii) access to financing (US$2.5 million, channeled through IDB Lab, which will contribute to the realization of the theory of change, addressing the financing challenges of forest producers and MSMEs (paragraph 1.3) through creation of a guaranty fund that facilitates access to credit for financing plantations and machinery and targeting the unbanked population. These three projects were designed in close collaboration. The operational coordination mechanisms to be implemented during execution will be spelled out in greater detail in paragraph 3.4.

1.18 **Lessons learned.** Table 2 presents the main lessons learned from similar interventions and how they have been incorporated into the design of the operation.

[21] Concessional resources for institutional strengthening, among other purposes, which will help facilitate Guatemala's access to other sources of climate-change funding.

[22] US$475,000 of which will be provided through technical-cooperation project ATN/SX-16949-GU for the work required to prepare this operation, as well as impact evaluation activities, leaving US$775,000 for the investment (nonreimbursable investment financing).

Table 2. Lessons learned

Lesson learned	Reflection in the design of the operation
Support to facilitate preparation of incentive applications (including the administrative process of obtaining certificates of possession) substantially improves access to incentives by vulnerable populations traditionally excluded from such programs.	Component 2 includes technical and legal support in this area.
Empirical evidence suggests that Payments for Environmental Services (incentives for natural forest management) are ineffective in a context of weak institutions and poor targeting, whereas incentives for establishing AFS/SPS systems can be more effective.	Component 2 will focus on support for access to incentives under the AFS/SPS modality, combined with institutional strengthening activities (Component 1).
Technical assistance plays a key role in proper implementation of the practices promoted by incentives and must be offered in a timely manner during the cultivation cycle and with adequate frequency.	Component 2 includes training with a gender perspective and cultural relevance so that the beneficiaries properly implement FMPs aimed at establishing and maintaining AFS/SPS.
The eligibility criteria for beneficiary producers and MSMEs and the strategy for their selection should promote transparency and equal opportunities.	Prioritization and selection mechanisms will be applied with consideration for: (i) the project objectives and indicators; (ii) institutional prioritization tools for the programs executed, including the prioritization criteria of PINPEP and PROBOSQUE; and (iii) safeguard criteria. Those criteria will be widely disseminated through communication campaigns taking linguistic diversity into account. Details are provided in the project's Operating Regulations.
Projects that finance training and technical assistance should include indicators of knowledge improvement and changes in practices that make it possible to proactively adjust the content and/or methodology of the training and technical assistance in the event that indicators demonstrate they are not being effective.	The monitoring and evaluation plan includes guidelines for the ongoing evaluation of the effectiveness of training on increasing the level of knowledge of the beneficiaries and on changing labor practices. The Results Matrix defines the corresponding indicators.
Any project aimed at stimulating a productive sector should consider the linkage of small producers with the market to ensure the sustainability of the model.	The objective of Component 3 is to link producers to the market.

1.19 **Innovation.** The project will promote innovative management, the implementation of incentive programs, and linkages with markets through investments in: (i) an information management system and computerized processes; (ii) a satellite-based topographic survey system; (iii) support for adoption of new agricultural practices based on AFS/SPS; (iv) support for implementing efficient practices in wood product processing; and (v) a market intelligence system. A random impact evaluation is also planned to measure the project's impact for AFS/SPS. This will include a pilot project to identify the best incentives for increasing the participation of the target population.

1.20 **Strategic alignment.** The project is consistent with the Update to the Institutional Strategy (document AB-3008) and it is expected to contribute to the Corporate Results Framework 2016-2019 (document GN-2727-6) through the development challenges of: (i) Social Inclusion and Equality, by contributing to access by small

producers and communities to public forestry financing and services; (ii) Productivity and Innovation, by promoting the productivity and profitability of forestry activities across the value chain and technological innovation in the public and private sectors; and (iii) Economic Integration, by promoting market linkages. It is aligned with the crosscutting themes of: (i) Gender Equality and Diversity, because of its focus on indigenous populations and women; (ii) Climate Change and Environmental Sustainability, because it is geared toward protecting the priority forest ecosystem services for mitigation (reduction of CO_2 emissions) and adaptation (regulation of the water cycle); and (iii) Institutional Capacity and Rule of Law, by strengthening the public forest administration. It is consistent with the IDB Group Country Strategy with Guatemala 2017-2020 (document GN-2899) because of its contribution to the objective of promoting the generation of renewable energy and to the crosscutting themes of climate change, gender equality, and focus on indigenous peoples, and it is included in the 2019 Operational Program Report (document GN-2948-2). It contributes to the pillar of "Energizing the productive sector" in the Plan of the Alliance for Prosperity in the Northern Triangle (PAPTN) through actions aimed at increasing value-added and access to markets for wood and nontimber products, in eight of the municipios prioritized in that plan. It is also consistent with the following Sector Framework Documents: Agriculture and Natural Resources Management (document GN-2709-5) in its dimension of success "Natural resources in the region are used sustainably"; Environment and Biodiversity (document GN-2827-8) in its dimension of success "Marginalized populations and indigenous communities reduce their vulnerability and exposure to the effects of environmental degradation and the risks of natural disasters, and improve their incomes and quality of life associated with their natural capital"; and Climate Change (document GN-2835-8) in its dimension of success "Countries improve their access to climate finance and the effectiveness of its use". One hundred percent (100%) of the operation's resources are invested in activities to mitigate climate change pursuant to the joint methodology of the multilateral development banks for estimating climate finance, thus furthering the IDB Group goal of increasing financing for climate change projects to 30% of all operation approvals by the end of 2020.

1.21 **Alignment with national plans.** The Forest Investment Plan envisages that the "Sustainable Forest Management Project" to be administered by the IDB will directly contribute to various strategic lines of action in the NS-REDD+, as well as to achieving the mitigation and adaptation targets for the Planned and Specified Contribution of Guatemala; the General Government Policy 2016-2020 (strategic country outcomes associated with forest cover and resilience and adaptation to climate change); National Development Plan (K'atun 2032) (pillar: "Natural resources for today and tomorrow"); the national Policy, Law, and Action Plan for Adaptation and Mitigation of Climate Change (chapter on "Land Use, Change in Land Use, and Forestry"); and Sustainable Development Goals 13 and 15.

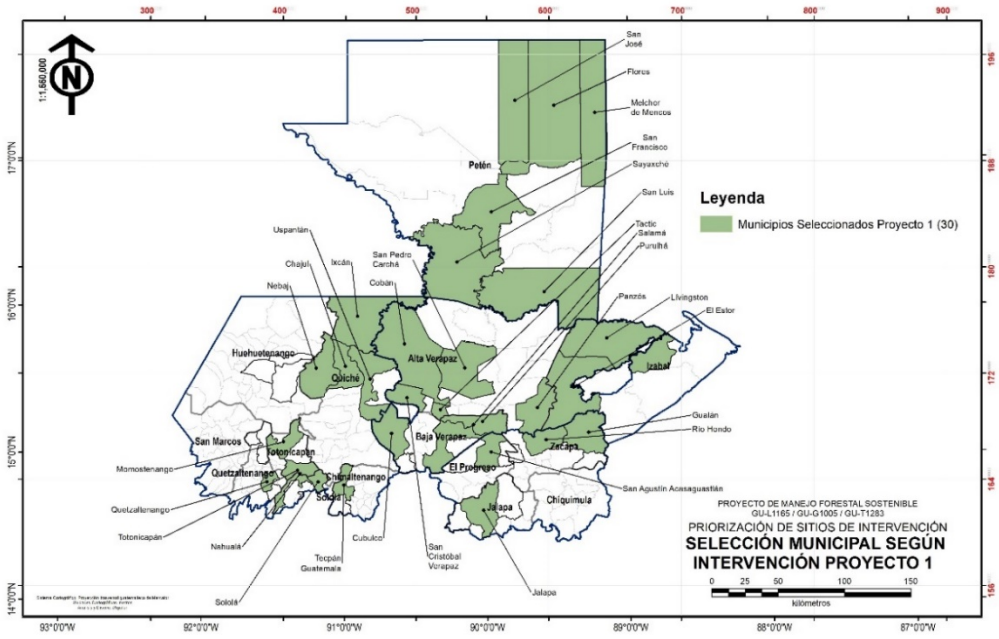
B. Objectives, components, and cost

1.22 **Objectives.** The project's general objective is to help reduce the rates of deforestation and CO_2e. Its specific objectives are to: (i) improve the efficiency of public forest services; (ii) improve the effectiveness, returns, and social inclusion of incentive programs; and (iii) promote the sustainable use of forests.

1.23 **Target population.** The end beneficiaries will be, at minimum: (i) 8,317 small and medium-sized forest producers that meet the requirements to access the forestry incentives granted by PINPEP and PROBOSQUE (at least 37% women and 58% indigenous peoples); and (ii) 800 individual producers (at least 50% women and 50% indigenous peoples), as well as members of 225 forestry enterprises from the private sector (cooperatives, associations, or MSMEs). Intermediate beneficiaries include 1,570 providers of forest services, either public or private with authorization to provide public services (at least 20% women).[23] To a lesser extent, the implementation of the activities is expected to benefit CONAP, MAGA, and MARN.

1.24 The interventions will target 30 municipios (Figure 2) identified through an analysis that combines priority variables (areas of forest loss, water recharge, and firewood shortage; presence of the forestry industry, INAB offices, municipal forestry offices) and exclusion variables (social and territorial disputes, in particular those associated with land tenancy; illicit drug activity), and that is validated with stakeholder participation.

Figure 2: Areas of intervention



1.25 **Activities and components.** The project will finance goods and services, structured into three components (see intervention details at optional link 4):

a. **Component 1. Institutional strengthening (US$3,146,891).** This component seeks to reduce the processing times of applications, forestry

[23] Each time a percentage of women or a percentage of indigenous peoples are mentioned, it should be noted that a portion of the beneficiaries will be indigenous women, in accordance with both criteria. Monitoring will be conducted in a way that clearly identifies instances of double counting; therefore, the total of women + men + indigenous peoples + nonindigenous women beneficiaries will exceed the actual number of beneficiaries.

incentive payments, and forest utilization licenses. It will finance consulting services and goods aimed at: (i) streamlining and harmonizing processes and regulations; (ii) designing and developing an information management system and automated processes; (iii) installing information technology infrastructure at the national and regional offices of INAB and CONAP; (iv) building the capacity of personnel at INAB, CONAP, MAGA, and MARN involved in providing forest services and supporting the organizational change associated with process automation; and (v) establishing a satellite-based monitoring system for certification of FMPs.

b. **Component 2. Inclusive restoration (US$2,202,053).** This component focuses on increasing the area of tree cover, the return on agricultural parcels as a result of AFS/SPS, the participation of women and indigenous peoples in forestry incentive programs, and improved targeting of incentives through more effective modalities. It will finance consulting services to: (i) provide producers with technical and legal assistance (including the preparation of FMPs and environmental impact assessments where required) with cultural relevance and a gender perspective, in order to prepare and submit applications for forestry incentives with an AFS/SPS approach; and (ii) provide individual and group technical assistance and training to producers and local experts at INAB, CONAP, MAGA, and MARN throughout the life of the project in order to help effectively implement the FMPs.

c. **Component 3. Forest-industry-market linkages (US$2,513,000).** With the aim of increasing the value of forest products, this component will finance the services of specialized firms, as well as workshops and events aimed at: (i) offering technical support to forest producers in market-driven forest management, including assistance obtaining forest utilization licenses and training in good management practices; (ii) promoting the formalization of existing forestry enterprises (associations, cooperatives, and MSMEs); the creation of new ones; and the promotion of alliance-building (horizontal and/or vertical integration, with the creation of second tier entities) among those enterprises to address the problem of fragmentation and its consequences (paragraph 1.5(c)); strengthening of management and marketing capacities geared toward making market connections, including support for the development of business plans, and participation in business expos and trade fairs to network directly with buyers; (iii) enhancing technological efficiency by training machine operators, sharing experiences, and participating in trade fairs; and (iv) establishing a publicly accessible market intelligence system by developing protocols for collecting and analyzing data and improving the current mechanisms for disseminating information, operated by INAB in collaboration with municipal forestry offices (website, training, forestry extension, technical visits, forestry trade fairs).

d. **Project management.** Financing will be provided to cover the staffing costs of consultants assigned to the PEU (with the exception of those responsible for reporting activities, who will be designated within the staff of the executing agency), as well as the costs of monitoring and evaluation, audits, environmental and social management, and contingencies.

C. Key results indicators

1.26 The operation has a Results Matrix that includes impact, outcome, and output indicators, with their respective baselines, targets, and means of verification. Table 3 presents the impact and outcome indicators.

Table 3. Key indicators from the Results Matrix

Indicator	Measurement period	Rationale for selection
IMPACT	Baseline and final target	
Reduction in the average net annual deforestation rate in the targeted municipios		See paragraph 1.3: Improve profitability of forests; and paragraph 1.4: The restoration of forest landscape through AFS/SPS reduces deforestation.
Reduction of additional CO_2e emissions in the target municipios		See paragraph 1.1: Reducing deforestation decreases CO_2e emissions.
OUTCOMES		
Average time to approve incentive applications		See paragraphs 1.13 and 1.15: More streamlined procedures reduce the transaction costs that discourage the sustainable use of forests and/or negatively impact the forestry incentive programs.
Average time to issue utilization licenses		
Areas with AFS/SPS systems are increased		See paragraph 1.13: Better access to incentives and focus on more effective modalities results in greater tree cover and higher returns.
Change in the production value of a basic crop parcel converted to AFS/of a pasture parcel converted to SPS		
Proportion of women / indigenous peoples receiving forestry incentive payments		See paragraph 1.14: Support with a gender and ethnic approach results in greater inclusion.
Proportion of wood products sold		See paragraphs 1.3: Support to overcome barriers specific to forest utilization results in greater market access.
Change in average prices received by forest producers for their wood products		

II. Financing Structure and Main Risks

A. Financing instruments

2.1 The total cost of the project is US$9,225,000, which will be financed by the FIP of the Climate Investment Fund (Strategic Climate Fund, SCX) through: (i) an investment grant for US$775,000; and (ii) a specific investment loan for US$8,450,000. The distribution by source of financing and component is described in Table 4.

Table 4. Costs and financing (in U.S. dollars)

Investment category	CIF loan	CIF grant	Total	%
Component 1. Institutional strengthening	2,470,865	676,026	3,146,891	34
Component 2. Inclusive restoration	2,202,053	-	2,202,053	24
Component 3. Forest-industry-market linkages	2,513,000	-	2,513,000	27
Project management: Administration, monitoring and evaluation, audit, socioenvironmental management	1,241,760	20,000	1,261,760	14
Contingencies	22,322	78,974	101,296	1
TOTAL	**8,450,000**	**775,000**	**9,225,000**	**100**

2.2 The Forest Investment Program was approved using estimated amounts, which were adjusted (optional link 11) during the formulation process based on the precise identification and sizing of the intervention's needs.

2.3 The activities will be carried out over a five-year period pursuant to the preliminary disbursement schedule (Table 5).[24]

Table 5. Disbursement schedule (US$ thousands)

Source	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Loan	2,792	1,821	1,847	1,714	276	8,450
Grant	189	465	42	79	-	775
Total	**2,981**	**2,286**	**1,889**	**1,793**	**276**	**9,225**
Percentage	**32.31**	**24.78**	**20.48**	**19.44**	**2.99**	**100**

2.4 **Economic viability.** An ex ante economic impact analysis was conducted to assess the project's economic viability and to estimate its NPV and internal rate of return. The multiregional Integrated Economic-Environmental Model (Banerjee et al., 2019) was used to estimate the direct, indirect, and induced benefits of the project, which includes its 22 departments and incorporates information from the Economic Environmental Accounts System (INE et al., 2013). The scenarios implemented consist of both the impact of the project investment on the various economic sectors and expectations for: (i) improvements in the efficiency of public forest services; (ii) improvements in the effectiveness of incentive programs, specifically increasing the area devoted to agroforestry and silvopastoral systems; and (iii) an increase in the value of forest products. It is anticipated that by 2035 the project will have created 1,679 new jobs and reduced the number of poor people by 22,137 individuals. The cost-benefit analysis shows that at a discount rate of 12%, the project has an NPV of US$194 million (2019 dollars) and an internal rate of return of 159%.

[24] Provided that the Bank receives the project resources in a timely manner.

B. Environmental and social risks

2.5 The project has been classified as a category B[25] operation under the IDB's Environment and Safeguards Compliance Policy (Operational Policy OP-703) since it is expected to have moderate direct and indirect environmental and social impacts. The project is not expected to cause the physical or economic displacement of the population. Based on the Disaster Risk Management Policy (Operational Policy OP-704), the operation has been categorized as having a moderate natural disaster risk, mainly landslides, frosts, volcanic eruptions, and drought, as well as forest fires caused by drought.

2.6 A strategic environmental and social evaluation was prepared for the project, along with an environmental and social management framework, including an Indigenous Peoples Strategy, which analyzes the potential risks and impacts of the operation and proposes prevention and/or mitigation measures. The project's gender action plan is consistent with the two lines of action defined in Operational Policy OP-761: preventive action, which analyzes the potential adverse impacts of the operation on women and gender equality and proposes appropriate mitigation measures; and proactive action, which actively promotes gender equality and the empowerment of women who are rural producers. The project also has a communication plan. These documents are available on the Bank's website. Two consultation processes were carried out with the stakeholders: the first was to identify the risks to be considered in the design of the project activities; and the second was on the above-mentioned evaluation and framework. The first consultation took place in May 2018 and included 86 participants (21% women and 79% men; 36% Mayan and 64% nonindigenous). The second consultation was held between November and December 2018 and included 211 participants (40% women and 60% men; 31% Mayan and Xinka and 68% nonindigenous). They were representatives from municipalities, community forest organizations and cooperatives, groups of women with ties to the forestry sector, representatives of indigenous peoples, environmental nongovernmental organizations, private forestry enterprises, and regional or local organizations involved in the management of forest resources. The main issues discussed were: how the project would improve forest management through actions to standardize INAB/CONAP procedures and through state-of-the-art technologies and equipment; how the project would provide support for or minimize difficulties in accessing forestry incentive programs; what technical assistance would be provided to producers; what support would be given for accessing financing; and the potential project risks and impacts. The consultations resulted in adjustments to internalize mitigation measures, consisting of strengthening the gender and intercultural approach in all the interventions, and elevating that approach to the level of a specific objective.

2.7 The main risks include: (i) possible exclusion of indigenous peoples and women from the project's benefits, which is mitigated by selecting a social specialist as part of the project execution unit (PEU) to ensure implementation of the Gender Action Plan and Indigenous Peoples Strategy; annual supervision by the Bank of implementation of the measures included in the ESMF, the Gender Action Plan,

[25] Moderate environmental and social impacts that can be reversed and mitigated with available and applicable measures.

and the Indigenous Peoples Strategy, in addition to implementation of Component 2, which was specifically designed and dedicated to addressing this risk; (ii) insufficient resources of small landowners and landholders to finance preparation of the environmental management instruments required to access the incentive programs and required by national environmental regulations, which will be mitigated through financing by the project for preparation of those instruments; and (iii) reputational risk, conflicts, or disincentives that discourage participation in the project as a result of erroneous or distorted information. This will be mitigated through the communication plan, which includes actions aimed at informing the potential beneficiaries about the project and reducing reputational risks resulting from ineffective dissemination of information, as well as introduction of a mechanism for lodging complaints.

C. Fiduciary risks

2.8 Although INAB has a regulatory framework, uses a public sector financial management system, and follows institutional processes, the limited availability of human resources and the fact this will be its first time executing Bank-financed projects and applying Bank policies constitutes a high-level fiduciary risk. Risks include: (i) weak financial management, to be mitigated by strengthening INAB's Financial Management Division by hiring experienced fiduciary specialist consultants for the PEU that are well-versed in Bank policies; deconcentration of financial management system operations in the PEU; training, assistance, and fiduciary oversight by the IDB; (ii) delays in or failures of procurement processes, to be mitigated through formation of the PEU; training, assistance, and oversight by the IDB; and inclusion in the project's Operating Regulations of procurement management procedures; (iii) insufficient and delayed budget allocations for financial execution of the project, to be mitigated through the creation of a programmatic structure within MAGA/INAB's budget, timely and comprehensive planning of the project, and allocation of budgetary headroom during budget formulation and execution as part of the planning process; (iv) delays in payments to contractors and suppliers, which will be mitigated by monthly monitoring of the Payment Plan, as well as inclusion in the project's Operating Regulations of a description of actions, responsible parties, and payment periods; and (v) ineffective contract management, to be mitigated through implementation of the contract management certificate and appointment of individuals responsible for contract management.

D. Other risks

2.9 Other risks include: (i) potential delay in approving the project by the Congress of the Republic, since a new government administration will be taking office, which is being mitigated through proactive dissemination of information about the project with groups influential in its formulation; (ii) delay in execution due to a short-staffed INAB, which is being mitigated by forming a PEU with additional human resources, as well as through an outsourcing strategy (activities were grouped so that they could be carried out by a limited number of consulting firms specializing in the areas of intervention; for example: technical assistance and training in AFS and SPS; technical assistance and training in forest-industry-market linkages); (iii) low level of sustainability of the achievements of Component 1, which will generate certain recurrent costs. This situation will be mitigated with the timely preparation

and implementation of maintenance plans; (iv) insufficient seed capital of small landowners and landholders, which affects implementation of the AFS and SPS systems that require an initial investment and, consequently, access to incentives, as well as investment-related difficulties for the beneficiaries of Component 3. Both of these risks will be mitigated through close coordination with the FIP-3 project "Green Guaranty for Competitive Landscapes."

III. IMPLEMENTATION AND MANAGEMENT PLAN

A. Summary of implementation arrangements

3.1 The borrower and beneficiary will be the Republic of Guatemala, and INAB will be the executing agency. INAB is a decentralized and autonomous state agency with legal capacity, its own equity, and administrative independence, legally established through Legislative Decree 101-96 (Forestry Law) as the lead agency and competent authority over forestry matters in the public agriculture sector. To execute the project, a PEU will be formed, comprised of a general coordinator, an official responsible for financial matters, and an official responsible for procurement, and the following consultants who will support the appointed members of the PEU: a procurement specialist, a financial specialist, an environmental specialist, a social specialist, and a monitoring and evaluation specialist.

3.2 At minimum, the executing agency will be responsible for: (i) implementing project activities; (ii) keeping consolidated accounting records that identify the sources and uses of the operation's resources by component; (iii) preparing and presenting to the Bank any disbursement requests and supporting documentation for expenses, as well as the audited financial statements; (iv) contracting of the annual external audits and submitting the corresponding financial reports to the Bank; (v) carrying out public bidding/tendering processes, conducting procurement/contracting, processing the corresponding payments, and providing technical oversight of contracts for the activities under its responsibility; (vi) preparing, submitting to the Bank, and making available to the public all required work plans, consolidated monitoring reports, and evaluation reports; (vii) overseeing compliance with the contractual conditions established in the loan contract and the nonreimbursable financing agreement; and (viii) implementing the environmental and social management framework and overseeing compliance with the Bank's environmental and social safeguards.

3.3 Project Operating Regulations will be in place for project execution, which describe, *inter alia*, the project's governance arrangements.

3.4 **Coordination.** Interagency coordination to plan and execute the project's activities that will benefit CONAP, MARN, and MAGA will be facilitated through interagency coordination agreements that the INAB will sign with CONAP, MARN, and MAGA. **As a special contractual condition for execution**, (i) within 180 days of informing the borrower/beneficiary that the conditions precedent to the first disbursement have been fulfilled, the respective agreements will have been signed between INAB, CONAP, MARN, and MAGA, through which each commits to participate as project beneficiaries in procurement planning, to be carried out by the executing agency, the use and maintenance of the equipment, and all other

project execution activities in which they participate, including their obligations with respect to environmental and social considerations. Coordination between projects FIP 1, FIP 2, and FIP 3 will be carried out pursuant to the mechanisms established in the project Operating Regulations.

3.5 **Fiduciary agreements and requirements.** Annex III presents the financial management and procurement guidelines that will be applied to the project. Those guidelines have been developed based on an analysis of the fiduciary context of the country and executing agency, the risk analysis, and meetings held with personnel from the executing agency and the MINFIN.

3.6 **Procurement plans.** The procurement plans (one each for nonreimbursable and reimbursable financing) contain the list of project procurement processes to be undertaken under the policies set forth in documents GN-2349-9 and GN-2350-9 and include: (i) contracts for procurement of goods and nonconsulting services, and contracting of consulting services required to carry out the project; (ii) the proposed procurement and contracting methods; and (iii) the procedures for review of the processes. The executing agency will update the procurement plans annually or whenever needed by the project. Any proposed revision to the procurement plans must be submitted to the Bank for approval.

3.7 **Special contractual conditions precedent to the first disbursement of the financing. Special contractual conditions precedent to the first disbursement of both nonreimbursable and reimbursable financing will be: (i) approval and entry into effect of the project's Operating Regulations**, which will include the following: contracting and procurement procedures that compile in a single document the Bank's policies to be applied along with the procedural rules established in national law (not included in Bank policies) so as to create one body of procurement and contracting regulations for reference and application; a contract management manual; a code of ethics; and environmental and social management framework and social exclusion criteria; and **(ii) formation of the PEU and the appointment, by INAB, of the unit's general coordinator, an official responsible for financial matters, and an official responsible for procurement; and the selection of consultants who will support the aforementioned PEU staff in the following capacity: a technical coordinator, a technical specialist for each project component, a procurement specialist, a financial specialist, an environmental specialist, a social specialist, and a monitoring and evaluation specialist.**

B. Summary of arrangements for monitoring and evaluation of results

3.8 **Monitoring.** The operation has a monitoring and evaluation plan. The environmental and social management framework also includes an environmental and social monitoring and evaluation plan. The executing agency will present, to the Bank's satisfaction, the annual work plan for the following year no later than the last quarter of each year of execution. The executing agency will prepare and send to the Bank, no later than 60 days after the end of each six-month period during execution of the activities, a monitoring report that addresses: (i) fulfillment of the output indicators and progress toward outcomes, compared to what was established in the annual work plan, including explanations for any differences observed; (ii) identification of problems and corrective measures adopted; and (iii) fulfillment of risk mitigation measures and the related outcomes. The report for

the second half of the year will include an updated risk analysis. The executing agency will conduct two independent evaluations financed with resources from the operation: (a) the midterm evaluation report to be submitted to the Bank no later than 90 days after disbursement of 50% of the loan proceeds or 30 months after entry into effect of the loan contract (whichever occurs first). The executing agency will also analyze the project's alignment with the needs and priorities of the country at the time of the evaluation, the project's physical and financial progress, the likelihood that its achievements will be sustainable, and any factors impacting project performance, and then issue recommendations and any corrective actions necessary; and (b) a final evaluation report to be submitted no later than 90 days after disbursement of 90% of the operation's resources. Those reports will include an evaluation of the quality of data from the monitoring system, the degree of fulfillment of the outputs and outcomes, and progress toward the expected impacts established in the Results Matrix, as well as the level of compliance with the environmental and social management framework, including progress in social and environmental indicators.

3.9 **Evaluation.** A quasi experimental impact assessment will be conducted by introducing a random promotion to increase participation in a randomly selected treatment group that receives the incentive. The promotion will be used as an instrumental variable to evaluate the impact of the project on the increase in the return on agriculture parcels transitioning to AFS/SPS systems. In order to select an effective promotion instrument, a pilot will be conducted to test the effectiveness of pamphlets, technical visits, and phone calls. Surveys taken before and after the intervention (in 2020 and 2024) with a sample size of at least 200 producers each time will be the source of information for the analysis. In addition to this evaluation, an ex ante and ex post analysis of the project will be conducted to determine the impact in terms of reduction of deforestation and decrease in emissions, as well as other key outcomes (see required link 2 for details).

Development Effectiveness Matrix		
Summary GU-L1165; GU-G1005		
I. Corporate and Country Priorities		
1. IDB Development Objectives	Yes	
Development Challenges & Cross-cutting Themes	-Social Inclusion and Equality -Productivity and Innovation -Economic Integration -Gender Equality and Diversity -Climate Change and Environmental Sustainability -Institutional Capacity and the Rule of Law	
Country Development Results Indicators	-Reduction of emissions with support of IDBG financing (annual million tons CO2 e)* -Beneficiaries of improved management and sustainable use of natural capital (#)* -Women beneficiaries of economic empowerment initiatives (#)* -Micro / small / medium enterprises provided with non-financial support (#)* -Professionals from public and private sectors trained or assisted in economic integration (#)* -Government agencies benefited by projects that strengthen technological and managerial tools to improve public service delivery (#)* -Farmers with improved access to agricultural services and investments (#)* -Terrestrial and marine areas with improved management (ha)*	
2. Country Development Objectives	Yes	
Country Strategy Results Matrix	GN-2899	Promotion of renewable energy generation
Country Program Results Matrix	GN-2948-2	The intervention is included in the 2019 Operational Program.
Relevance of this project to country development challenges (If not aligned to country strategy or country program)		
II. Development Outcomes - Evaluability		Evaluable
3. Evidence-based Assessment & Solution	10.0	
3.1 Program Diagnosis	3.0	
3.2 Proposed Interventions or Solutions	4.0	
3.3 Results Matrix Quality	3.0	
4. Ex ante Economic Analysis	10.0	
4.1 Program has an ERR/NPV, or key outcomes identified for CEA	3.0	
4.2 Identified and Quantified Benefits and Costs	3.0	
4.3 Reasonable Assumptions	1.0	
4.4 Sensitivity Analysis	2.0	
4.5 Consistency with results matrix	1.0	
5. Monitoring and Evaluation	10.0	
5.1 Monitoring Mechanisms	2.5	
5.2 Evaluation Plan	7.5	
III. Risks & Mitigation Monitoring Matrix		
Overall risks rate = magnitude of risks*likelihood	High	
Identified risks have been rated for magnitude and likelihood	Yes	
Mitigation measures have been identified for major risks	Yes	
Mitigation measures have indicators for tracking their implementation	Yes	
Environmental & social risk classification	B	
IV. IDB´s Role - Additionality		
The project relies on the use of country systems		
Fiduciary (VPC/FMP Criteria)	Yes	Financial Management: Budget.
Non-Fiduciary	Yes	Monitoring and Evaluation National System.
The IDB's involvement promotes additional improvements of the intended beneficiaries and/or public sector entity in the following dimensions:		
Additional (to project preparation) technical assistance was provided to the public sector entity prior to approval to increase the likelihood of success of the project		

Note: (*) Indicates contribution to the corresponding CRF's Country Development Results Indicator.

The general objective of the project is to help reduce the rate of deforestation and CO2e emissions. The specific objectives are: (i) to improve the efficiency of public forest services; (ii) improve the effectiveness, profitability and social inclusion of incentive programs; and (iii) promote the sustainable use of the forest.

The documentation presents a solid diagnosis, which describes the forestry sector and its main challenges, as well as its importance within the economy and as a fundamental source of ecosystem services. Historical data on deforestation and its main causes are provided, such as the change in land use and the low relative profitability of the forest. The main barriers to promoting better use of the forest are identified, and the barriers for women and indigenous peoples to participate in forest management programs are highlighted.

To mitigate these problems, the project will implement 3 components: institutional strengthening; inclusive restoration; and forest-industry-market linkages. The proposed solution is clearly linked to the problems identified. Evidence is presented on the effectiveness of this type of programs in countries of the region. The results matrix (RM) reflects the objectives of the program and shows a solid vertical logic. The main higher-level indicators have targets in line with evidence in the literature and are consistent with the economic analysis. Lower level indicators reflect the design of the 3 components. The RM includes SMART indicators at the level of products, outcomes, and impacts, with baseline values, targets, and means to collect the information.

An economic analysis (EA) is done based on a computable general equilibrium model which analyzes the impacts of the program in the 22 departments of the country using information from the System of Economic Environmental Accounts and the expected benefits derived from the program. The EA finds a net present value (NPV) of US$194 million and an internal rate of return (IRR) of 159%. A sensitivity analysis is carried out under alternative scenarios modifying the main variables that may affect the benefits. These modifications do not present significant alterations to the NPV or IRR.

The monitoring and evaluation plan proposes a quasi-experimental impact evaluation based on random promotion to measure the impact on the profitability of the plots that adopt the new systems promoted by the program. This is complemented by a reflexive evaluation.

The risks identified in the risk matrix seem reasonable and are classified as Medium (3) and High (10). Risks include mitigation actions and compliance indicators.

RESULTS MATRIX

Project objective:	The project's general objective is to help reduce the rate of deforestation and carbon dioxide equivalent (CO_2e) emissions. Its specific objectives are to: (i) improve the efficiency of public forest services; (ii) improve the effectiveness, returns, and social inclusion of incentive programs; and (iii) promote the sustainable use of forests.

EXPECTED IMPACT

Indicators	Unit of measurement	Baseline	Baseline year	Final target	Means of verification	Comments
THE OVERALL OBJECTIVE IS TO HELP REDUCE THE RATE OF DEFORESTATION AND CO_2e EMISSIONS						
IMPACT 1: REDUCTION IN THE DEFORESTATION RATE						
Indicator 1. Reduction in the average net annual deforestation rate in the target municipios	%	7.04	2018	6.5	Specific study that estimates the average net annual deforestation rate in the target and control municipios during the five years of the project.	The methodology defined in the Report on Changes in Forest Cover 2010-2016 will be followed to ensure comparability.
IMPACT 2: REDUCTION OF CO_2e EMISSIONS						
Indicator 2. Reduction of additional CO_2e emissions in the target municipios	Tons of CO_2e	0	2019	161,894	A specific study, applying the same methodology as in the ex ante economic analysis of the project to ensure comparability.	The target corresponds to the reduction of cumulative emissions over the life of the project.

EXPECTED OUTCOMES

Indicators	Unit of measurement	Baseline	Baseline year	Final target	Means of verification	Comments
SPECIFIC OBJECTIVE (I) IMPROVE THE EFFICIENCY OF PUBLIC FOREST SERVICES						
EXPECTED OUTCOME 1: Time needed to process applications and incentive payments is reduced						
Indicator 1.1. Average time to approve incentive applications outside protected areas	Working days/application	131	2018	60	Database/National Forestry Institute (INAB)	The baseline corresponds to the Forestry Incentives Program for Owners of Small-holder Farms Used for Forestry or Agroforestry (PINPEP) (Baseline of the Program to Promote the Establishment, Recovery, Restoration, Management, Production, and Protection of Forests (PROBOSQUE): 471 days/application)
Indicator 1.2. Average time to approve incentive applications inside protected areas	Working days/application	315	2018	90		
Indicator 1.3. Number of inspections per week to certify Forest Management Plans (FMPs)	Inspections/week	7.5	2018	50		Proxy for reduction in certification time/FMP
Indicator 1.4. Proportion of total time used by INAB and National Council for Protected Areas (CONAP) personnel dedicated to field visits to certify implementation of FMPs	% of working days in the field	90	2018	60	Database/INAB/ CONAP	
EXPECTED OUTCOME 2: Time needed to issue forest utilization licenses is reduced						
Indicator 2.1. Average time to issue utilization licenses outside protected areas	Working days/application	95	2018	60	Database/INAB	
Indicator 2.2. Average time to issue utilization licenses inside protected areas	Working days/application	133	2018	90		
SPECIFIC OBJECTIVE (II.A) IMPROVE EFFECTIVENESS OF INCENTIVE PROGRAMS						
EXPECTED OUTCOME 3: Area of forest cover increased						
Indicator 3.1: Area of agroforestry systems (AFS) increased in the area of intervention	Hectare	0	2018	11,300	Maps of forest cover and use, and PINPEP/ PROBOSQUE system	
Indicator 3.2: Area of silvopastoral systems (SPS) increased in the area of intervention	Hectare	0	2018	2,300		

Indicators	Unit of measurement	Baseline	Baseline year	Final target	Means of verification	Comments
Indicator 3.3: Proportion of incentive projects paid (out of those approved)	%	67	2018	100	PINPEP/ PROBOSQUE system	Since incentives are paid once INAB has certified that the FMP created to access the incentives program has been satisfactorily implemented, this indicator is also a proxy of proper application of good forest management practices by producers who have received the corresponding training.
Indicator 3.4: Average difference in knowledge on good practices for implementation of FMPs (before/after training)	Score	0	2018	10	Ex ante and ex post tests applied systematically	See details in the Guidelines for Evaluation of the Effectiveness of Learning Activities (the "Guidelines"). The target is to achieve a difference of at least 10 points between the ex ante and ex post tests using tests with 20 questions (= maximum of 20 points)
Indicator 3.5: Applications for incentives (AFS or SPS) approved (out of applications filed)	Number	0	2018	3,400	PINPEP/ PROBOSQUE system	Indicator that the application meets the requirements = proxy of the quality of technical and legal assistance provided to prepare them. Accordingly, 100% of the applications filed are expected to be approved.
SPECIFIC OBJECTIVE (II.B) IMPROVE THE RETURN OF INCENTIVE PROGRAMS						
EXPECTED OUTCOME 4: Return of agriculture parcels is increased due to transition to AFS/SPS						
Indicator 4.1 Change in the production value of a basic crop parcel converted to AFS (US$/Ha)	%	0	2018	20	Surveys administered before and after the intervention (in 2020 and 2024) with a total sample size of at least 800 producers	Using a multivariable regression model, the % is the difference (coefficient) between Treatment and Control at the baseline. Impact will be measured using multivariable regression with panel data (impact coefficient). The target was established based on a similar experience that has a rigorous impact evaluation (NI-L1048).
Indicator 4.2 Change in the production value of a pasture parcel converted to SPS (US$/Ha)	%	0	2018	20	Surveys administered before and after the intervention (in 2020 and 2024) with a total sample size of at least 800 producers	

Indicators	Unit of measurement	Baseline	Baseline year	Final target	Means of verification	Comments
SPECIFIC OBJECTIVE (II.C) IMPROVE SOCIAL INCLUSION OF INCENTIVE PROGRAMS						
EXPECTED OUTCOME 5: The participation of women and indigenous peoples in forestry incentive programs in the 30 target municipios is increased.						
Indicator 5.1 Proportion of women out of all beneficiaries who receive forestry incentive payments in the area of intervention	%	14.5	2018	35	PINPEP/ PROBOSQUE system	Pro-Gender Baseline = average proportion for PINPEP and PROBOSQUE
Indicator 5.2 Proportion of indigenous peoples out of all beneficiaries who receive forestry incentive payments in the area of intervention	%	6.5	2018	50		Ethnic monitoring Baseline = average proportion for PINPEP and PROBOSQUE
SPECIFIC OBJECTIVE (III) PROMOTE THE SUSTAINABLE USE OF FORESTS						
EXPECTED OUTCOME 6: Increased value of forest products						
Indicator 6.1: Proportion of wood products sold in the area of intervention	%	7	2018	9	Surveys taken before and after the intervention (in 2020 and 2024) with a total sample size of at least 800 producers	(wood products = of harvest age) The baseline and desirable target correspond to national data and reflect an expected increase of 30%. That 30% will be applied to the baseline to be determined in the target municipios no later than 60 days after determination of loan eligibility, with resources from ATN/SX-16949-GU, in order to establish the final target.
Indicator 6.2: Change in average prices received by forest producers for their wood products in the area of intervention	%	0	2018	10%	Surveys taken before and after the intervention (in 2020 and 2024) with a total sample size of at least 800 producers	The average price varies significantly based on: type of wood (broadleaf is worth double the price of coniferous trees), legality (legal wood is worth double the price of illegal wood), insertion in chains, and value-added (high-value products are worth triple the price of low-value products).The baseline in the areas of intervention will be determined with resources from ATN/SX-16949-GU.
Indicator 6.3: Proportion of high-value products made by the supported associations	%	37	2018	42	Sistema Electrónico de Información de Empresas Forestales [Electronic Information System for Forest Enterprises] (SEINEF)	

Indicators	Unit of measurement	Baseline	Baseline year	Final target	Means of verification	Comments
EXPECTED MIDTERM OUTCOME 6.1: Improved market-driven forest management						
Indicator 6.1.1: Producers that implement market-driven management practices (among producers supported)	Producers	0	2018	600	Monitoring survey applied systematically six months after the support/training	See "Guidelines." Producers are considered to have implemented the practices promoted if they receive a score of at least 15/20 on the survey.
Indicator 6.1.2: Average difference in knowledge on market-driven forest management (before/after training) (among individuals trained)	Point	0	2018	10	Ex ante and ex post tests applied systematically	See "Guidelines." Difference of at least 10 points between the ex ante and ex post tests, using tests with 20 questions (= maximum of 20 points).
EXPECTED MIDTERM OUTCOME 6.2: Improved entrepreneurship						
Indicator 6.2.1: Proportion of associations supported that implement their business plan	%	0	2018	70	Similar to 6.1.1	Similar to 6.1.1
Indicator 6.2.2: Average difference in business management knowledge (before/after training) (among individuals trained)	Point	0	2018	10	Similar to 6.1.2	Similar to 6.1.2
Indicator 6.2.3: Forestry associations created	Associations	0	2018	75	National Forest Registry	
Indicator 6.2.4: Formalized forestry associations	Associations	0	2018	75	National Forest Registry	
EXPECTED MIDTERM OUTCOME 6.3: Improved industrial returns						
Indicator 6.3.1: Average returns on wood product processing among associations supported	%	67	2018	85	Ex ante and ex post surveys of associations	Processing return = ratio of volume of sawed lumber produced to log volume. Baseline and final target correspond to national data and the target achieved with similar projects, respectively. The difference represents an expected increase of 27%. In order to calculate the final target, the 27% will be applied to the baseline for the associations supported, which will be determined with resources from ATN/SX-16949-GU. Sustainable forest management indicator
Indicator 6.3.2: Proportion of trained operators who implement good processing practices	%	0	2018	70	Similar to 6.1.1	Similar to 6.1.1
Indicator 6.3.3: Average difference in knowledge on good processing practices before/after training (among operators trained)	Point	0	2018	10	Similar to 6.1.2	Similar to 6.1.2

OUTPUTS

Outputs	Unit of measurement	Baseline	Baseline year	Year 1	Year 2	Year 3	Year 4	Year 5	Final target[1]	Means of verification	Comments
Component 1. Institutional strengthening											
Output 1.1 INAB/CONAP processes are streamlined and harmonized	Processes	0	2019	0	0	25	0	0	25	Proposed regulations	
Output 1.2 Software solution is developed for managing information and processes	Software solution	0	2019	0	0	1	0	0	1	Certificate of product acceptance	
Output 1.3 IT (hardware) infrastructure is strengthened	IT infrastructure	0	2019	0	2	0	0	0	2	Certificate of receipt of equipment	
Output 1.4 Institutional staff and service providers are trained, with consideration for cultural relevance and gender sensitivity	People	0	2019	0	150	500	770	150	1,570	Lists of participants	
	Women	*0*	2019	0	30	100	154	30	314		*Gender monitoring*
Output 1.5 Monitoring system is implemented based on samples and satellite data	System	0	2019	0	0	0	0	1	1	Independent final evaluation	

Outputs	Unit of measurement	Baseline	Baseline year	Year 1	Year 2	Year 3	Year 4	Year 5	Final target[1]	Means of verification	Comments
Component 2. Inclusive restoration											
Output 2.1 Producers receiving legal and technical support to prepare AFS/SPS incentive applications	Producers	0	2019	1,363	1,818	1,818	1,818	0	6,817	Consulting firm reports	Includes support for obtaining municipal certificates of possession and affidavits by hiring forest regents and attorneys. It is anticipated that 3,400 applications will be prepared for the 6,817 beneficiaries because some projects are group projects. The total number of producers is less than the total of women + indigenous peoples because some beneficiaries are indigenous women.
	Women	*0*	2019	463	618	618	618	0	2,317		*Gender monitoring*
	Indigenous peoples	*0*	2019	777	1,036	1,036	1,036	0	3,885		*Ethnic monitoring*
Output 2.2 Producers trained in Sustainable Forest Management (ASF or SPS)	Producers	0	2019	0	120	500	500	380	1,500		
	Women	*0*	2019	0	60	250	250	190	750		*Gender monitoring*
	Indigenous peoples	*0*	2019	0	74	305	305	232	916		*Ethnic monitoring*
Component 3. Forest-industry-market linkages											
Output 3.1 Forest producers trained in demand-driven forest management in the area of intervention	Producers	0	2019	0	200	200	200	200	800	Consulting firm reports	Includes support for obtaining forest utilization licenses
	Women	*0*	2019	0	100	100	100	100	400		*Gender monitoring*
	Indigenous peoples	*0*	2019	0	100	100	100	100	400		*Ethnic monitoring*
Output 3.2 Cooperatives/associations/ micro, small, and medium-sized enterprises (MSMEs) supported in formalization and entrepreneurship in the area of intervention	Cooperatives/ associations/ MSMEs	0	2019	0	0	75	75	75	225		Includes development of business plans

Outputs	Unit of measurement	Baseline	Baseline year	Year 1	Year 2	Year 3	Year 4	Year 5	Final target[1]	Means of verification	Comments
Output 3.3 Cooperatives/associations/ MSMEs trained in technologies for efficient forest utilization in the area of intervention	Cooperatives/ associations/ MSMEs	0	2019	0	0	10	20	20	50		Includes sharing of experiences/participation in trade fairs
Output 3.4 Forest Market Intelligence Program implemented	Program	0	2019	0	0	0	0	1	1	Independent final evaluation	Includes sharing of experiences/participation in trade fairs

FIDUCIARY AGREEMENTS AND REQUIREMENTS

Country:	Republic of Guatemala
Project:	Sustainable Forest Management Project (GU-L1165/GU-G1005)
Executing agency:	National Forestry Institute (INAB)
Prepared by:	Lilena Martínez and Rodrigo Castro (FMP/CGU)

I. EXECUTIVE SUMMARY

1.1 INAB[1] is a decentralized, autonomous state agency with legal capacity, its own equity, and administrative independence. It is the lead agency and competent authority over forestry matters in the public agriculture sector and has the objective of promoting and furthering forestry development in Guatemala through sustainable forest management, reducing deforestation on forest lands, promoting reforestation of existing forests that have been depleted, and increasing forest productivity. INAB is led by a Board of Directors and Management, and has technical, scientific, and administrative units to carry out the range of duties assigned to it. The Board of Directors, either at the request of Management or on its own initiative, is empowered to establish those units and to regulate their responsibilities, methods, and procedures.

1.2 In evaluating the fiduciary considerations for execution of projects with external financing, including regulatory considerations, organization, financial and procurement management, internal control, the capabilities and availability of human resources, it was concluded that INAB does not have prior experience executing projects financed by international organizations and lacks sufficient personnel to naturally assume the activities involved in executing the Sustainable Forest Management Project (GU-L1165/GU-G1005). Accordingly, mitigation actions are necessary to reduce the high-level fiduciary risk.

1.3 The Financial Management Guidelines for IDB-financed Projects (document OP-273-6) will be applied for financial management, and the Integrated Financial Management System (IFMS) will be accepted as the country system. Procurement and contracting will be undertaken in accordance with the Policies for the Procurement of Goods and Works Financed by the Inter-American Development Bank (document GN-2349-9) and the Policies for the Selection and Contracting of Consultants Financed by the IDB (document GN-2350-9). The Procurement System of the State of Guatemala (GUATECOMPRAS) portal will be accepted solely as an information system for advertising procurement processes.

[1] Created in Article 5 of the Forestry Law approved by Legislative Decree 101-96.

1.4 The project will be executed by a project coordination unit (PCU) within INAB, which for purposes of fiduciary management will have a minimum of one financial management specialist and one procurement specialist, who will work in coordination with INAB's Financial Management Division. The total cost of the project is US$9,225,000 (a US$775,000 grant and a US$8,450,000 loan), financed with resources from the Forest Investment Program (FIP), a window of the Climate Investment Fund (SCX).

II. THE EXECUTING AGENCY'S FIDUCIARY CONTEXT

2.1 The Organic Budget Law of Guatemala[2] regulates the budget, accounting, treasury, and public credit subsystems that comprise the IFMS and operate under the principle of regulatory centralization and operational decentralization. INAB is a decentralized, autonomous agency subject to the aforementioned law and budget, accounting, and treasury regulations applicable to this type of institution. With respect to procurement, a number of INAB's procedures must be approved by the Ministry of Finance (MINFIN). INAB is subject to the Government Procurement Act[3] and its Regulations,[4] which govern the regulatory and transactional aspects of government procurement. The analysis of fiduciary capacities determined that INAB does not have sufficient human resources with prior experience to execute projects financed by multilateral organizations.

III. FIDUCIARY RISK EVALUATION AND MITIGATION ACTIONS

3.1 An evaluation of the project's fiduciary risk concluded that although INAB has a regulatory framework, an IFMS, and institutional processes, in practice the limited availability of human resources and the fact this will be its first time executing Bank-financed projects and applying Bank policies constitutes a high-level fiduciary risk. Risks include: (i) weak financial management, to be mitigated by strengthening INAB by hiring experienced fiduciary specialists familiar with Bank policies and meeting the minimum profile requirements set out in the project's Operating Regulations to form the PCU; deconcentration of financial management system operations in the PCU; training, assistance, and fiduciary oversight by the IDB; (ii) procurement delays or failures, to be mitigated by forming the PCU; training, assistance, and oversight by the IDB, including the rating committees, so that they have the ability to evaluate the processes according to Bank policies; and inclusion in the project's Operating Regulations of procurement management procedures; (iii) insufficient and delayed budget allocations for financial execution of the project, to be mitigated by creating a programmatic structure to identify the project within INAB's budget, comprehensive planning of the project activities, and timely allocation of headroom during budget formulation and execution as part of the planning process; and (iv) delays in payments to contractors and suppliers, which will be mitigated by monthly monitoring of the Payments Plan, as well as inclusion in the project's Operating Regulations of a description of actions, responsible parties, and payment periods; and (v) ineffective contract management, to be

[2] Decree 101-97.

[3] Decree 57-92.

[4] Government Agreements 122-2016 and 172-2017 of MINFIN.

mitigated through implementation of the contract management certificate as a contract monitoring instrument and appointment of individuals responsible for monitoring contracts.

IV. CONSIDERATIONS FOR THE SPECIAL PROVISIONS OF CONTRACTS

4.1 **Conditions precedent to the first disbursement of the loan and grant proceeds are as follows:**

a. **The accounts in which the loan disbursements and counterpart contribution will be deposited, established as a condition precedent to the first disbursement of the loan in the general conditions of the loan contract, will be opened in U.S. dollars, used specifically for the project, and attached to the treasury single account (TSA). In order to make payments for project commitments, INAB will open and maintain separate accounts in a bank of the national financial system. A request from the borrower (included in all the loan contracts) must be made so that the Bank of Guatemala can authorize the opening of the account in U.S. dollars. In this case, an additional monetary account must be opened since autonomous and decentralized entities do not make payments charged against the TSA.**

b. **The PCU to be formed as a condition precedent to the first disbursement of the financing will include a procurement specialist and a financial specialist. Those specialists will be selected prior to the first disbursement and will meet the profile requirements established in the project's Operating Regulations. This is justified to ensure adequate technical profiles in compliance with Bank policies and the exclusive dedication of minimum personnel for effective execution of the project.**

c. **Signing of a funds transfer and execution agreement establishing the terms under which the loan and grant proceeds will be transferred from the State to INAB, through the Ministry of Agriculture (MAGA), and agreeing upon the obligations for execution of the project components. The above is necessary because INAB is a decentralized agency with its own legal capacity and, as such, is not acting under the loan contract and budget as an agency of the central government.**

4.2 Special contractual conditions of execution:

a. The exchange rate for project accounting will be the rate reported by the Bank of Guatemala on the date of the payment transaction. Any foreign exchange earnings may be reinvested in the project activities upon the Bank's prior no objection.

b. The borrower agrees to assign a specific budget code within the programmatic structure of MAGA/INAB to identify and correlate the source of financing with the project resources, based on the components contained in the cost table for the loan contract/grant agreement. This is justified to ensure utilization of the national financial management system, without the need to keep subledgers or parallel ledgers in Excel, which streamlines project execution and accounting.

c. Under this project, INAB may sign multiyear contracts for consulting firm services provided sufficient annual budget allocations are made to meet the payment obligations corresponding to commitments undertaken in prior fiscal years. This is justified to allow multiyear contracts to be signed and avoid their unnecessary partitioning when execution extends beyond the fiscal year.

d. Provisions on the following are to be included and observed when using national competitive bidding (NCB): (i) not restricting the participation of vendors from the Bank's member countries and declaring ineligible vendors from the Bank's nonmember countries; (ii) not establishing percentages of origin, preferential rates, or registration requirements; (iii) elements that are to be included in the bidding documents; and (iv) the formation of evaluation committees or boards with members knowledgeable of the project's governance framework and the Bank's procurement policies. The project's Operating Regulations will establish the specific criteria for forming those committees or boards, and the PCU will be responsible for monitoring compliance. This is justified to ensure that eligible companies, firms, or consultants have an equal opportunity to compete, and to ensure that bids or proposals are evaluated by applying the procedures set out in the Bank's policies.

V. AGREEMENTS AND REQUIREMENTS FOR PROCUREMENT EXECUTION

5.1 **Procurement execution:** The procurement and contracting will be undertaken in accordance with the Policies for the Procurement of Goods and Works Financed by the IDB (document GN-2349-9) and the Policies for the Selection and Contracting of Consultants Financed by the IDB (document GN-2350-9), as follows:

a. **Procurement of goods and nonconsulting services:** Contracts for goods and nonconsulting services arising under the project and subject to international competitive bidding (ICB) will be executed using the standard bidding documents issued by the Bank. Procurement by NCB will be executed using the bidding documents agreed upon with the Bank. The project's sector specialist is responsible for reviewing the technical specifications for procurement during preparation of selection processes.

b. **Selection and contracting of consultants:** Contracts for consulting services arising under the project will be executed using the standard request for proposals issued by or agreed upon with the Bank, according to the international or national designation of the shortlist. The project's sector specialist is responsible for reviewing the terms of reference for procurement of consulting services.

c. **Selection of individual consultants:** The contracting of individual consultants will be governed by the provisions of document GN-2350-9, Section V, paragraphs 5.1 to 5.4, pursuant to the methods set out in the procurement plan.

d. **Use of the country procurement system:** The Bank approved the use of the system or subsystem of electronic reverse auction in document GN-2538-26 up to the shopping threshold for goods and/or nonconsulting services, which may be applied once the required measures for implementation have been

fulfilled. The GUATECOMPRAS information system is accepted exclusively for advertising purposes.

5.2 **Thresholds applicable to the project:** The recommended thresholds for using ICB and a shortlist of international consultants correspond to those established for Guatemala and listed on the IDB procurement portal.

Table 1.Threshold amounts (in thousands of U.S. dollars)

International advertising (works)	Shopping (works)	International advertising (goods)[5]	Shopping (goods)	International advertising (consulting)	Shortlist 100% national
Greater than or equal to US$1,500	< US$150	≥ US$150	< US$25	≥ US$200	< US$200

5.3 **Main procurement items:** The main procurement items for the project are related to the engagement of consulting firms to support execution of the components, procurement of electric generators, IT and communications equipment, and the hiring of individual consultants to support the PCU. Once the loan is approved, the PCU will be responsible for preparing the procurement plan[6] based on the multiyear execution plan. The procurement specialist will furnish the plan and ensure its adequacy and quality in accordance with the provisions of the loan contract and the Bank's procurement policies, which will require an expert opinion to be issued.

Table 2. Main procurement items

Activity	Selection method	Estimated date of request for proposals/ invitation	Estimated loan amount (US$ thousands)	Estimated grant amount (US$ thousands)	Estimated total amount (US$ thousands)
Goods					
IT equipment (Data Center) P1.3	ICB	2021	211	0	211
IT equipment (Desktops, tablets) P1.3	ICB	2020	373	0	373
Procurement of electric generators P1.3	ICB	2020	554	0	554
Structured wiring	Shopping	2020	22	0	22
Microwave communication equipment	NCB	2021	95	0	95
Consulting services (firms)					
Consulting firm for support P1.1 and P.1.2.1	Quality- and cost-based selection (QCBS)	2019	0	466	466
Consulting firm for support P1.2.2, P1.2.3, and P1.4	QCBS	2020	1,084	0	1,084

[5] Includes nonconsulting services.

[6] Documents GN-2349-9 (paragraph 1.16) and GN-2350-9 (paragraph 1.23). The Borrower shall prepare and furnish to the Bank for its approval, prior to loan negotiations, a procurement plan acceptable to the Bank for an initial period of at least 18 months.

Table 2. Main procurement items

Activity	Selection method	Estimated date of request for proposals/ invitation	Estimated loan amount (US$ thousands)	Estimated grant amount (US$ thousands)	Estimated total amount (US$ thousands)
Consulting firm for support P1.5	QCBS	2022	223	0	223
Consulting firm for support P2.1 and P2.2	QCBS	2020	2,082	0	2,082
Consulting firm for support P3.1	QCBS	2020	360	0	360
Consulting firm for support P3.2	QCBS	2020	1,113	0	1,113
Consulting firm for support P3.3	QCBS	2020	450	0	450
Consulting firm for support P3.4	QCBS	2020	470	0	470
Final evaluation	QCBS	2024	150	0	150
Socioenvironmental management measures	QCBS	2020	200	0	200
Audit	QCBS	2021	100	0	100
Consulting services (individual)					
General coordinators and components 1, 2, and 3 and support consultants (5) for the PCU	3 CVs	2019	888	222	510
Midterm evaluation	3 CVs	2023	30	0	30

5.4 **Initial procurement plan.** To access the 18-month procurement plan see required link 4(a) and required link 4(b).

5.5 **Procurement supervision.** The Bank will conduct ex ante reviews of project procurement. Fiduciary procurement visits will be made at least every six months according to the plan for supervision of the initiative, and will include at least one physical inspection visit.[7]

5.6 **Records and files.** The PCU will be responsible for maintaining project records and files. The consultants supporting project procurement will work with the PCU to ensure institutional capacity in the area of procurement and the integrity of processes. They will develop internal workflows and attach them to the project's Operating Regulations.

VI. Financial Management Agreements and Requirements

6.1 **Programming and budget.** The project execution budget will be allocated within the programmatic structure of MAGA/INAB, identifying and correlating the resources and source of financing, as well as the other classifications necessary for proper execution and identification of the resources based on the cost table for

[7] The physical inspections verify the existence of the items procured, leaving verification of their quality and fulfillment of specifications to the sector specialist.

the loan contract/grant agreement. Guatemala's integrated accounting system (Sistema de Contabilidad Integrado, SICOIN) will be used for operational management of the budget.

6.2 **Accounting and information systems.** Project accounting and records will be decentralized and managed by INAB through SICOIN, which is the sole source of information on the use of the project funds. The existing accounts and expense structure will be used, and there will be no special chart of accounts. Supporting documentation for payment transactions will reside with INAB, which will be responsible for booking the entries and making payments as a charge against the project. The transactions will be converted at the exchange rate reported by the Bank of Guatemala on the date of the transaction.

6.3 **Disbursements and cash flow.** The TSA mechanism is acceptable for managing the resources financed by the Bank. Therefore, advances of funds will be deposited in a secondary U.S. dollar account attached to the TSA. In order to make payments for project commitments, a monetary account will need to be opened and held in a bank of the national financial system. As an autonomous and decentralized entity, INAB does not make its payments through the TSA.

6.4 The Bank will make disbursements under the advance of funds modality or other modality established in document OP-273-12. Advances of funds will be made based on a financial plan generated by the multiyear execution plan for the following six months or other reasonable period, provided the payments are made on time and properly documented. Subsequent disbursements may be made once 80% of the prior advances have been justified. If necessary, use of the accommodations established in document OP-273-12 may be analyzed.

6.5 **Internal control and external auditing.** The project will be executed under the internal control structure established in the project's Operating Regulations. The country's internal audit subsystem will not be used.

6.6 **External control and reports.** The project's financial statements will be audited annually by a private independent audit firm eligible for the Bank according to the terms of reference and standard model contract, or by the Comptroller General's Office eligible to audit Bank-financed projects.

6.7 **Financial supervision.** Financial supervision of the project will be conducted through consultations of budget information, payments, and accounting in SICOIN and the multiyear execution plan. In addition, at least one financial fiduciary oversight visit is planned for each year, and the unaudited financial information prepared by the executing agency will be reviewed.

6.8 **Execution mechanism.** Financial execution will be deconcentrated for operational purposes and SICOIN will be managed in the PCU. Final approval of the transactions may reside with INAB's National Financial Administration Directorate. In the event of available human resources to assume approval functions, those functions may be placed under the authority of the PCU.

6.9 **Other financial management agreements and requirements.** None anticipated.

SUSTAINABLE FOREST MANAGEMENT PROJECT

GU-L1165

CERTIFICATION

The Grants and Co-Financing Management Unit (ORP/GCM) certifies that the operation received the letter of commitment for financing by the **Strategic Climate Fund (SCX)** for up to **US$8,450,000** confirmed by Alvaro Flores (ORP/GCM), June 13, 2018.

Certified by: *original signed* July 22, 2019

Sonia M. Rivera
Chief
Grants and Co-Financing Management Unit
ORP/GCM

Date

SUSTAINABLE FOREST MANAGEMENT PROJECT

GU-G1005

CERTIFICATION

The Grants and Co-Financing Management Unit (ORP/GCM) certifies that the operation received the letter of commitment for financing by the **Strategic Climate Fund (SCX)** for up to **US$775,000** confirmed by Alvaro Flores (ORP/GCM), June 13, 2018.

Certified by:	*original signed*	July 22, 2019
	Sonia M. Rivera Chief Grants and Co-Financing Management Unit ORP/GCM	Date

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

PROPOSED RESOLUTION DE-__/19

Guatemala. Loan ____/SX-GU to the Republic of Guatemala
Sustainable Forest Management Project

The Board of Executive Directors

RESOLVES:

That the President of the Bank, or such representative as he shall designate, is authorized, in the name and on behalf of the Bank, as implementing entity of the Forest Investment Program (FIP) of the Strategic Climate Fund (SCX), to enter into such contract or contracts as may be necessary with the Republic of Guatemala, as Borrower, for the purpose of granting it a financing to cooperate in the execution of the Sustainable Forest Management Project. Such financing will be up to the amount of US$8,450,000, chargeable to the resources of the SCX/FIP, and will be subject to the Financial Terms and Conditions and the Special Contractual Conditions of the Project Summary of the Loan Proposal.

(Adopted on __ _____ 2019)

LEG/SGO/CID/EZSHARE-317695454-16567
GU-L1165

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

PROPOSED RESOLUTION DE-___/19

Guatemala. Nonreimbursable Investment Financing GRT/SX-_____-GU
Sustainable Forest Management Project

The Board of Executive Directors

RESOLVES:

That the President of the Inter-American Development Bank, or such representative as he shall designate, is authorized, in the name and on behalf of the Bank, as Administrator of the Forest Investment Program (FIP) of the Strategic Climate Fund (SCX), to enter into such agreement or agreements as may be necessary with the Republic of Guatemala, as Beneficiary, for the purpose of granting it a nonreimbursable investment financing for a sum of up to US$775,000 chargeable to the resources of the SCX/FIP, and to adopt any other measures as may be pertinent for the execution of the project proposal contained in document PR-____.

(Adopted on ___ _____ 2019)

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