Gobierno de Reconciliación y Unidad Nacional

El Pueblo, Presidente!

MARENA
Ministerio del Ambiente y los Recursos Naturales

AWB

ESTRATEGIA NACIONAL PARA LA REDUCCIÓN DE EMISIONES POR DEFORESTACIÓN Y DEGRADACIÓN FORESTAL • (ENDE-REDD+)

NICARAGUA

Banco Centroamericano de Integración Económica
BCIE

EL BANCO MUNDIAL
BIRF • AIF

Environmental and Social Safeguards Management Framework (ESMF)

Bio-CLIMA Project *"Integrated climate action to reduce deforestation and strengthen resilience in BOSAWÁS and Rio San Juan Biospheres"*

Emissions Reduction Program *"Fighting climate change and poverty in the Caribbean Coast, BOSAWAS Biosphere Reserve and the Indio Maíz Biological Reserve"*

FONDO VERDE PARA EL CLIMA

FOREST CARBON PARTNERSHIP FACILITY

Environmental and Social Safeguards Management Framework (ESMF)

Bio-CLIMA Project "Integrated climate action to reduce deforestation and strengthen resilience in BOSAWÁS and Rio San Juan Biospheres"
Emissions Reduction Program "Fighting climate change and poverty in the Caribbean Coast, BOSAWAS Biosphere Reserve and the Indio Maíz Biological Reserve"Programa de Reducción de Emisiones para Combatir el Cambio Climático y la Pobreza en la Costa Caribe, Reserva de Biosfera BOSAWAS y Reserva Biológica Indio Maíz

MARENA, junio 2020

Content

I. EXECUTIVE SUMMARY

1. Nicaragua´s GHG Emissions Reduction Program (ERP) "Fighting climate change and poverty in the Caribbean Coast, BOSAWAS Biosphere Reserve and the Indio Maíz Biological Reserve", and the Bio-CLIMA Project: "Integrated climate action to reduce deforestation and strengthen resilience in BOSAWAS and Rio San Juan Biospheres", have the objective to support the Caribbean Region of Nicaragua to transition from an economic development model based on resources exploitation and extensive land-use, to one of sustainable production with resource conservation and intensified agricultural production, creating synergies between forest ecosystem conservation, and sustainable agricultural production for greenhouse gas (GHG) emissions reduction and improving vulnerable livelihoods, while enhancing the resilience of ecosystems and ecosystem services.

2. Bio-CLIMA and the ERP are complementary within the programmatic approach Nicaragua has chosen to implement its National REDD+ Strategy "ENDE REDD+" and as such, will act synergistically. While the ERP, which has been approved by the World Bank Forest Carbon Partnership Facility shall compensate Nicaragua for REDD+ through payments for emission reductions achieved (RBP´s); Bio-CLIMA will contribute to reduce these GHG emissions through concrete activities and targeted investment. As these emissions are mainly caused by inappropriate soil use, deforestation and forest degradation, Bio-CLIMA shall achieve to reduce them and increase carbon stocks through better land use, land restoration and sustainable forest management. Bio-CLIMA´s transformative vision is oriented to produce a paradigm shift to be achieved through a triple strategy of mutually reinforcing interventions, consisting of: i.) Targeted investments for the restoration and sustainable management of the landscape, ii.) The creation of good governance conducive to an environment for sustainable investment and; iii.) Substantial investments to strengthen local and regional capacities with supporting tools and instruments. Bio-CLIMA is expected to provide important benefits associated to the reduction in emissions from land use, deforestation and forest degradation; poverty alleviation and enhanced livelihood resilience of the most vulnerable, including indigenous and afro-descendant people, small and medium agricultural producers, with extended benefits of the conservation of ecosystems and ecosystem services for the population of the Caribbean Coast of Nicaragua and the "Alto Wangki y Bocay" Region.

3. Project activities have been structured into three main components: Component 1 "Conserving and Producing for Life" which would involve actual physical activities and "hard" investments on the ground; Component 2 "Good Governance" which would involve mainly the strengthening of regional and local environmental authorities including the Indigenous Territory Governments (GTIs), and the facilitation of dialogue mechanisms oriented to improve the business climate for sustainable investment by the private sector; and Component 3 "Capacity Development for Productive Landscape Restoration and Forest Conservation" which would involve training and capacity building for technical and extension personnel, tools and instruments for environmental monitoring and awareness raising campaigns and public environmental education.

4. Potential environmental and social impacts could be generated mainly from Component 1, which involves activities for participatory formulation and implementation of Territorial Development Plans (TDPs) of indigenous communities, and the Land Use Management (LUMP) for individual family farms. The latter could include the facilitation of conservation and peaceful cohabitation agreements between GTIs and non-indigenous colonists that have settled on indigenous territories. Only on the basis of land-use planning agreements for sustainable land and forest use Bio-CLIMA shall support indigenous and non-indigenous farmer families with technical assistance and the investments such as tools, seed and material needed for sustainable, productive landscape restoration through three landscape restoration modules: sustainable silvo-pasture (SSP), cocoa-agroforestry (CAF) and close-to-nature planted forests (CTNPF). On natural forest land located in indigenous territories within protected areas indigenous communities will be supported to develop sub-projects and business plans for Sustainable Community Enterprises (SCEs) which may involve income generating activities such as the use of non-timber forest products, eco/ethno-tourism and other forest and biodiversity conservation and sustainable-use activities. In Indigenous Territories outside protected areas indigenous communities shall be supported to prepare and implement commercial Community Forest Management (CFM) and Community Forest Restoration (CFM) sub-projects in order to put community forest land in value and sustainable use. All these modules, sub-projects and measures described will include support to access high value markets and certification of fair trade and practices of sustainable use.

5. This Environmental and Social Management Framework (ESMF) that has been prepared trough an intensive participatory process with main stakeholders by Bio-CLIMAs´ technical Executing Entity, the Ministry of the Environment and Natural Resources (MARENA). It is aligned with international best practices and applicable standards, reflecting the experiences and lessons learned in the preparation phase of the National REDD+ Strategy "ENDE-REDD+". Observations and recommendations of the safeguard's specialists of the GCF, CABEI, World Bank, FAO have been considered during its preparation. The ESMF has been publicly disclosed on MARENA´s internet site since February 2020. The latest up-dated, exhaustive and pedagogic version in Spanish (224 pages) can be accessed at the following link: http://www.marena.gob.ni/Enderedd/wp-content/uploads/2020/06/1-EAS1_MGAS-Evaluaci%C3%B3n-y-Gesti%C3%B3n-Amb-y-Soc-09062020.pdf

6. The ESMF includes all the inputs and findings of ENDE REDD+, as well as the results of the implementation of two Strategic Environmental and Social Assessment (SESA) roundtables set up in both autonomous regions on the Caribbean Coast, the RACCN – in the North and the RACCS in the South. These were integrated by regional universities, GTIs, women organizations, young adults, the local media, the Regional Councils and Regional Autonomous Governments. These roundtables held a total 12 working sessions and 11 workshops to analyze strategic options, social and environmental impacts and risks, and mitigation measures, all related to social and environmental safeguards. Another additional 7 workshops were carried out to analyze and discuss the country´s legal framework regarding the ENDE-REDD+.

7. The main objectives of the ESMF are to: 1) identify and assess potential environmental and social risks resulting from the ER Program and the Bio-CLIMA Project; 2) identify and establish risk management measures, adverse impacts mitigation, and the environmental and social measures to scale-up the positive effects of Project measures and activities; and 3) identify the institutional roles for the application and follow-up of the established guidelines in the ESMF.

8. The project is expected to generate benefits for local communities through the adoption of sustainable and productive land-uses, as well as significant positive impacts on forest conservation, as it aspires to tackle the main direct drivers of deforestation and forest degradation to promote emissions reductions and improve the management of natural resources with the local communities and indigenous peoples.

9. The environment risks and impacts themselves are mostly temporary, predictable and/or reversible, and serious adverse effects are not expected. However, because of the work with indigenous communities and non-indigenous settlers in protected areas and critical habitats and given the social conflict prevalent in the project region, and according to CABEI standards, the overall project risk has been rated as “high”.

10. The effects of the Project on areas of high value or sensitivity are expected to be positive, given the mainly environmental conservation characteristics of the project. Some examples of potential adverse risks and impacts on the environment are related to the implementation of infrastructure for sustainable forest management, such as the opening of new paths, that could generate risks such as the opening of new deforestation fronts, runoff and erosion, the removal of the vegetation, the loss of biodiversity due to arrival of non-native species and environmental degradation due to canopy openings and the increased risk of fires. Agroforestry, silvo-pastures and forest management and restoration activities can generate risks associated with the use of fertilizers, pesticides and to a lesser extent, hydrocarbon pollution by the use of machinery. Risks related to the production chain can also be associated with the purchase of seeds and seedlings, or even the use of timber posts for fencing.

11. The vast majority of these risks and impacts are predictable and specific mitigation actions reduce their probability of occurrence. However, in order to ensure that the risk does not become an impact, the ESMF includes prevention and mitigation measures, as well as specific tools, such as an Integrated Pest Management Guides, the Guidelines for the Biodiversity Action Plan and Guidelines for the Forest Management Plan. The ESMF and the associated instruments include a capacity building program for MARENA as Project Executing Entity and its project implementing partners and other stakeholders involved, in order to manage such risks and impacts for achievement of Project goals.

12. The ESMF and its specific instruments provide an opportunity for the Bio-CLIMA project to incorporate environmental and social considerations in ways that, not only include safeguard measures to “do no harm,” but also to improve environmental and social outcomes

during implementation and generate co-benefits to the environment and the communities, especially indigenous peoples and the rural poor. The ESMF addresses measures to ensure gender and youth participation, monitoring and accountability, information disclosure, gender mainstreaming, incorporation of considerations related to indigenous peoples, stakeholder engagement, and a grievance and redress mechanism. Also, the ESMF sets out the principles, rules, guidelines and procedures to assess the environmental and social risks and impacts. It contains measures and plans to reduce, mitigate and/or offset adverse risks and impacts, provisions for estimating and budgeting the costs of such measures, and information on the agencies responsible for addressing project risks and impacts, including its capacity to manage environmental and social risks and impacts.

13. The ESMF also includes: i) An exclusion list of activities that will not be allowed nor supported by the Project (e.g. the introduction of invasive species for reforestation); (ii) A screening plan to identify, avoid and mitigate any potential negative environmental, health, safety, and social impact associated with prohibited activities; iii) A process for categorizing, in terms of expected level of environmental and social risks, and assessing and safeguarding future potential underlying activities to be included under the Program; (iv) Guidelines of good practices for potential activities such as community forestry, sustainable management of forest landscapes, guidelines for sustainable exploitation of timber and non-timber products, productive reconversion, national and international certification, value chain development, access to markets, and certification processes, as well as for the preservation of critical natural habitats, inter-alia.

14. Based on the identified risks and impacts following stand-alone, specific instruments were developed for the Program in a participatory manner together with the interested stakeholders, especially indigenous and afro-descendant populations and have been published on MARENA´s website since February 2020[1]:

- Indigenous Peoples Planning Framework (IPPF)
- Process Framework for involuntary restrictions of access to natural resources in natural protected areas (PF)
- Stakeholders Engagement Plan (SEP) and Grievance Redress Mechanism (GRM).
- Integrated Pest Management (IPM)
- Biodiversity Action Plan (BAP)
- Labor Management Procedure (LMP)
- Guidelines for Forest Management Plans (GFMP)

[1] http://www.marena.gob.ni/Enderedd/otros/proyecto-bio-clima/

- Guidelines for Cultural Heritage (GCH)

15. As the specific actors and communities that shall participate in the Program are still to be defined and activities and interventions proposed by the Project shall have to be consulted and agreed upon through free, prior and informed consultation processes (FPIC) with the beneficiaries, precise Project intervention sites and locations will still to be determined. Therefore, at this stage of project preparation an ESMF has been developed, consulted and disclosed, while a comprehensive Environmental and Social Impact Assessment (ESIA) will be carried out by MARENA at the beginning of the Project, when the exact areas of implementation of the investments and actions have been defined.

16. Based on the results and findings of that ESIA MARENA will formulate and implement the ESI mitigation plan and supporting instruments. The ESIA will take into account all potential environmental and social risks and impacts that could arise from the interventions of the Project at indigenous community level through Territorial Development Plans (TDP), at-farm land use management planning and development (LUMPs), as well as sub-projects for sustainable forest and biodiversity use in indigenous territories trough Sustainable Community Enterprises (SCE), Community Forest Management (CFM) and Community Forest Restoration (CFR) sub-projects, as well as for the management plans to be developed for both protected areas.

II. PROJECT DESCRIPTION

17. Bio-CLIMA will contribute to the global objective of combatting climate change through the reduction of emissions caused by deforestation, forest degradation and livestock, as well as the enhancement of carbon stocks. These actions will directly benefit the most vulnerable people of the Caribbean Region of Nicaragua (CR) reducing the negative effects climate change have on their livelihoods and improving the resilience of ecosystems and ecosystem services.

18. Bio-CLIMA is embedded within the programmatic approach Nicaragua has chosen for the implementation of its National REDD+ Strategy, the "ENDE-REDD+", which was formulated, broadly consulted and agreed upon during an intensive multi-sectoral dialogue process with the contribution of all relevant societal actors[2]. The preparation of the "ENDE-REDD+" and its key elements, systems and policies has had the technical and financial support of the World Bank trough the FCPF Readiness Fund since 2011.

19. To implement the ENDE REDD+ Nicaragua has decided to request GCF and GEF-7 grant finance, which together with substantive loans from CABEI and the GCF will be invested to unlock REDD+ Result Based Payments that have been agreed upon with the World Bank FCPF in the framework of Nicaragua's Emission Reduction Program (ER-P). Thus Bio-CLIMA and the ER-P are the main pillars for the implementation of the ENDE-REDD+.

20. Bio-CLIMA´s objectives shall be achieved through a three-pronged strategy of mutually reinforcing interventions organized within three project components:

I.) Component 1 will make targeted investments for sustainable landscape restoration and natural resources management by providing communities and farmers with capacities, technical assistance, incentives and market access to improve their livelihoods while restoring and conserving the natural resources on their farms and territories. Bio-CLIMA´s strongest investment will be put on the deforestation fronts where the risks of forest carbon and biodiversity loss are the highest.

II.) Component 2 shall provide the support for an enabling environment for sustainable investment through strong and efficient institutions, tailored financial instruments and investment facilities, improved and transparent territorial governance with clear norms simple procedures, and enhanced land-use and environmental law enforcement.

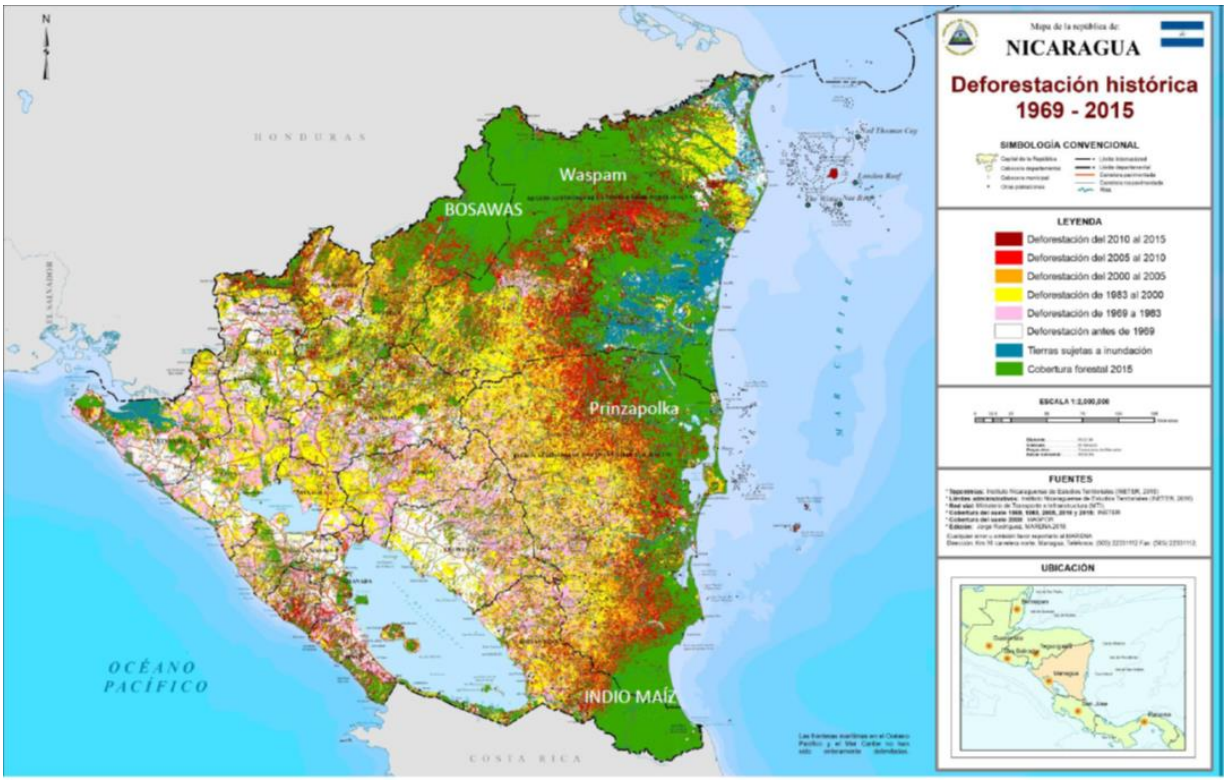
III.) Component 3 will help to strengthen the capacities of technical personnel, farmers and community members in low-carbon production systems and the knowledge needed to promote local development adapted to climate change with supporting tools and instruments for monitoring and control, public awareness and environmental education.

[2] http://www.marena.gob.ni/Enderedd/

21. The Project intervention zones that are described further below have been carefully selected considering among other the three main factors[3]:

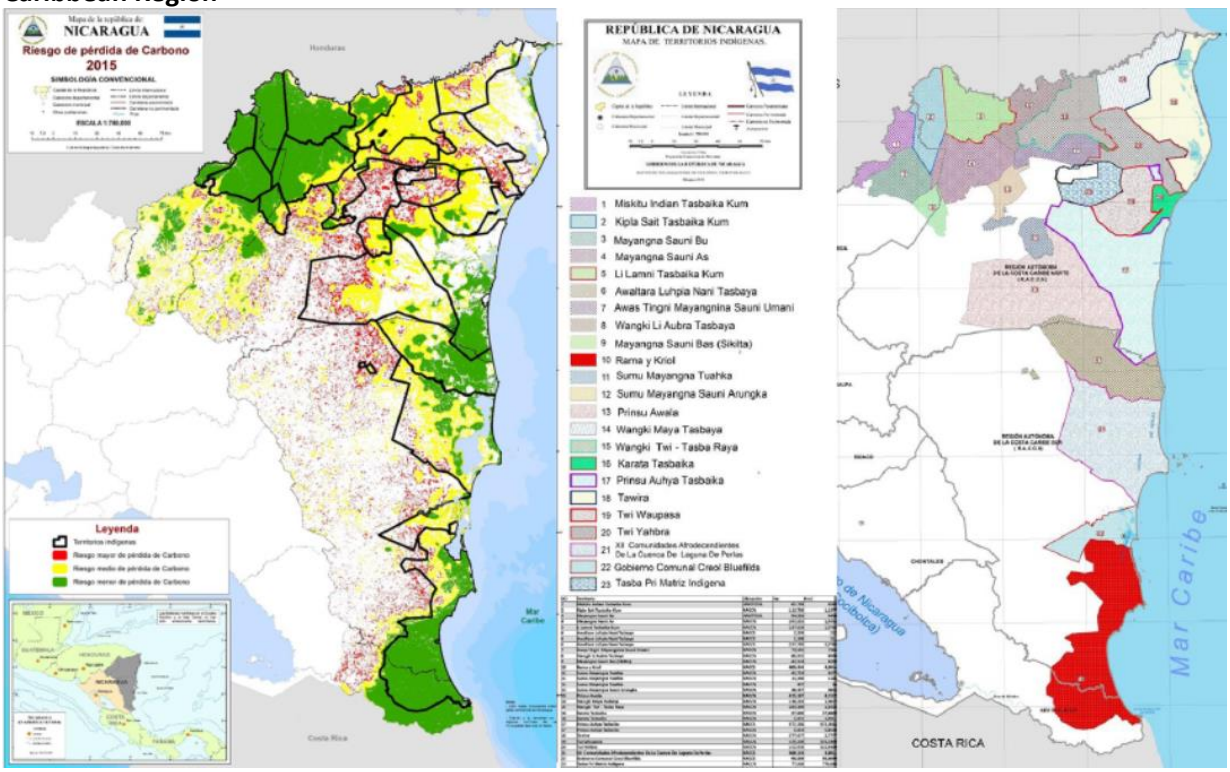
- Highest risk of forest carbon loss
- Indigenous territories
- Buffer zones and biodiversity corridors around protected areas

Map 1a: Deforestation threatening the protected areas of BOSAWAS and Indio Maíz; as also the Indigenous Natural Forest Zones in the Regions of Waspam and Prinzapolka



[3] MARENA 2018 Priorización de áreas de intervención del Proyecto BIO-CLIMA, Noviembre 2018.

Map 1.b: Risk of forest carbon loss (red the highest) and indigenous territories in the Caribbean Region



22. Bio-CLIMAs´ activities are complementary and mutually reinforcing and it impacts are crosscutting between climate change mitigation and adaptation, since they all contributes to the achievement of GCF Impact Results M.4 “Reduced emissions from land use, deforestation, forest degradation and through sustainable management of forests and conservation and enhancement of forest carbon stocks (26 Mt C02eq)” in 7 years of project implementation, A1 “Increased resilience and enhanced livelihoods of the most vulnerable people, communities and regions” (51,000 direct beneficiaries, vulnerable indigenous and family farmers living in poverty) and A.4 “Improved resilience of ecosystems and ecosystem services (coverage/scale 2.32 million ha of ecosystems protected), benefitting approximately 615 thousand people in the Caribbean Region. The huge change that Bio-CLIMA strives to produce in the CR is summarized in the following table: approximately half of degraded land area in the project region will be restored (61,209 of 122,610 ha) and same proportion of natural forest in the project area sustainably managed, conserved and restored (541,826 / 979,955 ha). The total area impacted by Bio-CLIMA has an extension of 2,319,359 ha, which is equivalent in area to Belize. This project area covers a third of the Caribbean Region of Nicaragua, which has and extension equivalent to the sum of the territories of Belgium and the Netherlands.

II.1. Project activities, sub-projects typology, and implementation zones

II.1.1. Land Use Management Planning

23. During the first two years, indigenous and non-indigenous family farmers, and on the other hand, indigenous communities will be supported with intensive technical assistance (TA) to undertake the land use and management planning of their farms, productive units and/or territories on which they sustain their livelihoods (Activities 1.1.1.1 to 1.1.1.3). The output of these participatory planning processes are:

- Land Use Management Plans (LUMP) for individual families
- Territorial Development Plans (TDP) for indigenous communities

II.1.1.1. Land use management plans (LUMPs) for individual family farmers

24. Assistance will be provided to undertake the land use planning with sustainable investment and business plans (+sib) with the objective that productive landscape restoration and forest conservation is socially sane, financially viable and sustainable.

25. These planning instruments will need to fulfill the following minimum requirements:

- Be formulated in a participatory manner to assure the inclusion of the needs and perspective of all, especially women and young people
- Identify, map and demarcate the production zones (agroforestry, silvo-pasture, crops, etc.) and separate them from the forest and watershed conservation, degraded landscape restoration and biological connectivity zones
- Degraded land on soils with a slope steeper than 50% (26.6 degrees), which are prone to further degradation and soil erosion, are to be restored through Close-to-Nature-Planted Forests (CTNPF) and remnants of natural forest on the farm to be conserved.
- Include a technically viable business proposal based on a financially sound investment plan for the sustainable use of the land or the territory (+sib).
- Clearly expressed free, prior and informed consent (FPIC) to the planning process and to its outcomes LUMPs and TDP (+sib)

26. Non-indigenous families (so called *"terceros":* third parties) that have settled within indigenous territories will be supported by the Project to formalize their land use and

occupation through a "Peaceful Co-habitation Regime Agreement"[4] with the Government of the Indigenous Territory (GTI) only if following conditions are met[5]:

- The GTI has requested the Project to facilitate the dialogue process to reach an agreement
- The family or community of settlers are small and medium size farmers that have used the land peacefully for at least five years
- The family or community of settlers will have to formally commit to comply with the land use plan and zoning of the LUMP and/or TDP, to conserve the natural forests and to undertake the agreed landscape restoration activities
- The family or community of settlers will have to renounce to any ownership claim to the land and explicitly recognize land ownership of the respective GTI. This cession will involve that any Emission Reduction benefits of payment shall accrue to the GTI, and be considered as a compensation for the right to use or rent the land

27. Bio-CLIMA will benefit only small and medium scale private producers, and indigenous communities. Non-indigenous families living in peaceful cohabitation for at least five years in Indigenous Territories will be supported if they commit themselves to contribute to productive landscape restoration and forest conservation. In order to benefit from the TA and investments for the implementation of the productive landscape restoration and/or forest conservation models, beneficiaries will need to agree and sign landscape restoration and forest conservation and peaceful cohabitation agreements with the land owner (the Indigenous Community and/or Indigenous Territorial Government). These dialogue and agreement processes (Project Activity 1.1.1.4.) shall be facilitated by and independent, specialized entity entrusted with this process. To this Ends coordinated action and collaboration will be sought with the Property Institute of the Office of Attorney General of the Nation (*Procuraduría General de la República*) and its Second Land Administration Project (PRODEPII); as also with the Directorate for Alternative Conflict Resolution of the Supreme Court (DIRAC de la Corte Suprema de Justicia) which has worked in mediating in land tenure conflicts in the CR and are recognized by indigenous organizations.

[4] The situation of land tenure within the project region and the legal status of different actors within indigenous territories is descibed in Section III.5 and has also been thoroughly assessed and analysed in "Evaluación sobre la tenencia de la tierra y los recursos naturales para la formulación del Proyecto de Reducción de Emisiones de la Costa Caribe, Reservas BOSAWAS e Indio Maíz". MARENA 2017. http://www.marena.gob.ni/Enderedd/wp-content/uploads/2019/05/Evaluaci%C3%B3n-Tenencia-de-la-Tierra-ERPD.pdf
The actual situation of settlement is the result of an array of different factors, including wars and resettlements forced by the armed conflict, which is described in detail in Matamoros Chávez E., Micropolíticas y redes de colonos en BOSAWAS, Agosto 2016

[5] Please see also Section 2.2.1 (parag. 24, page 16) of the Benefit Sharing Plan of the ERPD (version November 2019/February 2020) which has been undergone public consultation processes al regional and local level; and is included in Section H, Annex 24.a. Selection criteria will be further elaborated and refined trough the Operational Manual.

II.1.1.2. Territorial Development Plans (TDP) for indigenous communities

Indigenous communities will be provided with intensive technical assistance to undertake participatory gender sensitive land use and resources management planning on their farms, productive land units or community territories. Land-use zones (sustainable production, restoration and conservation) will be identified on the field and mapped, as also the implementation of desired productive landscape restoration and forest conservation models planned and agreed upon. During this land-use planning exercise special attention will be given on natural resources and water conservation, as well as protecting biodiversity and building biological connectivity and biological corridors. Furthermore, a business plan will be designed for each productive unit and/or or indigenous territory, which may include some or all of the productive landscape restoration and forest conservation models or sub-project typologies described further below.

II.1.2. Productive landscape restoration and forest conservation models

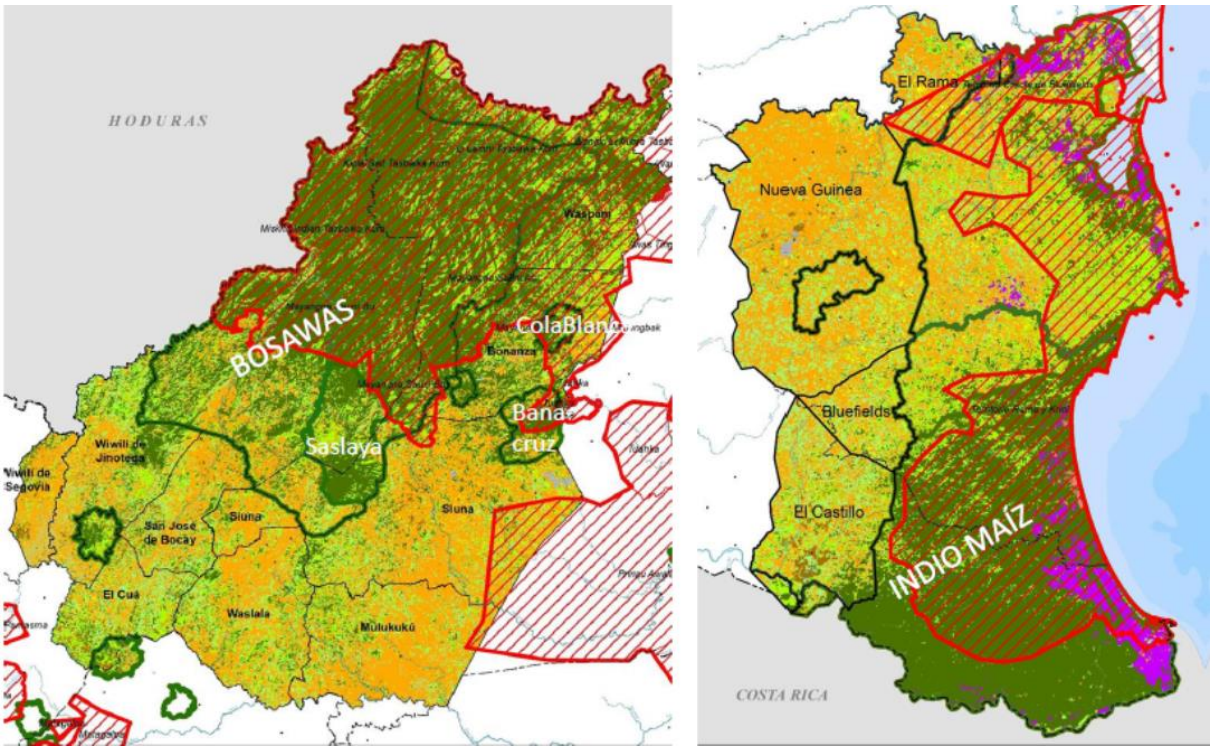
28. These investments that are included within Project Sub-component 1.2. can be grouped into two groups: Output 1.2.1 Landscape restoration by individual family farmers through three productive landscape restoration models (Sustainable Silvo-pasture, Cocoa-Agroforestry and Close-to-Nature Planted Forests); and Output 1.2.2: Sub-project for Forest conservation by indigenous communities three community forest conservation and restoration models (Sustainable Community Enterprises, Community Forest Management and Community Forest Restoration). In both cases the enabling condition is that land use and management planning has been successfully concluded (LUMPs +sib, TDPs +sib), and if applicable, conservation and/or peaceful cohabitation agreements have been signed. Support modalities (loans, grants, other) shall be adapted to the beneficiary and community typology; and to the financial, social and environmental return of each individual business plan or community sub-project. While the main objective of the implementation of these models is to stabilize the agricultural frontier to reduce deforestation and improve local livelihoods, their mitigation impact in this zone has been estimated to be 800,000 $tCO_{2\ eq}$ in 20 years.

II.1.3. Landscape restoration models by individual family farmers

29. The activities to produce Project Output 1.2.1 “Degraded pasture-and rangeland restored” are three models of landscape restoration: a.) Cocoa-agroforestry, b.) Sustainable silvo-pastures and c.) Close-to-nature- planted forests. These models will be financed for indigenous and non-indigenous family farmers in the following zones (see also Map 2-a):

- South-western part of BOSAWAS, and the buffer and connectivity zone between BOSAWAS and the protected areas Cerro Saslaya, Cerro Cola Blanca and Cerro Banacruz
- As the conservation category of Indio Maíz is “Biological Reserve” productive uses as agroforestry or silvo-pasture within the protected area are not allowed (in difference to BOSAWAS). Therefore, the models will be applied only in its Buffer Zone in in the Municipalities of El Castillo, Bluefields and Nueva Guinea.

Map 2-a: BOSAWAS (left) and Indio Maíz (right): Protected area core zone (limits in dark green), indigenous territories (red lines) and land use forms: Orange represents degraded pasture land; light-green shows re-growth and open forest land, dark green closed natural forest.



II.1.3.1. Eligibility criteria for landscape restoration models

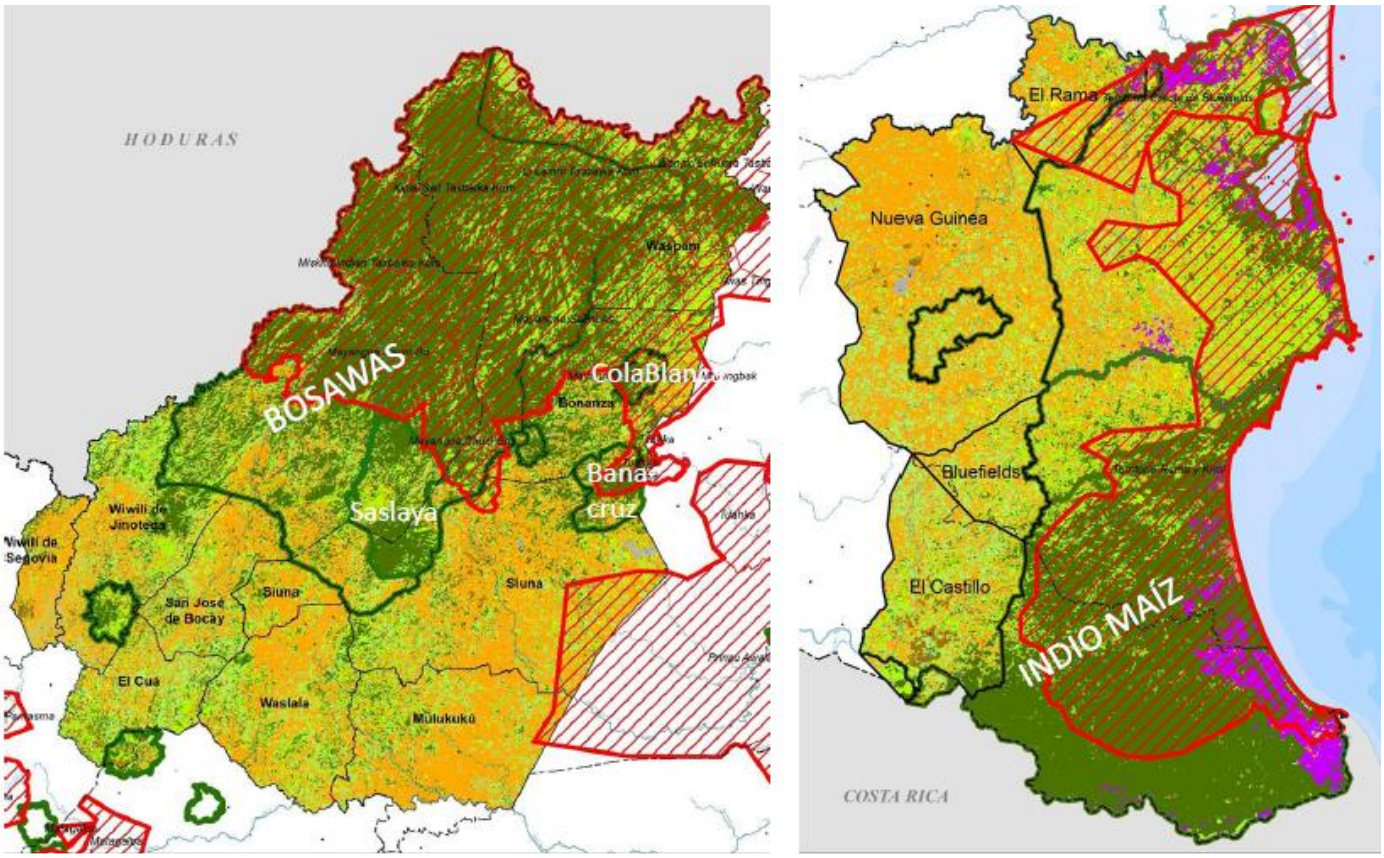
30. Selection criteria for beneficiaries of these landscape restoration models include:

- Sustainable land management and business plan (LUMP+sib or TDP+sib)
- Commitment to forest land restoration and no further deforestation
- Legal Land Ownership; or Peaceful Cohabitation Agreement signed with the GTI
- Small / medium land owner with less than 50 ha of agricultural land (not including forest land)
- Location within Project intervention zones
- High potential for productive landscape restoration and biological connectivity
- Others to be further determined and / or refined within the Operational Manual

II.1.3.2. Landscape restoration through sustainable silvo-pastoral systems (SSPS)

31. Bio-CLIMA will support small farmers (<35 ha per farm area) and medium sized farmers (> 35 ha / farm area) with TA, inputs to introduce (or expand existing) sustainable silvo-pastoral systems. Small farmers will be supported to improve pastures up to 10 ha / farm, while medium sized farmers will be supported to reduce their pastureland from 40 to 30 ha per farm. In both cases the support will be aimed at improving stocking rates and productivity while restoring degraded land and expanding/conserving forest cover. The introduction of SSPS involve the combination of native tree species with improved forages that increase high quality feed availability, allow for soil restoration, increase resilience to extreme weather events (drought, excess rainfall), provide firewood and contribute to household food security. Apart from providing shade and animal feed, the trees provide additional income (which can be substantial) through the sale of timber and fruits. Because of the importance of livestock production, massive adoption can have a profound impact. The introduction of the SSPS involves the following measures: i.) The introduction (small farmers) or increase (medium farmers) of improved grasses that have higher nutritional value and are better adapted to drought and waterlogging, in combination with dispersed trees in well-managed pastures under rotational grazing, contributing to recovery of degraded soils, reduced soil erosion, water and biodiversity conservation. i.) The introduction (small farmers) or increase (medium farmers) of cut-and-carry grasses to increase general feed availability, especially during the drier months. ii.) Protein banks, to increase nutritional quality of the ration. Shrub legumes' deep roots reduce erosion and optimize recycling of nutrients. iv.) Electric fences to facilitate rotation of cattle between pastures, to optimize the use of the biomass. V.) Live fences, to be planted around pastures, which also serve as protein banks. These practices, together with improved livestock management, improve productivity and reduce greenhouse emissions (2.4 MtC02 eq in 20 years) (methane from enteric fermentation and nitrous oxide from manure) per kg of milk and meat. Live tree fences and valuable tree species in pastures shall provide shade and increasing animal welfare, recycle nutrients, reduce weed pressure, improve water availability, increase feed productivity, biodiversity and add economic value. Soil structure is improved and stabilized, and herbicide use is reduced. Animal stocking rate can almost be tripled from 1.2 to 3.2 LTU/ha, while carbon sequestration improves from 2.1 in BAU to 6 t $CO_{2\,eq}$/ha/yr.

Map 3: **BOSAWAS (left) and Indio Maíz (right): Protected area core zone (limits in dark green); land uses (colors), and indigenous territories (red lines). Orange color represents degraded pasture land; light-green shows re-growth and open forest land.**



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32. Apart from improving livestock productivity, stabilizing the agricultural frontier and improving the resilience of rural livelihoods, these measures will also have a positive impact on greenhouse gas emissions. Although the figures in table 1 below show that GHG emissions of full SSPS can be reduced significantly if the SSPS is fully adopted at farm level, GHG calculations for the Bio-CLIMA project take a more conservative approach assuming that carbon sequestration can be improved from 2.1 in BAU to 6 t $CO_{2\ eq}$/ha/yr. The adoption of these models on 12,144 ha in the Project region shall therefore reduce GHG of at least 2.4 $MtC0_{2\ eq}$ in 20 years.

Table 1 Environmental benefits of the introduction of sustainable silvo-pastoral systems (SSPS)

	Small farms		Medium farms		1 ha
	BAU	SPS	BAU	SPS	Full SPS
Stocking rate (TLU/ha)	1.26	2.11	1.49	2.40	3.17
N-balance (kg/ha)	-21.60	-36.58	-25.24	-29.90	-53.03
water use (m3/kg milk)	2.34	0.92	1.31	0.74	0.60
water use (m3/kg meat)	18.93	10.60	21.79	13.01	6.50
GHG emissions (kg CO2e/kg milk)	9.69	4.51	5.22	3.91	3.67
GHG emissions (kg CO2e/kg meat)	78.33	51.85	87.05	68.44	39.82
GHG emissions (t CO2e/ha)	3.23	4.97	3.48	5.45	7.59
Carbon stock change (t CO2e/ha)	1.14	8.92	1.14	6.26	23.90
Balance GHG emissions - C-stock change (tCO2e /ha)	2.09	-3.95	2.34	-0.81	-16.30

II.1.3.3. Landscape restoration to biodiverse cocoa agroforestry systems (CAS)

33. Through Project Activity 1.2.1.3 indigenous and non-indigenous small family farmers shall be provided with technical assistance and inputs (grants) to establish up to 2 ha of CAS, which consists in restoring degraded pasture or rangeland or old orchards into biodiverse cocoa agroforestry systems. A density of 1734 trees/ha, including 816 cocoa trees, 816 banana plants, 51 forest trees, and 51 of other fruit trees shall be planted. Of especial relevance is the introduction of improved cocoa varieties more adapted to the projected climate conditions, more resistant to pest and diseases, with higher productivity and high organoleptic quality. These in combination with banana, fruit trees, native timber tree species and annual crops crate a biodiverse agroforestry system that will sequester more carbon, regulate the micro-climate via shade production, protect soil and water sources, enhance family asset due to timber tree species, and ensure food security with crop diversification. Overall, integrative management of CAS will improve social, economic, and environmental sustainability. While yield increases from BAU are estimated to be 3.5 times higher from year 3 onwards, earnings from fermented cocoa beans sold to international exporters that source this improved cocoa in the region like Ritter Sport, Cacao Oro, Atlantic or Ingelmann, can rise 5 to 10 times in relation with the traditionally dried, "red" cocoa that are sold to local retailers[6]. Carbon sequestration rises from 2.1 in BAU situation to 11.2 $tCO_{2\ eq}$/ha/yr in the improved cocoa agroforest.

II.1.3.4. Reforestation of Close-to-nature Planted Forests (CTNPF)[7]

34. Sustainable intensification of agricultural and livestock practices and LUMP will leave part of the farm area, especially the one located on slopes steeper than 50% and/or alongside

[6] Bio-CLIMA will support family farmers and communities to tap into the enormous market potential that sustainable agroforestry cocoa farming offers to local producers: The market description and analysis can be found in the Feasibility Study

[7] Close-to-nature Planted Forests (CTNPF) are established with more than one tree species, often native, adapted to the site and its ecological conditions. These forests are often vertically structured in more than one layer and may be uneven aged. They provide a wide range of products and environmental services and have a higher resilience to external disturbances (Kanowski, 1997, in FAO 2009).[7]

water courses idle. These idle lands get covered quickly by natural regrowth, shrubs and pioneer vegetation (*"tacotales"*) within a process of natural succession that eventually will lead to the formation of a secondary forest. Project Activity 1.2.1.3 incentives and TA will support farmers to learn and apply simple sylvicultural techniques, establish and manage community nurseries, and undertake enrichment plantings with high-biodiversity value native tree species to accelerate the natural succession and landscape restoration process in such areas. The resulting CTNPF will not only provide a wide array of ecosystem goods and services, but also an important intergenerational asset of high value timber for the family that can be sustainably managed and selectively harvested in the future. Carbon sequestration increases from 6 (BAU: *tacotal* to secondary forest), to 25.3 $tCO_{2\ eq}$/ha/yr in CTNPFs.

II.1.4. Community sub-projects for forest ecosystem conservation and restoration

35. Through activities within Proyecto Output 1.2.2, indigenous and afro-descendent communities located within the Indigenous Territories of the CR of Nicaragua (Map 2) will be called to present proposals to conserve and sustainably use forest ecosystems and natural forest lands on an area that cover nearly a million hectare (Table 2). It is foreseen that for more than half of this huge territory (541,826 ha) indigenous and afro-descendant communities will prepare funding proposals (sub-projects) to undergo a competitive selection processes that will be managed through investment facilities (Trust Funds and National Funds). As the Project (Activities 1.1.1.2; 3.1.2.2) will support the communities to prepare these sub-projects together will well-structured business plans.

36. Depending of their location respective to the core of the protected area, the legal status and their protection category, these sub-projects are divided in three broad categories: i.) Sustainable Community Enterprises (SCEs), ii.) Community Forest Management (CFM), and iii.) Community Forest Restoration (CFR) sub-projects. While SCE´s could be placed also within a protected area and its buffer zone, CFM and CFR sub-projects are legally constrained to be located only 10 km outside of a protected area and its buffer zone, as within 10 km of the national borderline.

II.1.4.1. Eligibility criteria for community sub-projects

37. Calls for proposals to submit SCE, CFM and CFR sub-projects will be done and indigenous communities will have to apply for funding on a competitive basis. Selection criteria for these three modalities of sub-project proposals that will be developed and implemented by the communities (SCEs, CFM and CFR) will include:

- Provide a significant contribution to sustainable livelihoods within the indigenous or afro-descentant community
- Take into account the needs and generate tangible benefits for women and young people
- Contribute to emissions reduction and/or carbon sequestration

- Contribute to ecosystem and biodiversity conservation
- Make reasonable technical proposals, have sound financial indicators
- Contribute to strengthen the capacities and entrepreneurship within the community
- Private sector co-finance and participation will be positively valued

II.1.4.2. Sustainable Community Enterprises (SCEs)

38. These sub-projects corresponding to Project Activity 1.2.2.1 will be located within the core and buffer zones of BOSAWAS and Indio Maíz protected areas where forest cover is conserved. In accordance with the Management Plan of the protected area and according to the TDP indigenous communities will be assisted to prepare and submit sub-projects, called "Sustainable Community Enterprises (SCEs)" to be co-financed by the project through grants or through concessional loans, depending on SCE nature and its social, environmental and financial return on investment. To be considered for support SCEs will have to include a business and investment plan ("+bin") to assure their technical, social, environmental and financial and market feasibility. SCE+bin´s will need to promote the wellbeing and livelihoods of the communities through forest and biodiversity conservation.

39. These sub-projects could include investment of promote following activities (or their combination):

- Ecological and ethnic tourism
- Handicrafts, goldsmith and indigenous jewelry
- Fine wood artisan making and fine wood products
- Mon-timber forest products, resins and medicinal substances
- Other productive community enterprises to be proposed by the community

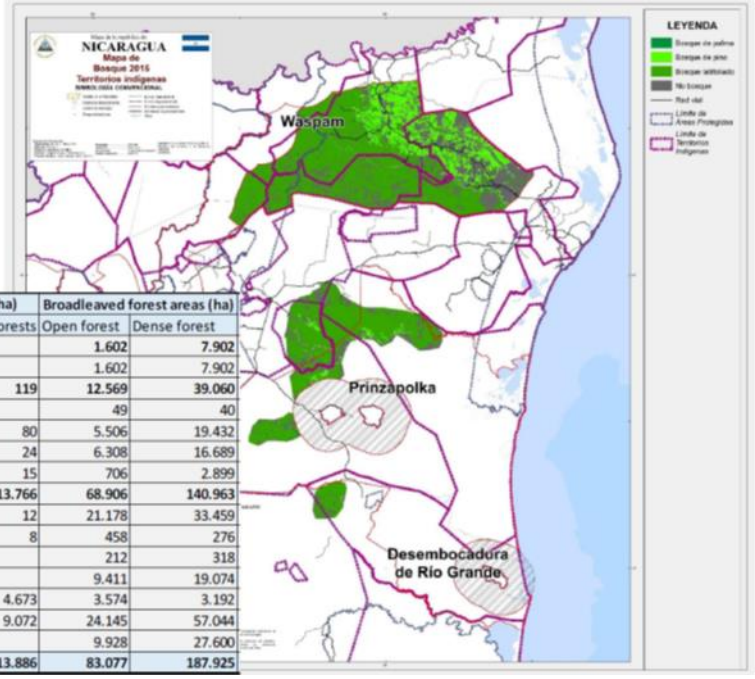
40. These sub-projects will be supported on a competitive basis with a financial contribution of US$ 54,000 per project on the assumption that each SCE supports the protection of at least 3,000 ha of natural forests. It is estimated that Bio-CLIMA will be able to co-finance 95 SCEs benefitting 9,487 people of the indigenous territories of Miskitu Indian Tasbaika Kum (1), Kipla Sait Tasbaika Kum (2), Mayagna Sauni Bu (3), Mayagna Sauni As (4), Li Lamni Tasbaika Kum within BOSAWAS, and Rama and Kriol (10) in Indio Maíz (see Map 2); and have a mitigation impact of 1.4 Mt $CO_{2\ eq}$ in 20 years.

II.1.4.3. Community Forest Management (CFM) and Community Forest Restoration (CFR)

41. This sub-project typology, corresponding to Project activities 1.2.2.2 and 1.2.2.3 will be located in natural forest areas in high risk of deforestation located within 12 indigenous territories in the Waspam and Prinzapolka that total approximately 318,000 ha and have the

potential to be sustainably managed for commercial timber production and restoration/reforestation. Forest management to be done by the indigenous communities on these territories will also be supported to achieve group certification (see Activity 1.2.3.3) in order to comply with highest environmental and social standards for sustainable management of natural forests.

Potential areas for Community Forest Management (dark green) and Community forest Restoration (light green) sub-projects located in indigenous territories in the Waspam and Prizapolka forest zones



Municipalities / Indigenous Territories	Pine Forests area (ha)		Broadleaved forest areas (ha)	
	Open forests	Dense forests	Open forest	Dense forest
La Cruz de Río Grande			**1.602**	**7.902**
Awaltara Luhpia Nani Tasbaya			1.602	7.902
Prinzapolka	**3.258**	**119**	**12.569**	**39.060**
Awaltara Luhpia Nani Tasbaya	9		49	40
Prinsu Auhya Tasbaika	1.849	80	5.506	19.432
Prinsu Awala	1.328	24	6.308	16.689
Tuahka	71	15	706	2.899
Waspam	**29.801**	**13.766**	**68.906**	**140.963**
Awas Tingni Mayangnina Sauni Umani		12	21.178	33.459
Karata Tasbaika		8	458	276
Li Lamni Tasbaika Kum			212	318
Mayangna Sauni As			9.411	19.074
Twi Yahbra	7.808	4.673	3.574	3.192
Wangki Twi - Tasba Raya	21.993	9.072	24.145	57.044
Wangki Li Aubra Tasbaya			9.928	27.600
TOTAL	**33.059**	**13.886**	**83.077**	**187.925**

42. Similar to the SCEs, the Community Forest Management (CFM) and the Community Forest Restoration (CFR) sub-projects will have to be prepared and presented by the communities to the Funds with viable technical and financial support documentation in order to compete for funding. CFM and CFR sub-project may finance investment to undertake following activities, including:

- Design, approval and implementation of forest management plans
- Low-impact selective tree cutting, hauling and milling
- Local timber processing and adding value of timber forest products
- Harvesting and storing of forest seed
- Establishment of local nurseries
- Productive restoration of forest landscapes
- Promotion of the natural regeneration and regrowth of successional
- Enrichment plantings and other related activities

- Other forest management and restoration activities proposed by the communities

43. It is estimated that 262 sub-projects will be co-financed by Bio-CLIMA, and that these sub-projects should contribute to the sustainable management or restoration of an area of approximately 800 ha/per project, resulting in 78,185 ha of sustainably managed natural forest and 131,608 ha of restored/reforested open forest land. It is estimated these activities will benefit 1311 vulnerable people and have a mitigation impact of 900,000 t $CO_{2\ eq}$ in 20 years.

II.1.4.4. Activities to support beneficiaries to access high-value markets

44. To grant the financial sustainability, market access and social inclusion of all the productive landscape restoration and forest conservation models, but especially to communities that are granted financial support through SCE´s, CFM and CFR sub-projects described above, the activities included in Project Output 1.2.3 will strive to provide support to producer organizations, women groups, cooperatives and community enterprises to access high value markets on fair trade basis, training in added value and marketing, strengthening of entrepreneurial capacities, facilitation of business contacts, the participation in fairs and commercial exchange events. Bio-CLIMA will also support producer in obtaining organic and/or fair-trade certification labels for their products, as group certification of sustainable forest management of timber and non-timber products. The latter will be reinforced by investment and capacity development to enforce forest law and support to combat illegal logging (Activities 2.2.2.1, 2.2.2.3 and 3.2.1.2).

II.1.5. Activities to improve sector governance (Component 2)

II.1.5.1. Strengthen regional natural resources governance

45. Project Sub-component 2.1 shall contribute to create an enabling environment for investment for natural resources management and conservation in the whole CR that would offer clear and simple norms, efficient local institutions and transparent governance schemes. Through this project component public environmental institutions in the CR will be provided with new and additional technical personnel, equipment and operative capacities to support sustainable land use planning and environmental/forest law enforcement. Likewise, more public budget will be assigned to the local institutions and the 23 Indigenous Territory Governments (GTIs) of the CR to support their own efforts to improve the oversight and control of their territories, which covers an area of 1.7 million hectares.

46. While Nicaragua's legislation, norms and instruments for Sustainable Rural Development are solid Land-use Planning (LUMPs) instruments have to be put in place to make sure that multi-sectoral development interventions accrue into an integrated, sustainable development approach at farm, landscape and ecosystem level. On the other hand forest and protected areas legislation will need to be up-dated and normative gaps to be filled to promote sustainable management, conservation and harvesting of natural forests at small-scale. Bio-CLIMA will provide expert support, facilitate the dialogue between different sector and actors and promote public participation to facilitate this exchanges through discussion fora, workshops and other mechanisms, with the objective that the rules of the game for sustainable

land planning and use are clear and simple to understand for farmers and communities, and forthrightly administered, monitored and enforced by public officials. For such a fundamental change, policy and legal innovation must be constructed and socialized in a broad and participatory manner.

47. Bio-CLIMA will facilitate and promote the societal dialogue involving all relevant local actors and institutions, producer organizations, indigenous peoples, communities and academia, which shall also foster social control and transparency. On the other hand and complementarily, Bio-CLIMA will facilitate the public-private dialogue processes involving all relevant actors and the private sector to create the investment facilities (Trust Funds) needed, through with which the majority of project funding will be channeled to promote and bring to scale the sustainable landscape restoration and forest conservation models described in Component 1.

48. Unduly competition by illegal logging and deforestation will have to be addressed through efficient and effective law enforcement: the Government will invest important resources to guarantee that forest, land use and environmental regulations are duly complied with and that infringements are duly sanctioned: inter-institutional illegal logging and forest fire control patrols that will be strengthened by Bio-CLIMA which will operate with the participation of indigenous communities. All these interventions aim to create the enabling regulatory and governance environment, paving the way to transform extensive and destructive land use-forms into sustainable climate resilient practices, targeting especially small vulnerable farmers and households on the deforestation fronts.

II.1.5.2. Strengthen local organization, territorial oversight and law enforcement

49. Project Sub-component 2.2. shall contribute to strengthen the local organizations: All 23 GTIs of the CR will be provided with organizational, legal and administrative support in order to improve their ability to exercise the territorial authority the law entitles them to. Participatory institutional diagnose and analysis will be done to identify needs and demands for each one of the GTIs in order to provide targeted organizational support through training, expert support, workshops and other activities. Special care will be taken on including and empowering young people and women in community decision making processes.

50. Local producer organizations will be provided with organizational support to improve their governance and oversight mechanisms, their administrative and financial procedures, quality enhancement of their products and services, bankability and others. For this, expert support will be provided for diagnosis and for participatory organizational improvement processes, including workshops, exchange visits and similar.

51. Targeted legal support will be provided to local producer organizations, cooperative and community enterprises to get and/or up-date their legal status as a formal statutory

organization in order to allow them to sign contracts, interact in commercial and financial transaction and be able to acquire credit.

52. Finally, forest, land-use and land use change administration, control and environmental law enforcement shall be strengthened. The activities include support to operate mobile units and fixed control posts to control timber transport; deforestation control and forest fire prevention brigades; and to support Indigenous Territory Governments to operate indigenous people territorial defense and resources control brigades. For all these expert and intelligence support, equipment, vehicles and operational expenses will be covered to operate mobile control units and fixed control posts to control timber transports, deforestation and forest fire prevention brigades.

II.1.6. Activities for capacity and public awareness development (Component 3)

53. Project Component 3 includes a comprehensive offer of capacity development options and tools to support and sustain productive landscape restoration and forest conservation efforts and investments in the Caribbean Region of Nicaragua.

II.1.6.1. Capacity development through training

54. To move towards an integrated and sustainable farm, landscape and ecosystem approach that Bio-CLIMA strives to promote, a significant training and capacity-building effort will need to be undertaken: Technical personnel from public extension services, farmers and beneficiaries will be trained in integrated land use management and planning (TDPs, LUMPs), implementation and maintenance of productive landscape restoration modules, investment and business planning ("+in"), innovations in administrative processes, legislation and norms, strengthening of local organizations, quality management and market access, among others.

55. Technical personnel, extension workers and promoters from environmental authorities and public extension services present at the regional and local level will be trained in the use and implementation of the new land and territory planning instruments (LUMP-b and the TDP-s), legal and normative framework and Productive Landscape Restoration Models that will be introduced by the Project. Special attention will be given not only in the technical content, but in methodologies, including Innovation and Research Farms, Farmer Field Schools, in order to train these trainers. Emphasis will be given also to participatory use and business planning approaches, holistic farm, landscape and ecosystem planning, climate resilience, biological connectivity and biodiversity conservation.

56. The Project will strive to provide organizational, management, financial and marketing training to producers and members of organizations/communities; while in activity 3.1.2.2 producers will be trained in LUMP, TDP and Productive Landscape Restoration / Forest Conservation Models: Farmers, producers and members of organizations (indigenous and non-indigenous) will be trained in the use and implementation of the new land and territory planning and resources conservation instruments (LUMPs, "bis" and the TDPs), legal and normative framework and Productive Landscape Restoration Models that will be introduced

by the Project. These training will involve training session, workshops, exchange visits to Innovation and Research Farms and Farmer Field Schools and other appropriate methodologies.

II.1.6.2. Development of tools and instruments

57. Bio-CLIMA will help to set up a deforestation and forest fires early-warning system for the CR that should build on systems already developed. Expert support and training will be provided to make sure that the diverse remote sensing tools and instruments publicly available are known by relevant institutions, chosen and used and put into practice by regional and local environmental authorities and stakeholders in the CR.

58. A forest products administration and control system will be designed and put in place. Simplified norms for forest use and administration will be streamlined into a user friendly informatics forest administration and control system. This will have to be designed, adjusted and run by national, regional and public offices in charge of forest administration, control and oversight. Expert support, software, equipment and training will have to be provided. In order to continue to monitor LULUC, deforestation and forest degradation. MARENAS REDD+ Units` operation will be supported within Project activity 3.2.1.3 through consultant honoraria and workshop expenses.

59. The installation and permanent monitoring of plots within Nicaragua´s Second National Forest Inventory (NFI) which will involve not only forest cover and socio economic variables, but also climate change, biodiversity and other new variable. This encompasses 70 plots that will be financed by the Bio-CLIMA project in the Caribbean Region. Additionally Project Activity 3.2.1.5 will support to monitor biodiversity indicator species in 10% of plots of the NFI in the CR for which expert support, training and methodological assistance and operational expenses will be provided to MARENA, INETER and the regional environmental authorities to improve their capacities to monitor the impact of the land use planning instruments and models introduced by the Project on climate change adaptation, mitigation and biodiversity conservation in the CR. This will be done through activities 3.2.1.6 to monitor adaptation, mitigation and biodiversity impact of implemented productive landscape restoration/forest conservation models and activity 3.2.1.7 to monitor climate, hydro-meteorological (including tropical storms, hurricanes, droughts) and pest risk phenomena in order to inform and emit alerts. Expert support, training, methodological assistance and operational expenses will be provided to INETER and IPSA in partnership with the regional environmental authorities to be in capacity to monitor climate, hydro-meteorological phenomena and pest risk, to inform the public and emit alert bulletins.

II.1.6.3. Public awareness development

60. The very high ambition to shift the prevailing development paradigm, which is based on extensive natural resources and landscape exploitation, towards climate smart, sustainable development can only be achieved if very deep cultural and behavioral transformation of attitudes and values within the society is achieved. A great effort will be done and significant

resources invested to inform and create awareness at regional and local level, farmers and communities and to the general public in general. This will be done through a permanent and efficient public communication strategy and a specifically designed and targeted education program for local schools and universities. Through activity 3.3.3.1 a public communication strategy will be developed and rolled-out, while a very intensive environmental education program in local schools and communities will be carried out in activity 3.3.3.2. Expert support to update the environmental curricula of the public school's system will be provided. Training of trainers (teachers) will be financed to include environmental education and relevant climate change mitigation/adaptation and biodiversity conservation into their curricula. Environmental curricula in schools of the CR includes biodiversity and climate issues and number of education events successfully held.

61. Through the credit component of Bio-CLIMA, the Government of Nicaragua will invest substantial financial resources to strengthen regional public institutions and the 23 Indigenous Territory Governments of the Caribbean and the Alto Wangki y Bocay Regions. Promotion of sustainable land-use and forest management, planning and monitoring; local territorial governance as also environmental and forest law enforcement urgently need additional capacities and resources, which currently are scarcely present in the Region. The relevant public institutions in charge of environmental protection, forest conservation and sustainable, climate adapted agricultural production will be provided with technical assistance, logistical means, vehicles, information technologies, equipment and operational costs. The improvement of forest governance on the total forest area impacted by Bio-CLIMA in the 23 Indigenous Territories (1,716,325 ha) together with the restoration and conservation investments described in Component 1 is expected to reduce GHG emissions of 53.1 MtC02 in 20 years. BIO CLIMA comprehensive intervention strategy is designed to go beyond a one-off project: its climate resilient production models have been field tested and assessed and have the potential to be replicated in other municipalities within the Region. The trust funds to be set up with Project support through activity 2.1.3.2 provides sustainability and scale, and an important investment in additional technical capacities and strengthened institutions will serve to replicate and expand the project approach. The Project will showcase a comprehensive integrated approach and intervention at the farm, landscape and ecosystem level. Project interventions aim to create the enabling regulatory and governance environment, paving the way to transform extensive and destructive land use-forms into sustainable, climate resilient practices, targeting especially small vulnerable farmers and households on the deforestation frontier.

Table 2: Area covered, farms and beneficiaries impacted by Bio-CLIMA´s interventions

Landscape restoration /forest conservation models	Area impacted (ha) /potential area[8]	Family farms / Sub-projects (number)	Direct beneficia-ries	Disaggregated by gender	
				Female	Male
Output 1.2.1 Degraded pasture- and rangeland restored	***61,209*** ***/122,610***	***8,060***	***40,302***	***20,554***	***19,748***
Cocoa Agroforestry - Systems	**8,850** /14,048	4,425	22,126	11,284	10,842
Sustainable Silvopastural Systems	**12,144** /61,593	2,429	12,144	6,193	5,950
Close to Nature Planted Forest	**40,215** /46,969	1,206	6,032	3,076	2,956
Output 1.2.2 Natural forest ecosystems and forest land conserved	**541,826** /979,955	**357**	**10,798**	**5,507**	**5,291**
Sustainable Community Enterprises	***332,033*** ***/554,096***	95	9,487	4,838	4,648
Community Forest Management and Restoration Sub-Projects	***209,793*** ***/425,859***	262	1,311	669	642
Sub-total	**603,035** /1,102,565	**8,417**	**51,100**	**26,061**	**25,039**
Forest area benefitted from improved governance, capacities and law enforcement	**1,716,325**				
Total area impacted by Bio-CLIMA	**2,319,359** /7,023,700				
Number of indirect beneficiaries			**614,721**	**307,684**	**307,037**

[8] Note: Implementation area of the landscape restoration and forest conservation models / total potential area in the selected project region. The forest area benefitted from improved forest governance is put in relation with the total area of the Caribbean Region.

III. ENVIRONMENTAL AND SOCIAL CONTEXT

III.1. Bio-physical environment

62. The Project area includes the North Caribbean Coast Autonomous Region (RACCN) and the South Caribbean Coast Autonomous Region (RACCS), the Special Development Regime of the territories located in the upper Wangki Bocay watersheds, the BOSAWAS Biosphere Reserve in the north and Indio Maíz Biological Reserve in the south. The BOSAWAS Reserve lies within the RACCN and the departments of Jinotega and Nueva Segovia, while the Indio Maiz Reserve is found partly in the Rama and Kriol territory located in the RACCS and partly in the department of Rio San Juan. The two Autonomous Regions and the upper Wangki Bocay watershed make up 49% of the national territory and 83% of the ERP accounting area, while the two Reserves make up 10% of the national territory and 17% of the ERP accounting area.

63. The Caribbean Region (CR) contains approximately 64% of the country's forests (2.49 M ha) and is inhabited by only 15% of national population (12.7 inhabitants/km^2) mostly (67%) in rural areas. The main economic activities in the CR are subsistence agriculture, livestock, coffee, cocoa, palm oil, bamboo, fishing (including shrimp and lobster), logging, tourism and mining[9]. The CR is home of most indigenous and afro-descendant people that control most closed broadleaved forests. Nevertheless, the deforestation rate in the CR has been very high: Between the years 2000 and 2015 Nicaragua suffered a gross deforestation of 90,844 ha of tropical forests every year – and a forest degradation of 16%, equivalent to 15.65 M t CO_{2eq}./year. Most of these areas have been converted into pastureland, crops or to secondary vegetation "*tacotales*", which increased in area 30% and 53% respectively. Added to the emissions from forest degradation (+ 3.5 M t $CO_{2\ eq.}$/year) minus the sequestration produced by restored areas (- 2.8 M t $CO_{2eq.}$/year) the result of net emissions is 16.3 M t $CO_{2\ eq.}$ /year[10]

64. The main underlying causes for deforestation and forest degradation in the CR are the demographic pressures caused by drought in the Pacific and Central Regions of Nicaragua and the expanding road system have generated strong migration flows into the CR were "idle" forest-covered land has been abundant and institutional capacities to enforce environmental, land planning and forestry laws are still weak. These factors combined with low land prices, undervaluation of the standing forest, lack of access to TA, finance and responsible markets have driven settlers to convert forests into extensive pastures with the aim to initially take as much land as possible, often encroaching into indigenous territories. Between the years 1983 and 2015, 2.2 million ha of forests were cut down and 1.4 million ha of extensive pastureland was established. The area converted to perennial crops multiplied by ten in that period[11].

65. Because of feed and water scarcity in the northern (Estelí, Madriz, Nueva Segovia) and central (Matagalpa, Chontales) parts of Nicaragua, low land prices and a more constant (and relatively high) rainfall ensuring feed availability have attracted many livestock farmers to the

[9] Agriculture contributes with 17% to Nicaragua´s GDP and represents more than 70% of the country's´ total exports.
[10] Niveles de Referencia de las Emisiones Forestales. República de Nicaragua, Enero 2019. https://redd.unfccc.int/files/nref_nacional_vf_170119.pdf
[11] ENDE REDD+. MARENA, 2018.

CR[12]. This has resulted into expansion of livestock into the buffer zones and the core zones of protected areas. The predominant livestock production system is extensive, where animals are grazing freely on mostly traditional pastures on deforested and often not suitable soils (texture (high clay-content) and inadequate nutrient availability) lead quickly to pasture degradation, deforestation and loss of biodiversity and low productivity both per area and per animal. These systems are also highly vulnerable to climate change as they mainly depend on pastures without much supplementary feeding during times of challenging weather conditions (e.g. drought or flooding).

66. The predominant extensive livestock system is dual-purpose (milk and beef), characterized by low stocking rates (less than one animal per ha), poor productivity and reproduction parameters, also when compared to the central and Pacific regions of Nicaragua. Livestock productivity is limited mostly by the lack of availability of good quality feed. Milk production ranges from 3 to 7 kg per animal per day (on average 4.5 kg), most of the milk processed into cheese for the local, national and some export markets. Cattle for beef production reach typically a finishing weight of 380 kg after 3.5 years, but many farmers sell their animals at a younger age (14 months, 150 kg), to intermediaries or farmers who specialize in fattening. The market is mainly domestic (slaughterhouses), export of live animals takes place to Honduras, Mexico and Venezuela. Part of the exported meat, often of low quality, goes to the United States to be processed into hamburgers.

67. Favorable market conditions created by free trade agreements with Central American countries, Venezuela, and the US have stimulated livestock expansion. Between the years 2000 - 2009, the national livestock sector grew at a 5% annual rate, and between 2006 and 2015 the export value of livestock products increased by 176%[13]. Presently, beef and dairy products are among the top four exports in terms of value. In 2015, Nicaragua exported over 222,000 metric tons of livestock and dairy products, valued at nearly US$700 million, which represents almost 10% of GNP and contributes more than 25% of the total value of exports. The indicators of the Business as Usual (BAU) scenarios presented in Section B.3 (very high GHG emission intensities and water requirements per unit of product) show that even without a further increase in livestock numbers (which is against the current trend) the expansion of pastureland and the degradation of already established ones will continue. This will result in further expansion of pastureland into protected areas and indigenous territories, and a further deterioration of already degraded pastures causing further soil erosion, deterioration of ecosystems and ecosystem services, and other landscape elements.

68. While in year 2000 the Agriculture, Forestry and Land Use (AFOLU) sector accounted to nearly 92% of Nicaragua's GHG emissions, sectoral contribution has been reduced steadily to reach 68% in 2010 most of it still being generated through loss of forest. Both CH_4 and N_2O

[12] CIAT/FAO 2019: Business as Usual and Feasibility Study for Landscape Restoration through Sustainable Silvopastures within the Bio-CLIMA Project.
[13] TechnoServe, 2017. In ER-PD, ibid.

emissions increased by 36% between years 2000 to 2010 to 6,492 and 2,252 $GgCO2_{eq}$, respectively, mainly from the enteric fermentation of livestock (41%) and the management of agricultural soils (47%)[14]

III.2. Vulnerability to climate change

69. The CR has a permanently humid tropical rainforest climate. Nevertheless, future climate scenarios foresee a temperature rise of 0.7 ºC for the period 2010-2039, an increase in number of days where maximum temperature will surpass 35 ºC and an increase of 10% in dry days. The rates of temperature increases are significantly higher in deforested areas, more than 50% higher than average temperature changes in tropical areas. These changes will affect the suitability of the main crops that support rural livelihoods in the CR, especially livestock and coffee, increasing especially the vulnerability of poor families that depend on this cash-crops for daily subsistence. As temperatures increase above the current suitability range (18–28 °C) for coffee production Bio-CLIMA will support farmers in the transition towards cocoa cultivation as an promising alternative crop with higher heat tolerance within agroforestry systems.

70. Due to Nicaragua´s geographic position the country is highly exposed to frequent climatic shocks produced by excessive precipitation (hurricanes and tropical depressions) and droughts of varying intensities, sometime associated with the El Niño Southern Oscillation (ENSO). Events that were declared natural disasters occurred in 1982, 1988, 1996, 1998, 2001, and 2014, primarily hurricanes and tropical storms that caused damage to infrastructure, displaced people from their homes, and produced losses to the agriculture sector. Recently, in November 2016 Hurricane Otto hit the Río San Juan Biosphere damaging and defoliating severely 22% of the area. In 1998 Hurricane Mitch caused losses of US$1.3 billion, of which US$ 244.6 million was in the agriculture sector. In contrast, in 2001, one of the most severe droughts on record caused losses of US$49.1 million, of which US$41.4 was in agriculture. Many of the 162,000 people who suffered significant damages from Hurricane Felix in 2007 have not yet recovered.

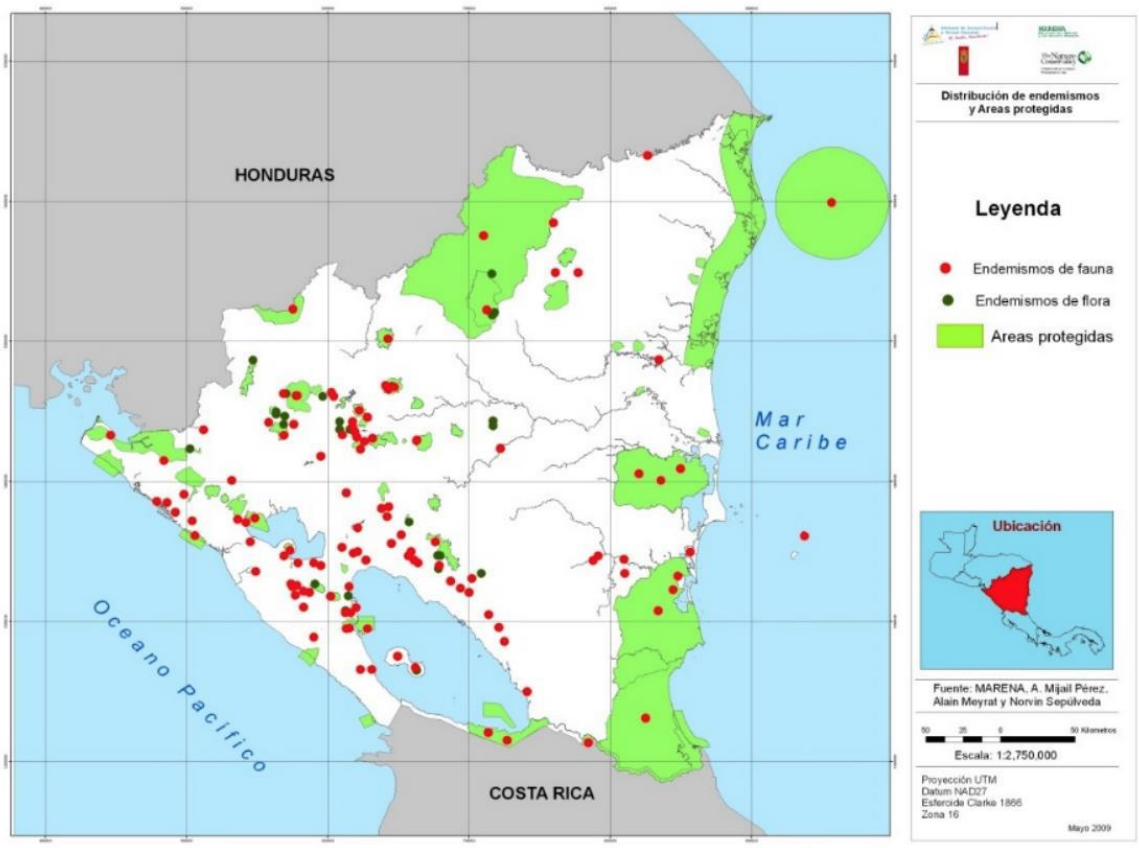
71. Nicaragua is within the ten most vulnerable countries and ranks 6th in the Climate Risk Index rank from 182 countries. Family farming is particularly vulnerable to climate risk: it encompasses the vast majority of producers in number, land holdings, and agricultural production. Family agriculture incorporates 98 percent of all producers. In land area, family farming comprises 90 percent of agricultural land. In agricultural production, their output value comprises 89 percent of the total. Their relevance for food security is irrefutable. Family farms contribute an estimated 60 percent of agricultural GDP from production of basic grains (maize, rice, beans, and sorghum) and livestock.

[14] Contribución Nacionalmente Determinada a la Mitigación del Cambio Climático (NDC) de la República de Nicaragua antes la Convención Marco de Naciones Unidas sobre Cambio Climático (CMNUCC). 2018.

III.3. Biodiversity and protected areas

72. Nicaragua contains around 7% of global biodiversity: The country has 68 different ecosystems, 74 protected areas, and 20,485 species. Yet, the highest proportion of the territory presents modified habitats, presenting areas for cattle ranching and crops. Due to its strategic position in the biological Mesoamerican corridor The Caribbean Coast of Nicaragua is one of the 25 diversity hotspots in the world. However, biodiversity in the country is highly threatened, mainly due to anthropic activities, such as the transformation of ecosystems, irrational exploitation of resources, pollution, infrastructure construction, and climate change. Nevertheless its protected areas representing 82% of protected areas in the country.

Protected areas of Nicaragua -light green-; and endemism spots fauna –red-, and flora -dark green-. (Source: Estudios Ecosistemas de Nicaragua, 2010)



73. The CR contains the BOSAWÁS Biosphere Reserve[15] in its northwest, while the Río San Juan Biosphere[16] which stretches from the Southeast of the RACCS into the *Departamento Río*

[15] Includes six Natural Reserve Areas (BOSAWAS, Cerro Kilambe, Cola Blanca, Banacruz, Macizo de Peñas Blancas y Pis Pis) and the National Park "Cerro Saslaya".

[16] Incluyes: Historical monument "Fortaleza La Inmaculada Concepción", National Monument "Archipiélago de Solentiname", two Wild Life Refugees (Río San Juan y Los Guatuzos), the Biological Reserve "Indio Maíz" and three Natural Reserve Areas (Cerro Silva, Punta Gorda, Serranía de Yolaina).

San Juan and contains the *Indio Maíz* Biological Reserve. These protected areas are mostly covered with tropical rain forest are home to some seventy ecosystems, thirteen of the nation's 21 most important watersheds and contain a higher number of trees, bird, and insect species than all of Europe. Within these two protected areas forest cover diminished by 2.7% between years 2010 and 2015[17], demanding urgent action and substantial investment to protect them. Deforestation in the municipalities located within the buffer zones of both Biosphere Reserves continues to be alarming, as shown by the forest cover change assessment for the period 2015 and 2018 carried out by MARENA. Deforestation also threatens the permanence and biological connectivity of very important natural forest lands in indigenous territories in the Waspam and Prinzapolka forest areas.

III.4. Socio-economic aspects

74. The population of the CR was estimated at 1.1 million inhabitants (2013) [18] with most people living at the coast. The population is multi-ethnic, including Miskito, Rama, Mayagna and Ulwa (indigenous), Garifuna and Creole afro descendent) people. In the RACCN the population is predominantly Miskitu (72%) and Mestizo (22%), while in the RACCS most people are Mestizo (81%) and Creole (8.5%). The Caribbean Coast is therefore multicultural and multilingual, with Miskito, Creole and Spanish being the most widely used languages, while the Mayangna, Ulwa, Garifuna and Rama languages are used in smaller geographical areas.

75. While it is true that both poverty and extreme poverty have been reduced in half since 2005, Nicaragua is the second poorest country in the Western Hemisphere, and RACCS, RACCN and Río San Juan have the lowest human development indices (0.50-0.55) of Nicaragua. Since nearly all remaining natural forests are located in the 23 indigenous and afro-descendent territories, which has a total land area of 3,819,340 ha and includes 304 communities[19], Bio-CLIMA will focus its interventions on these territories and strive to support its inhabitants to restore, protect and make sustainable use of its forests and natural resources.

76. A recent survey undertaken on 359 non-indigenous settler families living on the deforestation front around BOSAWAS[20] revealed that 65% of these households live below the poverty line, only 20% have legal land titles and a same portion do not have any titles. The remaining 60% of households hold other informal land transfer contracts or private instruments of their land possession, which is a source of increasing conflicts. This situation demands urgent action through tailored interventions, facilitation of land use and conservation

[17] World Bank; CIAT. 2015. Climate-Smart Agriculture in Nicaragua. CSA Country Profiles for Africa, Asia, and Latin America and the Caribbean Series. Washington D.C.: The World Bank Group.
[18] In Caribbean Coast Emission Reduction Program Document (ER-PD) submitted to the Forest Carbon Partnership Facility FCPC. Carbon Fund. Nicaragua, May 29, 2018
[19] Benefit Sharing Plan of the REDD+ Emission Reductions Program. MARENA. (version February 4, 2020)
[20] Duriaux Chavarría JY, 2017. Cornell University Ornithology Lab 2017. Improving smallholder´s livelihoods through reforestation around BOSAWAS Reserve, Nicaragua.

agreements, and innovative financial instruments at high concessionality and grants, if the problem of deforestation and poverty reduction is to be tackled.[21]

III.5. Land tenure

77. During program preparation and exhaustive assessment of the land tenure situation in the project region was undertaken[22]. The land tenure assessment undertaken for the CR reports that 98.12% of the land is titled, 53% as communal property of 23 indigenous and afro descendant people, 45% as private property while only 2% of the land has not yet been titled[23]. While in some indigenous territories there is the presence of non-indigenous families that have settled and live there, this does not touch the legal right that original peoples have over their territory. According to Law 445 on "Communal Property Regime of the Native Peoples and Ethnic Communities of the Autonomous Regions of the Caribbean Coast and the Bocay, Coco, and Maíz Rivers" and the civil code of Nicaragua, communal property is defined as collective and is made up of land, water, forests and other natural resources that have traditionally belonged to the community[24]. It includes the traditional knowledge, intellectual and cultural property, biodiversity and other goods, rights and actions that belong to one or more indigenous or ethnic communities. Communal land cannot be taxed, sold or divided and the property right does not end in time.

78. Nicaragua is a pioneer and regional leader regarding the restoration and protection of the rights of originary and afro descendant peoples, and has development of a robust institutional and legal framework. Land tenure is legally guaranteed, and the communal lands in Nicaragua possess special protection, according to Law 445. Nicaragua´s Constitution recognizes the following types of property: private, communal, public, associative, cooperative, family and mixed. As regards to land tenure, the country has a full legal framework that provides legal security to owners, holders, and tenants.

79. However, there are weaknesses with the implementation of the law, and illegal occupation of lands and illegal land trafficking are latent sources of tension and conflict, especially between indigenous communities (owners of some of the land) and non-indigenous settlers (*"colonos"*). This is mainly due to strong migration pressure from the western part of the country, encroachment into indigenous territories by colonists and land conflicts occur, since the presence of local public institutions and the rule of law is still weak. The national government is making efforts to solve the problem using actions to up-date public property registries, recognizing agrarian reform titles, accelerating the judicial resolutions for lawsuits and mediating for the resolution of conflicts between population groups. During the

[21] Since 2018 Nicaragua is implementing the Second Land Administration PRODEP II with financial support of the World Bank (US$ 18 M) precisely to solve land tenure conflicts which includes also parts of the Bio-CLIMA Project implementation fegion

[22] Evaluación sobre la tenencia de la tierra y los recursos naturales en la Costa Caribe, la Reserva de Biósfera BOSAWAS y la Reserva Biológica Indio-Maíz. MARENA 2017 http://www.marena.gob.ni/Enderedd/wp-content/uploads/2019/05/Evaluaci%C3%B3n-Tenencia-de-la-Tierra-ERPD.pdf

[23] Information about the tenure of these remaining 2% is unclear.

[24] González M (2017). Community land property ownership in the Nicaraguan autonomous regime. In "Securing rights in tropical lowlands". International Development Studies Program, Department of Social. Science, York University, Toronto, Canada.

formulation of the Program, these weaknesses, and existing tensions were identified as the main concerns for the indigenous and afro-descendant communities. They have expressed their support for the Program but are asking for immediate and effective actions to address the illegal occupation of lands, deforestation and forest degradation.

80. Through Activity 1.1.1.4. Bio-CLIMA shall specifically address these demands and mitigate these risks by facilitating dialogue and agreement processes with support of independent, specialized entities to be specifically entrusted with this process. To this Ends coordinated action and collaboration will be sought with the Property Institute of the Office of Attorney General of the Nation *(Procuraduría General de la República)* and its Second Land Administration Project (PRODEPII); as also with the Directorate for Alternative Conflict Resolution of the Supreme Court *(DIRAC de la Corte Suprema de Justicia)* which has worked in mediating in land tenure conflicts in the CR and are recognized by indigenous organizations.

IV. LEGAL AND REGULATORY FRAMEWORK

81. The country has a solid legal framework rooted in the Political Constitution of Nicaragua (PCN). As a basic norm it establishes responsibility for a healthy environment, protection of the natural resources, recognition and protection of the different property regimes, recognition of the communal property of the indigenous and afro-descendant communities, promotion of sustainable economic development in harmony with Mother Earth, recognition of the use, enjoyment and benefit of the natural resources, ownership by the forest owners and the autonomy of the Autonomous Regions of the Caribbean Coast. The country's environmental Legal Framework is underpinned by articles 60 and 102 of the PCN and is a robust legal framework as it has been sustained since 1996 under the principles of Environmental Law mandated in international instruments ratified by Nicaragua and has created special laws that regulate the forest, protected areas, biodiversity, water, land and other issues under the sustainable development focus.

IV.1. The Political Constitution

82. The PCN recognizes the importance of the State in environmental protection and of the services provided by the forests and their ecosystems, which represent a juridical strength for the implementation of Bio-CLIMA and the ER Program. The State has a regulatory and normative role, is a guarantor of the application of the laws, decrees, resolutions, ordinances, programs, policies, public policies and strategies on environmental and forestry issues. The articles of the Political Constitution relevant to Bio-CLIMA and ER Program are presented below:

Program relevant articles of the Political Constitution of Nicaragua	
Art.2	Direct participation of the people in national affairs.
Art. 5	Recognition of the original and afro-descendant peoples, forms of social organization, administration of local affairs, maintenance of their communal forms of property and the enjoyment, use and benefit of the natural resources.
Art. 8	The Nicaraguan people is of a multiethnic nature.
Art. 44	Recognition of the different types of property that must fulfil a social function.
Art. 60	Right to live in a healthy environment.
Art. 89	Right of the peoples of the Caribbean Coast to preserve and develop their identity, recognition of their communal forms, and enjoyment, use and benefit of the waters and forest.

Art. 102	The natural resources are national assets, granting concession contracts for natural resources when the national interest requires it.

IV.2. Applicable international treaties and commitments

83. The international treaties and conventions that have been adopted and ratified on the issues of the environment and sustainable development are diverse: forests, biodiversity, climate change, anti-desertification, indigenous peoples, protection of the ozone layer and control of dangerous substances, among others. All of them, in accord with the PCN are part of the national legislation.

84. Nicaragua has signed relevant regional and international commitments by adopting and implementing a serious of administrative, legislative and political adjustments aimed at dealing with the phenomenon of climate change under three major principles: precaution, common but differentiated responsibilities and sustainable development in its three pillars (social, environmental and economic). Nicaragua is a signatory of the Universal Declaration of the Common Good of the Earth and Humankind, which is part of the Political Constitution of Nicaragua. It stresses that "the climates belong to the Common Good of Mother Earth and of Humanity because they are the essential condition of the maintenance of life and climate changes must be treated globally and with a shared responsibility."

85. Regarding climate change, the country has stood out since 1993 in its approval and ratification of the Regional Convention on Climate Change. That agreement commits the Central American countries to establish regional economic integration and cooperation mechanisms for the rational use of the environment so as to protect the climatic system for the benefit of the present and future generations. The Convention establishes that the States, in accord with their capacities, will implement national programs and take measures to assure the conservation of the climate within and outside of their jurisdiction.

86. United Nations Framework Convention on Climate Change (UNFCCC). Nicaragua signed and ratified the United Nations Framework Convention on Climate Change (UNFCCC), the objective of which is to "achieve, in accordance with the relevant provisions of the Convention, stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system." (UN, 1992, Article 2). Nicaragua recognizes the importance of directing actions aimed at actively and concertedly participating in the international community's efforts to ensure stability in the world's climate. Kyoto Protocol, approved by the National Assembly via Legislative Decree No. 2295, July 1, 1999, published in La Gaceta, Diario Oficial, No. 133, of July 13, 1999.

87. The Kyoto Protocol was approved by the National Assembly via Legislative Decree No. 2295, July 1, 1999, published in La Gaceta, Diario Oficial, No. 133, of July 13, 1999. The Protocol constitutes a historic first step to control greenhouse effect gases, offering a basic framework of action in the struggle against climate change. The protocol obliges many industrialized

countries to implement the policies and institutions needed to reduce emissions, although its impact on the rising tendency of emissions has been very limited. In 2014, Nicaragua noted that "what we need is a legally binding instrument that recognizes the different degrees of development, as well as responsibility and differentiation with respect to who causes and who is suffering the consequences of this phenomenon. This agreement contains obligatory commitments to reduce greenhouse gas emissions and also financial commitments, technology transfer and the strengthening of the capacities of the developing countries."

88. The UN Declaration on the Rights of Indigenous Peoples though it does not have the status of a convention or treaty, i.e. does not involve binding or obligatory compliance by its signatories, was the assumed by the National Assembly in 2010 with the commitment to promote actions to adjust the national normative frameworks to the Declaration.

89. Convention 169 "Indigenous and Tribal Peoples Convention" was ratified by Nicaragua in 2010 and is the only binding international instrument that specifically addresses the rights of indigenous peoples. Nicaragua adhered also to the International Convention on the Elimination of All Forms of Racial Discrimination (CERD), which was approved by the UN General Assembly in 1965 and went into effect in 1969. This Convention is based on the principle of dignity and equality of all human beings, and that all have the same human rights and fundamental liberties, without distinction for reasons of race, language, sex, religion or nationality. Additionally, Nicaragua ratified the Convention for the Elimination of all Forms of Discrimination against Women (CEDAW) on September 3, 1981.

90. Other relevant international treaties instruments that Nicaragua has signed include the Convention on the International Trade in Endangered Species of Wild Fauna and Flora (CITES), the Inter-governmental treaty for the conservation and rational use of wetlands (RAMSAR), the Stockholm Convention on Persistent Organic Pollutants (ratified in July 2005) and the Montreal Protocol.

IV.3. Applicable Legal Framework

91. Nicaragua has been continuously improving its laws since the 1990s, with an orientation to the protection, conservation and sustainable use of the natural resources as assets of the nation. A description of the main legal provisions that safeguard environmental and social rights is presented in the table below:

Legal and normative framework applicable to the Program	
Law 28, Law of the Autonomous Regime of the Caribbean Coast and its regulations, Decree No. 3584. Text of Law No. 28 "Statute of Autonomy of the Regions of the Caribbean Coast of Nicaragua with its incorporated reforms. Law No. 28, approved on July 29, 2016. Published in *La Gaceta* No. 155 of August 18, 2016.	Establishes the norms and regulations of the Caribbean Coast autonomous region and recognizes the rights and duties corresponding to its inhabitants in conformity with the Political Constitution of Nicaragua
Law No. 40 and its regulations. Text of Law 40, Law of Municipalities with reforms and incorporations. *La Gaceta Diario Oficial* No. 06, published January 14, 2013.	The law that regulates the municipality as the basic unit of the country's political-administrative division, regulates its territory and natural resources in coordination with other authorities, the local affairs of its circumscription, recognizes the existence of the indigenous communities located in its territories, whether legally constituted or de facto, according to the dispositions of the Law of Indigenous Communities of 1914, 1918, Law 445 and other laws
Law 217, General Law of the Environment and Natural Resources. Approved on March 27, 1996, published in *La Gaceta* No. 105 of June 6, 1995 and is regulations Decree 9-96. Text with reforms and incorporations published in *La Gaceta Diario Oficial* No. 20 of January 31, 2014.	General Law of the Environment and Natural Resources has the objective of establishing norms for the conservation, protection, improvement and restoration of the environment and natural resources that make it up, assuring their rational and sustainable use in accord with what is stated in the Political Constitution. Article 18 of Law 217 created the National System of Protected Areas. Nicaragua has been advancing satisfactorily in updating, adjusting and modernizing its laws; in 2004 it considered important reforms to Law 217, which incorporate the issue of climate change

Law 274, Basic Law for the Regulation and control of Pesticides, Toxic, Dangerous and Other Similar Substances, approved on November 5, 1997, published in *La Gaceta* No. 30 of February 13, 1998, and the regulations for Law 274, Decree 49-98, approved on June 26, 1998. Published in *La Gaceta* No. 142, of July 30, 1998.	The law establishing the basic norms for the regulation and control of pesticides and toxic, dangerous and other similar substances as well as determining the institutional competency to that effect and ensuring the protection of sustained agricultural activity, human health, the natural resources safety and hygiene of labour and the environment in general to avoid the damage these products could cause due to their improper selection, management and poor use.
Law 290, Law of the Organization, Competence and Procedure of the Executive Branch and Law 929, Law of Reforms and Additions to Law 290. Law No. 929 reforms Law No. 290, Law of the Organization, Competence and Procedure of the Executive Branch and Law 462 on conservation, fostering and sustainable development of the forestry sector, published in *La Gaceta Diario Oficial* No. 97, of May 25, 2016.	It determines the organization, competence and procedures of the Executive Branch (MARENA, MAG, INAFOR, MEFFCA, etc.).
Law 445, Law of the Communal Property Regime of the Indigenous Peoples and Ethnic Communities of the Autonomous Regions of the Caribbean Coast of Nicaragua and of the Bocay, Coco and Indio Maíz Rivers. Published in *La Gaceta* No. 16 of January 23, 2003.	Regulates the communal property regime of the lands of the indigenous peoples and ethnic communities of the Caribbean Coast and the basins of the Coco, Bocay and Indio Maíz rivers.
Law 462, Law of the Conservation, Fostering and Sustainable Management of the	Since 2003 the country has had a modern legal forestry framework whose objective is to regulate and promote the conservation, fostering and

Forestry Sector and its reforms. Approved June 26, 2003, published in *La Gaceta*, *Diario Oficial* No. substantial reforms contained in Law 929, *La Gaceta*, *Diario Oficial* No. 97 of May 25, 2016. 168 of September 4, 2003. Law with	sustainable development of the forestry sector through Law 462,7 taking as a fundamental base the forestry management of the natural forest, the fostering of plantations and the protection, conservation and restoration of forested areas. Law 462 stresses the importance of improving the standard of living of the population through forest management and giving participation to the municipal governments and civil society to oversee the conservation of the resource, assuring the multiple benefits in goods and services produced by forests. In relation to ownership of the land and its diverse forms of tenure, Law 462 expressly defines that the owner of the soil has dominion over the forest cover existing above it, and of the benefits derived from it, being responsible for managing it in accord with the law and its regulations the objective of the law is to promote the full exercise of citizenship in the political, social, economic and cultural spheres through the creation and operation of institutional mechanisms that permit fluid interaction between Ley 475, Law of Citizen Participation. Approved on October 22, 2003. Published in La Gaceta No. 241 of December 19, 2003. the State and Nicaraguan society, contributing with that to the strengthening of liberty and participatory and representative democracy established in the Political Constitution of Nicaragua.
Law 757, Law of dignified and equitable treatment of Indigenous and Afro-descendant Peoples. Approved on March 2, 2011. Published in *La Gaceta* No. 96 of May 26, 2011	Its objective is to regulate and ensure the fair and egalitarian treatment of the Indigenous and Afro-descendant Peoples of the Caribbean Coast and Upper Wangki of Nicaragua, as well as of the indigenous peoples of the Central and North Pacific of Nicaragua with respect to opportunities and access to work in the public and private sector and nongovernmental organizations with all the rights, guarantees and benefits established in the labour

	laws, international conventions signed and ratified by Nicaragua, and other related dispositions.
Law 765, Law of Promoting Agro-ecological or Organic Production. Published in *La Gaceta*, *Diario Oficial*, No. 124 of July 5, 2011, and its regulations.	This is a law aimed at production under three major dimensions: social, economic and environmental. Its objective is to foster development of agro-ecological or organic production systems through the regulation, promotion and push to production activities, practices and processes with environmental, economic, social and cultural sustainability that contribute to the restoration and conservation of the ecosystems and agro-ecosystems, as well as sustainable land management
Law 805, Law of Conservation and Sustainable Use of the Biological Diversity, October 19, 2012.	Its objective is to regulate the conservation and sustainable use of the existing biological diversity in the country, ensuring equitable participation and fair distribution of the benefits derived from its use with special attention to the indigenous and afro- descendant communities and respect for and recognition of intellectual property rights, and the traditional and customary use forms of the local communities
Decree 01-2007, Regulation of the Protected Areas of Nicaragua, approved on January 8, 2007. Published in *La Gaceta* No. 08 of January 11, 2007	Nicaragua has a National System of Protected Areas (SINAP), whose purpose is to protect the country's natural resources; preserve natural ecosystems representative of the country's diverse bio- geographical and ecological regions; protect hydrographic basins, aquifers, samples of biotic communities, genetic resources and the genetic diversity of wildlife flora and fauna; protect natural landscapes and the surroundings of historic archaeological and artistic monuments; promote local sustainable development promoting the implementation of clean processes and technologies for the improvement and rational and sustainable use of the natural and potential ecosystems and systemically strengthen the environmental services that the protected areas provide for the benefit of the area's inhabitants,

	the national economy and sustainable development. SINAP produces various environmental services: carbon capture, water and soil protection, connectivity and conservation of biodiversity.
Decree 76-2006, Environmental Evaluation System, approved December 19, 2006. Published in *La Gaceta* No. 248 of December 22, 2006.	The objective of Decree 76-2006 is to establish the dispositions that regulate the Evaluation System, which is made up of the Strategic Environmental Evaluation and the Environmental Evaluation of Works, Projects, Industries and Activities. Environmental Evaluation is used as an instrument for preventive management with the aim of identifying and mitigating possible environmental impacts of plans, programs, works, projects, industries and activities in conformity with the decree, and includes the preparation of studies, holding of public consultations and access to public information for decision-making that concludes with the authorization and/or denial by the competent authority (MARENA, SERENA and municipal governments).
Law 759, Law of Traditional Medicine, approved March 29, 2011 and published in *La Gaceta*, *Diario Oficial*, No. 123 of July 4, 2011, and its Regulation, Decree No. 25-2014, published in *La Gaceta*, *Diario Oficial*, No. 85 of May 12, 2014.	It recognizes, respects, promotes and protects the practices and knowledge related to traditional medicine. It also seeks to protect the knowledge of collective intellectual property. It protects and promotes the use of natural medicines based on plant, animal and mineral derivatives or any combination of them, in conditions of quality, safety, accessibility and responsibility.

IV.4. Applicable environmental and social safeguard policies and standards

92. Bio-CLIMA and the Emission Reduction Program, which is co-financed by the FCPF/World Bank and by the Global Environmental Facility (GEF) shall comply with the Environmental and Social Standards of the World Bank25 and the IFC. The Program also complies with CABEI´s Environmental and Social Management Manual (SIESMAS).

Environmental and Social Standards of the World Bank (ESS):

- Environmental and Social Standard 1: Assessment and Management of Environmental and Social Risks and Impacts
- Environmental and Social Standard 2: Labor and Working Conditions;
- Environmental and Social Standard 3: Resource Efficiency and Pollution Prevention and
- Management;
- Environmental and Social Standard 4: Community Health and Safety;
- Environmental and Social Standard 5: Land Acquisition, Restrictions on Land Use and Involuntary Resettlement;
- Environmental and Social Standard 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources;
- Environmental and Social Standard 7: Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities;
- Environmental and Social Standard 8: Cultural Heritage;
- Environmental and Social Standard 9: Financial Intermediaries; and
- Environmental and Social Standard 10: Stakeholder Engagement and Information Disclosure

IV.5. Gaps assessment of policies/regulations vis a vis applicable safeguard standard

93. In the framework of good governance, important progress has been made as to legislation and public policies, strengthening the process of autonomy for the Caribbean Coast regions, land titling lands in territories of indigenous and Afro-descendant people, as well as in other parts of the country. The Nicaraguan Political Constitution recognizes and guarantees rights to different forms of property, rights on the use of lands and natural resources, mechanisms for citizen participation, participation in the management and the right to opt for incentives. Nicaragua has designed public policies to define the state's course in environmental matters. It was the first country to sign the Universal Declaration of the Common Good of the Earth and Humanity. The country included principles of international legal instruments ratified by Nicaragua into its framework of environmental laws, and it has created special laws for the regulation of forests, protected areas, biodiversity, water, earth, and others, from a perspective of sustainability. Also has adopted and ratified various conventions on forests, biodiversity, climate change, desertification, indigenous people, protection of the ozone layer,

[25] http://pubdocs.worldbank.org/en/837721522762050108/Environmental-and-Social-Framework.pdf

control of dangerous substances, and others. In accordance with the Constitution, these conventions have become part of the national legislation.

94. In general, the government's development and environmental policies are based on a new culture and new values: stakeholders of the general population and public institutions joining efforts to achieve sustainable development and preserve the environment, in order to improve the quality of life of the Nicaraguan people. The PNDH 2012-2016 emphasizes protection and sustainable use of natural resources, adaptation to climate change and comprehensive disaster risk management.

95. The Nicaraguan government conceives secure land tenure as an essential element for economic stability, good governance and social harmony in the country. Under this approach, the government has delivered land titles to 23 indigenous territories, which represent 35% of the national territory. It is a government priority to continue improving the legal certainty, with a view to boosting the economic and social development of the country. This policy promotes the productive and sustainable use of the land and its components, with the objective of recovering its true value as an economic, social and cultural factor. From this perspective, the regulation of land ownership, the consolidation of land rights and the operational integration of public policies in the territory are the axes aiming at economic and social development of the Nicaraguan people.

96. The National Policy for Sustainable Development of the Forestry Sector states that Nicaraguan families can improve their quality of life by gradually establishing a community-based model of sustainable forest use and management, including agroforestry and agroindustry, in articulation with other actors of rural and non-rural, national and international value chains, based on land- use planning focused on environmental conservation and national sustainable production for food security and sovereignty.

97. The legal framework analysis shows that Nicaragua´s laws and policies are progressives and bring a strong support for the preparation and implementation of Bio-CLIMA Project. However, there has been identified some gaps related to the ESS:

98. The table below shows how the national legal framework and ESS 5 requirements are complementarily. Gaps are highlighted and proposals to fill those gaps are made. The biggest gap is related with the weak institutional capacity at the local level to enforce environmental law and procedures, but these shall be substantially strengthened through Project Components 2 and 3:

National legal framework	Gap or alignment identifies al ESS2	Proposal to fill gaps
Law 185. Labor and Social Security.	Aligned with ESS2	No gap identified / alignment description
Law 664 General Law on Labor Inspection	MARENA operates with consultants which do not have complaints rights.	Promote the Grievances and Redress Mechanism
Law 618 on Labor Hygiene and Safety	Consultants are not included	Apply the Labor Management Guidelines
Law 539 on Social Security	Aligned: The Law established a Social Security System to regulate and develop reciprocal rights and obligations for the State and the citizens, the protection of workers and their families related to social contingencies in life and work spheres.	
Law 505 Ley that regulates the provision of profesional and technical services	Code of conduct is not included.	Consultants shall be trained in the use of the Program Code of Conduct.
Law No. 757. Law on the dignity and equitable treatment of Indigenous and Afro-descendant Peoples.	Aligned: The law has the objective to grant for dignity and equality in the relations with the indigenous and afrodescendant peoples of the Caribbean Coast, the Alto Wangki y Bocay, as also of the indigenous peoples of the North, Centre and the Pacific of Nicaragua in order to grant opportunities and access to work in the public sector.	
Law 337. National System for the Prevention, Mitigation and Attention of Disasters (SINAPRED).	Aligned: The system based on this Law activates disaster alerts at the national, regional and local levels.	
Decree 20-2017. Environmental asessment	Aligned: the system identifies the impacts, risks and mitigation actions needed during the implementation of a	

system of permits issued for the sustainable use of natural resources.	Project or activity. Accordingly, projects that due to its nature cause shall develop a Environmental Impact Assessment that has to include the meassures to diminish or mitigate the impacts to Project personnel, neighboring communities and the environment.	
Nicaragua is signatory to the commitments agreed upon in the framework of the International Labor Organization (ILO). Plan of the Regional Action Group for the Americas, GARA[26].	Aligned: include issues that can be considered as basic principles and rights for workers.	
Compatibility analysis of national legislation with the ESS 5		
Decree 20-2017: Environmental assessment system of permits issued for the sustainable use of natural resources. The Strategic Environmental Assessment is considered as a preventive management instrument to identify and mitigate possible environmental impacts of programs and projects.	Does not establish measures in case of harm or damage through the use of natural resources.	Elaborate a process framework for the case of damage in the use of natural resources
Law 475 – On participation of the citizenry: Gives citizens the right to be consulted and participate in issues related with the formulation of public policies and projects that have	A gap identified with ESS 5 is the lack of resettlement plans and process framework.	Involuntary resettlement framework and Process Framework (Bio-CLIMA does not include any resettlement)

[26] Since November 2018 Nicaragua is a member of the Regional Action Group for the Americas (GARA), en entity of regional carachter with the participation of public tourism entities and international organization to defend the rights of children and adolescents.

a direct impact in citizens' daily life.		
Law 217, General Law on the Environment and Natural Resources. Art. 23 "All private land within protected areas are subject to the management conditions established by the Law that regulate this matter. The rights acquired by the owners that do not accept new conditions to be established will be declared of public interest and receive a just compensation payment.	A gap identified with ESS 5 is the lack of resettlement plans and process framework.	Involuntary resettlement framework and Process Framework (Bio-CLIMA does not include any resettlement)
Law 509: General Law on National Cadastre: Art. 2, no. 2 "The Municipal Cadastre shall have following rights: No 7: Undertake and execute the valuation of properties within its territory, […] for the effect of compensation payments and quantification of damages and losses from natural desasters or other causes, according to the technical norms issued by the "Dirección de Catastro Fiscal", approved by the National Commission of Cadastre"	No gap has been identified.	

99. From the gap analysis undertaken it can be concluded that the most serious gaps refer not to the legal or normative framework, but to the fact that in the Caribbean Region public institutions have had weak institutional capacities to implement public policies and to enforce the environmental and social legal framework and its procedures. These structural deficiencies can generate situations of corruption, and limitations to the access of justice, especially for vulnerable and disadvantaged groups of the population.

IV.6. Measures to fill gaps identified

100. Environmental and social Law enforcement requires of the institutional capacities within the public institutions: these need not only enough technical personnel, but also a continuous training program that involves all the ministries and entities related to program implementation and safeguard compliance.

101. While MARENA has experience in safeguard management this institutional knowledge has to be transferred to the other ministries, regional governments and local entities and sectors that participate in the Safeguard Commission. With the objective to guarantee timely attention to safeguard issues MARENA will have to include more specific support specialists into its staff. Same situation occurs with the environmental authorities of the Regional Governments of the Caribbean Coast. Through Bio-CLIMA´s Sub-Component 2.1 Nicaragua shall undertake a big effort financial effort to strengthen regional natural governance, specifically by hiring of additional technical personnel (Activity 2.1.1.1), as to procure equipment, material, operational expenses and institutional budget to regional and local environmental authorities (Activities 2.1.1.2 – 3).

102. On the other hand, Bio-CLIMA shall support the up-dating and participatory improvement process of the environmental and land-use planning legal and regulatory framework at national and regional level through activities included under Output 2.1.1.

V. INSTITUTIONAL FRAMEWORK

V.1. National level

V.1.1. Ministry of the Environment and Natural Resources (MARENA)

103. As to Law 290[27], the MARENA is the national lead authority of the country's environmental policy and administers the National System of Protected Areas (SINAP), the National System of Environmental Information (SINIA) and the Environmental Evaluation System; regulates and authorizes the sustainable use of agricultural and forest land and is responsible for enforcing environmental crime through an administrative procedure. Its main inter-institutional coordination is with the following entities:

- The Environmental Evaluation System is decentralized in the Caribbean Coast Autonomous Regions and is the responsibility of the Secretariat of Natural Resources (SERENA) of each autonomous region, which coordinates with MARENA.
- Coordination with the Ministry of Agriculture and with the National Forestry Institute in sectoral planning and sustainable use policies for agricultural, livestock and forest land use.
- Coordination with the authorities of the Attorney General's Office, Prosecutor General's Office, National Police and Army of Nicaragua for the protection, surveillance and control of the protected areas.

104. MARENA is the Executing Entity for the National REDD Strategy (ENDE-REDD+) and as such responsible for the execution of the ERP and the Executing Entity for the Bio-CLIMA Project, which also involves also the following matters:

- The National Forest Monitoring System, which processes and provides information on national indicators of forests, non-carbon benefits (Hydric Resources, Biodiversity and Food Security) and Information on REDD+ Safeguards.
- Information generation and monitoring related to biodiversity, ecosystems (protected areas), species, GHG emissions, deforestation hot-spots and land uses.
- Quantifying the amount of emissions and/or absorptions through annual recovery or loss of forest cover
- To issue the official data on deforestation and forest cover at a national level.

V.1.2. Ministry of the Treasury and Public Credit (MHCP)

105. The MHCP Administers public finances; defines, supervises and controls the fiscal policies; formulates the policies, norms and procedures for the preparation of the public budgeting, programming and execution. The MHCP consolidates and proposes the General

[27] Law 290, Law of the Organization, Competency and Procedure of the Executive Branch

Budget Bill to be issues by the President of the Republic; administers the State Public Investment Record (RIPE); and organizes and supervises the transfers and disbursements of current and capital financial resources. In the framework of the implementation of the national ENDE-REDD+ Program, the MHCP will be responsible for:

- Act as Designated National Authority to the Green Climate Fund (GCF)
- Identifying and approve financial instruments and sources that will be used in the Program, including the Trust Funds
- Identifying sources of financing linked to sustainable development.
- Assure the transfers of the payments.

V.1.3. National Forestry Institute (INAFOR)

106. The INAFOR is the national authority that formulates forestry policy and norms; supervises the forest incentive programs; reports on the forestry sector; surveils, regulates and controls the sustainable use of the nation's forestry resources, inspection and enforces forest law and issues administrative sanctions outside of protected areas. Surveillance and control is done through coordination with other authorities (municipal governments, SERENA, MARENA, National Police and the Army). In the framework of the implementation of the ENDE REDD+ and the implementation of the Bio-CLIMA Project the INAFOR shall be responsible for:

- The National Forestry Inventory, administered by INAFOR through the Division of National Forestry Inventories, a division responsible for providing information about the state of the forests and the biomass. The data generated allows for the calculation and updating of the national emission factors
- Promoting reforestation programs through the administration of the National Forest Fund FONADEFO, specifically evaluate the Community based Sustainable Forest Management (CFM) and Community Forest Restoration Projects (CFR) sub-projects
- INAFOR field personnel to be trained in community forest management and create capacities at the local level
- Oversee and evaluate the CFM and CFR Sub-project in order to inform the Project Steering Committee

V.1.4. Ministry of Family, Community, Cooperative and Associative Economy (MEFCCA)

107. MEFCCA has the mandate to promote and develop the rural and urban family economy through socio-productive plans, programs and strategies (food security, tourism, gastronomy, handcrafts and family agricultural production). It provides technical assistance, promotes the use of basic agro-industrial technologies and processes, fosters small businesses and participates in socio-productive programs together with the Secretariat of the Caribbean

Coast and Governments of the Caribbean Coast. It also supports the implementation of the development plans in the indigenous, mestizo and Afro-descendant territories. In the framework of the Project implementation MEFCCA will be responsible for:

- Supporting the development of productive projects that give value to the forest and ensure good environmental practices.
- Supporting the agro-ecological transformation of traditional farms for their adaptation to climate change.

V.1.5. National Institute for Agricultural Technology (INTA)

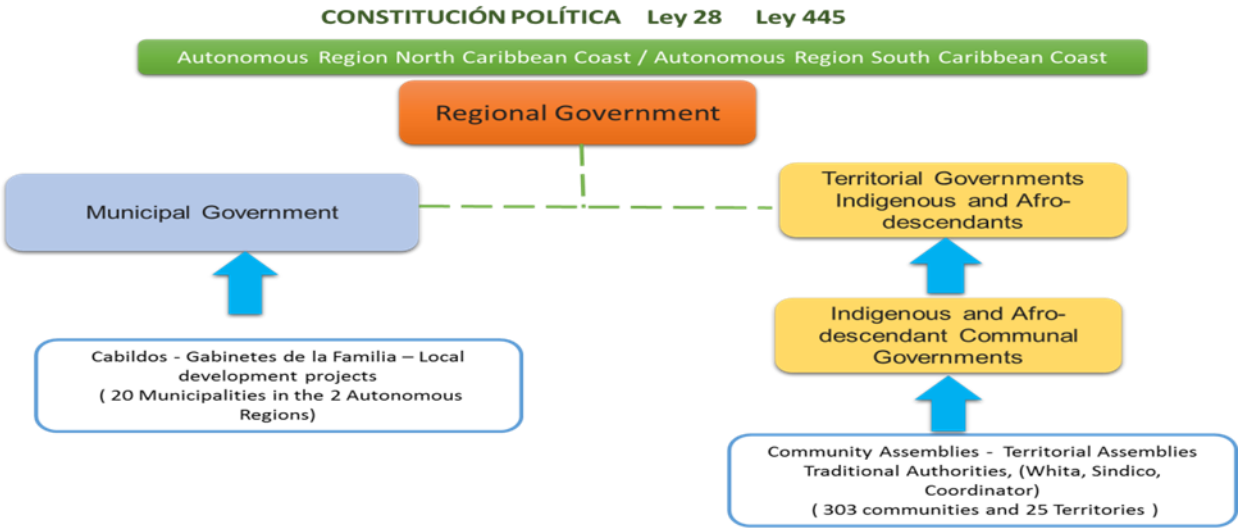
108. INTA has the mandate to develop and to spread innovative agricultural technologies and seed to promote the sustainable development of the agricultural sector and grant national food security. INTA has been especially successful in promoting a farmer field school scheme, the *"Fincas de Innovación e Investigación Agropecuarias"* (FIIA) through which farmer families, selected for their interest to innovate and lead on innovation in their communities, partner with INTA to try new species and approaches and if successful, act as extension agents in their community together with INTA´s technicians. As one of Bio-CLIMA co-implementing entities it will be in charge of following activities:

- To include it extension workers and field personnel in the training and capacity building efforts in order to make them acquainted with the new comprehensive approach of production and conservation to be introduced by LUMP, TDP, business plans and the productive landscape restoration models
- INTAs´extensionists and field workers will together with co-implementing partners train service providers and extensionists from the organizations that will be sub-contracted by the silvopastural and agroforestry Trust Funds to implement land use plans, landscape restoration and forest conservation models
- Oversee and evaluate the work carried out by service providers and sub-contractors and report to the project Steering Committee

V.2. Regional and local level

V.2.1. The Autonomous Governments of the Caribbean Coast

109. In both Autonomous Regions of the Caribbean Coast (RACC) a system of administration coexists that is structured by the following levels of authority: The Autonomous Regional Governments, the Municipal Governments, the Territorial Governments and Communal Governments, as shown in following figure:



110. The Regional Government participate effectively in the drafting and the execution of regional development plans and programs, as well to manage and to promote the rational use and usufruct of bodies of water, forests and communal lands, and the defense of Its ecological system. Their Regional Councils issue resolutions and ordinances on the issues of their competency in the region; participate in the planning, implementation and follow-up of the economic, social and cultural policies and programs that affect their region; approve through resolution the exploitation of the natural resources in the region.

111. Both regions have a Secretariat of Natural Resources (SERENA) that oversees the sustainable management of the natural resources in each region and administers the National Environmental Evaluation System. In the framework of the implementation of the national ENDE-REDD+ program, the Autonomous Governments of the Caribbean Coast are responsible for co-implementing the projects and programs under the ENDE REDD+ as also compliance and monitoring of applicable safeguards, in coordination with MARENA.

V.2.2. Indigenous Territorial Governments (GTI) and communal authorities

112. According to Law 445, they are the representation with administrative and traditional government bodies that represent the communities that elect them according to their customs and traditions. The territorial authorities or Indigenous Territorial Governments (GTI) are administrative bodies of the territorial unit that they represent. For governance, the GTIs have Ecological Statutes and Norms that help regulate and administer the resources. Inside the communities, the maximum authority is the Communal Assembly, which elects their president “Síndico” and their communal judge “Whita”, who are designated to administer the natural resources. In addition, pastors, teachers, nurses and midwives are figures who are generally consulted by the communities on issues of communal interest.

113. The GTI structure is in charge of representing a set of communities. Its board of directors is made up of delegates for decision-making in the affairs that involve their lands and natural resources and they are involved in implementing the ENDE REDD+.

114. The implantation of the ENDE REDD+ and the Bio-CLIMA Project is based on recognition of and respect for the organization of the autonomy regime and of the original peoples, who have their own traditional leadership. The structure of territorial power starts with the Communal Assembly, which may be advised or counselled by the Council of Elders and has a Communal Board of Directors. Within that board are two very important figures related to the management or administration of the community's resources, which are the Síndico and the communal judge, or Whita.

V.2.3. Municipal Governments

115. The municipalities have competence in all affairs that affect the socioeconomic development and the conservation of the environment and natural resources of their territorial circumscription, which is exercised mostly in their urban and peri-urban zones. The have the duty and right to resolve, under their responsibility, the provision and management of all affairs of the local community within the framework of the Political Constitution and other laws of the Nation. The economic resources for the exercise of these competencies will originate in their own income and in those transferred by the Government, through the transfer of either taxes or financial resources.

VI. POTENTIAL ENVIRONMENTAL / SOCIAL IMPACTS, RISKS AND MITIGATION MEASURES

116. During the participatory Social and Environmental Safeguard Assessment (SESA) it was identified that the interventions and sub-projects to be implemented by Bio-CLIMA will generate overall positive impacts related with landscape restoration and promote sustainable and resilient land use practices. Based on the analysis of the underlying activities of the ER Program and Bio-CLIMA Project their activities per se are not likely to cause significant negative impacts on human populations. On the contrary, it is expected to have positive impacts on vulnerable and systematically excluded groups and communities through the improvement of livelihoods of people subsisting from small farms, as the increase in employment, business opportunities and marked access for certified fair-trade produce. Furthermore, the project will foster the adoption of sustainable and productive land-uses. It is also expected to enhance livelihoods through a more coordinated support from various public programs that would generate increased revenues from sustainable practices (sustainable silvo-pastures, cocoa agroforestry and sustainable forest and biodiversity use). Impacts on physical, cultural, and/or archaeological sites are thought to be minimal, and measures to avoid, minimize or mitigate them shall be reflected in the Environmental and Social Impact Assessment (ESIA) during the implementation project. There will be no situation of land acquisition or resettlement, and any activity that could produce such impacts will be screened out of the program activities. Given that the project has an explicit focus on forest conservation through best-practice landscape restoration and forest management, the risk of adversely affecting conservation values is limited. Furthermore, a strong focus will be put on capacity building of the social and environmental safeguards team of the Executing Entity, which will foster the continuity of social considerations throughout and after the life cycle of Project activities.

117. However, because of the work with indigenous communities and non-indigenous settlers in protected areas and critical habitats and given the social conflict prevalent in the project region, and according to CABEI standards, the overall project risk has been rated as “high”.

118. While the Nicaragua has achieved exceptional achievements in terms of the recognition of property rights of indigenous and afro-descendant peoples, it is a fact that the titling process does not come to fully resolve land tenure disputes, which pose a potential risk to the Project. While titling of indigenous territories and communities was based on a process of self-demarcation by the indigenous people without the negotiation or participation of non - indigenous “third parties” that had been living within these demarcated areas, these settlers came to these territories through invasion, legal or illegal purchase of land or land transfer to colonists made by the Governments in the context of the Agrarian Reform, or also a form of compensation for ex-combatants. This situation has caused recurrent tensions in the territories. Contributing structural factors, for potential conflicts in the Project area are: i) The increasing presence of illegal settlers – “colonos” - in indigenous and afro-descendant territories, that could spur violence, ii) Colonos encroachment of Indigenous and afro-descendant territories, which is a major driver of deforestation and displacement; and iii) Government capacity to prevent land invasions and enforce indigenous peoples rights is weak and needs urgently to be strengthened. However, indigenous communities have taken initiatives to prevent escalations of violence by establishing “Peaceful Co-habitation Regime Agreements” where these “Third Parties” if these

commit to respect the rules for the use of community land and its resources. In order to mitigate this risk, Bio-CLIMA shall build on these success stories and facilitate the dialogue between GTIs and non-indigenous Third Parties to achieve peaceful co-habitation "Landscape restoration and forest conservation agreements" through its Activity 1.1.1.4.

119. The following matrix presents a summary of positive and negative impacts and risks, as also the mitigation measures, what have been identified during the participatory SESA events and roundtables in preparation of the ER-Program and the Bio-CLIMA Project:

Emission Reduction Program (FCPF)	Bio-CLIMA Components, sub-components and activities	Positive Impacts	Negative Impacts	Mitigation measures
	COMPONENT 1: CONSERVING AND PRODUCING FOR LIFE			
	Subcomponent 1.1 Land use and management planning for landscape restoration, forest conservation and climate-resilient production systems ***Output 1.1.1 Land use/management plans formulated; and restoration/conservation agreements signed/formalized with beneficiaries.***			
Strategic Line 1. Forest Conservation **Strategic Line 2. Sustainable intensified production systems**	Act. 1.1.1.1 Assist small producers to formulate Land Use-Management Plans (LUMPs) with business plans (BPs)	**Social:** Beneficiaries learn and apply participatory, sustainable farm and landscape planning for production and business plan development to conserve of Mother Earths ecosystems and ecosystem services	Risk: LUMPs and TDPs do not demarcate and respect sacred places	TA applies safeguard instruments, specifically IPPP and the Guideline for Cultural Heritage. MARENA and the Safeguard
	Act. 1.1.1.2 Assist indigenous communities to formulate Territorial Development Plans (TDPs) including business plans (BPs)			
	Act. 1.1.1.3 Assist middle sized producers to formulate Land Use-Management Plans (LUMPs) with business plans (BPs)	**Environmental:** Farm and communal territory planning involve production and conservation within a ecosystem services, landscape restoration and forest biodiversity conservation approach	Risk: LUMPs and TDPs do not include criteria to grant for biological connectivity and are not included in biological corridors	Commission monitors its implementation Potential biological corridors according to fragmentation index shall be defined and complied with.

	Act. 1.1.1.4 Facilitate celebration and formalization of landscape restoration and forest conservation agreements	**Social:** Peaceful cohabitation between indigenous and non-indigenous within a win-win situation fosters sustainable use of natural resources and forest restauration/ conservation: GTI receives REDD+ RBPs as land lease, and non-indigenous farmers get support for sustainable land use intensification. **Environmental:** Agreements shall stabilize the agricultural frontier	Risk: Non-indigenous farmers could claim land tenure rights based on peaceful cohabitation agreements. Impact: Facilitation process escalates latent land conflicts. Risk: GTIs, regional and local institutions do not monitor compliance of agreements	Facilitation and TA make clear that the legal framework does not allow to sell or make and cession of land rights of indigenous territory. Government strengthens law enforcement and defense of IP rights. Institutional capacities for monitoring land use and land use changes shall be strengthened; as also GTIs supported. (Components 2, 3)
	Sub-component 1.2 Investments in landscape restoration, forest conservation and climate-resilient production			
	Output 1.2.1 Degraded pasture- and rangeland restored			

Emission Reduction Program (FCPF)	**Bio-CLIMA Components, sub-components and activities**	**Positive Impacts**	**Negative Impacts**	**Mitigation measures**
Intervention 2a: Silvo-pastural trusts	Act. 1.2.1.1 Small producers (farm size < 35 ha) restore degraded pastures into climate resilient, biodiverse sustainable silvo-pastoral systems Act. 1.2.1.2 Middle sized producers (farm size > 35 ha) restore degraded pastures into biodiverse silvopastoral systems	**Social:** Sustainable intensification for increased, diversified production and income generation and food	Risk: Attractive financial return and market demand for sustainable agricultural produce lead	Land-use-planning capacities and land-use monitoring and enforcement of regional, local institutions and GTI

Emission Reduction Program (FCPF)	Bio-CLIMA Components, sub-components and activities	Positive Impacts	Negative Impacts	Mitigation measures
Intervention 2b: Agroforestry trusts	Act. 1.2.1.3 Producers restore degraded pastures into biodiverse cocoa agroforest systems	security and livelihood resilience Increased offer of labor opportunities for local people Increased food production to meet market demand **Environmental:** Agroforestry and silvopastural systems shall improve soils fertility and biomass carbon stocks, microclimate, and increase provision of environmental services, including biodiversity.	to further expansion and forest cover loss Risk: Weak inter-institutional coordination and weak law enforcement. Risks: Indirect promotion of species with low ecological and economical value Soil erosion / sedimentation due to inadequate management. Inadequate management of chemical inputs	shall be strengthened through investments and activities of Project Components 2 and 3. Project shall facilitate access to high value markets for sustainable certified produce that pay higher prices to compensate any financial loss. Independent Certification of deforestation free products should mitigate the risk of further expansion into forest areas. Compliance with norms and Guideline for Sustainable Forest

Intervention 1c. Promotion of natural regeneration and social reforestation crusade	Act. 1.2.1.4 Reforest degraded land on slopes (> 50%) into biodiverse, Close to Nature Planted Forests (CTNPFs)	Restoration of degraded pastures and rangeland restores ecosystem services, especially the water regime, controls erosion and improved biological connectivity. CTNPF provides timber and non-timber forest products for beneficiaries for livelihood resilience.	Producer families may experience a reduction to their access to land (although on steep slopes) and resources for extensive land-use practices.	Management and Biodiversity Conservation to protect seed trees and tree species for biodiversity conservation; incl. definition of species to be promoted for regeneration due to biological and economic criteria. Compliance with the guidelines for Integrated Pest Management. Beneficiaries shall receive intensive on farm TA and training on sustainable production practices and the conservation of soils and ecosystem services (Outputs 3.1.1; 3.1.2)
	Output 1.2.2 Natural forest ecosystems and forest land conserved, restored and sustainably used			

Emission Reduction Program (FCPF)	**Bio-CLIMA Components, sub-components and activities**	**Positive Impacts**	**Negative Impacts**	**Mitigation measures**
Intervention 1b: Community forest managemen t (CFM)	Act. 1.2.2.1 Finance Sustainable Community Enterprises (SCE) in indigenous territories within protected areas for natural forest ecosystems conservation and use Act. 1.2.2.2 Finance commercial Community Forest Management (CFM) sub-projects with business plans prepared by indigenous communities outside protected areas	**Social:** Indigenous people get access to knowledge and techniques for sustainable production of	Risk: Opening of new paths or trails that permit access to forest to colonist squatters, to illegal loggers or other	Training, capacity building and implementation of norms and technical guidelines for the sustainable use of biodiversity and forest management shall be

Intervention 1c: Promotion of natural regeneration and commercial reforestation	Act. 1.2.2.3 Finance commercial Community Forest Restoration (CFR) sub-projects with business plans prepared by indigenous communities outside protected areas	forest goods and services to protect Mother Earth. Employment and income generation for indigenous people to reduce poverty. Defense of resources and territories through sustainable use and put into value forest ecosystems and forest land. **Environmental:** Conservation and increase in forest cover, protection of watershed and ecosystem services as also CO_2 sequestration.	invaders of indigenous territories. Sacred sites and biodiversity protection zones are not demarcated and respected. Risk: Timber harvesting exceeds sustainable yield and harms forest structure and recovery Un-intended promotion of fast-growing species may delay forest regeneration. Forest degradation and biodiversity loss through illegal logging and forest fires.	offered through Project Components 2 and 3. Safeguard instruments to be rigorously applied and monitored; especially on the IPPF, guideline for SFM and for Cultural Heritage. Forest Law 462 and Technical Norm (NTON) for Forest Management and Environment Law 217 to be complied and enforced by INAFOR and MARENA (Subcomp.2.1) Forest management zoning will demarcate and map forest production, protection and biodiversity conservation zones; linked to biodiversity corridors. Environmental and Forest Law Enforcement capacities shall be substantially strengthened (Output 2.2.2)

Emission Reduction Program (FCPF)	**Bio-CLIMA Components, sub-components and activities**	**Positive Impacts**	**Negative Impacts**	**Mitigation measures**
Intervention 3a: Strengthening investment promotion by private or government institutions	***Output 1.2.3 Farmer cooperatives, producer organizations and community enterprises access high-value markets***			
	Act. 1.2.3.1 Support cooperatives, producer organizations and indigenous community (SCEs and CRMR) to reach high-value markets	**Social:** Conditions will be created to increase national and foreign investment for	Risk: Internal conflict within the communities	Territorial governments and local organizations shall be strengthened to achieve better organizational and
	Act. 1.2.3.2 Facilitate targeted business contacts between producer organizations and indigenous communities' enterprises with high value markets			

Emission Reduction Program (FCPF)	Bio-CLIMA Components, sub-components and activities	Positive Impacts	Negative Impacts	Mitigation measures
that promote private investments	Act. 1.2.3.3 Support producer organizations and community enterprises in voluntary certification processes	sustainable production and forest conservation. Local livelihoods shall receive higher income and employment opportunities. **Environmental:** Increase in forest value of forest products and services.	regarding the access and distribution of benefits. Risk: Rise in demand does not meet sustainable offer	transparent management capacities and avoid capture by individuals or families (Output 2.2.1). Instruments like IPPP and Benefit Sharing Plan to be applied during implementation. Technical norms and guidelines are complied with and enforced by institutions.
Strategic Line 4. Institutional enabling conditions	**COMPONENT 2: GOOD GOVERNANCE**			
	Sub-component 2.1 Regional natural resources governance strengthened ***Output 2.1.1 Environmental authorities present at the regional and the local level, including municipalities and Indigenous Territorial Governments (GTIs) strengthened***			

Emission Reduction Program (FCPF)	Bio-CLIMA Components, sub-components and activities	Positive Impacts	Negative Impacts	Mitigation measures
Intervention 4b: Strengthen local and regional forest and land use monitoring *Intervention 4e: Increase institutional resources and capacities for forestry and land use management*	Act. 2.1.1.1 Hire new technical, extension and control personnel to work in the project area and indigenous territories Act. 2.1.1.2 Procure material, equipment and vehicles for regional and local institutions Act. 2.1.1.3 Grant public budget for operational expenses to regional/local environmental authorities, including Indigenous Territorial Governments	Territorial governance will improve and oversight of land use and forest management plans by environmental and forest authorities. New employment opportunities for local technicians, incl. indigenous. **Environmental:** Improved environmental governance and law enforcement.	Risk: Areas within the territory of the CR that may not be covered by improved governance and enhanced land use and forest law enforcement may be prone to stronger deforestation pressures and/or reduced value of standing forest. No risk nor impact foreseen.	Through Bio-CLIMA Nicaragua shall receive increased RBPs from the FCPF up to US$265.5 million in 20 years. These resources shall not only pay private land owners and indigenous communities for forest conservation, but also provide resources for continued institutional strengthening at regional and local level.
Intervention 4a. Harmonization of policies and	***Output 2.1.2 Legal and normative framework up-dated***			
	Act. 2.1.2.1 Analyze and up-date forestry, environmental and land-use normative framework at national level Act. 2.1.2.2 Support regional / local environmental authorities to actualize the normative framework	**Social:** Better forest and environmental governance, more agile administrative	Risks: Technical and social dimensions of GTIs are	Intensive dialogue and working session shall be held to reach consensus and capacity building through training

Emission Reduction Program (FCPF)	Bio-CLIMA Components, sub-components and activities	Positive Impacts	Negative Impacts	Mitigation measures
coordination institutional	Act. 2.1.2.3 Up-date the management plans of the two protected areas: BOSAWAS and Indio Maíz	procedures, better quality of forest management plans, technical norms better adjusted to local needs and specific conditions. **Environmental:** Improved environmental governance	not properly taken into account. Socio-cultural diversity is not properly taken into account in norms. Normative gaps can cause further conflicts. No risk nor impact foreseen.	(Outputs 3.1.1 and 3.1.2) of Technical Norms of Sustainable Forest Management and its improvements; combined with intensive TA

Emission Reduction Program (FCPF)	**Bio-CLIMA Components, sub-components and activities**	**Positive Impacts**	**Negative Impacts**	**Mitigation measures**
Intervention 3a: Strengthenin	***Output 2.1.3 Public-private dialogue and cooperation strengthened***			
	Act. 2.1.3.1 Facilitate sectoral public-private dialogue at regional and local level			

Emission Reduction Program (FCPF)	Bio-CLIMA Components, sub-components and activities	Positive Impacts	Negative Impacts	Mitigation measures
g investment promotion by private or government institutions that promote private investments	Act. 1.3.2 Strengthen the Production, Consumption and Marketing System (SPCC) at regional level	**Social:** Public –private dialogue shall create conditions of improved business and investment climate for sustainable development and conservation, specifically through the Trust Funds	Risks: Conflicts within the communities regarding the sharing of benefits Undue capture of power or benefits within the Trust Fund mechanisms	Benefit Sharing Plan and Participation Plan of Interested Parties is duly implemented, and the Complaints and Redress Mechanism is operational. Legitimate independent participation of relevant actors in Trust Fund decision making grants transparency, accountability and public oversight.

Emission Reduction Program (FCPF)	**Bio-CLIMA Components, sub-components and activities**	**Positive Impacts**	**Negative Impacts**	**Mitigation measures**
Intervention 1a: Improved forest and land use managemen t and	***Sub-component 2.2 Local organization, territorial oversight and law enforcement strengthened*** ***Output 2.2.1 Territorial governments and local organizations strengthened***			
	Act. 2.2.1.1 Provide institutional strengthening to Indigenous Territorial Governments (GTIs)		Organizations and communities that are not benefitted by the Project	As project resources are limited and focalized on some but not on all areas, strengthened institutional capacities
	Act. 2.2.1.2 Provide organizational support to local producer organizations (indigenous and non-indigenous)			

Emission Reduction Program (FCPF)	Bio-CLIMA Components, sub-components and activities	Positive Impacts	Negative Impacts	Mitigation measures
governance in ITGs	Act. 2.2.1.3 Provide legal support to legalize producer organizations, cooperatives and community enterprises	**Social:** Improved environmental and territorial governance More transparency and legitimate participation in communal and organizational decision-making **Environmental:** Better environmental governance at territorial local level	may experience severe disadvantage. No risk nor impact foreseen.	within MARENA and partners shall serve to acquire additional support to cover a bigger extent of the territory.

Emission Reduction Program (FCPF)	**Bio-CLIMA Components, sub-components and activities**	**Positive Impacts**	**Negative Impacts**	**Mitigation measures**
Intervention 4b: Strengthen local and regional forest and	***Output 2.2.2 Forest, land-use and land use change administration, control and environmental law enforcement strengthened***			
	Act. 2.2.2.1 Operate mobile units and fixed control posts to control timber transport	**Social:** Undue competition on the market from illegal timber shall be reduced		Timber control units shall always have the support
	Act. 2.2.2.2 Operate deforestation control and forest fire prevention brigades			

Emission Reduction Program (FCPF)	Bio-CLIMA Components, sub-components and activities	Positive Impacts	Negative Impacts	Mitigation measures
land use monitoring Intervention 4d. Improved application of policies, laws, regulations and norms	Act. 2.2.2.3 Operate indigenous people territorial defense and resources control brigades	and price for legally sourced timber rise in benefit of sustainable forest management. Stronger institutional presence on the territory and improved law enforcement. Brigades shall be put together by the GTIs with strong and active participation of members of indigenous communities and local environmental authorities. **Environmental:** Systemic restoration of forest cover, areas for forest regeneration and reduced forest fragmentation for biodiversity conservation	Risks: Violent conflicts from timber seizure from illegal operators Corrupt practices in control posts for private gain de-naturalize the purpose. Risks: Exposure to member of indigenous communities to violent actors Lack of participation of indigenous women and their organizations No negative environmental risk or impact foreseen.	of the National Police and/or the Armed Forces. A public oversight and accountability mechanisms with the participation of the local community (improved international best practices), shall be part of the control mechanism. Public environmental authorities together with the Police and the Armed Forces (“Batallón Ecológico”) should be part of these brigades. Participation of women in activities shall be sought and granted.

Emission Reduction Program (FCPF)	**Bio-CLIMA Components, sub-components and activities**	**Positive Impacts**	**Negative Impacts**	**Mitigation measures**
Strategic Line 4. Institutional enabling conditions	**COMPONENT 3: CAPACITY DEVELOPMENT FOR PRODUCTIVE LANDSCAPE RESTORATION AND FOREST CONSERVATION**			
	Subcomponent 3.1 Capacity development through training			
Intervention 4e: Increase institutional resources and capacities for forestry and land use managemen t	***Output 3.1.1 Technical personnel, extension workers and promotors trained***			
	Act. 3.1.1.1 Train technicians and extension workers in participatory land use planning instruments (LUMP-b, TDPs-b)	**Social:** Local capacities shall be improved substantially through new comprehensive vision of productive landscape restoration and forest conservation. **Environmental:** Improved capacities for landscape restoration and forest conservation	Local indigenous traditional knowledge is not considered. No negative environmental risk or impact foreseen.	Comprehensive vison of production, restoration and conservation shall be enriched by traditional knowledge and practice and FPIC shall be applied to each intervention. The languages of the traditional communities of the Caribbean Coast shall be included in training and training materials, as mandated by Law No.162 on the
	Act. 3.1.1.2 Train stakeholders to use the sectoral legal and normative framework			
	Act. 3.1.1.3 Train technicians and extension workers to implement Productive Landscape Restoration / Conservation Models			
	Output 3.1.2 Producers and members of organizations/communities trained			
	Act. 3.1.2.1 Provide organizational, management, financial and marketing training to members of cooperatives and producer organizations			

Emission Reduction Program (FCPF)	Bio-CLIMA Components, sub-components and activities	Positive Impacts	Negative Impacts	Mitigation measures
	Act. 3.1.2.2 Train producers in LUMP and Productive Landscape Restoration Models through Farmer Field Schools	at regional and local level reduce deforestation and natural resources depletion.		Official Use of these languages. Capacity building plans and programs to be validated by group of oldest from the communities.
Intervention 4b: Strengthen local and regional forest and land use monitoring **Intervention 4c. Improve gathering, use and**	***Subcomponent 3.2 Tools and instrument development***			
	Output 3.2.1 Information systems for climate resilient sustainable development and risk management are in place			
	Act. 3.2.1.1 Set up /strengthen a deforestation and forest fires early-warning system	**Social:** Institutional capacities for environmental and forest, land use – land use change oversight, monitoring and law enforcement will be strengthened in an important way to	Strengthened capacities and resources remain in silos and are not used for decision making and	Including of information and systems with the National Environmental Information System Access to the public and the civil society of environmental
	Act. 3.2.1.2 Up-date and roll out the forest products administration and control system			
	Act. 3.2.1.3 Monitor LULUC, deforestation and forest degradation			
	Act. 3.2.1.4 Install and monitor permanent plots of the National Forest Inventory (NFI) in the CR			

Emission Reduction Program (FCPF)	Bio-CLIMA Components, sub-components and activities	Positive Impacts	Negative Impacts	Mitigation measures
disseminati on of information	Act. 3.2.1.5 Monitor biodiversity indicator species in 10% of plots of the National Forest Inventory	promote sustainable use, reduce illegal use or predatory destruction, and support sustainable regional development **Environmental:** Improved information systems for sustainable land use and forest conservation support emission reduction and local livelihood resilience	environmental law enforcement. Lack of inter-institutional coordination and action. No negative environmental risk or impact foreseen.	information (Output 3.3.1)
	Act. 3.2.1.6 Monitor adaptation, mitigation and biodiversity impact of implemented productive landscape restoration/forest conservation models			
	Act. 3.2.1.7 Monitor climate, hydro-meteorological (including tropical storms, hurricanes, droughts) and pest risk phenomena in order to inform and emit alerts			
	Subcomponent 3.3 Development of public awareness			
	Output 3.3.1 The Public is more aware of the need for climate change adaptation, mitigation, landscape restoration and forest conservation			
	Act. 3.3.3.1 Develop and roll-out a public communication strategy			Accredited Entity shall alert and call for

Emission Reduction Program (FCPF)	Bio-CLIMA Components, sub-components and activities	Positive Impacts	Negative Impacts	Mitigation measures
	Act. 3.3.3.2 Undertake environmental education in local schools and communities	**Social:** New development vison and paradigm change is widely communicated in the Caribbean Region and to political decision makers to get further political and financial support to scale up Project to the whole territory of the CR. **Environmental:** Public awareness and education shall support reduction and deforestation and depletion of natural resources	Risk: Misuse of communication campaign or capture for non-environmental purposes. No negative environmental risk or impact foreseen.	corrective action if this risk is detected.

VII. PROCEDURES FOR SCREENING ENVIRONMENTAL AND SOCIAL ISSUES DURING PROJECT IMPLEMENTATION

VII.1. Objective and Approach

120. Since some of the project activities and subprojects will be identified during implementation, this ESMF was prepared to apply to all subprojects and investment activities. The main objective of the ESMF process is to ensure that the subprojects and activities financed by the project will not create adverse impacts on the local environment and communities, and the residual and/or unavoidable impacts are mitigated in line with E&S policies of the GCF and lending institutions.

121. During implementation, identified activities/subprojects and TA support will be screened for and given a risk classification based on their E&S issues and applicable safeguards standards (ESSs), after which any necessary ESA and other E&S instruments will be prepared based on the requirements laid out in this ESMF. The assessments, instruments, and mitigation measures will be proportionate to the nature and scale and the potential risks and impacts of the project and consistent with the requirements of the Environmental and Social Framework (ESF) of the GCF and lending institutions. The safeguards plans prepared for subprojects may include, but are not limited to: Environmental and Social Impact Assessment (ESIA), Environmental and Social Management Plans (ESMPs); Biodiversity Management Plans (BMPs); Integrated Pest Management Plans (IPMP/PMP); Forest Management Plans (FMPs); Labor Management Plans (LMPs); Cultural Heritage Management Plans (CHMPs); and/or Environmental Codes of Practice (ECOPs), including health and workers issues related to sexual exploitation and abuse (SEA). In addition, relevant Indigenous Peoples' Plans (IPPs) – including Free Prior Informed Consent (FPIC) – will be prepared in line with the safeguard's requirements. Terms of reference, work plans, and documents defining the scope and outputs of any technical assistance activities will be drafted so that the advice and support provided is also consistent with the safeguard's standards (ESS 1-10). Based on the initial screening, any subsequent ESA would cover the requirements established under the relevant ESSs for that subproject and identify the environmental and social risks and impacts including direct, indirect, cumulative, and residual impacts.

VII.2. Key Steps

122. The ESMF process is comprised of four steps:

- **STEP 1:** Screening for eligibility and E&S issues including risks and impacts using screening criteria, application of ESSs, and identification of and needs for preparation and implemenation of E&S documents/instruments.
- **STEP 2:** Preparaton of E&S documents as required, including the development of mitigation measures and finalization of related plans and/or Environmental Code of Practices (ECOPs) to be incorporated into bidding and contractual documents and subjected to close monitoring of the contractor performance. ECOPs clearly identify mitigation measures for potential negative impacts during site clearance and construction, including the management of contractors, chance finds, Environmental Health and Safety Guidelines (EHSG) application, and Codes of Conduct on Sexual Exploitation and Abuse.

- **STEP 3:** Clearance and disclosure of of E&S documents; and
- **STEP 4:** Implementation, monitoring, and reporting.

123. The risk analysis, impact assessment, and preparation of E&S documents for all subprojects will be carried out during implementation. At this point in time, most activities are substantial risk but should not require a full ESIA; however, in instances where subprojects do trigger high risk, then a follow-on ESIA will be down. This is budgeted into the Project. Preparation of a subproject ESMP occurs when the subproject activities have been clearly identified and locations are known. During the preparation of the ESMP, due attention will be given to address the issues of labor and working conditions (ESS2), resource efficiency and pollution prevention and management (ESS3), community health and safety (ESS4), biodiversity conservation and sustainable management of living natural resources (ESS6), cultural heritage (ESS8), and stakeholder engagement and information disclosure (ESS10).

124. Key safeguards actions can be highlighted as follows:

- Small construction works that may be carried out (e.g. for subprojects focused on sustainable community enterprises, etc.) will incorporate simplified ECOPs into the bidding documents and consultant contracts, with contractor performance closely monitored by the responsible persons of the implementing agencies.
- If screening highlights the need for land acquisition, restricted land use, and/or involuntary resettlement, Resettlement Plans (RPs) will be made in line with the ESS5 and the guidelines found the in the Resettlement Framework, however resettlement is not envisaged at this point in time.
- If the indigenous peoples are present in the subproject, the IPP will be prepared and implemented according to the ESS7 and the guidelines can be found in the IPPF of this ESMF.
- All the E&S documents of a given subproject will be submitted to the accredited entity for clearance before their respective approval and implementation.

Applications of ESMF Annexes		
Annex	**Content**	**Application**
1	E&S Screening, Checklist, and Forms for Subprojects	All subprojects
2	Chance Finds Procedure	All subprojects
3	Guidelines for Cultural Heritage	All subprojects
4	Process Framework for Involuntary Restrictions to Access to Resources in Protected Areas	Subprojects with envisaged restrictions to resources in protected areas
5	Integrated Pest Management Plan	All subprojects
6	Exclusion List	All subprojects

Applications of ESMF Annexes		
Annex	**Content**	**Application**
7	Biodiversity Action Plan	Subprojects in protected areas
8	Labour Management Procedures	All subprojects with contract work/construction works
9	Guidelines for Forest Management	Subprojects in forested areas

VII.3. Identification of applicable ESS standards per project activity or sub-project typology (STEP 1: E&S Risk and Impact Assessment)

125. This step (Step 1) aims to confirm the eligibility of subproject and/or activities to be financed by the Project as well as identify the potential E&S issues and assess potential impacts of the subprojects/activities including needs for preparation of E&S documents as required by the ten safeguards standards using an E&S screening checklist. The agencies responsible for implementing the subproject/activity will be responsible for undertaking and signing the screening forms. The accredited entity will be responsible for the overall activities and ESMF processing and clearance, supervision and monitoring, and reporting.

126. Project interventions are all oriented to improve social and ecological conditions, thus the identification of possible applicable ESS standards per subproject predominantly depends upon location (Indigenous Territory within a Protected Area; Indigenous Territory outside the Protected Areas; and non-communal, private land). Additional consideration must be made with regard to specific activities in those locations, which will further guide the applicability of specific safeguards.

ESS Standards	Indigenous Territory Governments (Non protected area)	Indigenous Territory Governments (Protected area)	Private
ESS1 Assessment and Management of Environmental and Social Risks and Impacts	X	X	X
ESS2: Labor and Working Conditions	X	X	X

ESS3: Resource Efficiency and Pollution Prevention and Management	X	X	X
ESS4: Community Health and Safety	X	X	X
ESS5: Land Acquisition, Restrictions on Land Use and Involuntary Resettlement		X	
ESS6: Biodiversity Conservation and Sustainable Management of Living Natural Resources	X	X	X
ESS7: Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities	X	X	
ESS8: Cultural Heritage	X	X	X
ESS9: Financial Intermediaries	-		
ESS10: Stakeholder Engagement and Information Disclosure	X	X	X

VII.3.1. Determining the E&S risk category for the sub-project typology

127. The design of the project builds on the comprehensive safeguards determined for the National REDD+ Strategy and the Bio-CLIMA Project that comply with Warsaw guidance. Furthermore, a commitment to active and effective participation by local stakeholders and indigenous communities through effective multi-level landscape governance will limit the potential for human rights abuses and negative impacts on marginalized communities. The Government of Nicaragua, BCIE and the FAO have a history of collaboration in the areas of conservation and sustainable development, and the project is firmly in line with constitutional and national development objectives, establishing a strong platform for cooperation and risk limitation. Financial and operational risks have also been identified and specific mitigation measures incorporated into the design accordingly.

128. In order to avoid social and environmental risk, activities or sub-projects that include any activity included in the exclusion list in Annex 6, cannot be financed with program

resources due to its implications on physical, social and economic impact on the affected populations.

129. Subprojects will be designed by indigenous afro-descendant communities with technical support, during the implementation of the Bio-CLIMA project. Therefore, they will have to fill in the checklists included in Annex 1 according to the guidelines and determine the relevant risk category related to their envisaged activities. MARENA will endorse the category, risk assessment and safeguards compliance, according to the ESS guides stipulated in the instruments. The guide includes the potential social and environmental risks. All "Yes" answers in the checklist indicate a potential risk.

VII.4. Development of E&S Documents: determining specific instruments to be prepared for each sub-project (STEP 2)

130. This step (Step 2) is focused on preparing safeguards documents in relation to the issues identified in Step 1. The accredited entity and implementing agencies of the subprojects and activities are responsible for preparation of E&S documents. Each sub-project has to be screened to comply with relevant safeguards and apply Bio-CLIMA´s Project safeguards instruments. Territorial Development Plans (TDPs) are instruments specifically created to enable a participative land-use planning process related for the sustainable development of a given territory, in concordance with the legal framework. However, if the risk category indicates that a subproject requires an additional instrument to mitigate potential negative impacts, then the development of that instrument must occur prior to implementation of activities for the subproject in question. The screening self-guided questionnaire below illustrates how this process shall be followed:

Based on the Bio-CLIMA & ER Program Environmental and social screening checklist and the risk categorization matrix, what requirements of the ESS are relevant?		
INSTRUCTIONS: Based on all identified risks note which ESS are relevant. It must be noted that the overall project risks and specific mitigation measures are applicable to all sub projects; the intent here is to indicate whether particular risks associated with the principles have been identified (e.g. potential human rights violations). Check all that apply		Comments
ESS	Yes or No	
2. Labor and Working Conditions Instrument:*Labor Management Procedures Template*		
3. Resource Efficiency and Pollution Prevention and Management Instrument: *Management Pest Plan*		
5. Land Acquisition, Restrictions on Land Use and Involuntary Resettlement Instrument: □ *Action Plan for involuntary restriction of access to natural resources*		
6.Biodiversity Conservation and Sustainable Management of Living Natural Resources Instrument: *BMP* *FMP*		
7. Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities Instrument: *IPP*		

8. Cultural Heritage Instrument: *CHMP*		

Screening Checklists and guidance for the ESS-specific instruments can be found in Annex 1.

VII.4.1. Procedures for preparing and approving site-specific safeguard instruments

131. According to the ESS guides, the sub projects that are identified, prepared, and implemented during the course of the Bio CLIMA-project, MARENA in coordination with beneficiaries will carry out appropriate environmental and social assessment of subprojects, in order to design the specific measures to implement such subprojects.

VII.4.2. Application of environmental and social review

132. Take into account all potential environmental and social risks and impacts that could arise from the interventions of the sub project:

- **Environmental risks and impacts, including:** (i) those defined by the Environmental, Health, and Safety Guidelines (EHSGs); (ii) those related to community safety (including dam safety and safe use of pesticides); (iii) those related to climate change and other transboundary or global risks and impacts; (iv) any material threat to the protection, conservation, maintenance, and restoration of natural habitats and biodiversity; and (v) those related to ecosystem services and the use of living natural resources, such as fisheries and forests:
- **Social risks and impacts, including:** (i) threats to human security through the escalation of personal, communal, or interstate conflict, crime, or violence (according with the Community Health, Safety, and Security standard), (ii) risks that project impacts fall disproportionately on individuals and groups who, because of their particular circumstances, may be disadvantaged or vulnerable; (iii) any prejudice or discrimination toward individuals or groups in providing access to development resources and project benefits, particularly in the case of those who may be disadvantaged or vulnerable; (iv) negative economic and social impacts relating to the involuntary taking of land or restrictions on land use; (v) risks or impacts associated with land and natural resource tenure and use including (as relevant) potential project impacts on local land use patterns and tenure arrangements, land access and availability, food security and land values, and any corresponding risks related to conflict or contestation over land and natural resources; (vi) impacts on the health, safety, and well-being of workers and project-affected communities; and (vii) risks to cultural heritage.
- **Potential violent conflict:** The ESIA also will include an analysis of any situation of conflict or violence in the areas in emphasis in the last potential conflicts mentioned and the specific measures to avoid or mitigate the impact[28].

[28] https://www.ifc.org/wps/wcm/connect/24e6bfc3-5de3-444d-be9b-226188c95454/PS_English_2012_Full-Document.pdf?MOD=AJPERES&CVID=jkV-X6h.

In order to identify the risk category, following guidelines will have to be followed:

QUESTION 1: What are the Potential Social and Environmental Risks? (Follow Bio-CLIMA & ER Program Environmental and social screening checklist)	QUESTION 2: What is the level of significance of the potential social and environmental risks?	QUESTION 3: What social and environmental assessment and management measures have been conducted and/or are required to address potential risks?
INSTRUCTIONS: Describe briefly potential social and environmental risks identified in Bio-CLIMA & ER Program Screening checklist (based on any "Yes" responses). Risks should be identified as if no mitigation or management measures were to be put in place. .	INSTRUCTIONS: Estimate the level of significance (i.e. potential impact) and probability for each identified social and environmental risk Rate Impact ("I") and Probability ("P") on a scale of 1 (low) to 3 (high). Significance is determined based on the combination of Probability and Impact (see significance, above) General considerations for previously detected risks. If the project: *Involves non-indigenous settlers or social conflicts actives, should be considered as : Impact (3)	INSTRUCTIONS: Describe briefly the social and environmental assessments that may be required (per ESS) and/or that may already have been conducted. Summarize the measures for avoiding and, if avoidance is not possible, mitigating and managing potential adverse social and environmental impacts, according to the Bio-CLIMA ESMF and its standalone instruments.

PS 4 (2)

	* Private projects that involves opening roads should be considered as: Impact (2-3)			
	Impact and probability (1-3)	Significance (Low (C), Moderate(B), High(A))	Comments	Description of assessment and management measures as reflected in the Project design. ESIA is required to assess should consider all potential impacts and risks.

Potencial Social and Environmental identification to determine the sub project category risk matrix

Environmental and Social Standards	**Potential Social and Environmental Risks**	**Impact of probability**	**Level of significance**	**Comments**	**Measures conducted and/or are required to address potential risks**
ESS2. Labor and Working Conditions					
ESS3.Resource Efficiency and Pollution prevention					
ESS4: Community Health and Safety					
ESS5: Land Acquisition, Restrictions on Land Use and Involuntary Resettlement					
ESS6: Biodiversity					

Conservation and Sustainable Management of Living Natural Resources					
ESS7: Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities					
ESS8: Cultural Heritage					

Determining the "significance" of the risk

Check the correspondent final category of sub project:

Impact	3	B	A	A	**Final Category**
	2	C	B	A	(A) (B) (C)
	1	C	C	B	
		1	2	3	
		Probability			

*Subproject could change their significance of risk during the implementation.

133. Project categorization is determined by the highest level of significance of identified risks in the matrix. Check appropriate classification on the options below.

- Category A (High): Applies to programs and projects with potential risks and / or significant environmental or adverse social impacts, which are diverse, irreversible and without precedent. Such impacts may affect an area where the implantation is carried out, where the project takes place or because of its nature, which is difficult to manage. Generally, there are no effective mitigation measures.

- Category B (Moderate): Applies to programs and projects with potential or adverse environmental impacts, of limited nature that are limited in number, generally located in specific places, mostly reversible and are possible to manage by means of mitigation measures.

- Category C (Low): Applies to programs and projects that involve risks and / or minimal or no adverse environmental or social impacts.

VII.4.3. Preparation and implementation of safeguard instruments

134. The implementation of the activities of the Program must adhere to the technical and execution criteria established in the respective terms of reference of each modality or concept of support, as well as that established in the technical proposals presented during its management by the applicants or beneficiaries where appropriate. MARENA will provide technical support for develop and implement of each instrument mentioned on this chapter VII.

135. The operating mechanisms, guidelines, specific projects or activities, as well as their respective Calls, Supports, Terms of Reference and Technical Annexes, must include social and environmental criteria in order to avoid possible involuntary restrictions on access to natural resources in Protected Areas.

136. The GTIs, in coordination with the community leaders, will coordinate the execution of the ER program at the community and territorial level. They will also coordinate with the GRACC, the actions to be developed in their territories and communities. They will be responsible for the use and application of the rules and statutes for internal use, regarding the regulation, control and monitoring of their forest resources. Private producers will also be responsible for the preparation and implementation of the safeguard's instruments.

137. The Safeguards Commission is responsible on implementing the strategic evaluation and monitoring compliance with the corresponding safeguards and environmental and social management frameworks. Composition of the Safeguards Commissions: chaired by MARENA, basically made up of the Autonomous Regional Governments, GTI, SDCC, INAFOR and MEFCCA.

VIII. FRAMEWORK OF ACTIONS TO GUIDE THE DEVELOPMENT OF ESMPs

138. Each sub project will develop, if applicable an ESIA. The ESIA, must be based on the last screening checklist in order to explain any social and environmental risk and impact. This means that each ESIA will assess environmental and social risks and impacts, and issues associated for each sub-project typology, and linked to an action plan or instrument to

integrate alternative options for each ESS; and recommends broad measures to strengthen environmental and social management in the implementation area for sub-project.

139. The ESIA and any Action Plans to cover any standard will be prepared and implemented by the GTIs, or the technicians of the projects on private land. MARENA and the Safeguards Committee are in charge of verifying and support of the GTIs and technicians.

All the subprojects must include:

- Key Stakeholder mapping
- Evidence on participative and consulting processes

  1) General (name of consultation, closes, time and place)

  2) Consultation objectives

  3) Report of the previous process and post consultation and the use of social networks. Include material presented.

  4) Category of participants (of which communities, institutions, ethnicity, gender)

  6) Feedback from participants including key aspects,

  7) Answer and follow-up to address feedback after consultations

  8) Conclusions

  9) Attached list of participants (presence and virtual presence (in case there is) and list of invited participants and community organization to which it belongs, photographs

  10) Consultation and Dissemination of results

The GTI's and the private beneficiaries must assure that the preparation and implementation of each sub project will involve community stakeholders or any relevant key stakeholders.

Meaningful consultations and disclosure of information must be warranted. Including project objectives, duration, budget, delivers, social and environmental risks and the measures to avoid any risk or impact.

During the project preparation and implementation, potential conflicts or grievances within or between affected communities should be resolved and documented (For more information see: http://www.marena.gob.ni/Enderedd/?s=quejas)

IX. INSTITUTIONAL ARRANGEMENTS FOR SAFEGUARD MANAGEMENT

IX.1. Roles and responsibilities of project staff and associated entities

140. MARENA will be the main responsible of technical and management supervision and compliance of the project activities with the measures established in the ESMF and will participate directly in the protected areas, through the National System of Report and Monitoring, which will guarantee the monitoring of forest cover and emissions, safeguards and other benefits. Other institutions involved are the SDCC, GRACC, SERENA, SEPLAN, GTI, SINAP, INAFOR, and MEFFCA. A National Safeguards Commission shall be established in order to ensure compliance with safeguards, and the ESMF measures, and present proposals for improvements. Regional safeguards commissions will also be established, which will have to conduct meetings once every three months. The results from these meetings will be used to adjust the implementation process of the ER Program and Bio-CLIMA Project.

IX.2. Monitoring and evaluation arrangements

141. MARENA will be responsible for coordination of the Program's projects and budgets, ER accounting and reporting, safeguards compliance through the implementation of the ER Program and Bio-CLIMA ESMF, benefit sharing implementation, monitoring and reporting on the ER Program and Bio-CLIMA, as well as high-level coordination with other actors and development partners. MARENA currently has twenty technical specialists dedicated to REDD+ coordination and implementation. A dedicated coordination unit within MARENA will be established to oversee the ER Program's implementation.

142. In this context Nicaragua began preparing and setting up a National Forest Monitoring System that includes safeguards and non-carbon benefits (SNMRV, According to its initials in Spanish). Diagnostics, working sessions and workshops were carried out with technical actors from the Caribbean Region and national institutions. Key actors, their roles, performance indicators, and guidelines were identified for the operational functioning of the SNMRV. The SNMRV was prepared through participatory processes of dialogue and consensus reaching of the three working groups from the ENDE-REDD+, ER Program and Bio-CLIMA project.

143. Also, the ESMF identifies monitoring objectives and specifies the type of monitoring, with linkages to the impacts assessed in the environmental and social assessment, and the mitigation measures described in the ESMF. Such information enables MARENA and the CABIE or the World Bank to evaluate the success of mitigation as part of project supervision and allows corrective action to be taken when needed. Additionally, the Bio-CLIMA Project will use a Monitoring, Reporting, and Verification System, inside the Safeguard Information System (SIS), which will be used for monitoring the established indicators for the Environmental and Social Standards, as well as additional benefits. The SIS will provide information on the compliance of safeguards during the development and implementation of the program, the projects and sub-projects. It will also systematize all the information on social and environmental safeguards.

IX.3. Capacity building to implement the ESMF

144. MARENA leads the country's REDD+ agenda. With FCPF Readiness Fund support, Nicaragua prepared its National Avoided Deforestation Strategy (ENDE-REDD+), based on a

Social and Environmental Strategic Assessment (SESA) and elaborated the corresponding Environmental and Social Management Framework (ESMF). MARENA also developed a draft National Forest Monitoring System (NFMS) and built institutional capacity to estimate the Forest Reference Emission Levels (FREL) and for forest carbon accounting. These are the elements of the Nicaragua's REDD+ Readiness Package which FCPF endorsed in October 2016. The proposed Project will rely on this country capacity.

145. Even though MARENA has experience in implementing World Bank, GEF and bilateral cooperation and further strengthen its capacity for the management of the environmental and social standards. Since 2010, MARENA has been working on the implementation of safeguards instruments for the FCPF REDD Readiness project. The World Bank and FAO have provided technical advice for the development of environmental and social safeguards instruments, for the REDD + Nicaragua Strategy, as well as in the elaboration of a System for reporting how the environmental and social safeguards of the United Nations Framework Convention on Climate Change are met and respected, as a requirement for the a country to be part of REDD +. During this time, MARENA has established trained and strengthened a safeguard team being able to undertake the identification of environmental and social risks, as well as in the implementation of prevention and mitigation measures, so that the National REDD + Strategy is environmentally and socially sustainable. The MARENA safeguards team has also been trained in the development, implementation and reporting of the GRM.

146. However, MARENA could present some challenges in the implementation and monitoring of social and environmental safeguards when working at regional and local levels, as well as with other institutions. In order to strengthen the capacities of MARENA's safeguards team and other institutions, the Program includes a capacity building program, established in the ESMF and in the Annexes. The Program includes the budget for the strengthening of MARENA's capacity and continued consultation, through the ERPA signature.

147. In order to ensure that the participating institutions have the resources and institutional capacity necessary for the proper implementation of this ESMF, the projects foresees the implementation of activities to strengthen the capacity of the participating agencies and their professional teams in the application of the actions and procedures contemplated in this ESMF. The ESMP will assess and detail a plan to develop implementation capacity, where needed. This will involve determining if there is sufficient capacity within the responsible organizations or institutions for implementing the ESMP. If not, a decision will have to be made as to whether it will be possible to develop the appropriate capacity and, if so, at what cost and in what timeframe. The capacity development section of the ESMP shall at least:

- Recommend ESMF-management arrangements for the project, including structure, roles, responsibilities, and authorities;
- Designate specific ESMF- personnel, including management representative(s), with well-defined and clearly communicated lines of responsibility and authority;
- Require sufficient oversight and human and financial resources be provided on an ongoing basis to achieve effective and continuous environmental and social management throughout the life of the proposed project.

148. Bio-CLIMA will invest in major training, tools (tools and instruments for environmental monitoring and awareness raising campaigns and public environmental

education) and capacity-building efforts through the component 3 "Capacity development for productive landscape restoration and forest conservation", for the main stakeholders (technical, farmers, and men and women in the communities). The main activities to be financed will be i) Subcomponent 3.1 Capacity development through training, ii) Subcomponent 3.2 Development of tools and instruments. 3.2.1 Information systems for climate resilient sustainable development and risk management are in place.

IX.4. Estimated budget for ESMF implementation

149. The ESMF establishes the foreseen financial resources for the ESMF measures, including operational costs, such as the safeguards team, the grievance mechanism, safeguards and biodiversity monitoring, communication plan, and others. The ESMF will be conducted and supervised by MARENA, in coordination with the MHCP, MEFFCA, SDCC, INETER and INAFOR, as well as by regional and territorial governments of indigenous people and afro-descendant people. MARENA will present biannual reports to the FCPF and to CABEI, as Accredited Entity to the GCF for the Bio--CLIMA Project.

Annual budget for the implementation of the ESMF		
Concept	**Description**	**Budget (US$/year)**
Safeguards team	Safeguards specialist	24,000
Grievance Mechanism	Evaluation and reporting of the Grievance mechanism	85,000
Safeguards monitoring and reporting (SIS)	Execution of the actions and measures established in the ESMF and its Annexes	59,700
Communication Plan	Dissemination and dissemination of the culturally relevant project in different social networks and dissemination mechanisms	99,000
Financial and social auditing		30,000
Total		**297,700**

X. CONSULTATION AND STAKEHOLDER ENGAGEMENT

X.1. Consultation process during preparation

150. Under the GCF safeguards requirements, consultations must be held with the project affected peoples, local communities, and other relevant stakeholders. The consultations should provide information on the following aspects: a) purpose of the project; b) results of the environmental evaluation; and c) presentation of the complementary studies required, in any instances where they apply. This ESMF has been prepared through a detailed consultative process at both the field and central level, and consultations findings may also be used for subsequent safeguards documents.

151. Consultation through community outreach during project implementation is good practice to ensure that the potential adverse impacts and concerns are properly addressed during project construction and operation. Consultation with affected populations and ethnic minorities is required when the activities involve physical relocation, land acquisition, and indigenous peoples.

152. Public consultation was a key component of the project and it was pivotal in preparation of this ESMF. The purpose of consultations were to: (i) inform people in the project area, including potentially affected households, of project's potential impacts; (ii) collect information and initial feedback of local people, including representative of ethnic groups in potential project area; and (iii) reflect feedback in the safeguards instruments, where necessary.

153. In preparation of this comprehensive Program for ENDE REDD+ implementation, two Strategic Environmental and Social Assessment (SESA) roundtables were set up in both autonomous regions on the Caribbean Coast, the RACCN – in the North and the RACCS in the South. These were integrated by regional universities, GTIs, women organizations, young adults, the local media, the Regional Councils and Regional Autonomous Governments. These roundtables held a total 12 working sessions and 11 workshops to analyze strategic options, social and environmental impacts and risks, and mitigation measures, all related to social and environmental safeguards. Another additional 7 workshops were carried out to analyze and discuss the country´s legal framework regarding the ENDE-REDD+.

154. The ESMF and its specific standalone instruments document underwent a consultation process from September 19 – 24, 2019. The consultation was carried out in the localities of San Andres- Alto Wangki Bocay - September 19-20; Bilwi- RACCN - September 19-20; and in Bluefields RACCS - September 23-24, 2019. There was an approximate of 76 participants per event, out of which: approximately 26% were women, 57% were indigenous (Miskito, Mayangna, Ulwa, Rama) and 19% afro-descendants (Creoles and Garifunas.) The participants came mainly from the following institutions and sectors: Regional Autonomous Governments, Regional Autonomous Council, Communal Governments (Bluefields Creole, Tasbapounie) Territorial governments (Matumbak, Wak, Lilamni, Tuahka, Táwira, Karatá, Wangki Twi Tasba Raya, Kiplasait, M.S.B, Kukra Hill, Awaltara, Rama-Creole,) Municipal Governments (Rosita, Bonanza, Waspam, Prinzapolka, Bluefields, Rama), Bluefields Indian & Caribbean University (BICU), La Universidad de las Regiones Autónomas de la Costa Caribe Nicaragüense (URACCAN) ; Producers, association of farmers and fishermen, ONGs: The Centro de Derechos Humanos, Ciudadanos y Autonómicos (CEDEHCA) (CEDEHCA, Nacion Mayangna,

Asociación de Mujeres Indígenas de la Costa Atlántica de Nicaragua (AMICA), Asociación para El Desarrollo de la Costa Atlántica (PANA-PANA), Guardabarranco) communication media and ministries and public institutions (MARENA, INAFOR, MEFCCA, MHCP, MINED, Civil Defense, PRONICARAGUA, National Police). All the social and environmental instruments prepared by Nicaragua's Government are published in MARENA´s website since February 2020

155. During the consultation process, the Stakeholders expressed support for the project, and the safeguards instruments. The main comments that were addressed as a result of the consultation were incorporated in the respective ESS instruments. These recommendations and suggestions that resulted from the consultation process are also included and published at: http://www.marena.gob.ni/Enderedd/etapas/programa-de-reduccion-de-emisiones

X.2. Consultation during program implementation

156. Consultation throughout the project implementation has been built into the project's design. Landscape restoration and forest conservation activities that shall be financed by the Program begin with participatory land use planning which involves family members including the young and women (at family farm level), and community members (at community level). Therefore, any project intervention builds is community driven from the beginning and involves all possible stakeholders involved.

157. For the case of non-indigenous settler families in indigenous territories any agreement reached will have to be consulted with the indigenous community involved as it has to be requested and signed by the Indigenous Territory Government, in accordance to the traditional governance schemes of the indigenous communities.

X.3. Grievances and Redress Mechanism

158. Nicaragua's legal framework is conducive to improve social control and promotes the establishment of grievances and redress mechanisms: Article 50 of the Political Constitution gives citizens the right to participate on an equal footing in public affairs and state management, specifically article 52 states that "Citizens have the right to make petitions, report anomalies and make criticisms [...] to the State Powers or any authority; to obtain an early resolution".

159. Law No. 212 on Defense of Human Rights established that Nicaragua shall have a Special Attorney for the Defense of Human Rights *(Procuraduría para la Defensa de los Derechos Humanos)* to defend and promote Human Rights in the country. Any citizen can present queries at its webpage, which is: http://www.pddh.gob.ni/?page_id=183

160. Additionally, Law 475 on Participation of the Citizenry and Law 621 on Access to Public Information (published in *La Gaceta* No 241, 19/12/2003) create mechanisms for direct petitioning, queries and suggestions. The country has also an Office of Public Ethics at the Presidency of the Republic that has mailboxes for queries and suggestions as a means of direct communication with the citizenry.

161. These mechanisms will all be available to Project beneficiaries in addition to the specific Grievances and Redress Mechanisms to be set up by the Program.

162. During Project preparation and ESA roundtables the need and the operation of a Grievance Redress Mechanism was presented, extensively discussed and agreed upon. Its objective shall be to receive and facilitate resolution of concerns and grievances and ensure agility, access, prompt response timeframes, and respect for confidentiality. The mechanism

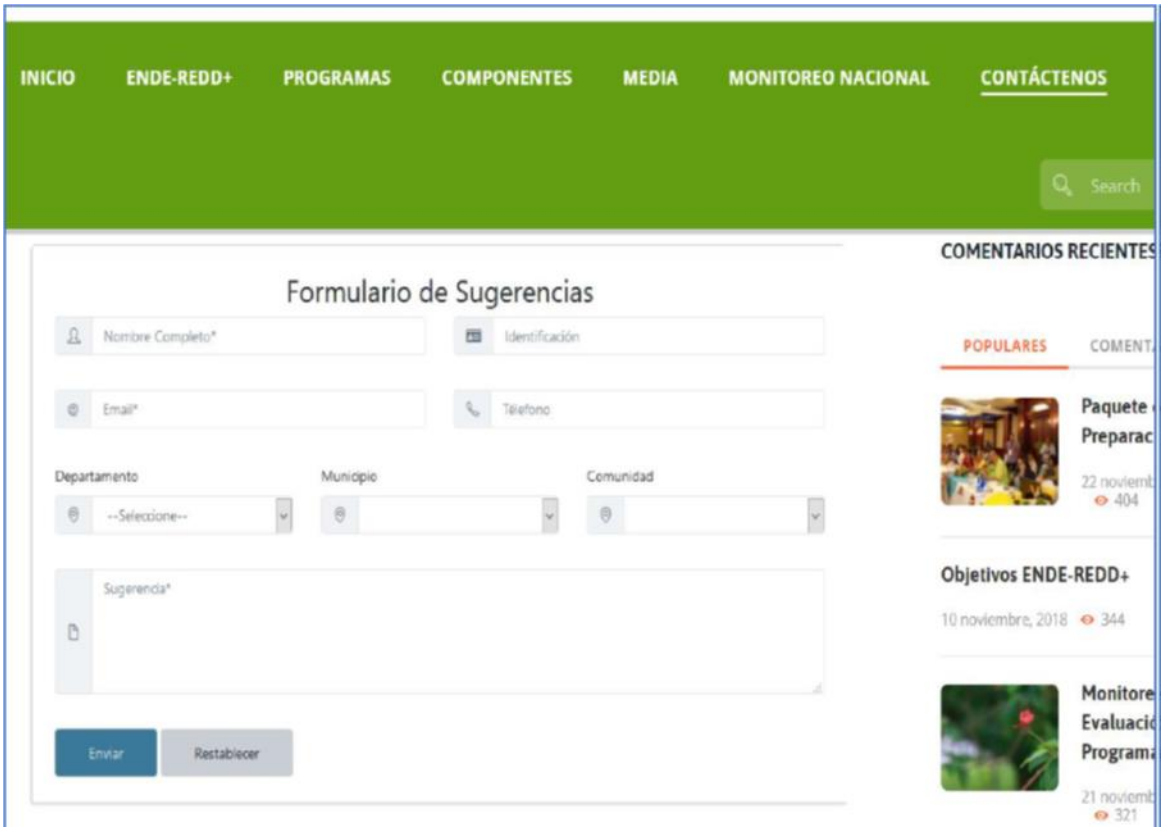
shall provide options for the presentation of recommendations and/or complaints by all actors involved in or affected by Program execution and implementation. The scope of the feedback mechanism is national and presents several options to express concerns, non-conformities and suggestions on the activities of the implementation of the ENDE-REDD+, the ER Program and the Bio-CLIMA Project. It builds on vast experience used within the Executive branch at national (Presidency, MARENA, INFONA) and local levels (municipalities) through mailboxes, as also on the mechanisms used by indigenous communities within their traditional governance schemes. The GRM design builds on a participatory process of 11 communal assemblies that were hold in the Project Region between April and June 2011.

163. The following six access (entry points) for queries shall be:

- Traditional authorities and leaders of indigenous and afro-descendent communities
- Municipal and departmental authorities
- Public assemblies / town hall meetings
- Mailboxes
- Webpage (MARENA)
- Whats-app

164. Therefore, the design of the Mechanism includes the use of permanent mailboxes that will be located in municipal offices, administrative centers of Indigenous Territorial Governments, and the MARENA to facilitate greater access and participation. Likewise, the feedback mechanism establishes a procedure for indigenous and afro-descendant peoples since it includes the traditional judges of the communities (*"Whitas"*) in this mechanism, given their traditional role of attending and resolving conflicts within their communities, which are currently recognized by the country's justice system, and through community assemblies.

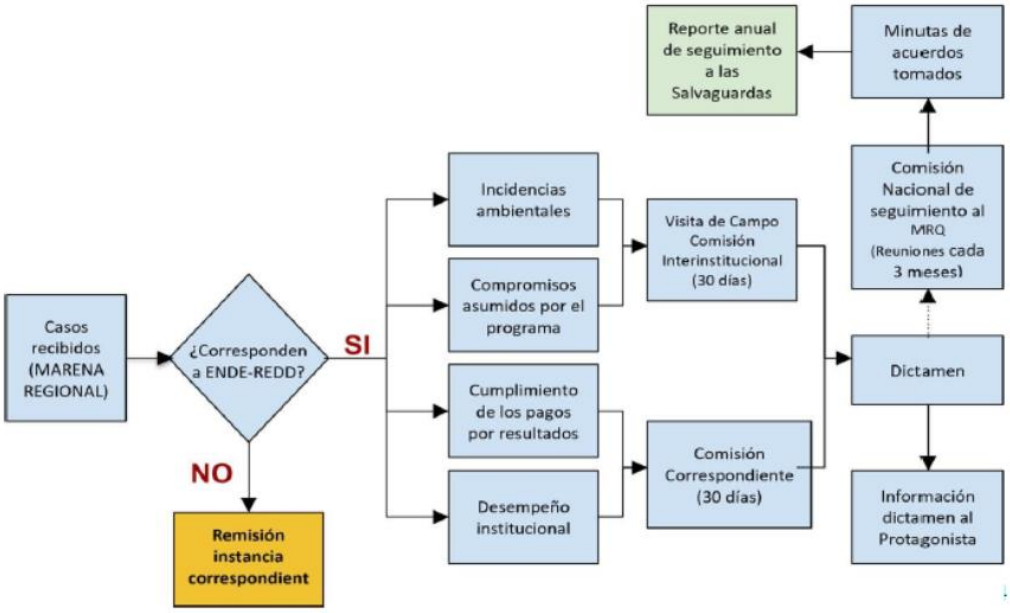
165. The Community Assemblies are spaces in which complaints can be expressed and filed. In addition, these periodic meetings have been incorporated in the design, which will be useful in order to know the level of satisfaction or concern about complaints by stakeholders related to the Program implementation, the distribution of benefits and services, and/or possible social or environmental impacts. MARENAs web-page includes the following link, which gives access to the form below through which grievances and comments and be expressed: http://www.marena.gob.ni/Enderedd/mecanismo-de-retroalimentacion-y-atencion-de-quejas/



166. To give attention to the queries and suggestions received inter-institutional commissions shall be formed at the national, regional and local levels with the participation of MARENA, the MHCP and INAFOR; and at the regional level with the Regional Autonomous Governments. These commissions should meet at least once a month to read and discuss the queries received and report to the National Safeguard Commission and the MARENA´s management (Dirección Superior). In any case a response to the query should never take longer as 30 days.

Esquema para recibir los Planteamientos y Quejas

Esquema de respuesta y cierre de los planteamientos o quejas recibidos



167. The ER Program and Bio-CLIMA Project will apply a participatory approach, citizen engagement and beneficiary feedback mechanisms. This will help create timely feedback loops

and ensure inclusion and active participation of beneficiaries from vulnerable groups, in order to avoid any kind of discrimination. The Stakeholders Engagement Program developed for this program provides inputs to generate strategies to avoid, minimize or mitigate the risks mentioned above. The SEP is culturally appropriate and puts a strong focus on inclusive stakeholder participation. It is published on MARENA´s website since February 2020 and can be acceded on the following links: http://www.marena.gob.ni/Enderedd/wp-content/uploads/2020/03/10-Plan-de-Participación-de-Partes-Interesadas.pdf

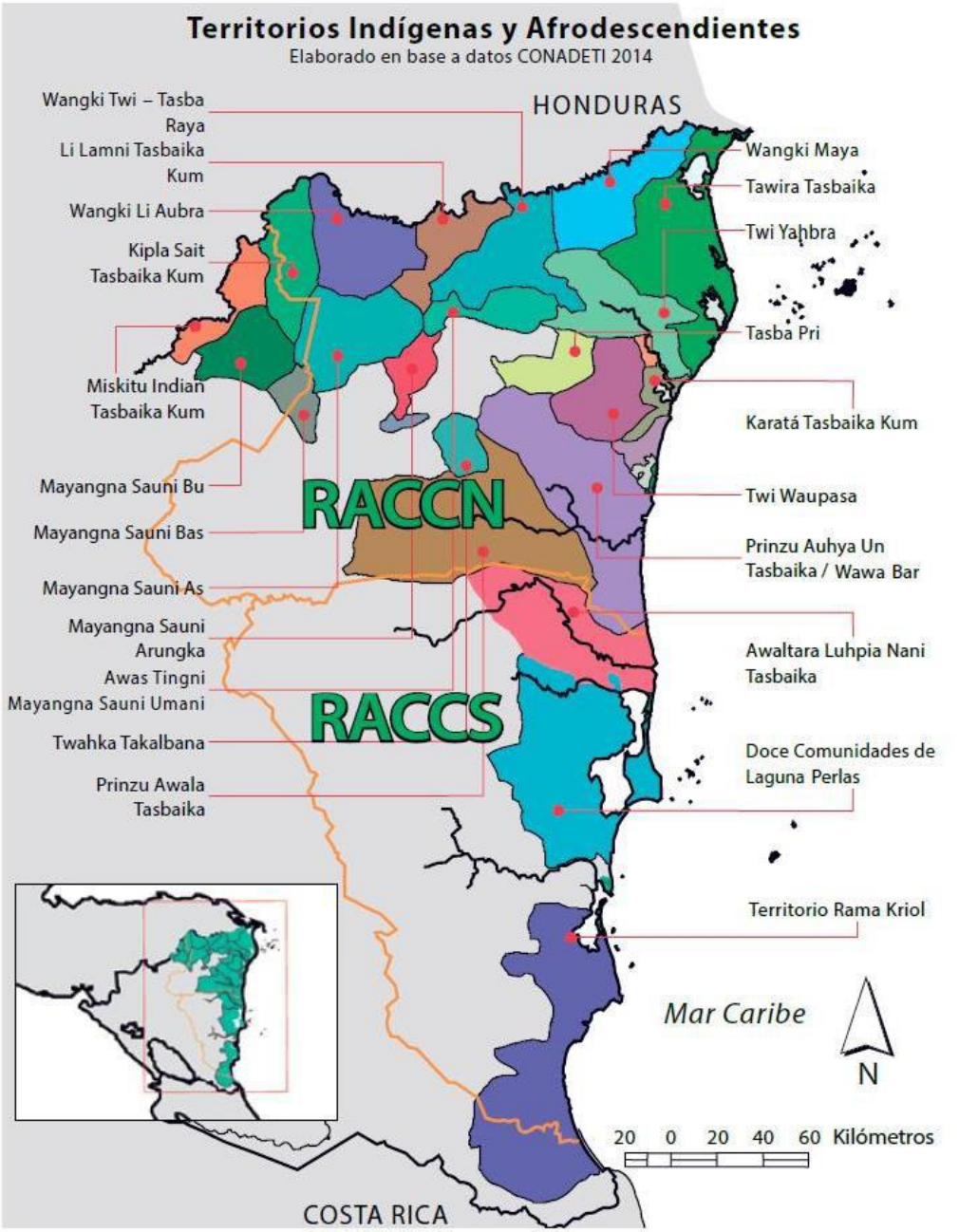
XI. INDIGENOUS PEOPLES PLANNING FRAMEWORK (IPPF)

168. The Caribbean Coast is characterized by its multi-ethnic population represented by the following indigenous peoples: Miskitos (120,817 people), Ramas (4,1845), Mayangnas (9,756) and Ulwas. Other people include afro-descendants Garifuna and Creoles. The population of the RACCS is mostly mestizo (81%), and Creole (8.5%). The population of the RACCN, on the other hand, is predominantly Miskito (72%) and mestizo (22%). The Caribbean Coast is therefore multicultural and multilingual, with Miskito, Creole and Spanish being the most widely used languages, while the Mayangna, Ulwa, Garifuna and Rama languages are used in smaller geographical areas and indigenous territories. In this setting the IPPF shall ensure that any project intervention follows a human rights-based approach, ensuring consistency with international and national laws, social standards, Principles on Human Rights, and the UNFCCC Cancun Safeguards for REDD+. A number of international instruments included in Section IV are applicable to this Project. In addition, the IPPF establishes guidelines and criteria for the preparation of Indigenous Peoples Plans (IPPs), to be drafted when required and during implementation once concrete activities require it. IPPs will be developed in line with ESS7 and will describe the specific actions, budgets, and indicators and will encourage inclusion of affected Indigenous Peoples and communities during their implementation.

169. Nicaragua has pioneered the development of a robust institutional and legal framework as regards to the restoration and protection of the rights of originary and afro-descendant peoples. Land tenure is legally guaranteed, and the communal lands in Nicaragua possess special protection, according to Law 445 (2001) on Community Property of Indigenous Peoples. At the level of the Political Constitution of Nicaragua, since 1986 the country acknowledges the multiethnic nature of the country and the right of the originary and afro-descendant People to conserve and develop their own identity, organization and culture. The National Constitution also recognizes the Autonomous Regime of the Caribbean Coast and the right of indigenous and afro-descendant people over the tenure, use and administration of their communal territories. Law No. 445 grants the right of communal property of the territory, the use, administration and management of the natural resources and sets legal and administrative procedures for the recognitions of these rights. Municipalities Law No. 40 that regulates the administrative division recognizes indigenous territories and their administration. With this constitutional and legal basis, the National Commission for the Demarcation and Titling (CONADETI) has titled 23 indigenous and afro-descendant territories which cover 54.7% of the land area of the Caribbean Coast of Nicaragua.

170. Each indigenous or afro-descendant territory has its own land title, is mapped and registered in the Public Land Registry. This process of the restitution of communal land was achieved during a process that lasted 12 years since Law 445 was issued in year 2001, executed by the National Commission of Land Demarcation and Titling (CONADETI). This process included a careful examination of claims of “third parties” within the territories as described and discussed in Section III.5.

Indigenous and Afro-descendant Territories in the Caribbean Region



Indigenous and Afro-descendant Territories of the Caribbean Region and the AWB Region					
No	**Territory**	**Municipality**	**Communities (#)**	**Population**	**Titled area (ha)**
	Autonomous Region of the North Caribbean (RACCN)				
1	Wangki Maya Tasbaya	Waspan	22	16,596.00	138,881.86
2	Wangki Twi Tasba Raya* Wangki Kupia Awala		21	18,117.00	162,181.60
3	Wangki Li Aubra Tasbaika*		18	7,991.00	88,434.78
4	Li Lamni Tasbaika Kum*		26	9,103.00	138,227.00
5	Awas Tingni		3	1,164.00	73,394.00
6	Kipla Sait Tasbaika Kum		19	5,164.00	113,597.00
7	Tawira	Puerto Cabezas	17	15,829.00	304,425.03
8	Twi Yahbra*		21	9,736.00	154,476.72
9	Karata		5	13,181.00	30,667.26
10	Twi Waupasa*		12	n/d	144,860.70
11	Tasba Pri		29	8,484.00	147,425.00
12	Prinzu Awala	Prinzapolka	19	5,372.00	414,955.40
13	Prinzu Auhya Un		9	n/d	379,334.27
14	Mayagna Sauni As*	Bonanza	16	10,000.00	163,810.00
15	Mayangna Sauni Arunka (MATUMBAK)		8	4,743.00	48,723.14
16	Tuahka	Rosita	14	8,718.00	54,556.36
17	Mayagna Sauni Bas	Siuna	1	870.00	43,241.40
	Región Autónoma de la Costa Caribe Sur - RACCS				
18	Awaltara Luhpia Tasbaya	Desembocadura Rio Grande y La Cruz de Rio Grande	16	7,753.00	241,307.00
19	Laguna de Perlas (10 Comunidades Indígenas y afro descendientes de la cuenca de /anteriormente 12 Comunidades)	Laguna de Perlas	10	8,795.00	241,307.00
	Tasba Pauni (Se desmembraron 2 comunidades del territorio de las 12 comunidades de la Cuenca de Laguna de Perlas)		2		
20	Territorio Rama y Kriol*	Bluefields, El Castillo y San Juan de Nicaragua	9 y 23 cayos	1,936.00	406,849.30
21	Territorio Creole de Bluefields	Bluefields	4	n/d	40,000.00
	Zona Especial Alto Wangki Bocay – AWB				

Indigenous and Afro-descendant Territories of the Caribbean Region and the AWB Region					
No	**Territory**	**Municipality**	**Communities (#)**	**Population**	**Titled area (ha)**
22	Miskito Indian Tasbaika Kum	Wiwili	31	3,452.00	65,230.00
23	Mayangna Sauni Bu	San José de Bocay	20	1,186.00	94,838.00
	Sub-total		**301**	**4,638.00**	**160,068.00**
	Total area of titled land (ha)			**158,190.00**	**3´690,722.82**
(*) Indigenous Territories where tensions through presence of "third parties" have been identified					

171. The objectives of the IPPF are to:

- Ensure that native and afro-descendant peoples are widely consulted and can actively participate in the design and arrangements for the execution of the project
- Avoid the potential adverse impacts of projects on indigenous and afro-descendant peoples or, when it is not possible to avoid, minimize, mitigate or compensate them
- Assure that any Project intervention follows a human rights approach in line with Law No. 445 (2001) on Community Property of Indigenous People, the national legal framework and international commitments, Principles on Human Rights, and the UNFCCC Cancun Safeguards for REDD+.
- Establish the criteria for the preparation of Indigenous Peoples Plans (IPP) if necessary, in line with ESS7

XI.1. Specific legal framework relevant to the IPs

172. Nicaragua has an institutional framework for the administration of natural resources and environmental management that is based on two levels: one of direct administration form central government entities and their territorial delegations which act in coordination with the municipal governments which form the National Sphere; and, on the other hand, the Autonomous Sphere, which is formed by the Autonomous Regions of the Caribbean Coast, the Indigenous Governments (Territorial and Communal) and special administration zones like the Alto Wangki Bocay. These have been established by Law 28 on the Autonomy of the Regions of Atlantic Coast of Nicaragua and Law 445, which determine the five layers of government: communal, territorial, regional, municipal and national. In this framework two autonomous regions (north and south), and the Special Region of the Alto Wangki Bocay were formed, within which the indigenous territories, the communities and municipalities are found.

173. In this dual institutional framework, the rights of indigenous and afro-descendant communities relative to the autonomous administration of their territories and their self-government have a special protection. In addition, Law No. 162 grants for the conservation of the languages of the originary people of Nicaragua and Law 759 protects the right of indigenous people to use and conserve their traditional medicine. Law 757 (2011) grants equal rights for indigenous and afro-descendant persons, especially related to equal opportunities and access to workplace in the public, private and non-governmental sectors. Finally, Forest Law 462 grants the fundamental legal right that the landowner, in this case the indigenous community, has

property right over all the natural resources on forest land, including timber, non-timber forest products; and also, the property rights over carbon.

XI.2. Specific institutional framework relevant to the IPP

174. Community Level. The Communal Assembly it is formed by all members of the community according to their customary right and traditions. In the Assembly, which is the highest authority of a community, all matters relevant to the community are discussed and decided. The community is represented by the Community Council *("Consejo Comunitario")* which includes the Council of the Eldest ("Consejo de Ancianos").

175. Territorial Level. At this level of government of and indigenous territory, a Territorial Assembly is held by the representatives of all the communities within the territory, represented by their Community Councils. The Territorial Assembly elects the Indigenous Territory Government (GTI) according to its traditional statues based on customary rights and traditions.

XI.3. Preparation of site-specific Indigenous Peoples Plans (IPPs) or similar instruments

176. The main objective of the IPPs is to assure that the indigenous and afro-descendant communities receive direct benefits in an appropriate and inclusive way that takes into account aspects of gender and inter-generational equity. Any possible negative aspects regarding these shall be identified and the eventuality of occurrence reduced as possible. Each IPP shall include a budget and financing plan, as well as self-evaluation and accountability mechanisms. Culturally appropriate community monitoring and evaluation instances shall be included and described.

177. In compliance with ESS7, in every single Indigenous Territory in which the Program shall be implemented a Social Assessments will be done in a cultural appropriate manner that takes into account local costumes and governance schemes. This Social Assessment will determine if a specific Indigenous Peoples Plan is needed for the specific sub-project that will be prepared and submitted by the community to be financed by the Project. The exact location and nature of these sub-projects, which will be defined by the indigenous communities during their preparation will define the need and depth of these IPP and additional instruments, if needed. The IPP shall include at least:

a) An ESA which includes the applicable legal and institutional framework, and baseline information
b) A summary of the consultation and participation process of the community and assurances that FPIC has been done (para. 24 EAS 7)
c) A framework for consultation during implementation of the sub-project
d) Measures to guarantee for equitable sharing of the benefits arising from the sub-project, specifically for women and young people
e) Measures to avoid, minimize or mitigate any negative impacts the sub-project may have and measures and steps for adequate compensation
f) Cost estimates, financing plan, timeline, roles and responsibilities for implementation of the IPP

g) Arrangement for grievances and redresses (para. 35 EAS 7 and EAS 10)
h) Monitoring and evaluation of IPP implementation

178. During IPP preparation MARENA will be following-up on and monitor progress in close coordination with the GTIs and the Regional Government. The tentative timeframe agreed upon establishes that IPP preparation, involving the Social Evaluation, the preparation of the IPP according to established guidelines, and its revision by MARENA should not take longer than 50 days. The Regional Governments shall submit every IPP to the PIU of MARENA for its evaluation to make sure it is consistent with Program objectives in order give its approval to any investment. Nevertheless, every co-implementing partners in charge of implementing activities in support of sub-projects shall be responsible to follow-up on IPP implementation and shall report to MARENA on half yearly basis.

179. A Consultation Plan and specific guidelines on culturally adequate consultations/dialogues, as well as measures to ensure joint planning, capacity building and culturally inclusive implementation of activities has been developed to assure equally distribution of benefits for the population, including women and youth. A basic guiding principle of ERP and Bio-CLIMA implementation is that every activity and intervention will have to follow the Free, Prior and Informed Consultation (FPIC) principle. Consultation protocols and modalities like agreements about timing for consultations, additional community protocols, the participation of a third independent facilitator or observing party, a secure and free consultation and an environment for the dialogue that is free of any coaction, as also the issue of un-authorized contacts and promises shall be included, discussed and agreed upon prior to any Project intervention. No preparatory activity nor sub-project shall be approved nor undertaken if not with prior approval of the Territorial Assembly and/or the GTI.

XI.4. Capacity development plan

180. To further ensure consistency with the human rights principles of participation and inclusion, project Outputs 2.2.1 and 3.1.2 will support capacity building and the creation of an enabling environment for meaningful participation and inclusion. The capacity building and knowledge management components incorporate recovery, protection and maintenance of collective and ancestral knowledge and practices, respecting the culture of indigenous communities and nations that are owners of, or dependent on, the forest for their livelihoods. In addition, the capacity building component underlines the relevance of effective, equal and full participation of women and men and priority groups.

181. The Indigenous and Afro-descendant Peoples Planning Framework in its extensive, pedagogic version in Spanish (130 pages) has been published on MARENA´s website since February 2020, its latest up-dated version and can be accessed at the following link: http://www.marena.gob.ni/Enderedd/wp-content/uploads/2020/06/8-EAS7_Marco-de-Planifi-de-Pueblos-Indigenas-y-Afro-09062020.pdf

XII. ANNEXES

XII.1. ANNEX 1: Checklists and forms

XII.1.1. Form 01: Environmental and social screening checklist

Bio-CLIMA - ER Program Project: Select relevant project

Project Investment name [type here]

Location [type here]

Estimated cost (USD) [type here]

TYPE OF Sub- Project

Sub Project Type

□Indigenous Territory Governments (Non-Protected area)

□Indigenous Territory Governments (Protected area)

□Private

Please give more details: [type here]

Fluid and direct communication will be maintained with the beneficiary involved, there will be a map of actors that will guide the exercise of dialogue with the parties involved. The decision making will be done considering the opinions, approaches expressed in workshops, work sessions and the feedback mechanism and attention to complaints. Therefore, all sub projects will have to accomplish the stakeholder engagement plan of the Project.

Additionally, sub-project will have to attend determined requirements according to the checklist results:

ESS2 Labor and working conditions

Will the project?	Yes/No
Conduct of hazardous work, such as working at heights or in confined spaces, use of heavy machinery, or use of hazardous materials?	☐ ☐
impact fall disproportionately on the disadvantaged or vulnerable (which include inequalities between males and females) and any prejudice or discrimination toward such groups in providing access to development resources and project benefits?	☐ ☐
Possible accidents or emergencies, with reference to the sector or locality?	☐ ☐
Detects possible incidents of child labor or forced labor, with reference to the sector or locality?	☐ ☐
Detects possible presence of migrants or seasonal workers?	☐ ☐
Require small constructions?	☐ ☐
Includes or detected potential collaboration of non-indigenous settler?	☐ ☐
Detects risks related to labor influx or gender violence?	☐ ☐
*Includes appropriate measures of protection and assistance to address the vulnerabilities of project workers, including specific groups of workers, such as women, people with disabilities, migrant workers and children of working age?	☐ ☐
*Apply the principle of equal opportunity and fair treatment in the employment of project workers, so that there will be no discrimination with respect to any aspects of the employment relationship?	☐ ☐

*If there is any "Yes" answers (or "No" in the marked boxes with *), then it should be described and considered in the Labor Management Procedures Template*

ESS3 Resource Efficiency and Pollution Prevention and Management

Will the project?	Yes/No
Requires the use of pesticides?	☐ ☐
Generate dangerous or non-dangerous waste?	☐ ☐
Are those pesticides restrict on Nicaragua´s legal framework (see Annex of Banned pesticides on the Environmental and Social Management Framework) ?	☐ ☐
Do the pesticides contain active ingredients, banned on conventions or protocols?	☐ ☐

If there is any "Yes" answers, then it should be described and considered in the Management Pest Plan.

ESS4 Community Health and Safety

Will the project?	Yes/No
Threats Human Security through the escalation of personal, communal or inter-state conflict, crime or violence?	☐ ☐
fall disproportionately on the disadvantaged or vulnerable, and cause disadvantaged in sharing any development benefits and opportunities resulting from the project	☐ ☐
exacerbate existing tensions and inequality within society (both within the communities affected by the project and between these communities and others?	☐ ☐
Presence of third parties in the sub project area (with peaceful coexistence agreements)?	☐ ☐
Presence of third parties in the sub project area (without peaceful coexistence agreements)?	☐ ☐
The Sub project area has recently presented any social conflict?	☐ ☐

If there is any "Yes" answers, then it should be accomplished the ESMF correspondent criteria.

ESS5 Land Acquisition, Restrictions on Land Use and Involuntary Resettlement

Will the project?	Yes/No
Result in a significant change/loss in livelihood of individuals?	☐ ☐
compromise existing legitimate rights for land and natural resource tenure and use (including collective rights, subsidiary rights and the rights of women) or have other unintended consequences, particularly where the project supports land titling and related issues?	☐ ☐
Cause potentially adverse effects related to non- indigenous settlers? *If the answer is "Yes" the project should prepare an* ***Action Plan for involuntary restriction of access to natural resources***	☐ ☐
Require to active conservation and peaceful coexistence agreements in indigenous and afro-descendant territories? *If the answer is "Yes" the project should meet the* ***component 3 of the Bio-CLIMA project***	☐ ☐
Cause potentially adverse effects in case of restrictions on use, or access to, land or natural resources? *If the answer is "Yes" the project should prepare an* ***Action Plan for involuntary restriction of access to natural resources***	☐ ☐
May cause restrictions in access to natural resources in legally designated parks and protected areas? *If the answer is "Yes" the project should prepare a* ***Action Plan for involuntary restriction of access to natural resources***	☐ ☐

**In all the cases women's perspectives must be obtained and their interests factored into all aspects of resettlement planning and implementation. Skills training, access to credit, and job opportunities, should be equally available to women and adapted to their needs. Measures should be considered to provide women as much protection as possible with the objective to achieve equity with men related to hold or contract in property.*

ESS6: Biodiversity Conservation and Sustainable Management of Living Natural Resources

Will this project	Yes	No
Modified habitats are areas that may contain a large proportion of plant and/or animal species of nonnative origin, and/or where human activity has substantially modified an area's primary ecological functions and species composition. Modified habitats may include, for example, areas managed for agriculture, forest plantations, reclaimed coastal zones, and reclaimed wetlands?	☐	☐
Be located on natural habitats are areas composed of viable assemblages of plant and/or animal species of largely native origin, and/or where human activity has not essentially modified an area's primary ecological functions and species composition?	☐	☐
Cause habitat loss, degradation, or fragmentation?	☐	☐
Be located on Critical habitat?	☐	☐
Occurs within or has the potential to adversely affect an area that is legally protected, designated for protection, or regionally or internationally recognized?	☐	☐
Foressen intentional or accidental introduction of alien, or nonnative, species of flora and fauna into areas where they are not normally found?	☐	☐
Involve primary production and harvesting of living natural resources?	☐	☐
Purchase natural resource commodities, including food, timber, and fiber, that are known to originate from areas where there is a risk of significant conversion or significant degradation of natural or critical habitats?	☐	☐
involve forest harvesting operations, fire management, road development or require heavy machinery? *If the answer is "Yes", then it should accomplish the Management Forest Plan*	☐	☐

If there is any "Yes" answers, then it should be described and considered in the Biodiversity Management Plan (BMP)

ESS7: Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities

Will the project?	Yes/No
Involve Indigenous Peoples and Afro-descendants? *If the answer is "Yes", then it should create an Indigenous Peoples Plan*	☐ ☐
Have significant impacts on Indigenous Peoples or Local Communities' cultural heritage that is material to the identity and/or cultural, ceremonial, or spiritual aspects of IP or Local Communities' lives? *If the answer is "Yes", then it should require Free, Prior, and Informed Consent (FPIC)*	☐ ☐
The sub project includes activities accord to the Indigenous People and Afro-descendant uses and costumes? *If the answer is "Yes", then it should require to create an Indigenous Peoples Plan*	☐ ☐

ESS8 Cultural Heritage

Will the project?	Yes No
Involves excavations, demolition, movement of earth, flooding, or other changes in the physical environment?	☐ ☐
Be located within a legally protected area or a legally defined buffer zone?	☐ ☐
Be located in, or in the vicinity of, a recognized cultural heritage site	☐ ☐
Be specifically designed to support the conservation, management, and use of cultural heritage? *If the answer is "Yes", then it should create a Cultural Heritage Management Plan.*	☐ ☐

If the answer to any of questions "Yes", please use the indicated Annexes or sections(s) of the ESMF for guidance on how to avoid or minimize typical impacts and risks.

CONCLUSION

Which course of action is required?

□ *Cultural Heritage Management Plan* □ *Labor Management Procedures Template* □ *Management Pest Plan*

□ *Action Plan for involuntary restriction of access to natural resources*

□ *Biodiversity Management Plan* □ *Indigenous Peoples Plan* □ *Free Prior Informed Consent*

Below are the guidelines for developing related E&S instruments based on the checklists above:

ESS1 Assessment and Management of Environmental and Social Risks and Impacts

(a) Executive summary • Concisely discusses significant findings and recommended actions.
(b) Project description ● Concisely describes the proposed project and its geographic, environmental, social, and temporal context, including any offsite investments that may be required (e.g., dedicated pipelines, access roads, power supply, water supply, housing, and raw material and product storage facilities), as well as the project's primary suppliers. ● Includes a map of enough detail, showing the project site and the area that may be affected by the project's direct, indirect, and cumulative impacts. ● Based on current information, assesses the scope of the area to be studied and describes relevant physical, biological, and socioeconomic conditions, including any changes anticipated before the project commences. ● Stakeholder and beneficiaries mapping ● Through typology categorization of sub project mention the ESS triggered. ● Based on current information, assesses the scope of the area to be studied and describes relevant physical, biological, and socioeconomic conditions, including any changes anticipated before the project commences.

(c) Baseline data

Through consideration of the details of the project, indicates the need for any plan to meet the requirements of ESS2 through 8.

- Develop a social and environmental issues screening checklist.
- According to the results set out in detail the baseline data of design, operation, or mitigation measures. This should include a discussion of the accuracy, reliability, and sources of the data, as well as information about dates surrounding project identification, planning, and implementation.
- Identify key data gaps (i.e. strengthening of capacities, tools).

(d) Environmental and social risks and impacts related to the **Potential Social and Environmental identification to determine the sub project category risk matrix**

- Takes into account all relevant environmental and social risks and impacts of the project. This will include the environmental and social risks and impacts specifically identified in ESSs2–8, and any other environmental and social risks and impacts arising as a consequence of the specific nature and context of the project, including the risks and impacts identified in the matrix.
- Assesses the feasibility of mitigating the environmental and social impacts; the capital and recurrent costs of proposed mitigation measures, and their suitability under local conditions; the institutional, training, and monitoring requirements for the proposed mitigation measures.

(j) Appendices

• List of the individuals or organizations that prepared or contributed to the Bio-CLIMA & ER Program Environmental and social screening checklist and Potential Social and Environmental identification to determine the sub project category risk matrix.

• References—set out the written materials, both published and unpublished, that have been used.

• Record of meetings, consultations, and surveys with stakeholders, including those with affected people and other interested parties. The record specifies the means of such stakeholder engagement that were used to obtain the views of affected people and other interested parties.

• Tables presenting the relevant data referred to or summarized in the main text.

• List of associated reports or plans

ESS2: Labor and Working Conditions

Labor Management Procedures Template

MARENA will design and implement this Template every six months. They will provide the Template report to the different donors and banks. It should contain the contracts, including the objective, period, budget and deliveries.

The project will not have many hires since MARENA will work with its current team. Projects at the community / private sector, will work with the same members of the community.

Nevertheless, some contracts can be made to strengthen capacities, coordination local staff and personal to build small constructions.

Number of Project Workers: The total number of workers to be employed on the project, and the different types of workers: a) direct workers (staff) b) contracted workers (Professional services providers) c) community workers. (Local Technical Support) Where numbers are not yet firm, it should be updated during project implementation.
Characteristics of Project Workers*:* To the extent possible, a broad description and an indication of the likely characteristics of the project workers: a) local workers b) national or international migrants c) female workers, workers between the minimum age and 18.
Timing of Labor Requirements: The timing and sequencing of labor requirements in terms of numbers, locations, types of jobs and skills required.
Contracted Workers*:* The anticipated or known contracting structure for the project, with numbers and types of contractors/subcontractors and the likely number of project workers to be employed or engaged by each contractor/subcontractor. If it is likely that project workers will be engaged through brokers, intermediaries or agents, this should be noted together with an estimate how many workers are expected to be recruited in this way.
Migrant Workers: If it is likely that migrant workers (either domestic or international) are expected to work on the project, this should be noted and details provided.

ASSESSMENT OF KEY POTENTIAL LABOR RISKS
Project activities: The type and location of the project, and the different activities the project workers will carry out.
Key Labor Risks: The key labor risks which may be associated with the project (see, for example, those identified in ESS2 and the GN). These could include, for example: · The conduct of hazardous work, such as working at heights or in confined spaces, use of heavy machinery, or use of hazardous materials · Likely incidents of child labor or forced labor, with reference to the sector or locality · Likely presence of migrants or seasonal workers · Risks of labor influx or gender-based violence · Possible accidents or emergencies, with reference to the sector or locality · General understanding and implementation of occupational health and safety requirements
RESPONSIBLE STAFF
This section identifies the functions and/or individuals within the project responsible for (as relevant): o engagement and management of project workers o engagement and management of contractors/subcontractors o occupational health and safety (OHS) o training of workers o addressing worker grievances
POLICIES AND PROCEDURES
*****Specific salaries, hours of work, and other requirements that apply to the project *Limit hours of work *Procedure to avoid disadvantage or vulnerable (which include inequalities between males and females) and any prejudice or discrimination toward such groups in providing access to development resources and project benefits.

AGE OF EMPLOYMENT
· The minimum age for employment on the project · The process that will be followed to verify the age of project workers · The procedure that will be followed if underage workers are found working on the project · The procedure for conducting risk assessments for workers aged between the minimum age and 18. According to the national framework employees aged below 18 years old can work with permission of their parent(s).
TERMS AND CONDITIONS
This section sets out details regarding: · Specific wages, hours and other provisions that apply to the project · Maximum number of hours that can be worked on the project · Any collective agreements that apply to the project. When relevant, provide a list of agreements and describe key features and provisions · Other specific terms and conditions
GRIEVANCE MECHANISM
This section sets out details of the grievance mechanism that will be provided for direct and contracted workers, and describes the way in which these workers will be made aware of the mechanism. The mechanism is attached in the Labor Management Plan of Bio-CLIMA Project: 3-EAS2_Gestión-de-Mano-de-Obra-09062020.pdf
CODE OF CONDUCT
All employees must accomplish the legal code of conduct of Nicaragua. The code can be consulted on the next link: http://legislacion.asamblea.gob.ni/normaweb.nsf/9e314815a08d4a6206257265005d21f9/1d93cd4eaf137dac0625765c006f6a87?OpenDocument

CONTRACTOR MANAGEMENT
· Selection process for contractors, as discussed in ESS2, paragraph 31 and GN 31.1. · The contractual provisions that will put in place relating to contractors for the management of labor issues, including occupational health and safety, as discussed in ESS2, paragraph 32 and GN 32.1 · The procedure for managing and monitoring the performance of contractors, as discussed in ESS2, paragraph 32 and GN 32.1
COMMUNITY WORKERS
Details of the terms and conditions of work Measures to check that community labor is provided on a voluntary basis. Details of the type of agreements that are required and how they will be documented. See GN 34.4. Details of the grievance mechanism for community workers and the roles and responsibilities for monitoring such workers. See ESS2, paragraphs 36 and 37. http://www.marena.gob.ni/Enderedd/mecanismo-de-retroalimentacion-y-atencion-de-quejas/
PRIMARY SUPPLY WORKERS
Procedure for monitoring and reporting significative risk on child work or forced work, on primary supply workers.

ESS3: Resource Efficiency and Pollution Prevention and Management

Management Pest Plan

- Geographical delimitation of the project/activity
- Does the site have a record on pests or forest disease?
- Actions to do in the property, affected areas by pest and forest diseases:
- Description of the mitigation and prevention of environmental impacts:
- Identify which party is responsible of the measure's implementation:
- Pesticide or treatment to be used:
- Amount of pesticide to be used:

- Specify the storage method:
- Specify the transport method [ ] bus [ ]car [ ]other _____
- Protection and application equipment required:
- Specify the disposal method for the material to be used:
- Capacitation and training activities:
- Identify which party is responsible of the implementation:
- Supervision, assessment and reporting:

ESS4: Community Health and Safety

Community Health and Safety Impacts and Risks

Key Community Health and Safety Risk. Describe the potential risks and the specific measures to avoid or mitigate them:
a) Environmental risks and impacts Community safety (including dam safety and safe use of pesticides); climate change and other transboundary or global risks and impacts; material threat to the protection, conservation, maintenance, and restoration of natural habitats and biodiversity; ecosystem services and the use of living natural resources, such as fisheries and forests.
b) Social risks and impacts (i) threats to human security through the escalation of personal, communal, or interstate conflict, crime, or violence (according with the Community Health, Safety, and Security standard), (ii) risks that project impacts fall disproportionately on individuals and groups who, because of their particular circumstances, may be disadvantaged or vulnerable; (iii) any prejudice or discrimination toward individuals or groups in providing access to development resources and project benefits, particularly in the case of those who may be disadvantaged or vulnerable; (iv) negative economic and social impacts relating to the involuntary taking of land or restrictions on land use; (v) risks or impacts associated with land and natural resource tenure and use including (as relevant) potential project impacts on local land use patterns and tenure arrangements, land access and availability, food security and land values, and any corresponding risks related to conflict or contestation over land and natural resources; (vi) impacts on the health, safety, and well-being of workers and project-affected communities; and (vii) risks to cultural heritage.

c) Community health linked to social /environmental impacts. Include possible health impacts related to pesticide use and its biological accumulation.
d) Potential violent conflict Analysis of any situation of conflict or violence in the areas in emphasis in the last potential conflicts mentioned and the specific measures to avoid or mitigate the impact.

ESS5: Land Acquisition, Restrictions on Land Use and Involuntary Resettlement

MARENA, in coordination with the corresponding instances of the implementation of the Project or activity, must provide the members of the affected community with a menu of alternative solutions to the identified restrictions.
The Territorial Governments and municipalities, together with the Inter-institutional Safeguard Commission, and the corresponding instances of the implementation of the Project or activity, will identify and search agreements on the best solutions, based on uses and customs of the affected persons, as well as based the internal rules used by the community in the resolution of their conflicts.
In the case of indigenous and afro-descendant communities, which could be affected by involuntary restrictions using resources in protected areas, these have to be dealt with according to the Free, Prior and Informed Consent (FPIC) processes and the consultations to be raised within the Planning Framework for Indigenous Peoples (IPPF).

Following principles shall be always guide the PF:

- The process shall be embedded within an open participation framework that involved and includes all community members
- The process should be always done in a culturally appropriate way involving if needed translator into the local languages and providing time needed for the community.
- The principle of equity should always be observed, giving opportunities to the most vulnerable to express their views and taking special attention that any form of exclusion cased on gender, age or any other reason is avoided.
- Transparency and accessibility of information shall be granted before, during and after the process.
- Shared responsibility and solidarity between communities, actors, regional and local institutions within the Caribbean Region autonomic administration model.
- The principle of the for-land use planning for sustainable development, livelihood resilience and the conservation of ecosystems and ecosystem services.

When any risk is determined related to involuntary restriction of access to natural resources, it should be developed a specific Action Plan, according to the next scheme:

Action Plan for involuntary restriction of access to natural resources.

- Objective of the Action Plan.
- Specific background
- Participatory community diagnoses
- Identification of the involuntary restrictions.
- Management Plan for the project area.
- Impacts of the involuntary restrictions.
- Stakeholders (disaggregated by sex), how many families and persons could be affected - describe vulnerabilities
- Attention strategy. Describe methods and procedures for communities affected, to identify and select the potential mitigation measures and procedures to decision making.
- Describe and document how does the community or group reached the agreement.
- Summary of the opinions expressed and how they were attended in the Action Plan preparation.
- Schedule and budget for the activities.
- Responsibility definition.
- Monitoring and evaluation. Continuing report
- Periodical monitoring related to the case.

ESS6: Biodiversity Conservation and Sustainable Management of Living Natural Resources

The Biodiversity Action Plan of the Bio-CLIMA Project shall support optimal biodiversity management throughout the implementation of the project activities, promoting the integration of biodiversity and their ecosystem services, into the planning and execution of the proposed activities.

The main objective of the Biodiversity Management Plan is to establish the general guidelines needed to assess the risks and impacts of the sub projects, in biodiversity related matters. It includes tools and methods for contributing to the conservation, restoration and sustainable use of biodiversity resources.

Some examples of potential adverse risks and impacts biodiversity are related to the opening of new forest paths that can generate risks such as the opening of deforestation fronts, runoff, erosion, the removal of the vegetation, the loss of biodiversity due to the invasion of non-native species and environmental degradation due to canopy open and increased risk of fires.

If possible negative impacts to biodiversity are detected, a Biodiversity Management Plan will have to be included, revised and authorized by MARENA.

Biodiversity Management Plan

- **Elements for the characterization of Biodiversity**
    - General information of the sub project (Biodiversity condition, indicate if the project is located in a Recognized Areas of High Biodiversity Value, RAMSAR site, or key biodiversity importance)
    - Identification of potential negative impacts of the activities to be implemented, on the biodiversity
    - Geographical delimitation of the impact
    - Specie/ecosystem/threatened resource or specie
    - Conservation status of the specie/ecosystem/ threatened resource
    - Measurement and actions to mitigate and compensate impacts on the biodiversity
    - Mechanism to implement the actions

Forest Management Plans

Any sub project including forest harvesting and management should develop a Sustainable Forest Management Plan (SFMP) and identify potential risks and impacts.
Some examples of potential adverse risks and impacts forests are related to the implementation of infrastructure for sustainable forest management such as the opening of new paths that could eventually pose risks, such as the opening of new deforestation fronts, runoff, the removal of the vegetation, biodiversity loss, environmental and degradation due to canopy open and increased risk of fires.

Sustainable Forest Management Plan

Forest harvesting type:

□PMF intervention plan for submerged wood
□Natural Forest Forest Management Plan for production purposes or Protection
□Forest Management Plan for the establishment and management of plantations forest or agroforestry systems for areas greater than 500 hectares.

□Projects to establish forest plantations and systems agroforestry under 500 hectares - Does not require a Plan, only the filling in Formats provided by INAFOR. □ Special Plans □ Community use □ Protected Area Management Plans
Criteria to determine if the area of exploitation has presented natural regeneration. The criteria should be at least the following: ● Species to regenerate ● Age in years ● Number of plants per hectare of the species that has been programmed regenerate ● Health and / or vigor ● Natural regeneration evaluation method and include the memory of calculation ● Maximum allowable gap size without reforestation; and Time for regeneration to establish

*Please follow the general instruction in GFMP for legal and administrative guidance on each forest harvesting type.

(http://www.marena.gob.ni/Enderedd/wp-content/uploads/2020/06/7-EAS6-Gu%C3%ADa-para-el-Manejo-Forestal-09062020.pdf)

ESS7. Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities.

Indigenous People and afro-descendant Plan (IPP).

The IPP will be based on the Management Plans, Conservation and Territorial Development (PMCDTI, for the siglas in spanish), which are result of a participatory process between national, local and indigenous authorities. It is important to notice that PMCDT are management instrument for the sustainable development of the territory, and regulations for the use and management of natural resources based in ecological economic zoning.

The plan should reinforce the self-management capabilities of GTIs.

a) Summary of the scheme of the PMCDT: i) Population settlements and the problem of Ii)land tenure, iii) synthesis of the diagnosis (potentialities and limitations), iv agroecological zones and v) land use rules, human aspects, ethnic and cultural) vi) context analysis vii) risk, threat, vulnerability.
b) Title, objectives, deliveries and budget of the sub project
c) Detail significant impact detected on the potential social and environmental category risks matrix and Bio-CLIMA & ER Program Environmental and social screening checklist. Detail gender participatory measurement.
d) Activities to enhance positive impacts that were identified by the families and IP and afro-descendants, and steps for implementing them. Also, the action plan will integrate the measures to avoid, minimize, mitigate, or compensate IP for any
e) Methods for IPP cultural disclosure
f) Matrix correlating: Activities, deliveries, budget, disclosure, schedule, and roles and responsibilities for implementing the IPP
g) Any complain, doubt, information request, must be address to the grievances mechanism of MARENA. The systematization of the semestral grievance result should be in responsibility of the leader communities and MARENA: http://www.marena.gob.ni/Enderedd/mecanismo-de-retroalimentacion-y-atencion-de-quejas/
h) Detail the monitoring, evaluating, and reporting on the implementation of the IP Plan. Monitoring and evaluation must include procedures to obtain Free, Prior, and Informed Consent during project implementation.
i) When circumstances require Free, Prior, and Informed Consent (FPIC) Document: (i) the mutually accepted process to carry out good faith negotiations that has been agreed upon by the Borrower and Indigenous Peoples (ii) Documentation in the process carried out for the agreements reached as well as dissenting views.
Summary of the results of the meaningful consultation tailored to IP, and if the project involves the three circumstances specified in paragraph 24 of ESS7, then the outcome of the process of FPIC carried out with the affected IP during project preparation.
j) Evidence of the IP community's approval

ESS8: Cultural Heritage

Cultural Heritage Management Plan (CHMP)

During the Bio-CLIMA Project activities, the implementation of activities could negatively affect some of the intangible heritage of the communities, including transculturation, maternal languages and religious beliefs. The guidelines stress the significance of addressing cultural heritage matters to hire native professionals, promote adequate, bilingual communication strategies and mapping of the tangible cultural heritage. Any sub project including cultural heritage issues should follow procedures specified in Annexes 2 and 3 and fill the relevant registration to be submitted to the Nicaraguan Institute of Culture

XII.1.2. Form 02: SCREENING CHECKLIST REVIEW FORM

(Checked by Safeguards Commission).

About the screening	Yes No
Based on the location and the type of investment, please explain whether the Proponent's responses are satisfactory.	□ □
Their description of the compliance of the investment with relevant planning Documents	□ □
If 'No', please explain: [type here]	
Their responses to the questions on environmental and social impacts	□ □
If 'No', please explain: [type here]	
Their proposed mitigation measures	□ □
If 'No', please explain: [type here]	
Their proposed measures to ensure sustainability	□ □
If 'No', please explain: [type here]	

REVIEWER'S CONCLUSION

Which course of action do you recommend?

□ *CHMP* □ *Labor Management Procedures Template* □ *Management Pest Plan*

□ *Action Plan for involuntary restriction of access to natural resources*

□ *BMP* □ *IPP* □ *FPIC* □ *SEP*

□There are no environmental or social risks

[Type here]

Preparation of a project Report, based on field appraisal by Safeguards Commission, is required to investigate further, specifically to investigate:

[Type here]

Reject Review form completed by: [type here]

Name: [type here]

Position: [type here]

XII.2. ANNEX 2: Chance finding procedure

If previously unknown cultural heritage is encountered during project activities, the sub project should accomplish the Guide for Cultural Heritage Management to identify and avoid impacts on physical cultural resources in line with PS 8.

The ER Program and the BIO-Climate project, in its main activities, has not contemplated requiring Contractors services to open roads or for construction works, however, reforestation work can lead to unexpected discoveries of a heritage asset, for all field workers from the ER, BIO-Climate Program will be trained on the steps to be followed in the event of accidental discoveries, which are detailed below:

a. Avoid removal and keep the original position of the finding.
b. Immediately contact the person responsible, who must ensure that tasks are stopped and prevent any form of traffic that may affect the preservation of the remains found.
c. Contact a trained paleontologist / archaeologist to evaluate the finding and appropriate action measures, recording: date of finding, location (using GPS if possible), details of the person who made the finding, general characteristics of the finding, type of damage, if any, proceed to photographic registration
d. Report the chance finding to the Instituto Nicaragüense de Cultura, which has to indicate and authorized the correspondent measurements to accomplish.
e. Signpost the site, restrict access and place surveillance until the authorities take over and establish the protection measures to be implemented
f. Implement all the protection measures established by the Application Authority.
g. Do not return the tasks or operations on the site until the Application Authority so indicates.
h. Prepare a report of the tasks performed to be presented to the Application Authority.
i. The measures of recovery of the material found by the competent professional should be adopted
j. Once the finding has been evaluated and appropriate measures taken, tasks or operations can be resumed.

Register the chance find on the Format of “Record finding according to the -Instituto Nicaragüense de Cultura INC-” , Annexed on the Guide for Cultural Heritage Management.

Registro de hallazgos según el Instituto Nicaragüense de Cultura, INC										
Indicador Nacional										
Codificación propia										
Periodos										
Prehispánico		Histórico		Sub-actual		Actual		Indeterminado		
Descripción ambiental del emplazamiento										
A cielo abierto		En reparo rocoso		Subacuático				Sin información		
Altitud				Método o Instrumentos de la obtención de la altitud						
msnm										
Geoforma del emplazamiento Marque con una X, en el siguiente listado										
Confluencia				Fondo de valle						
fluvial				Formación						
Cresta de cerro				rocosa						
Cumbre				Humedales						

Registro de hallazgos según el Instituto Nicaragüense de Cultura, INC										
Indicador Nacional										
Codificación propia										
Periodos										
Prehispánico		Histórico		Sub-actual		Actual		Indeterminado		
Descripción ambiental del emplazamiento										
A cielo abierto		En reparo rocoso		Subacuático				Sin información		
Altitud				Método o Instrumentos de la obtención de la altitud						
msnm										
Geoforma del emplazamiento Marque con una X, en el siguiente listado										
Confluencia				Fondo de valle						
fluvial				Formación						
Cresta de cerro				rocosa						
Cumbre				Humedales						
Desembocadura				Llanura						
Duna				Lomaje						
Fondo de lago				Ladera						
Fondo Marino				Meseta						
Fondo de rio				Playa						
Terraza fluvial				Otro						
Observaciones de las geoformas del emplazamiento:										
Cubierta Vegetal				Cobertura vegetal						
Área sin vegetación				Muy denso						
Bosque				Denso						
Cultivo agrícola				Semidenso						

Matorral		Abierto	
Pradera		Sin información	
Plantación			
Desconocido			
Sin información			
Pendiente general:			
Llano suave			
Acentuado			
Moderadamente acentuado			
Muy acentuado			
Sin información			
Otras			
Características de Suelo			
Observaciones Gen erales a las condiciones ambientales			
Uso del suelo			
Agrícola		Turismo	
Ganadero		Recolección pesquera	
Silvícola		Industrial	
Minero		Urbano	
Infraestructura		Sin uso	
Otro			
Área protegida			
Si		No	
En caso que si, Nombre del área protegida:			
Tipo de alteración			
Por saqueo	Naturales		

XII.3. ANNEX 3: Guidelines for Cultural Heritage

These Guidelines for Cultural Heritage are included in the Environmental and Social Management Framework (ESMF). Throughout the project activities, the importance of the protection and preservation of the cultural heritage, tangible and intangible, is recognized in the Environmental and Social Standard 8 of the World Bank, "Cultural Heritage". Because of this, the GCH contains general provisions on the possible risks and negative impacts that the ER Program and Bio-CLIMA Project could have on the Cultural Heritage, as well as the guidelines and mitigation measures to prevent them. The objectives of this Guidelines are: i) protect cultural heritage from the adverse impacts of project activities and support its preservation throughout the implementation area of the project; ii) address cultural heritage as an integral aspect of sustainable development; and iii) promote the meaningful consultation with relevant stakeholders in relation to the cultural patrimony.

Nicaragua has a very rich and varied Cultural Patrimony, rooted by the Pre-hispanic cultures that populated the territory in the past, the immigrant African cultures, and the Hispanic culture resulting from the colonization process. This Guidelines reflects the desired scenery of management, related to heritable resources, both tangible and intangible, present in the ER Program and Bio-CLIMA Project, promoting, recognizing and valuing cultural heritage. The guidelines are based on Nicaragua's legislation, and in the EAS 8, and must be applied in any subproject or activity that might imply a negative impact on tangible or intangible Cultural patrimony.

During the ER Program and Bio-CLIMA Project activities, the implementation of activities could negatively affect some of the intangible heritage of the communities, including transculturation, maternal languages and religious beliefs. The guidelines stress the significance of addressing cultural heritage matters to hire native professionals, promote adequate, bilingual communication strategies and mapping of the tangible cultural patrimony. It is also important to promote awareness raising on cultural patrimony during Project workshops.

Tangible cultural patrimony could be damaged during construction activities, opening of new roads, soil conservation activities, and planting of trees and landscape restoration activities. Whenever a cultural patrimony site is encountered, a special action protocol will have to be followed. The main activities, in case of a fortuitous finding, are: a) stop all activities in the area; b) conduct a social analysis; c) do not extract any of the figures, sculptures, etc. and inform the relevant authorities; d) inform MARENA, who then will have to inform the Nicaraguan Institute of Culture. This institute will then be in charge of evaluating and defining the procedures in order to ensure the conservation of the patrimony according to national and international safeguards.

For the monitoring of the compliance with the ESMF and its instruments, including this Guidelines, a national safeguards commission will be established. Several regional safeguards commissions will also be established, which will have to conduct meetings once every three

months. The results from these will be used to adjust the implementation process of the ER Program and Bio- CLIMA Project. MARENA has established indicators that will provide information on cultural heritage: 1) identified historic sites in the area of implementation of the ER Program and Bio-CLIMA Project; 2) number of historic sites identified during the project activities; 3) cultural heritage sites involved in the project; 4) qualitative report of implemented measures for the protection of the cultural patrimony.

The Guidelines for Cultural Heritage in Spanish (37 pages) have been published since February 2020, and the latest updated version can be acceded from the following link: http://www.marena.gob.ni/Enderedd/wp-content/uploads/2020/06/9-EAS8_-Gu%C3%ADa-para-la-Gesti%C3%B3n-del-Patrimonio-Cultural-09062020.pdf

XII.4. ANNEX 4: Process framework for involuntary access restrictions to resources in protected areas

182. In the ER Program and Bio-CLIMA Project area there are 20 protected areas, grouped into 5 management categories (Biological Reserve, Biosphere Reserve, Nature Reserve, National Park and Wildlife Refuge), which represent 82.32% of the total Nationally protected areas. Indigenous and afro-descendant territories are an integral part of the Nicaraguan Caribbean Coast. There is an environmental synchrony and geographic overlapping of important parts of the territory belonging to indigenous communities and protected areas.

183. Program implementation does not foresee any situation of land acquisition or resettlement, and any activity that could produce such impacts will be screened out of the program and/or its activities. This was confirmed during the different dissemination, participation and consultation platforms that concluded that, the project does not require to acquire land, resettle families or communities. However, it was analyzed that in certain circumstances Program implementation may cause involuntary restriction of use of the natural resources in protected areas that may affect forest-dependent livelihoods, by the measures resulting from the land use planning.

184. In this particular context MARENA has developed a Process Framework (PF) with the purpose to describe the process for resolving disputes related to resource use restrictions in protected areas that may arise and to grant the participation of the affected population in the planning and design of the restrictions, as well as in the proposed measures of its mitigation.

185. The main objectives of the PF are to:

- Identify, avoid, minimize or mitigate the potentially adverse effects in case of restrictions on access to natural resources
- Ensure that affected families or communities, particularly indigenous and afro-descendants, are informed with culturally appropriate means and participate in the design and implementation of activities that may affect them
- Establish the guidelines for the elaboration of an Action Plan in the case of any involuntary restriction of access to natural resources within protected areas

186. The PF establishes that in cases where an involuntary restriction of access to natural resources caused by an activity within the framework of the ER Program and Bio-CLIMA Project is identified, the following actions shall be taken:

- MARENA, in coordination with the corresponding the implementing entity of that particular activity must provide the members of the affected community with a menu of alternative solutions to the identified restrictions.
- The Territorial Governments and municipalities, together with the Inter-institutional Safeguard Commission, and the corresponding instances of the implementation of the Project or particular activity, will identify and search agreements on the best solutions, based on uses and customs of the affected persons, as well as based the internal rules used by the community in the resolution of their conflicts.
- In the case of indigenous and afro-descendant communities, which could be affected by involuntary restrictions by the use of resources in protected areas, these have to be dealt with according to the Free, Prior and Informed Consent (FPIC) processes and the consultations to be raised within the Planning Framework for Indigenous Peoples (IPPF).

- In cases of discrepancies, disagreements, families or communities have recourse to complaints, filed through the Grievances and Redress Mechanism.

187. Following principles shall be always guide the PF:

- The process shall be embedded within an open participation framework that involved and includes all community members
- The process should be always done in a culturally appropriate way involving if needed translator into the local languages and providing time needed for the community
- The principle of equity should always be observed, giving opportunities to the most vulnerable to express their views and taking special attention that any form of exclusion cased on gender, age or any other reason is avoided
- Transparency and accessibility of information shall be granted before, during and after the process
- Shared responsibility and solidarity between communities, actors, regional and local institutions within the Caribbean Region autonomic administration model
- The principle of the need of participatory land use planning for sustainable development, livelihood resilience and the conservation of ecosystems and ecosystem services

188. In cases where a restriction to natural resources is identified, an Action Plan will be elaborated in a participatory manner and carried out. It will include strategies and recommendations to allow for mitigating, improving, restoring or repairing people's livelihood levels. The PF provides for guidance on all elements that this Action Plan need to include, and also includes criteria for the eligibility for affected persons or groups.

189. To carry out and facilitate the action plan, whose scope will be consistent with the problem detected, the Safeguards Team of MARENA shall intervene, in coordination with the Safeguards Commission and the entity in charge of implementing the activity, which should be then enabled to delegate or hire a specialist to ensure the formulation and implementation of the Action Plan.

190. The Process Framework in Spanish (72 pages) has been published on MARENA´s website since February 2020, its latest up-dated version can be accessed at http://www.marena.gob.ni/Enderedd/wp-content/uploads/2020/06/5-EAS5_Marco-de-Proceso-09062020.pdf

XII.5. ANNEX 5: Integrated Pest Management Plan

The ER Program and Bio-CLIMA Project shall incentive the implementation of agroforestry and silvo-pastural landscape restoration systems; as also reforestation and forest management, and forest ecosystem conservation efforts. Some of these, but especially the agricultural activities may require the use of certain pesticides. As Nicaragua depends on exportation crops which are fundamental part of their economic growth (the economy of the country depends on the agriculture sector), this sector relies on the use of pesticides in order to increase its productivity. The IPM describes the background and history on pesticide use in Nicaragua, which has one of the highest rates of pesticide use *per capita* in the world. As a result of the non-regulated use of pesticides in the country, most of the agricultural regions, water bodies, estuaries and coastal ecosystems are contaminated by pesticides despite the fact that the country has a strong regulatory framework to control of the distribution, storage, use and disposal of pesticides. The instrument describes the regulatory framework for the use of pesticides.

The IPM has three main objectives: 1) Guide the measures required in order to avoid or minimize possible adverse effects resulting from the increase in the use of pesticides or the extension of non-sustainable practices, risky for human health and/or the environment; 2) Guide the measures for avoiding or minimizing the generation of dangerous and non-dangerous waste; and 3) Guide the measures for a safe use of pesticides and promote integrated pest management techniques.

During the consultation process of the ESMF, three regional workshops were conducted. It was identified that the advance of the agricultural frontier and extensive livestock farming are the associated with the use of chemical substances. These workshops also allowed for the identification of risks and strengthening of mitigation measures for the use of chemical products. The improper use of pesticides can cause several environmental and health problems, including skin disease, respiratory conditions, intoxications, cancer, etc. As for the environmental impacts, negative impacts include the pollution of water bodies and soil, negative effects on biodiversity, etc. Other risks include the introduction of new plagues, a decrease in the soil nutrients and productivity, loss of natural soil microbiota, among others. Some of these risks and mitigation measures are described in the Risks and Impacts Matrix Summary provided within the ESMF.

Additionally, in order to reduce and mitigate the potential negative impacts to the environment and human health, the IPM identifies measures that will have to be applied throughout the ER Program and Bio-CLIMA Project activities. These measures include: i) Sensibilization campaigns and workshops; ii) regulation updates; iii) strengthening of vigilance and control; iv) select

organic, natural pesticides; v) use of traditional management of sustainable production systems; vi) follow expert recommendations; vii) use the minimum required doses; etc. Furthermore, underlying activities will avoid the use of prohibited pesticides at the national level and those prohibited internationally. All pesticides will have to be fabricated, formulated, packaged, labelled, manipulated, stored, disposed and applied according to national and international standards.

Since Bio-CLIMA incentives sustainable intensification within a close-to-nature approach, the need to use a chemical substance for pest control will have to be carefully evaluated. Before using any chemical substance, a careful evaluation of the needs and possible negative impacts will have to be conducted. All projects will have to comply with Law 274, on the Regulation and Control of Pesticides, Toxic, Dangerous and Other Similar Substances; as well as the Environmental and Social Standards. In case there are needed, pesticides shall be only procured from legal providers, with legalized and updated registries in the relevant Health, Environment and Agriculture institutions. The vendors shall also be able to receive empty packages, for correct disposal. No pesticide will be used unless their use is adjusted to the World Bank's General Guidelines on Environment, Health and Security, as well as international conventions and treaties. The IPM establishes a list of prohibited pesticides for the country.

Furthermore, the guideline specifies the criteria to be used when selecting a pesticide, such as having insignificant effects to human health, to be specifically targeted to the specific plague, have a minimal effect on biodiversity and environment, etc. If a sub-project identifies the need to implement pest control, the project will have to develop a Pest Management Plan, with the specific Annex provided in the IPM.

For the monitoring of the compliance with the ESMF and its instruments, including this Guidelines, a national safeguards commission will be established. Several regional safeguards commissions will also be established, which will have to conduct meetings once every three months. The results from these participative processes will be used to adjust and improve the implementation process of the ER Program and Bio-CLIMA.

The Integrated Pest Management Plan (42 pages) has been published on MARENA´s website since February 2020. The updated exhaustive Spanish version of the IPMP and can be acceded from the following link: http://www.marena.gob.ni/Enderedd/wp-content/uploads/2020/06/4-EAS3_Gu%C3%ADa-para-el-Manejo-de-Plagas-09062020.pdf

XII.6. ANNEX 6: Exclusion list

Any activity that could cause physical displacement to formal or informal occupants shall be excluded. No land taking will be financed, and no means will be used to acquire land. Any activity that would lead to involuntary taking of land was screened out in the ESMF. The ESMF has the flexibility to include new activities, not part of the original design, during projects' implementation. In this sense, the ESMF includes a process to screen/evaluate such activities to ensure that they will be implemented in a manner consistent with the environmental and social safeguard provisions of the document.

Any proposed Bio -CLIMA project measure that would fall within the exclusion list of the ESMF shall not be eligible, including: i) Purchase of land; ii) Activities carried out in relation to the granting of land titles that are under dispute; iii) Activities carried out in lands under dispute; iv) Activities that may promote involuntary physical and economic displacement; v) Activities adversely affecting indigenous and afro-descendant people or where communities have not been consulted and have provided their support; vi) Removal or alteration of any physical cultural property (includes sites having archeological, paleontological, historical, religious, or unique natural values); vii) Conversion, deforestation or degradation or any other alteration of natural forests or natural habitats including, among others, conversion to agriculture or tree plantations; viii) Activities related to illegal harvesting of timber and non-timber products for commercialization; ix) Purchase and use of formulated products that fall in World Health Organization classes IA and IB or formulations of products in Class II, if they are likely to be used by, or be accessible to, lay personnel, farmers, or others without training, equipment, and facilities to handle, store, and apply these products properly; x) Financing of elections or election campaigning; xi) Activities and crops implemented and/or cultivated with the overall purpose to produce and/or market alcohol; xii) Purchase of tobacco, alcoholic beverages, and other drugs; xiii) Purchase of arms or ammunition.

Following activities shall not be financed by the Project:

- Conversion, deforestation, degradation or any other alteration of natural forest or natural habitats, including, PA invasion or National Parks or private lands, land conversion for agriculture or tree plantation, amongst others.
- Activities in Protected Areas different from conservation or forbidden in the PA Management Plan.
- Activities that implies use or promotion of invasive species.
- Activities that promotes the conversion or degradation of critical habits and relevance cultural sites.
- Activities that involves negative impacts on land and natural resources traditionally owned or customary occupation,

- Activities that may cause displacement of Indigenous People, restrictions on land use or access to natural resources subject to traditional ownership or under customary use or occupation
- Activities on disputed lands
- Activities with or that may have significant impacts on Indigenous Peoples or Local Communities' cultural heritage that is material to the identity and/or cultural, ceremonial, or spiritual aspects of IP or Local Communities' lives
- Activities with potential to have negative impacts (due to its extension, permanence, intensity and magnitude) on critical habitats.
- Activities that can have negative impacts on Indigenous People and Afro-descendant, local communities, or that has not the general community support.
- Activities that promote or incite to invade state, municipal, communal or private lands.
- Activities that promote forced eviction and/or agrarian conflicts.
- Activities that involves allocation of disputed land.
- Seizure or alteration of tangible cultural resources (including archeological, paleontological, historical, religious and natural sites, which are of outstanding value)
- Financing of elections or electoral campaigns.
- Purchase of weapons or ammunitions.
- Purchase of pesticides (See annex of Banned pesticides on the Environmental and Social Management Framework).
- Planting of narcotics or crops devoted to alcoholic beverage production.
- Infrastructure projects that may promote conversion, deforestation, degradation or any other alteration into natural forest, natural habitat in the intervention zone or its influence zone, such as: opening roads, railway, construction of transmission line, heavy equipment, that may lead to forest or soil degradation or natural habitats.

XII.7. ANNEX 7: Biodiversity Action Plan

191. As described in Section V.3, the Caribbean Coast of Nicaragua is one of the 25 diversity hotspots in the world, due to a strategic position in the biological Mesoamerican corridor. Yet, the highest proportion of the territory presents modified habitats, presenting areas for cattle ranching and crops. In the area of the ER Program and Bio-CLIMA Project, 21 protected areas are included, representing 82% of the total amount of protected areas in the country.

192. The Biodiversity Action Plan15 (APBM) shall support optimal biodiversity management throughout the implementation of the project activities, promoting the integration of biodiversity and their ecosystem services, into the planning and execution of the proposed activities. This APBM follows the regulation established in Nicaragua's legal framework, as well as WB Environmental and Social Standard 6, on Biodiversity Conservation and Sustainable Management of Living Natural Resources.

193. The main objective of this instrument is to establish the general guidelines needed to assess the risks and impacts of the ER Program and Bio-CLIMA Project, and related projects, in biodiversity related matters. It includes tools and methods for contributing to the conservation, restoration and sustainable use of biodiversity resources. It prioritizes five lines of work:

- Protection, conservation and restoration through the inclusion of local stakeholders
- Sustainable use of biodiversity
- Reducing human impacts on species and ecosystems
- Strengthening local capacities for biodiversity management
- Support national priorities for conservation and sustainable use of biodiversity

194. As the ER Program and Bio CLIMA Project are not likely to generate significant adverse risks and impacts on biodiversity, the risks and impacts themselves are mostly temporary, predictable and/or reversible, and serious adverse effects are not expected. The effects of the Project on areas of high value or sensitivity are expected to be positive, given the mainly environmental conservation objectives of the project. Some examples of potential adverse risks and impacts biodiversity are related to the opening of new forest paths that can generate risks such as the opening of deforestation fronts, runoff, erosion, the removal of the vegetation, the loss of biodiversity due to the invasion of non-native species and environmental degradation due to canopy openings and potential increased risk of forest fires. All these risks and its corresponding mitigation measures are described in the Risks and Impacts Matrix Summary that has been developed and is included in Section IV.

195. In order to minimize and mitigate potential negative effects on biodiversity guidelines for the correct management of biodiversity shall be followed. All threats to biodiversity have to be considered before the beginning of the project activities (such as habitat loss, degradation, fragmentation, invasive exotic species, over exploitation, pollution, etc.). All negative effects will be avoided. If they cannot be avoided, measures will be implemented in order to reduce the risks to the minimum. If possible negative impacts to biodiversity are detected, a Biodiversity Management Plan will have to be included, revised and authorized by MARENA.

196. MARENA will be the responsible institution for providing information on safeguard compliance. The Program will implement a Monitoring, Report, and Verification System, inside a Safeguard Information System (SIS), which will be used for monitoring established indicators for the Environmental and Social Standards, as well as additional benefits. For the monitoring of the compliance with the ESMF and its instruments, including this APBM, a national safeguards commission will be established. Several regional safeguards commissions will also be established, which will have to conduct meetings once every three months. The results from these processes will be used to adjust and improve the implementation process of the ER Program and Bio-CLIMA Project.

197. In order to monitor the impact of the land use planning instruments, restoration models introduced by the Project and sub-projects to be financed on climate change adaptation, mitigation and biodiversity conservation in the CR, Bio-CLIMA Activity 3.2.1.5 will support biodiversity monitoring through indicator species in 10% of plots of the National Forest Inventory in the Caribbean Region. Expert support, training and methodological assistance and operational expenses will be provided to MARENA, INETER and the regional environmental authorities to improve their capacities. Bird monitoring will also be used as a biodiversity indicator. This monitoring will be performed by the General Direction of Natural Patrimony and Biodiversity of MARENA, together with local communities and park rangers. An exhaustive Biodiversity Action Plan (44 pages) has been published in Spanish on MARENA´s website since February 2020; its up-dated latest version and can be acceded at the following link: http://www.marena.gob.ni/Enderedd/wp-content/uploads/2020/06/6-EAS6_Gu%C3%ADa-para-el-Manejo-de-la-Biodiversidad-06062020.pdf

XII.8. ANNEX 8: Labor Management Procedures

The Guidelines for Labor Management Procedures (LMP) are included as an Annex of the Environmental and Social Management Framework (ESMF). The main objective of these guidelines is to establish the procedures in order to: 1) promote health and safety in the workplace; 2) promote a fair treatment, nondiscrimination and equal opportunities of project workers; 3) protect all the project workers, including vulnerable workers; 4) to prevent the use of all forms of forced labor and child labor; 5) support the principles of freedom of association and collective bargaining of project workers in a manner consistent with national law; 6) to provide project workers with accessible means to raise workplace concerns.

These Labor Procedures apply to all those employers and workers that maintain a labor relation with any activity of the Project, independently of the type and duration of the contract. All guidelines established in the LMP are based on national regulations and jurisdiction, as well as in the Environmental and Social Standard 2 of the World Bank "Labor and Working Conditions". The projects' coordinators will have to elaborate a Labor Management Guide included as an Annex in the LMP, in order to identify the main labor needs, and associated risks, as well as the necessary resources to respond to potential labor problems. This will be a dynamic document, elaborated during project on-set, revised and updated during execution and implementation. It will have to identify the number of workers in the project, the description of the project workers (age, women, migrants, etc.), vulnerable workers, an assessment of the main labor-related risks, the responsible personnel, terms and conditions, policies and procedures, contractors, community workers, and providers. MARENA, INAFOR, and the regional governments will be responsible for revising and monitoring the LMG. Furthermore, the Safeguards Commission will revise the evidence on the compliance with the established measures, which will be verified during project implementation support visits and events.

Each sub-project will have, and comply with, a Safety Plan. All enterprises/contractors, supervisors will be obliged to comply with this plan. A special team will be responsible for guaranteeing its compliance. Furthermore, all project activities will have to comply with the established Technical, Organizational Guidelines on Hygiene and Safety at Work, published by the Work Ministry, as well as the Law 539 on "Social Security Law". Nicaragua has a solid legal framework regarding labor conditions, safety and security, including Laws 290, 476, 185, 664, 618, 815, 539, 445, 757, and 337.

The LMP describes the potential adverse risks to the health of the beneficiaries and workers of the ER Program and Bio-CLIMA Project. In general, no severe risks are envisaged. However, the workers of the ER Program and Bio-CLIMA Project could present several risks associated to the project activities, which are described in the LMP, including physical risks (injuries and accidents,

car crashes, burns, fires, dehydration), chemical risks (use of pesticides and chemicals), biological risks (fungus, dirt, snake or insect bites), exclusion risks (gender discrimination), security-related risks (organized crime, socio political crisis, land tenure risks). Also, some diseases could be presented, such as pneumonia, rheumatism, ulcers, tuberculosis, and recently, COVID-19.

Additionally, Nicaragua is exposed to several natural disasters, such as earthquakes, volcanic eruptions, hurricanes, among others, that cause problems related to the availability and quality of water, problems with food, disease, damages, health problems, etc. Yet, the country has a solid legal framework that allows a multi-sectoral management of disaster risk. The National System for Disaster Prevention, Mitigation, and Attention has created a National Disaster Response Plan. MARENA will ensure that all beneficiaries of the ER Program and Bio-CLIMA Project have the necessary information regarding risk management and disaster administration. Furthermore, all projects will have to describe a Security and Emergencies Plan.

THE ESMF and LPM establish mitigation measures in order to deal with all potential risks and negative impacts. These include capacity building activities to promote individual work, occupational health and safety, labor risks, biodiversity protection, gender violence, nondiscrimination and vulnerable groups, and cultural patrimony. For all activities during the ER Project, no forced labor nor child labor will be accepted, all contracts will ensure work insurance of all of the workers, all workers must receive clear and comprehensible information on the job terms and conditions, and all employers will apply the principle of equity of opportunities and fair treat. No discrimination will be tolerated. Communication will have to be maintained in a comprehensible language and format.

According with the Guidance Note No 4 , the LPM assess the record and capacity of law enforcement and judicial authorities to respond appropriately and lawfully to violent situations. If there is social unrest or conflict in the project's area of influence, the Program Executing Entity should understand not only the risks posed to its operations and personnel, but also whether its operations could create or exacerbate conflict in order to avoid or mitigate adverse impacts on the situation and contribute to the improvement of security conditions around the project area. The LPM also describes a Grievance Redress Mechanism, in order to attend complaints from the workers, which will be available for all interested parts, which will contribute to avoid conflicts, attend complaints and suggestions, contribute to identify and solve potential problems, etc.

The exhaustive document of the Labor Management Procedure (65 pages) is published in Spanish on MARENAs website since February 2020, its latest version and can be accessed from the following link: http://www.marena.gob.ni/Enderedd/wp-content/uploads/2020/06/3-EAS2_Gesti%C3%B3n-de-Mano-de-Obra-09062020.pdf

XII.9. ANNEX 9: Guidelines for Forest Management

The main objective of these Guidelines is to assess the foreseen risks and negative impacts to forests, resulting from the ER Program and Bio-CLIMA Project activities related to forest restoration and management. The specific objectives are to: 1) protect and conserve forests throughout the project implementation area; 2) sustainable use of forests; and 3) strengthening local capacities for forest management.

The GFMP follows the specific norms and regulation established in Nicaragua's legal and normative framework for sustainable forest management and conservation. The Guidelines also complies with WB Environmental and Social Standard EAS6, on Biodiversity Conservation and Sustainable Management of Living Natural Resources. This document reflects the desired scenery for forest management throughout the implementation of the project activities, promoting the incorporation of a sustainable management in the planning and execution of the proposed activities.

The Project is not likely to generate a wide range of significant adverse risks and impacts on forests. The risks and impacts themselves are mostly temporary, predictable and/or reversible, and serious adverse effects are not expected. The effects of the Project on areas of high value or sensitivity are expected to be positive, given the mainly environmental conservation characteristic of the project. Some examples of potential adverse risks and impacts forests are related to the implementation of infrastructure for sustainable forest management such as the opening of new paths that could eventually pose risks, such as the opening of new deforestation fronts, runoff, the removal of the vegetation, environmental degradation due to canopy open and increased risk of fires. All these risks and mitigation measures are described in the Risks and Impacts Matrix Summary provided within the ESMF.

Any subproject including forest-related activities, a Forest Management Plan will have to be implemented, following the guidelines contained in the National Forestry Regulations, mainly Forest Law 464 on forest management and conservation, incentive and sustainable development of the forestry sector and the specific technical norms (NTON). Any of this sub-project will need to include a Sustainable Forest Management Plan (SFMP) to be presented and approved by the regional forestry authority and the National Forest Institute, INAFOR.

SFMPs have to follow the methodological guide containing all technical, legal, and administrative information, regarding forest use. INAFOR will be responsible for providing, monitoring and reporting all issues related to sustainable forest use. For forest use permits, in areas over 500 hectares, an environmental impacts assessment will be needed, and will have to be accredited by MARENA.

The GFMP includes information on restoration activities, specifications for reforestation, specific sylvicultural treatment recommendations, infrastructure, activities for forest protection

(including capacity building workshops), recommendations on forest pests and diseases, among other relevant information to ensure the sustainable use of forest resources.

This Framework will have to be applied in any subproject related to the use and management of forestry resources, considering the multi-functionality of forest ecosystems and biological diversity. The activities will have to be designed in order to provoke cero or minimum damage to the ecosystems.

For the monitoring of the compliance with the ESMF and its instruments, including this FMP, a national safeguards commission will be established. Several regional safeguards commissions will also be established, which will have to conduct meetings once every three months. The results from these reunions will be used to adjust the implementation process of the ER Program and Bio-CLIMA Project. The SIS will provide information on the compliance of safeguards during the development and implementation of the Program. It will also systematize all the information on social and environmental safeguards.

These extensive Guidelines for Forest Management in Spanish (40 pages) have been published on MARENA´s website since February 2020, its latest up-dated version and can be acceded from the following link: http://www.marena.gob.ni/Enderedd/wp-content/uploads/2020/06/7-EAS6-Gu%C3%ADa-para-el-Manejo-Forestal-09062020.pdf