



Project Information Document (PID)

Concept Stage | Date Prepared/Updated: 28-Oct-2019 | Report No: PIDC26859

**BASIC INFORMATION****A. Basic Project Data**

| | | | |
|--|--|--|---|
| Country El Salvador | Project ID P170854 | Parent Project ID (if any) | Project Name El Salvador Integrated Landscape Management and Restoration (P170854) |
| Region LATIN AMERICA AND CARIBBEAN | Estimated Appraisal Date Jun 01, 2020 | Estimated Board Date Aug 03, 2020 | Practice Area (Lead) Environment, Natural Resources & the Blue Economy |
| Financing Instrument Investment Project Financing | Borrower(s) Ministry of Environment and Natural Resources | Implementing Agency Ministry of Environment and Natural Resources | GEF Focal Area Multi-focal area |

Proposed Development Objective(s)

The proposed Project Development Objective (PDO) is to restore degraded land in El Imposible – Barra de Santiago Conservation Area.

PROJECT FINANCING DATA (US\$, Millions)**SUMMARY**

| | |
|---------------------------|------|
| Total Project Cost | 3.56 |
| Total Financing | 3.56 |
| of which IBRD/IDA | 0.00 |
| Financing Gap | 0.00 |

DETAILS**Non-World Bank Group Financing**

| | |
|-----------------------------------|------|
| Trust Funds | 3.56 |
| Global Environment Facility (GEF) | 3.56 |



Environmental and Social Risk Classification

Substantial

Concept Review Decision

Track I-The review did authorize the preparation to continue

Other Decision (as needed)

B. Introduction and Context

Country Context

- 1. El Salvador is the smallest country in Central America, one of the most densely populated and vulnerable to natural disasters in the world.** With a population of 6.4 million (2017) and a total extension of 21,041 Km², El Salvador is one of the most densely populated countries in the world (83th percentile). Sixty five percent of the population lives in urban areas and it is estimated that over 90 percent of the population live in areas considered at risk of natural hazards such as earthquakes and volcanic eruptions, as well as to climate related impacts such as floods, droughts and storms.
- 2. The country's economy is performing well after experiencing slow growth for over two decades.** After an initial "recovery bounce" from the end of the Civil War in the early 1990s, by the late 1990s the economy slowed down noticeably and started to fall behind comparator countries in a process that extended for more than two decades. With an average growth rate of real Gross Domestic Product (GDP) per capita of less than 1 percent from 1996 to 2001, and an average 1.5 percent after 2001, the country became one of the slowest growing economies in the Latin America and Caribbean (LAC) region and among structurally comparable peer countries.¹ However, in recent years the performance of the economy has improved considerably. Fueled by remittances, strong domestic consumption and investment, resulted in real GDP growth of 2.5 percent in 2018, and above the estimated potential of 2.2 percent. Real GDP is projected to grow at 2.5 percent in 2019 and converge to its potential of 2.2 percent over the medium-term in line with the global growth outlook².
- 3. High public debt, high levels of crime and violence, and informality constitute important barriers to sustained growth.** Public debt remains high at 70 percent of GDP and constitutes the main vulnerability of the economic performance, and overall competitiveness of El Salvador have been constrained by fiscal deficits. Persistent high levels of drug trafficking and gang related violence deter investments in the country. In addition, facing limited employment opportunities and high exposure to crime and violence, many Salvadorians have migrated from the country. To date, remittances from abroad account for nearly one-fifth of the country's GDP³. Regardless of constituting an important source of income, remittances from migration flows can also have negative effects. Specifically, they affect labor force participation rates by increasing reservation wages which ultimately undermine the country's growth.
- 4. During the past decade El Salvador has made considerable progress in social development, but social challenges persist.** GDP growth of 15 percent over the past decade in real per capita terms (purchasing power parity) allowed for an

¹ World Bank. (2015). Country Partnership Framework 2016-2019.

² IMF. (2019). El Salvador Country Report No. 19/143. Retrieved from <https://www.imf.org/en/Publications/CR/Issues/2019/05/23/El-Salvador-2019-Article-IV-Consultation-Press-Release-Staff-Report-and-Statement-by-the-46940>

³ The Heritage Foundation. (2019). 2019 Index of economic freedom. Retrieved from Heritage: <https://www.heritage.org/index/country/elsalvador>



increase in social spending, leading to a considerable decline in inequality and poverty. However, poverty remains high as 32.7 percent of households live below the poverty line and 7.9 percent of the population is considered to live in extreme poverty conditions⁴. Poverty rates in urban areas are lower than in rural areas and there are large disparities across the territory. The departments of Ahuachapán, Cabañas and Morazán have the highest share of the population with incomes laying in the national bottom 40 percent.

Sectoral and Institutional Context

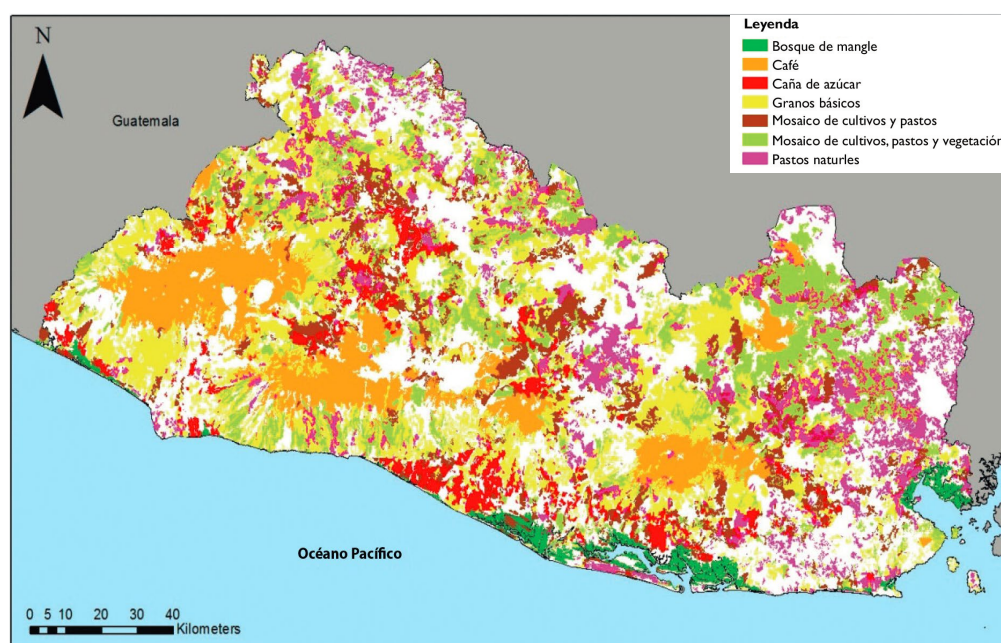
5. **El Salvador has a long history of anthropogenic intervention and land use change in its territory, which is composed of complex mosaics that include forest patches, coffee farms, pasture, bushes, subsistence crops and sugarcane, among others, while the remaining area of natural ecosystems is limited.** Land use is dominated by agriculture with approximately 60 percent of the territory being used for agricultural production (See Map 1). Despite a decrease in forest loss in recent years, from 2001 to 2018 El Salvador lost 74.4 thousand has of tree cover, equivalent to a 7.5 percent decrease in forest cover since 2000⁵, and placing the country as the second most deforested in Latin America. Deforestation has also affected the country's marine resources: in the last five decades the country lost 60 percent of its mangroves, passing from almost 100,000 ha to only 40,000 ha⁶. Today, according to the 2018 National Forest Inventory, 38.8 percent of the country is covered by forests, but most of those forests are secondary forests (58 percent) and agroforestry systems of shade coffee (21 percent), and there is important fragmentation of forest ecosystems. Despite recent efforts to improve environmental sustainability and restore degraded land, land use change remains a serious problem in the country and drives severe land degradation and threatens biodiversity.

Map 1. Current Land Use in El Salvador. 2015.

⁴ MINEC. (2016). Encuesta de hogares de propósitos múltiples. Ministry of Economy of El Salvador.

⁵ GFW (2019). El Salvador Country Dashboard. Global Forest Watch.

⁶ MARN. (2015). Hacia la restauración y reforestación de ecosistemas y paisajes 2016-2017.



Source: IUCN (2017).

Legend: Bosque de mangle (Mangrove forests), Café (Coffee), Caña de azúcar (sugar cane), Granos básicos (Basic grains), Mosaico de cultivos y pastos (Crops and grasslands), Mosaico de cultivos, pastos y vegetación (crops, grasslands and forests), pastos naturales (natural grasslands).

6. Forest loss has resulted in loss of ecosystem services and in severe land degradation, which in turn threatens biodiversity, agricultural productivity and exacerbates the country's vulnerability to climate change and food insecurity.

15 percent of lands in El Salvador are severely degraded and about 89 percent of the national territory is at risk due to environmental degradation, which magnifies the country vulnerability to natural hazards and extreme weather events. 42 percent of landslide-prone areas and 64 percent of major water recharge areas are lacking tree cover. Furthermore, more than half of the riparian forests of the main rivers have been lost⁷. To date, over 50 percent of the land area is considered unsuitable for food cultivation. Furthermore, this land degradation and habitat loss constitutes the main threat to biodiversity conservation in the country.

7. The major direct drivers of deforestation and ecosystem degradation are the expansion of agriculture and livestock activities. The expansion of crops on natural ecosystems, together with the implementation of inadequate practices such as the heavy usage of agrochemicals have played an important role in terms of deforestation and degradation of the country's natural assets, through soil erosion and contamination of soil and water. Historically, the development of an export-oriented agriculture economy, with products such as coffee and sugarcane, has influenced land use change, loss of forest cover and the degradation of the country's natural assets. Today, these pressures persist and degradation of coffee-shade crops and replacement of this type of crops, subsistence farming of basic grains (corn, beans and sorghum), pastureland expansion for livestock production, sugarcane expansion, and forest fires still exert pressure on forest cover. Urban has also contributed to deforestation habitat loss, but to a lesser extent.

8. Agriculture production generates 12 percent of GDP and is an important source of employment, but its productivity is relatively low. In 2016, the agriculture sector contributed to 11.92 percent of the country's GDP and at

⁷MARN-IUCN. (2017). Strengthening the National Restoration Strategy. Ministry of Environment and Natural Resources.



the national level, 18.7 percent of the employed population is engaged in agriculture, fishing, and hunting. In rural areas that number rises to 43.3 percent and agricultural activities constitute the primary source of income⁸. Coffee production is the main product in terms of contribution to GDP. Subsistence agriculture is practiced by 325,000 producers in small farms of less than 3 has and in steep terrains, dominated by low productivity corn production. The agricultural sector receives direct and indirect incentives which often contradict environmental commitments and objectives El Salvador has established in recent years.

9. **Sugar cane expansion and harvest practices have been identified as one of the main current threats to Salvadorian ecosystems.** Located mostly on the lower western and central lands, sugar cane plantations have spread into coastal territories of the country and are primarily responsible for the clearing of mangroves and riparian forests in the center and western regions of El Salvador. From 2006 to 2015, sugar cane plantations increased from approximately 60,000 ha to 80,000 ha. The country's Fifth Biodiversity Report found that 48,280 ha of deforestation between 2000 and 2010 was due to the expansion of sugar cane plantations⁹. In terms of land degradation, unsustainable agricultural practices such as burning crops before harvest, heavy usage of herbicides and pesticides, and poor waste management practices generates soil erosion and the siltation of mangroves, importantly affecting biodiversity. Erosion of soils and sedimentation of water leads to lower productivity rates, which farmers tend to compensate by further expanding their agricultural area into mangrove and gallery forests¹⁰. Gallery forests are key for irrigating fresh water to the lowlands and into mangroves. Mangroves serve as an important nursery habitat for fisheries and are rich in biodiversity playing an important role when protecting shorelines from storm and hurricane winds, waves, and floods¹¹. Furthermore, polluting smoke and ash emissions from pre harvest burns, are especially harmful to the fauna and flora around the crops, as well as to the health of farmers doing the harvesting of sugar cane fields and surrounding populations.

10. **In turn, land degradation affects the agricultural sector.** Land degradation and soil erosion, exacerbated by recurrent flood and drought, adversely impact agricultural production, further affecting the livelihoods of the rural poor. The National Development Plan (2014-2019) identifies natural disasters, in combination with other factors like environmental degradation, as one of the greatest threats to human development, with a disproportionate impact on the poor¹².

11. **Lack of coordination and policy harmonization between environmental sustainability objectives and rural development objectives remain important underlying factors of land degradation and biodiversity loss.** Despite the development of multi-stakeholder dialog supported by rigorous analysis to advance restoration efforts, agricultural policies often contradict environmental objectives and commitments. The Government often provides direct and indirect support to both large scale and subsistence scale producers that do not take into consideration environmental elements, and contribute to both the expansion of the agricultural frontier and to environmental degradation via unsustainable use of agrochemicals (Dominguez, Castillo, & Kernan, 2019). For example, one of main objectives of promoted by MAG in recent years is to increase production and productivity, with a strong focus of basic grains, to ensure food security, through the delivery of technological packages with improved seeds and agrochemicals, often to be used in steep slopes without

⁸ Ministry of Agriculture and Livestock. Retrieved from <http://www.mag.gob.sv/mag-destaca-crecimiento-de-la-agricultura-y-aporte-al-pib-en-informe-de-rendicion-de-cuentas/>

⁹ Dominguez, J., Cherret, I., Catillo, J., & Kernan, C. (2018). Identificación y Análisis de las Causas Directas y Subyacentes de la Deforestación y Degradación de Hábitats Boscosos en El Salvador.

¹⁰ USAID (2018). Tropical forest and biodiversity analysis in El Salvador.

¹¹ WWF. (n.d.). Central America: El Salvador into Guatemala . Retrieved from <https://www.worldwildlife.org/ecoregions/nt1425>

¹² GFDRR. (2019). Global Facility for Disaster Reduction and Recovery - El Salvador. Retrieved from <https://www.gfdr.org/en/el-salvador>



considering ecological considerations. Capacities to transfer sustainable technologies and production practices to producers are missing, as extension services from MAG and from local governments are not sufficient and lack technical capacities to incorporate sustainability criteria. To address these issues, the Government of El Salvador is making efforts to update the National Environmental Policy and harmonize it with the Irrigation and the Forest Policies through a Forest Plan under preparation. The proposed project aims to contribute to strengthen these processes.

12. The environmental challenges and tensions with the agricultural sector are particularly present in the area of influence of the El Imposible-Barra de Santiago Conservation Area (EIBSCA), which hosts important biodiversity and provide key ecosystem services. These Conservation Areas are located on the Southwest and on the central West parts of the country, respectively, and they both hold several Natural Protected Areas within their territories. The EIBSCA hosts the highest concentration of biodiversity in El Salvador, with more than 400 species of trees, 500 species of butterflies, 30 species of large mammals, and 279 species of birds, 13 species of fish, 13 of amphibians, 7 of turtles, and 23 species of mangrove mollusks. However, the area is facing important pressures from agricultural expansion and bad agricultural practices and are importantly degraded. The main pressure is sugar cane production and the expansion of basic grains cultivation area and area for cattle ranching; as well as the replacement of shade coffee by other crops are the main drivers of forest cover and habitat loss, and land degradation drivers. These area counts with a Local Sustainable Development Plans, which includes as priority actions the restoration of landscapes and degraded ecosystems. In addition, the area is considered a pilot area to be restored under the Land Degradation Neutrality Action Plan under preparation.

13. Restoring ecosystems and landscapes to guarantee sustainable livelihoods is a national priority for El Salvador. To address the environmental sustainability challenges it faces, El Salvador is committed to reverse degradation process and has set ambitious targets to restore degraded land and mainstream biodiversity across sectors that are already driving important restoration efforts. In 2012 El Salvador formulated the National Environmental Policy, whose main components are the restoration and conservation of ecosystems to reduce risks while sustaining productive activities and ensuring the well-being of the population. Within this framework, the National Program for Restoration of Ecosystems and Landscapes (PREP, for its acronym in Spanish), with a target of restoring 50 percent of degraded land, was developed in synergy with key environmental, biodiversity, water and sanitation, and climate change strategies. The PREP is already being translated into action: MARN has been working with different partners to design and implement tools and instruments to strengthen and prioritize PREP actions, which include the application of the Restoration Opportunity Assessment Methodology (ROAM) to determine and analyze restoration options based on biophysical, social and economic criteria (See details of these criteria in Annex 1). As a result, restoration actions have been implemented in 170,000 has of degraded land across the country between 2014 and 2018¹³.

14. In terms of reducing land degradation and restoring degrading land, ES is updating its Action Plan to Fight Desertification (PANSAL) and has developed an ambitious National Restoration Plan. El Salvador has committed to Land Degradation Neutrality and it will be a pilot country in the implementation of Land Degradation Neutrality Framework under the United Nations Convention to Combat Desertification (UNCCD). To achieve this objective the country is currently in updating the PANSAL and developing a strategy at the national level and developing specific country objectives and voluntary targets. Third, as part of the Bonn Challenge the country pledged to restore one million hectares of land by 2030¹⁴. To meet its ecosystem restoration commitments the MARN presented in 2017 the National REDD+ Strategy for Landscape and Ecosystem Restoration (EN-REP, for its Spanish acronym). The EN-REP aims at restoring the ecosystem

¹³ MARN. (2019). *Restauracion de Ecosistemas y Paisajes Dashboard*. Retrieved from <http://seaweb.marn.gob.sv:8080/geocumplimiento/vgres/dashboard.php>

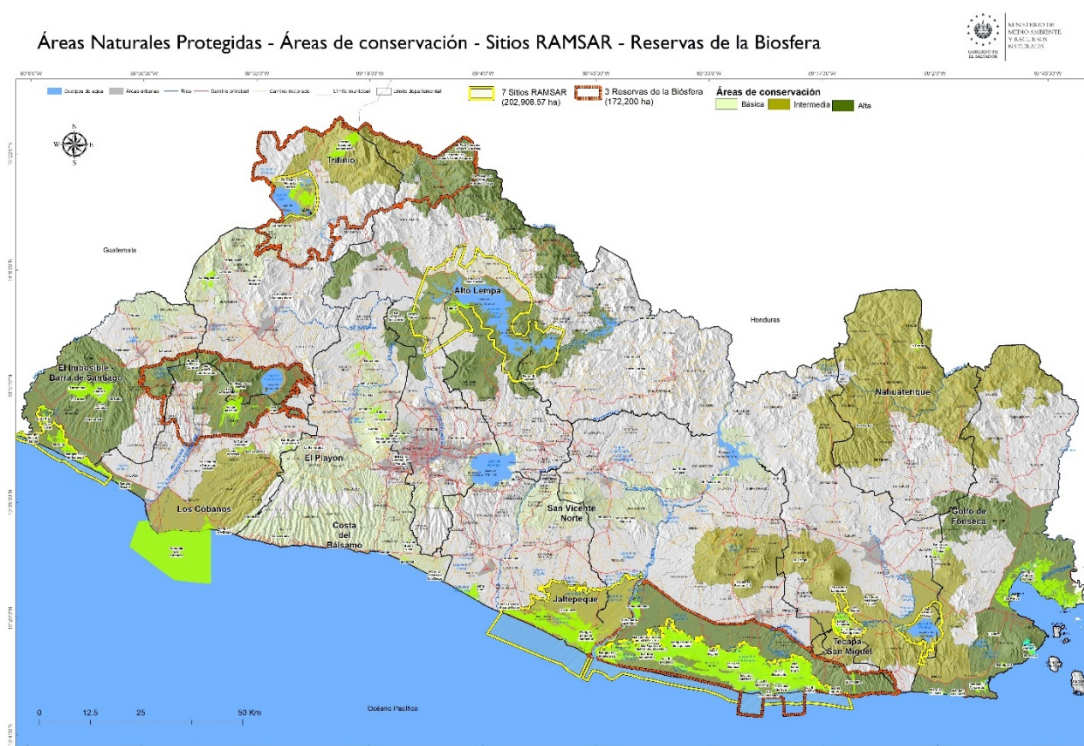
¹⁴ Bonn Challenge. (n.d.). *El Salvador*. Retrieved from <http://www.bonnchallenge.org/content/el-salvador>



functions of the country's degraded lands to reduce the loss and damage caused by natural and climate disaster risks, increase the country's carbon stocks, pursue sustainable economic activities, protect infrastructure investments, and ensure the overall well-being of the population.

15. **El Salvador's Biodiversity Strategy constitutes one of four national strategies developed for implementing the National Policy for the Environment (2012).** This strategy includes the mainstreaming of biodiversity into the country's economy and is closely related with the restoration of degraded ecosystems. It contains three main goals and identifies respective priority areas: (i) biodiversity mainstreaming in the economy (agriculture, fisheries and aquaculture, tourism); (ii) restoration and conservation, including critical ecosystems such as mangroves and beach ecosystems, rivers and wetlands, riparian forests and other forest ecosystems; (iii) Biodiversity for the People, focused on rescuing traditional knowledge of genetic resources, rights of use of biological resources, and local income generation options¹⁵. In addition, the country has established Conservation Areas which are territories to be managed in an integrated manner and with sustainable development principles that encompass protected areas, buffer zones, and biological corridors, and the conservation of biodiversity and ecosystem services (See Map 2). Conservation Areas are essential as they are part of the integrated management of protected areas, of special and critical relevance that hold lasts remains of natural habitat, ecosystems and biodiversity representativeness in the country.

Map 2. Conservation Areas of the System of Natural Protected Areas



Source: MARN (2019).

16. **To improve coordination at the regional level and to guide new investments and restoration efforts in the Conservation Areas, the MARN has worked on the development of Local Sustainable Development Plans (PDLS for its**

¹⁵ MARN. (2013). Estrategia Nacional de Biodiversidad. Retrieved from <https://www.cbd.int/doc/world/sv/sv-nbsap-v2-es.pdf>



acronym in Spanish). To date, 7 out of 15 total Conservation Areas have a PDL¹⁶. Conservation Areas with a PDL are: Alto Lempa – Cerrón Grande, Apaneca – Ilamatepec, Bahía de Jiquilisco – Xirihualtique, El Imposible – Barra de Santiago (EIBSCA), Jaltepeque – Bajo Lempa (Golfo de Fonseca), Los Cóbano, and Nahuaterique. PDLs are developed using the open standards methodology known as MIRADI. Each PDL has two axes of work that include: (i) the protection, increase and restoration of forest ecosystems to ensure ecosystem services, conserve biodiversity, and contribute to the reduction of greenhouse gas emissions and the increase of carbon reserves, and (ii) the transformation of traditional productive systems into agroecological or sustainable systems that contribute to improving the quality of life for the human population.

17. **Over the last decade international pressure has increased on the sugar cane industry to adopt more social and environmentally friendly practices that reduce the negative effects of the industry.** Aware of this, the sugar cane industry of El Salvador is promoting the adoption of the Bonsucro International Standard, that proposes criteria and indicators to assess the sustainability of cane production through its economic, social and environmental viability, and has supported the development of a good practices manual that promotes the employment of green harvest techniques (abandonment of burning and use of stubble) and the use of natural fertilizers. In line with these efforts, the Government of El Salvador is committed to face environmental degradation through intervention actions aiming at restoring its natural resources at the landscape level. In 2017 MARN launched the 2018-2022 National Ecosystem Restoration Plan, which includes an economic analysis of the actions for the restoration of landscapes and adoption of improved agricultural practices that reduce land degradation, along with technical guides on good practices with detailed information on restoration techniques for crops such as coffee, cocoa, sugarcane and basic grains, using the ROAM¹⁷. For the case of sugar cane plantation, the harvest of green cane without burning, improved practices could be applied in more than 80,000 ha¹⁸.

Relationship to CPF

18. **The proposed project is fully aligned with the second pillar of the World Bank Group's Country Partnership Framework (CPF) for El Salvador (FY16-19) and to national development objectives.** This pillar focuses specifically on fostering the country's resilience and sustainability by building its capacity to manage disasters and environmental challenges¹⁹. Thus the project will contribute to increasing the country's resilience to weather related events by promoting better natural resource management via the targeted protection of fragile ecosystems and biological corridors, the restoration of degraded areas, and the promotion of sustainable and environmentally friendly agricultural practices to be adopted producers located in the lower basin and coastal regions of EIBSCA. The project also builds from the Reductions in Emissions from Deforestation and Forest Degradation (REDD+) Readiness Preparation project that the MARN is currently implementing with technical assistance from the World Bank. This project is completely aligned with the recently launched Sustainable El Salvador Plan by the National Council of Environmental Sustainability and

¹⁶ Conservation Areas were proposed by the 2003 National Plan for the Development of the Territory. The 15 Conservation Areas are: Alotepeque-La Montaña, Alto Lempa, Apaneca – Ilamatepec, Bahía de Jiquilisco, Costa del Balsamo, Imposible-Barra de Santiago, El Playón, Golfo de Fonseca, Jaltepeque – Bajo Lempa, Los Cóbano, Nahuaterique, San Vicente Norte, Tecapa – San Miguel, Trifinio, and Volcán El Chingo.

¹⁷ Defined by IUCN and the World Resources Institute (WRI), the ROAM methodology consists of: 1. An analysis of the restoration needs based on national priorities, 2. definition of restoration actions based on these priorities, 3. identification of the scope and availability of land for each restoration technique, 4. analysis the costs and co-benefits of each restoration technique, and 5. identification and prioritization of opportunities for landscape restoration based on limitations and opportunities.

¹⁸ For more detail on restoration potential see annex 2.

¹⁹ World Bank. (2015). Country Partnership Framework 2016-2019.



Vulnerability (CONASAV), which represents a national bid for and roadmap towards achieving sustainable development in the country.

19. **The proposed project contributes directly with the objectives of GEF-7 in the focal areas of Biodiversity and Land Degradation.** The project advances the GEF-7 Biodiversity focal objective of mainstreaming biodiversity across sectors by supporting decision-making informed by biodiversity and ecosystem values. It also contributes to the biodiversity focal area by incorporating biodiversity considerations into land use planning in private and public actors in the agriculture sector, by strengthening tools that allow to monitor and manage biodiversity, and by reducing negative biodiversity impacts of agriculture through sustainable practices in sugar cane production. It will contribute to the main objectives of the Land Degradation focal area by creating an enabling environment to support voluntary Land Degradation Neutrality (LDN) target implementation by supporting the implementation of the PANSAL, with a special focus on building capacity for integrated land management, the promotion of participation of the private sector in the restoration of degraded production landscapes, and by supporting small and mostly poor farmers with extension systems. The project also includes innovative approaches to generate awareness about the cost of degradation and to leverage funds for restoration of degraded lands.

20. **The project also aligns with several international sustainability goals.** It will support achieving LDN strategic objectives under the UNCCD by supporting the implementation of the PANSAL. It will contribute to the Convention of Biological Diversity's (CBD) Aichi Targets under Strategic Areas B (Reduce the direct pressures on biodiversity and promote sustainable use) and E (Enhance implementation through participatory planning, knowledge management and capacity building). Finally, it contributes to the fulfillment of the United Nations Sustainable Development Goals, particularly goal 15 (Promoting sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, halt and reverse land degradation and halt biodiversity) and with the Nationally Determined Contributions (NDCs) goals under the United Nations Climate Change Convention, by contributing both to climate and adaptation.

Key Results (From PCN)

21. The proposed Project Development Objective (PDO) is to restore degraded land in El Imposible – Barra de Santiago Conservation Area.

The following key results are expected from this project:

- (i) Area of restored land in the prioritized Conservation Area (hectares). This Indicator aligns well with GEF CORE Indicator 3 (Area of land restored).
- (ii) Area under sustainable landscape management practices (hectares). This is a World Bank Corporate Results Indicator, aligns well with GEF CORE Indicator 4 (Area of landscapes under improved practices), and will capture the area of cane plantations that have adopted sustainable agricultural practices.
- (iii) Area with increased Normalized Difference Vegetation Index (NDVI). This indicator will allow to monitor the positive impact of the adoption of improved landscape management practice in reducing land degradation and biodiversity conservation.

Brief theory of change

22. Expansion of sugar cane crops and unsustainable production practices are degrading land and biodiversity in ecosystems, including mangroves and riparian forests, and are also degrading soil within production farms, which reduces productivity over time. Sugar cane expansion has also resulted in the displacement of traditional crops to higher mountain areas which in turn are also degraded and affect the provision of hydrological services for the overall country's economy,



and particularly for sugar cane crops themselves. In addition, coffee agroforestry systems, which constitute an important area of the country's forests, are being degraded or replaced by crops without shade or pasture. The main factors driving this situation are: (i) lack of capacities to manage natural resources and ecosystem services at the landscape scale, including lack of coordination between environmental and agricultural policies; (ii) lack of resources (human and financial) to promote sustainable production practices that mainstream biodiversity conservation and prevent land degradation; and (iii) lack of financial incentives to invest in ecosystem conservation and restoration.

23. To address this issue, the proposed project will work at a landscape scale and use an innovative approach to strengthen governance for natural resource management. It will also engage the private sector to adopt sustainable production practices and invest in the conservation and restoration of ecosystems, working with small farmers and communities. First, it will strengthen governance and technical capacities to manage natural resources at the landscape scale, by enhancing coordination of public institutions, particularly between MARN, MAG and local governments; and by generating technical capacities to mainstream biodiversity conservation and land degradation consideration in natural resource management decisions and policies. Second, it will promote the engagement of the private sector in the conservation and restoration of key areas in terms of ecosystem services provision. It will work in particular with sugar cane producers that benefit from ecosystem services from upper watersheds, where healthy coffee agroforestry systems and gallery forests are key for biodiversity conservation and water provision and regulation, to create financial mechanisms to restore degraded lands and preserve ecosystem services. In addition, technical assistance will be provided to sugar cane producers to help them adopt best production practices and farm management plans that mainstream biodiversity conservation and LDN criteria. This will allow to improve connectivity of ecosystems and reduce soil erosion at the farm level, which affects agricultural productivity. Third, it will provide incentives for the restoration of degraded lands in areas that are key for ecosystem services provision, mainly targeting small holders and communities along the area of intervention of the project. The combined actions are expected to generate the financial and institutional conditions to ensure sustainability of restoration and conservation efforts over time and to scale up similar landscape scale interventions in other landscapes.

Results and GEF focal areas

24. Following an integrated landscape management approach, the proposed project will directly contribute the GEF-7 Focal Areas of Biodiversity and Land Degradation. The project will work to strengthen local governance, inter sectoral coordination and technical capacities to manage natural resources at the landscape scale, mainstreaming biodiversity and LDN considerations in natural resource management. The project will contribute to mainstream biodiversity across sectors as well as landscapes by mainstreaming biodiversity conservation in agricultural production, with a special focus in sugar cane production, and by restoring habitat on degraded ecosystems with the participation of the private sector. In addition, it will mainstream biodiversity and LDN neutrality objectives in extension services and guidelines for sustainable agricultural production. These activities will also contribute to Land Degradation Focal Area by supporting voluntary LDN target implementation by enabling integrated land management and by restoring degraded production landscapes. As a result, land degradation will be reduced and land productivity will increase, contributing to achieve national LDN targets the country is setting in its LDN Plan – PANSAL.

25. The contribution of each GEF focal area towards the achievement of the PDO will be measured through intermediate indicators, with a suggested list included in the GEF Data Sheet and presented below. A complete results framework with SMART indicators will be developed during project preparation.



Outcome for Biodiversity Focal Area (BD1-1): Mainstream biodiversity across sectors as well as landscapes and seascapes through biodiversity mainstreaming in priority sectors (Components 1 and 2).

Indicators to be considered in this project

- # of technicians trained in land use planning and monitoring of biodiversity (Component 1)
- Area (hectares) of agricultural land that adopts biodiversity conservation practices (Component 2)

Outcome for Land Degradation Focal Area (LD-1-1): Maintain or improve flow of agro-ecosystem services to sustain food production and livelihoods through Sustainable Land Management (SLM) (Component 2).

Indicators to be considered in this project

- # of people with improved capacities to apply sustainable land use practices in production systems (Component 2).
- # of farmers with improved income derived from farm activities.
- Area (hectares) of productive land that adopts practices that maintain or improve the flow of agroecosystem services (Component 2).

Outcome for Land Degradation Focal Area (LD-1-3): Maintain or improve flows of ecosystem services, including sustaining livelihoods of forest-dependent people through Forest Landscape Restoration (FLR) (Component 3).

Indicators to be considered in this project

- # of private actors contributing to restoration of degrading land outside of their production area (Component 2)
- Area (hectares) of degraded forest restored (Component 2)

Outcome for Land Degradation Focal Area (LD-2-5): Create enabling environments to support scaling up and mainstreaming of SLM and LDN (Components 1 and 2).

Indicators to be considered in this project

- Area (in hectares) with information about biodiversity and land degradation (soil erosion and salinization) available, as a result of activities developed by the project (Component 1).
- # of local governance land use bodies strengthened (Component 1).

26. The proposed Project will also help achieve the following Aichi Targets:

- Strategic Goal A: Target 1 and Target 4
- Strategic Goal B: Target 7
- Strategic Goal D: Target 14; Target 15

D. Concept Description

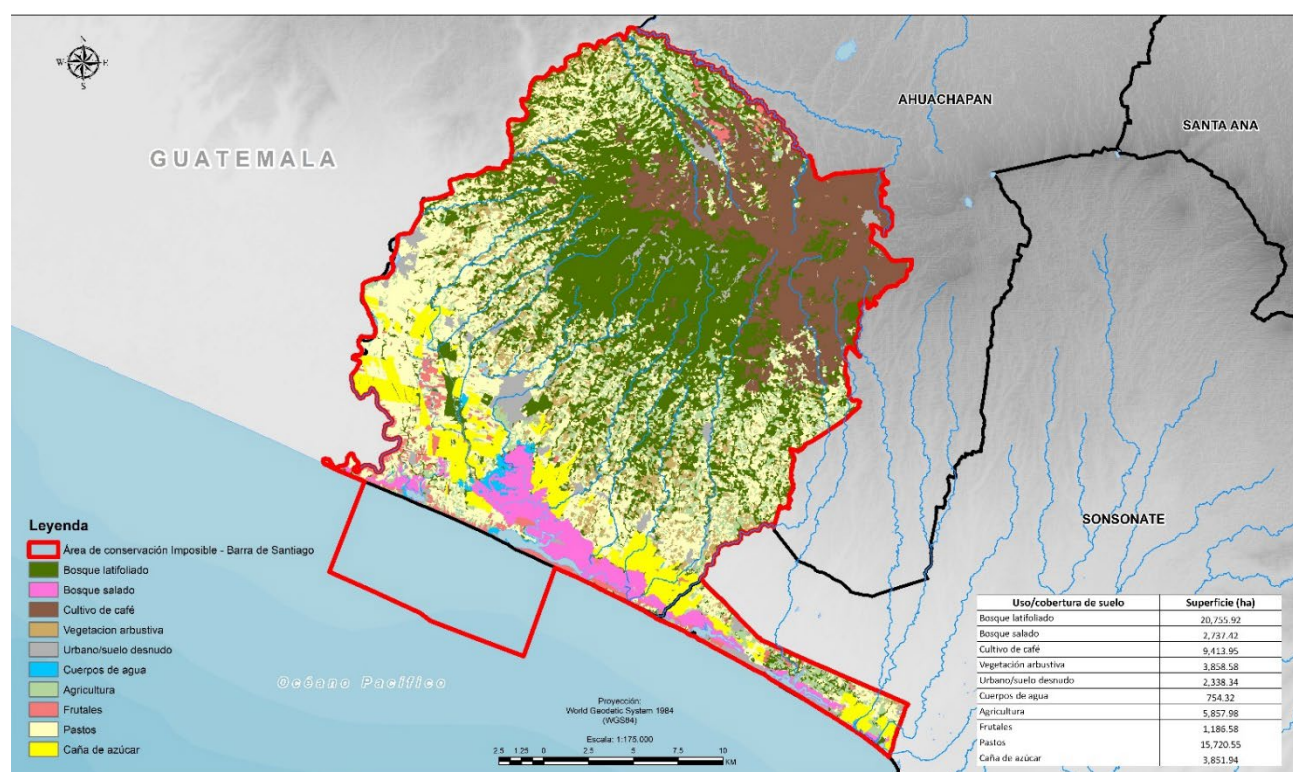
27. **The proposed project will work at the landscape scale and engage multiple stakeholder to promote sustainable management of natural resources and ecosystem services in El Imposible-Barra de Santiago (EIBSCA) Conservation Area.** It will strengthen technical capacities to manage resources at the landscape scale and will use innovative approaches to increase investment in restoration, by engaging the private sector to adopt sustainable production practices and invest in the conservation of ecosystem to preserve biodiversity, reduce soil degradation and provide ecosystem services. First, it will generate enabling conditions to manage natural resources at the landscape scale and will generate and disseminate



information about the relationship between agricultural practices, land degradation, and agricultural productivity. This will allow to strengthen governance and increase awareness about the importance of land use decision making with consideration of ecosystem services provision. Second, it will promote the engagement of the private sector in the conservation and restoration of key areas in terms of ecosystem services provision, with the establishment of private sector dialog roundtable and strengthening of water boards and restoration committees. Third, it will provide technical assistance to farmers adopt best production practices and the implementation of farm management plans that include biodiversity conservation elements.

28. **The proposed project will be implemented across selected areas in the EIBSCA influence area.** Component 1 will be implemented across the entire landscape. Component 2 will be implemented in areas to be selected during project preparation prioritizing water recharge areas and riparian forests, and biological corridors, and in and around sugar cane plantations in the lower basin and coastal municipalities, prioritizing crop areas with degraded lands and targeting those close to fragile ecosystems (See map of the implementation area in Map 3). The project will work with producer organizations and communities to be selected based on criteria developed during project preparation and aligned with the objectives of this project. The project will use innovative multistakeholder schemes and will serve as an example to scale up restoration in other regions of the country using an integrated landscape management approach.

Map 3. Project area - El Imposible-Barra de Santiago landscape land use cover



Source: MARN



29. **The project will be implemented over a period of 5 years with US\$ 4 million of financing from GEF-7 STAR and US\$ 16.7 million from parallel financing.** This project is part of a broader financing package that will contribute to the effective implementation of El Salvador's National Strategy for Restoration of Ecosystems and Landscapes (EN-REP), the design of which was supported by the World Bank through the Forest Carbon Partnership Facility (FCPF), International Union for Conservation of Nature (IUCN) and German Development Agency (GIZ). Parallel financing partners include the World Bank-FCPF, IKI/BMB, GIZ (REDD+ Landscape Phase II), FIAES, and the Ministry of Environment and Natural Resources.

Project Components

30. The proposed project is structured by three components as follow:

Component 1: Enabling conditions for integrated landscape management (GEF US\$ 800,000; Parallel financing US\$ 3,333,333)

31. The objective of this component is to create conditions to manage the targeted landscape in an integrated manner, considering interactions between agricultural production and ecosystem services in the landscape. This will be achieved through strengthening local governance for the management of natural resources; creating awareness about the flow of ecosystem services in the landscape and the costs of environmental degradation; generating technical capacities to evaluate and monitor key factors in terms of sustainability at the landscape scale. To generate conditions to ensure the continuity of conservation and restoration efforts, and leverage finance; this component will also support the creation of a financing mechanism with the participation of the private sector, that will allow to invest in ecosystem services provision through the restoration of degraded ecosystems.

32. First, local governance will be strengthened by increasing the coordination between public sector institutions and by increasing the private sector engagement and interest in restoration. Coordination between the MARN and the MAG, and between the National Ministries and the local governments will be strengthened. This includes strengthening restoration boards and waterboards alliances, in which MARN, MAG and local governments are represented. In addition, private engagement will be promoted through the creation of a private sector restoration roundtable and by pursuing alliances and coordination with private sector actors intervening in the landscape (mainly sugar cane producers) and local water boards, in order to promote investments in conservation of water recharge and biodiversity important areas.

33. Second, the cost of land and ecosystem degradation and the potential benefits derived from the restoration of degraded ecosystems will be developed, and their results will be disseminated among key stakeholders from the public and the private sector. It is expected that this activity will increase awareness about the importance of investing in healthy ecosystems.

34. Third, to assess and monitor the state and trajectory of sustainability conditions of the landscape that considers environmental, social and economic criteria at the landscape level, the landscape sustainability index will be strengthened by including specific biodiversity and land degradation considerations, and the information required to feed the index will be collected or generated. In addition, the capacities to generate the information and regularly assess the sustainability of the landscape through this index will be strengthened. This sustainability index will have the potential to become a tool to demonstrate sustainability factors from the agricultural products produced in the landscape, constituting an enabling factor to access specialized markets for sustainable sourced products.



35. Fourth, to secure financial resources and will support the creation of a financial scheme to ensure the sustainability of restoration efforts and the provision of ecosystem services in the landscape. This will be achieved by facilitating the establishment of a reciprocal ecosystem services agreements to finance the restoration and conservation of water and key ecosystem services.

36. The activities that this component will fund will contribute to generate the conditions to mainstream biodiversity and address land degradation by laying the foundations to promote and implement land use practices to avoid, reduce and reverse land degradation. This component will directly contribute to PANSAL²⁰ component 4 oriented to strengthen institutional capacities and human resources for sustainable land use management and component 5 oriented to generate, systematize and disseminate information related to land degradation to effectively monitor sustainability.

Expected outcomes from this component include:

- Strengthened governance for natural resource management at the landscape scale.
- Increased awareness about the costs of ecosystem degradation and the benefits of ecosystem restoration.
- Increased capacity to evaluate and monitor sustainability at the landscape scale.
- Sustainability of financial resources for ecosystem conservation and restoration increased.

Component 2. Ecosystem restoration to secure the flow of ecosystem services within the productive landscape (GEF US\$2,592,042; Parallel financing US\$ \$10.533.334)

37. The objective of this component is to restore degraded ecosystems across the landscape to ensure the flow of ecosystem services and the maintenance of biodiversity and ensure the sustainability of restoration efforts through institutionalizing sustainable practices in extension support schemes and securing long-term financing. This will include the implementation of land use practices that contribute to forest restoration and conservation, and increased provision of ecosystem services from agricultural lands. It will support investments in forest restoration that will be targeted in ecologically sensitive mountain areas currently degraded or used for agriculture, mainly basic grains and coffee, and cattle ranching, with potential biodiversity connectivity or water recharge; as well as in areas with severe land degradation in the mid and lower sections of watersheds, especially mangroves and riparian forests ecosystems. In addition, it will also support the adoption of improved agricultural practices in the production of sugar cane, which will be achieved by supporting producers and other industry actors in the adoption of improved harvesting practices and in integrating ecological considerations into farm management.

38. Restoration activities will be implemented using extension support from the National Agricultural and Forestry Technology Center (CENTA) Unit of Technology and Extension. This Unit will be strengthened to ensure the effectiveness of technology adoption by producers and to institutionalize capacities to promote sustainable agriculture production and restoration techniques.

39. The component will be structured in two sub-components as follow:

- (i) Subcomponent 1 will invest in the restoration of degraded areas affected by the expansion of agriculture that are essential for ecosystem services provision and biodiversity connectivity, including riparian forests, mangroves and other ecosystems. The restoration activities under this subcomponent will serve as demonstrative actions that are expected to be scaled with direct financial resources from beneficiaries of ecosystem services that will contribute to the reciprocal ecosystem services agreements (who will also be

²⁰ At the moment of the preparation of this Concept Note, the PANSAL was at advanced stages of development.



targeted by activities under component 1). The specific incentives that the project will provide to landowners of degraded lands and critical ecosystems in order to incentivize restoration and conservation actions will be defined during project preparation. This activity will use the EN-REP and the Action Plan for the Restoration of Ecosystems and Landscapes as inputs, such as the technical guide for the sustainable production of sugar cane.

- (ii) Subcomponent 2 will provide technical assistance for the adoption of improved agricultural practices in the production of sugar cane. It will support the adoption of sustainable practices and biodiversity criteria towards the Bonsucro standard, with a focus on the principle “Manage biodiversity and ecosystems”. Investments will be targeted in critical sugar cane crop areas with degraded lands, targeting farms located close to fragile ecosystems (such as mangroves) and in areas important for ecosystems connectivity. Activities to be financed in this component will include technical support and trainings for the adoption of sustainable practices and to develop farm management plans that mainstream biodiversity and other ecological considerations, with special attention of ecological connectivity within farms.

40. The implementation approach of restoration actions will be defined in close coordination with FIAES (Environmental Investment Fund of El Salvador), which has led to date the implementation of 1,079 protection and restoration environmental projects that include: forest restoration and planting, forest protection, and the restoration of mangroves and other micro-basins and agricultural systems. CENTA and Municipalities are expected to provide of technology transfer services to farmers and producers.

41. The activities that this component will fund will directly contribute to PANSAL’s²¹ component 1 oriented to restore ecosystems and control forest degradation in agroforestry systems specifically to restore agroforestry systems and critical forest ecosystems in an inclusive way; and to PANSAL’s component 2 oriented to restoring soil health by controlling erosion and restore biodiversity in soil, and increasing net primary productivity. The latter includes a specific objective of designing and implementing incentives to promote the transition towards sustainable soil management practices and the restoration of degraded ecosystems.

42. Expected outcomes of this component include:

Reduced soil degradation and improved biodiversity conservation through the restoration of degraded lands in agricultural landscapes and conservation of riparian forests and mangroves.

Increased sustainability in sugar cane fields through adoption of improved agricultural practices that mainstream biodiversity considerations.

Extension service capacities to promote sustainable practices and technologies strengthened.

Component 3. Project monitoring and management (GEF financing US\$169,602; Parallel financing US\$ 2,833,333).

43. This component will facilitate project management and coordination among the various institutions and partners involved in the implementation of components 1 and 2, across national and regional levels. It will also include implementation of project monitoring and evaluation.

44. The main outcomes for this component include:

- Effective project management and communication; and Monitoring and evaluation.

²¹ At the moment of the preparation of this Concept Note, the PANSAL was at advanced stages of development.



Beneficiaries

45. Rural population and agricultural producers will benefit the most from reduced erosion, ecosystem services and improved productivity through the adoption of more efficient production practices. Approximately 300 sugar cane producers, mainly medium and small holders, will benefit with direct technical assistance and incentives; while at least 1000 producers, mainly small holders and communities, will receive support to restoration practices and key ecosystem conservation. In addition, the population in the entire landscape will benefit from improved ecosystem services (mainly hydrological), reduced erosion, and reduced contamination.

Gender Strategy

46. El Salvador has made important efforts to recognize and advance the rights of women by signing and ratifying major international treaties and including them in domestic legislation. However, improvements in the legal framework have not resulted in comparable progress in gender equality of endowments, such as health, education, economic opportunities, family dynamics voice and agency. Females also face limited participation in rural organization and access to land. In addition, males are significantly more likely to migrate than females, and females in households that receive remittances have lower labor force participation rates, which can put young women in a situation of being dependent on income support from remittances of male partners living abroad²².

47. The proposed project recognizes that gender roles have impacts on both farming and land use decision, but the contribution of women is often un-recognized. During project preparation a diagnosis of gender relevant issues to the Project intervention will be carried out as part of the preparation of the Environmental and Social Framework instruments. This diagnosis will build on the analysis generated during REDD+ preparation to better identify practical gender needs, including conditions of women in terms of access to resources, services and opportunities, and strategic gender interests in terms of decision making. The project aims to contribute to close gender gaps, and it will encourage and monitor women participation of women in all the project activities.

Knowledge management

48. The project will generate information about the environmental conditions of the landscape, and the relationship between agricultural production and ecosystem services in the landscape. In addition, it will contribute to the establishment of an index that will generate periodically and reliable information about the sustainability of the landscape. The dissemination of this information will be key to create awareness about the importance of ecosystem restoration and to generate enabling conditions for the participation of the private sector in the adoption of sustainable production practices and restoration of ecosystems. In addition, the project will build on knowledge acquired through other current and previous projects that have been implemented by key partners in the region (e.g. REDD+ initiatives; ROAM; green cane harvest) and will also generate valuable knowledge for the management of sugar cane crops and innovative financial mechanisms for land restoration and conservation, that will generate important lessons for the country and the region, thus contributing to the integrated landscape management.

A strategy to systematize and disseminate lessons learned from the project implementation will be developed during the project development stage to ensure ownership and continuity.

Value-Added of GEF Involvement

²² World Bank. (2015). *El Salvador Systematic Country Diagnostic*.



49. The proposed GEF project represents a key opportunity to implement innovative actions that (i) generate enabling conditions and (ii) catalyze actions to improve sustainable landscape management and restoration. This will be achieved by strengthening governance for natural resource management at the landscape level through inter-agency coordination and the participation of the private sector, which are crucial for the implementation of the project and for ensuring its sustainability and scalability. GEF funding will allow El Salvador to bring into action the well-developed national restoration plans and the advanced PANSAL to achieve LDN employing an innovative approach to incentivize the private sector to invest in land restoration that involves: creation of dialogue spaces; awareness rising about the need to invest in ecosystem services provision; and the facilitation of the establishment of a reciprocal ecosystem services agreement. In addition, it will work to strengthen local extension systems to ensure that sustainable production practices and restoration techniques promoted and implemented by the project are institutionalized and that the capacities to scale up the project actions remain beyond the lifespan of the project.

50. By working with the private sector to establish innovative financing schemes to invest in ecosystems services, this project is expected to leverage additional resources for the restoration of degraded land and the maintenance of key ecosystem services in a way that is sustainable over time and beyond the lifespan of the project. This project will layout innovative multi-stakeholder structures foundations for integrated landscape management, a concept with little practical application in the country that is expected to be scaled up in other Conservation Areas.

51. Finally, GEF incremental funding will contribute to biodiversity conservation, to combat land degradation and to mitigate climate change, by taking advantage of the early steps the country has made to improve sustainability in the production of sugar cane, which is one of the main agricultural product in the country and the one that exerts the most severe pressures to the environment. GEF resources will allow to demonstrate the benefits of sustainable practices in sugar cane production, such as avoiding fires, conserving and restoring gallery forests and mangrove ecosystems, and mainstream biodiversity conservation in sugar cane production in areas that have been identified as critical for conservation, and are expected to provide a sizeable scale and that is replicable in other parts of the country and the region.

52. During the last years, El Salvador has taken important steps for the development of the enabling conditions for the implementation of EN-REP and this project will contribute to bring plans into practice and demonstrate how to achieve concrete objectives in terms of reduction of land degradation, restoration and biodiversity conservation.

Rationale for public sector provision/financing

53. The project aims at strengthening the capacities of public institutions and governance bodies and improve coordination among multiple stakeholders and improve the management of natural resources. For this, the use of public funds is essential. In addition, the Project outcomes are expected to have local, regional, national and global benefits as it aims at mainstreaming of biodiversity and other ecological services into productive landscapes, addressing negative externalities of agricultural production and from the degradation of ecosystems.

Value added of Bank's support

54. The World Bank has the country and global knowledge, as well as valuable operational experience to support the Government of El Salvador with the design and implementation of this multi-focal project. The World Bank has been a key partner in supporting the advancement of El Salvador along its Readiness Preparation for REDD+ activities which will continue strengthening the enabling conditions for the implementation of the EN-REDD.



| Legal Operational Policies | Triggered? |
|---|------------|
| Projects on International Waterways OP 7.50 | No |
| Projects in Disputed Areas OP 7.60 | No |

Summary of Screening of Environmental and Social Risks and Impacts

The environmental risk rating for the project is moderate at this stage. The project will include different types of activities such as technical assistance, capacity building and investments in restoration of degraded landscapes and sustainable agricultural practices within the EIBSCA and AICA sites. Overall, the project will promote the adoption of more sustainable and resilient land-use practices that will contribute to the conservation of local and national important ecosystems and biodiversity; avoid forest and soil degradation; control erosive processes; increase the provision of environmental services, improve land use planning, organize productive activities under a landscape vision; and contribute to GHG emissions. The project will also incorporate best practices in key agricultural activities prevalent in the region (particularly sugar cane) among key stakeholders that will reduce the expansion of the agricultural frontier and heavy use of herbicides and pesticides.

Project activities are not expected to have significant negative environmental impacts. Possible negative impacts are expected to be site-specific, short-term and reversible. These are related to the management of land restoration and green cane harvesting activities and may include: (i) water overuse for irrigation purposes; (ii) improper waste management of cleared vegetation from green cane harvesting; (iii) potential use of fertilizers and pesticides in seedling production and land restoration activities; and (iv) careless use of machinery and equipment. No rehabilitation or construction of infrastructure will be financed.

The social risk rating for the project at this stage is substantial. A summary of the main social risks that have been identified at this time based on preliminary screening includes: (i) exacerbation of existing inequalities for vulnerable ecosystem/agriculture-dependent communities, particularly IPs and other excluded groups (e.g. poor households, persons with disabilities, LGBTI people, women, youth); (ii) possible economic displacement impacts due to restrictions imposed on local communities in accessing natural resources and ecosystem services within the degraded lands and critical ecosystems targeted by project interventions; (iii) increased tensions between sugarcane producers and local communities over water usage; (iv) impacts on subsistence agriculture for food insecure households; (iv) child labor implications; and (vii) possible security threats for project personnel. While not expected at this stage, project interventions could also have negative impacts on tangible and/or intangible cultural heritage of IP communities residing in or with collective attachment to the EIBSCA and AICA CAs. This potential risk will be further assessed by the Borrower through the ESA process during preparation, including through culturally appropriate consultations with IP stakeholders, if required.

These environmental will be addressed by undertaking an ESA and stakeholder consultation during project preparation to inform project design and the development of environmental and social risk management strategies based on the mitigation hierarchy and summarized in the following instruments: ESMF, including a project-level Environmental and Social Assessment (ESA), a generic Environmental and Social Management Plan (ESMP) and guidelines for identifying and assessing environmental and social risks associated with specific project interventions, project-level GRM, that is socio-



culturally appropriate and accessible to IP and rural communities, LMP with a dedicated GRM, an OHSP; a SEP with a dedicated GRM; PF; and IPPF.

MARN has gained experience in preparing social safeguards instruments and in undertaking multiple stakeholder consultations in the context of the REDD+ Readiness process. The PIU will manage the project through a participatory approach and apply citizen engagement and beneficiary feedback mechanisms to help create timely feedback loops and ensure inclusion and active participation of beneficiaries in order to avoid any kind of discrimination. To help support capacity to manage social risks, a strong focus will be put on the capacity building of the social and safeguards specialist(s) of the PIU, to help promote inclusion and meaningful engagement of project affected people and beneficiaries throughout the life of the proposed project.

Note To view the Environmental and Social Risks and Impacts, please refer to the Concept Stage ESRS Document.

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