



**GREEN
CLIMATE
FUND**

Meeting of the Board
9 – 13 November 2020
Virtual meeting
Provisional agenda item 11

GCF/B.27/02/Add.06/Rev.01

3 November 2020

Consideration of funding proposals - Addendum VI

Funding proposal package for FP146

Summary

This addendum contains the following seven parts:

- a) A funding proposal titled "Bio-CLIMA: Integrated climate action to reduce deforestation and strengthen resilience in BOSAWÁS and Rio San Juan Biospheres";
- b) No-objection letter issued by the national designated authority(ies) or focal point(s);
- c) Environmental and social report(s) disclosure;
- d) Secretariat's assessment;
- e) Independent Technical Advisory Panel's assessment;
- f) Response from the accredited entity to the independent Technical Advisory Panel's assessment; and
- g) Gender documentation.

It is noted that slight modifications have been made to part a) A funding proposal titled "Bio-CLIMA: Integrated climate action to reduce deforestation and strengthen resilience in BOSAWÁS and Rio San Juan Biospheres".

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Funding Proposal

Project/Programme title:	Bio-CLIMA: Integrated climate action to reduce deforestation and strengthen resilience in BOSAWÁS and Rio San Juan Biospheres
Country(ies):	Nicaragua
Accredited Entity:	Central American Bank for Economic Integration (CABEI)
Date of first submission:	<u>[2019/11/08]</u>
Date of current submission	<u>[2020/08/04]</u>
Version number	<u>[V.008]</u>



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Note to Accredited Entities on the use of the funding proposal template

- Accredited Entities should provide summary information in the proposal with cross-reference to annexes such as feasibility studies, gender action plan, term sheet, etc.
- Accredited Entities should ensure that annexes provided are consistent with the details provided in the funding proposal. Updates to the funding proposal and/or annexes must be reflected in all relevant documents.
- The total number of pages for the funding proposal (excluding annexes) **should not exceed 60**. Proposals exceeding the prescribed length will not be assessed within the usual service standard time.
- The recommended font is Arial, size 11.
- Under the [GCF Information Disclosure Policy](#), project and programme funding proposals will be disclosed on the GCF website, simultaneous with the submission to the Board, subject to the redaction of any information that may not be disclosed pursuant to the IDP. Accredited Entities are asked to fill out information on disclosure in section G.4.

Please submit the completed proposal to:

fundingproposal@gcfund.org

Please use the following name convention for the file name:

“FP-CABEI-Nicaragua-20200605”

A. PROJECT/PROGRAMME SUMMARY			
A.1. Project or programme	ProjectProject	A.2. Public or private sector	PublicPublic
A.3. Request for Proposals (RFP)	Not applicable Not applicable Not applicable Not applicable		
A.4. Result area(s)	<p>Mitigation: Reduced emissions from:</p> <input type="checkbox"/> Energy access and power generation: <input type="checkbox"/> Low-emission transport: <input type="checkbox"/> Buildings, cities, industries and appliances: <input checked="" type="checkbox"/> Forestry and land use: <p>Adaptation: Increased resilience of:</p> <input type="checkbox"/> Most vulnerable people, communities and regions: <input type="checkbox"/> Health and well-being, and food and water security: <input type="checkbox"/> Infrastructure and built environment: <input type="checkbox"/> Ecosystem and ecosystem services:		<p>GCF contribution:</p> <p><u>Enter number</u>% <u>Enter number</u>% <u>Enter number</u> <u>100</u> %</p> <p><u>Enter number</u>% <u>Enter number</u>% <u>Enter number</u>% <u>Enter number</u>%</p>
A.5. Expected mitigation impact	47.3 M t CO_{2eq} in 20 years	A.6. Expected adaptation impact	<p>51,100 Direct beneficiaries 614,721 Indirect beneficiaries</p> <p>0.8 % of population (direct beneficiaries/total population) 9.8 % of population (indirect beneficiaries/total population)</p>
A.7. Total financing (GCF + co-finance)	115,692,245 USD	A.9. Project size	Medium (Upto USD 250 million)
A.8. Total GCF funding requested	64,094,029 USD		
A.10. Financial instrument(s) requested for the GCF funding	<input checked="" type="checkbox"/> Grant 26,139,067 <input checked="" type="checkbox"/> Loan 37,954,962 <input type="checkbox"/> Guarantee <u>Enter number</u> <input type="checkbox"/> Equity <u>Enter number</u> <input type="checkbox"/> Results-based payment <u>Enter number</u>		
A.11. Implementation period	7 years	A.12. Total lifespan	20 years
A.13. Expected date of AE internal approval	<i>This is the date that the Accredited Entity obtained/will obtain its own approval to implement the project/ programme, if available.</i> 11/26/202011/26/2020	A.14. ESS category	Refer to the AE's safeguard policy and GCF ESS Standards to assess your FP category. AA
A.15. Has this FP been submitted as a CN before?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	A.16. Has Readiness or PPF support been used to prepare this FP?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
A.17. Is this FP included in the entity work programme?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	A.18. Is this FP included in the country programme?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
A.19. Complementarity and coherence	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		
A.20. Executing Entity information	Republic of Nicaragua, acting through its Ministries of Environment and Natural Resources (MARENA) and Finance and Public Credit (MHCP)		

A.21. Executive summary (approximately 1.5 pages)

1. Between the years 2005 and 2015 Nicaragua lost approximately 150,000 ha of tropical forests every year equivalent to 14.45 M t CO_{2eq}/a at a rate of 2.3%¹. Deforestation occurs mainly in the Caribbean Region² (CR) that covers 54% of the national territory, contains 80% (3.16 million ha) of Nicaragua's forestland and the majority of the nation's indigenous populations. The CR contains the BOSAWAS Natural Reserve in the Northeast³ and the Indio Maíz Biological Reserve in the Southeast⁴ which are important areas for the conservation of biodiversity and the livelihoods and cultures of indigenous and afro-descendant people. Within the core zones of these protected areas the deforestation rate between 2010 and 2015⁵ overtook the national rate reaching 2.7% annually. The main underlying causes for deforestation and forest degradation in the CR⁶ are the following: Demographic pressures caused by drought in the Pacific and Central Regions of Nicaragua and the expanding road system that have generated migration flows into the CR where "idle" forest-covered land has been abundant and institutional capacities to enforce environmental, land planning and forestry laws are weak. These factors combined with low land prices, undervaluation of standing forests, lack of access to technical and financial support and responsible markets have driven settlers to convert forests into extensive pastures with the aim to 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.⁷

2. To revert this vicious cycle in such a vast territory that covers more than half of the entire country an investment proportionate to the task at hand of approximately US\$115.7 million will have to be mobilized. Nicaragua has decided to implement its National REDD+ Strategy through a programmatic approach: GCF (22.59%) and GEF-7 (7.16%) grant finance, together with new public debt from CABEL (16.42%%) and the GCF (32.81%%) shall be invested through Bio-CLIMA in 7 years to unlock Emission Reduction Result-Based Payments (RBP) within the Emission Reduction Program (ER-P) for the Caribbean Region that has been approved by the Forest Carbon Partnership Facility (FCPF)⁸. RBP's of US\$ 24.3 million shall co-finance 21.02%% of Bio-CLIMA's budget until year 7, which are a fraction of US\$ 236.5 million REDD+ RBPs that could be leveraged from reduced emissions until year 20 in a conservative scenario⁹, as result of the paradigmatic change Bio-CLIMA aims to create, scale-up and sustain. This transformative vision shall be accomplished through a three-pronged strategy of mutually reinforcing interventions consisting of focalized investments for sustainable landscape restoration and management, the creation of an enabling investment environment, and strong local capacities for territorial governance and law enforcement with the supporting tools and instruments needed. These are organized within the following three project components.

3. **Component 1 "Conserving and producing for life"**: 81.64% of Project budget (US\$ 94,455,226) will be on-site "hard" investment to support indigenous communities and individual families with the means, capacities and technical assistance needed to improve their livelihoods through sustainable land-use intensification, landscape restoration and forest conservation. Participatory land-use, restoration- and conservation zoning, business planning and market access for the individual family, producer group and indigenous community will be provided to bring to scale field proven cocoa agroforestry and sustainable silvo-pasture productive landscape restoration and forest conservation models. These shall be implemented at the deforestation fronts in and around the core areas of BOSAWAS and Indio Maíz in order to form a protective bow around them; as also in forest rich areas in indigenous territories in the Waspam and Prinzapolka areas where deforestation pressures are the highest (Maps 1 - 3). Ecosystem services on 20,994 ha of degraded pasture and rangeland will be restored through sustainable cocoa-agroforestry and silvo-pastoral systems; 40,215 ha of micro-catchments reforested, and 541,826 ha of natural forest land conserved through sustainable forest management and restoration; benefitting 51,100 women, men and young people directly.

4. **Component 2 "Good governance"**: 10.29% of Bio-CLIMAs' budget (US\$11,905,361) will be invested to create an enabling environment that offers clear and simple norms, efficient local institutions and transparent governance schemes. Public environmental institutions in the CR will be provided with equipment and capacities to support sustainable land use planning and environmental/forest law enforcement. The 23 Indigenous Territory Governments (GTIs) of the CR shall use the budget transferred to them to improve the oversight and control of their territories covering and area of 1.7 million hectares. Complementarily, Bio-CLIMA will facilitate the public-private dialogue processes involving all relevant actors to create the investment facilities (Trust Funds) to promote and bring to scale the sustainable

¹ National Emission Reference Level: "Niveles de Referencia de las Emisiones Forestales. República de Nicaragua. MARENA 2020" Updated to July 2020. https://redd.unfccc.int/files/nref_nicaragua_vf_limpio_14072020.pdf (pages 19 and 41)

² The Caribbean Region of Nicaragua covers an area of 70,237 km² equivalent to the land areas of Belgium and the Netherlands together: It includes the Alto Wangki y Bocay Region, the North (RACCN) and South (RACCS) Autonomous Regions; and the Departamento de Río San Juan.

³ The BOSAWAS Natural Reserve is part of the Biosphere which includes also the other Protected Areas of Cerro Kilambé, Cola Blanca, Banacruz, Macizo de Peñas Blancas y Pis Pis; and the National Park "Cerro Saslaya".

⁴ Indio Maíz is part of the San Juan Biosphere which includes: Monumento Histórico "Fortaleza La Inmaculada Concepción", Monumento Nacional "Archipiélago de Solentiname", Refugios de Vida Silvestre (Río San Juan y Los Guatuzos), Reserva Biológica "Indio Maíz" and three protected areas (Cerro Silva, Punta Gorda, Serranía de Yolaina).

⁵ Banco Mundial; 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.

⁶ The main causes for deforestation and forest degradation have been thoroughly assessed through: Study of the causes of deforestation and forest degradation in Nicaragua. ", Ministry of the Environment and Natural Resources. MARENA 2017. 125 pp.)

[http://www.marena.gob.ni/Enderedd/wp-content/uploads/Fases/2.%20Estudio%20Causas%20Desforestaci%C3%B3n%20y%20Degradaci%C3%B3n%20Forestal%20\(English\).pdf](http://www.marena.gob.ni/Enderedd/wp-content/uploads/Fases/2.%20Estudio%20Causas%20Desforestaci%C3%B3n%20y%20Degradaci%C3%B3n%20Forestal%20(English).pdf)

⁷ ENDE REDD+. MARENA 2018. Note: This area is equivalent to half the territory of Switzerland, or as big as the Republic of El Salvador.

⁸ <http://www.marena.gob.ni/Enderedd/etapas/programa-de-reduccion-de-emisiones/> Caribbean Coast Emission Reduction Program (ERP) Nicaragua. Approved by the 19th Carbon Fund Meeting of the "Forest Carbon Partnership Facility" (FCPC) / World Bank, through resolution CFM/20/2019/4, Washington DC, between 8 and 11th July 2019. https://www.forestcarbonpartnership.org/system/files/documents/CF20%20Resolution%204%20Endorsement%20of%20Nicaragua%20ERP%20Program_FINAL.pdf

⁹ Emission reduction estimates are very conservative, considering the achievement of only 50% of emission reduction targets estimated in the ERP (please see FP Table 8).

landscape restoration and forest conservation models, and to simplify norms and procedures to reduce transaction costs for natural resources sustainable management, use and market access. 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 deforestation fronts.

5. Component 3 “Capacity development”: To transform a sectoral land use approach into an integrated and sustainable farm, landscape and ecosystem restoration approach, 7.25% of the Project budget (US\$8,382,836) will be invested in the CR through a major training and capacity-building effort: Technical personnel from public institutions and extension services, farmers and beneficiaries will be trained in topics including integrated land use management and planning (LUMP), territorial development planning (TDP), and the implementation and maintenance of productive landscape restoration and forest conservation modules, business planning, efficient administration of local organizations, quality management and market access, environmental legislation and norms, among others. Environmental information and management systems to generate data and intelligence to support law enforcement shall be put in place which include a Deforestation and Forest Fire Early Warning System (SAT) and a Timber Tracking System (TTS). The land use changes monitoring system operated by MARENA within the REDD+ M-MRV System will also be strengthened, up-dated and linked to the National Forest Inventory (NFI).

6. This very ambitious plan to shift the prevailing development paradigm, which is based on extensive natural resources and landscape exploitation, towards climate smart, sustainable development can only be reached if a deep transformation of values within the society is achieved. Bio-CLIMA will inform political decision makers at regional and local level and create environmental awareness through an intensive public communication campaign and an education program for schools and universities.

7. BIO CLIMA’s comprehensive intervention strategy is designed to go beyond a one-off project: its climate resilient productive landscape restoration and forest conservation models have been field tested and have the potential to be replicated in the entire CR. Existing National Funds will be capitalized and strengthened, and new Investment Facilities managed as Trust Funds by private banks with the participation of the private sector will be set up with Project support to provide for sustainability and scale. Additional technical capacities and strengthened institutions will serve to replicate and expand the project approach. Although Bio-CLIMA will primarily have a climate change mitigation impact, the Project will additionally generate important climate change adaptation co-benefits. Its outcomes, outputs and activities contribute mainly 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” (47.3 Mt CO_{2eq.} in 20 years). In addition Bio-CLIMA shall generate adaptation co-benefits on GCF Result Areas A.1 “Increased resilience and enhanced livelihoods of the most vulnerable people” (51,100 direct beneficiaries, 0.8%/pop., 614,721 indirect beneficiaries 9.8%/pop.) mainly indigenous, afro-descendant families living in marginalization and poverty, contributing also to increased intercultural¹⁰ gender equality; and to A.4 “Improved resilience of ecosystems and ecosystem services (coverage/scale 2.32 million ha of ecosystems protected¹¹).

¹⁰ “Interculturality” means ‘relationship between cultures’, and refers to making the best use of each culture, so there will be reciprocity, knowledge, appreciation, understanding, interaction, participation, horizontality, respect and solidarity with other cultures. See Universidad de las Regiones Autónomas de la Costa Caribe Nicaragüense (URACCAN), 2008, Guía de investigación intercultural de la URACCAN, Bilwi: URACCAN.

¹¹ Bio-CLIMA will directly improve the resilience of ecosystem and ecosystem services of an area equivalent to the total national land area of Belize, which is 2,296,500 ha.

B. PROJECT/PROGRAMME INFORMATION

B.1. Climate context (max. 1000 words, approximately 2 pages)

8. The Caribbean Region (CR) constitutes more than half of the national territory and contains approximately 64% of the country's forests (2.49 M ha). It is inhabited by only 15% of national population (12.7 inhabitants/km²) most (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 mining¹². 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 it suffered a mean deforestation of 90,854 ha of tropical forests every year equivalent to emissions of 14.17 Mt CO_{2eq.}/year – and additional anthropogenic forest degradation of 16%, equivalent to an average of 2.43 M t CO_{2eq.}/year¹³. Most of these areas have been converted into pastureland, crops or to secondary vegetation “*tacotales*”, which increased in area 30% and 53% respectively.

9. The main underlying causes for deforestation and forest degradation in the CR have been thoroughly assessed¹⁴ recently for both, Nicaragua's REDD+ Strategy (2018-2040), and the Emissions Reduction Program (ERP) for the Caribbean Coast of Nicaragua: 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 where “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 period¹⁵.

10. 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 CR¹⁶. 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).

11. 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

¹² Agriculture contributes with 17% to Nicaragua's GDP and represents more than 70% of the country's total exports.

¹³ Emissions Reduction Program Nicaragua. FCPF July 2019. http://www.marena.gob.ni/Enderedd/wp-content/uploads/2019/11/ERP_INGLES_310719_VF.pdf (pages 22 and 185)

¹⁴ Study of the causes of deforestation and forest degradation in Nicaragua. “The problem of forest carbon inventories and the strategic focus of the ENDE-REDD+ Program to attend these causes on a national level”. Project Support for Strategy Preparation for the Reduction of Emissions by Deforestation and Forest Degradation (ENDE-REDD+) MARENA 2017. 125 pp.) [http://www.marena.gob.ni/Enderedd/wp-content/uploads/Fases/2.%20Estudio%20Causas%20Desforestaci%C3%B3n%20y%20Degradaci%C3%B3n%20Forestal%20\(English\).pdf](http://www.marena.gob.ni/Enderedd/wp-content/uploads/Fases/2.%20Estudio%20Causas%20Desforestaci%C3%B3n%20y%20Degradaci%C3%B3n%20Forestal%20(English).pdf)

¹⁵ Strategy to reduce emissions from deforestation and forest degradation. MARENA 2017. [http://www.marena.gob.ni/Enderedd/wp-content/uploads/Fases/13.%20Estrategia%20Nacional%20ENDE%20\(English\).pdf](http://www.marena.gob.ni/Enderedd/wp-content/uploads/Fases/13.%20Estrategia%20Nacional%20ENDE%20(English).pdf)

¹⁶ Annex 2.b: CIAT/FAO 2019: Business as Usual and Feasibility Study for Landscape Restoration through Sustainable Silvo-pastures within the Bio-CLIMA Project.

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.

12. 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%¹⁷. 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.

13. 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 CH₄ and N₂O 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%)¹⁸

14. The CR contains the BOSAWÁS Biosphere Reserve¹⁹ in its northwest, while the Río San Juan Biosphere²⁰ which stretches from the Southeast of the RACCS into the *Departamento Río San Juan* and contains the *Indio Maíz* Biological Reserve. These areas 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 tree, bird, and insect species than all of Europe. Within these two protected areas forest cover diminished by 2.7% between years 2010 and 2015²¹, 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 MARENA²². Deforestation also threatens the regular supply of water for rural livelihoods, and the permanence and biological connectivity of very important natural forest lands in indigenous territories in the *Waspam* and *Prinzapolka* forest areas.

¹⁷ TechnoServe, 2017. In ER-PD, *ibid*.

¹⁸ 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.

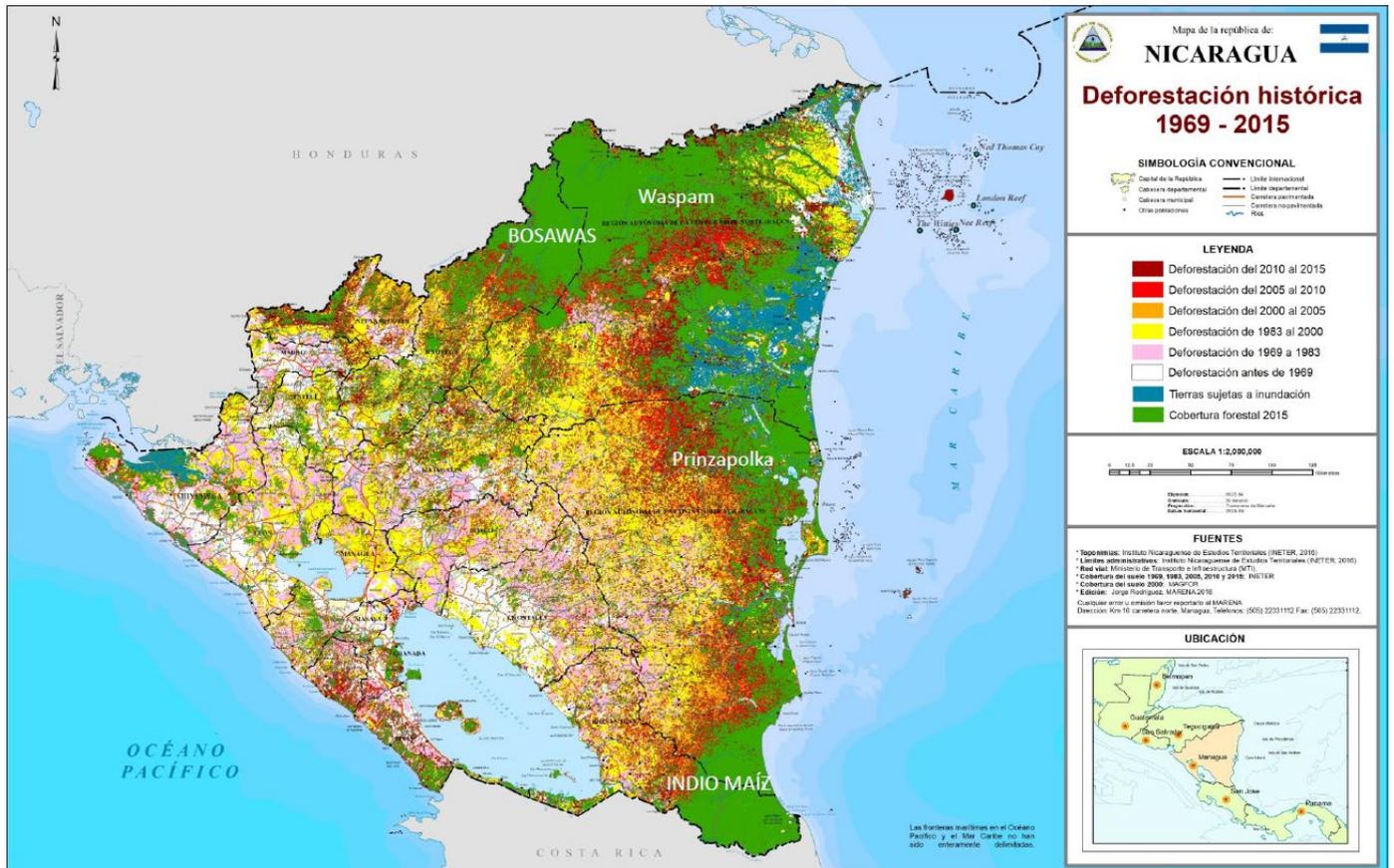
¹⁹ Includes six Natural Reserve Areas (BOSAWAS, Cerro Kilambe, Cola Blanca, Banacruz, Macizo de Peñas Blancas y Pis Pis) and the National Park "Cerro Saslaya".

²⁰ Includes: 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).

²¹ 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.

²² MARENA 2018 Priorización de áreas de intervención del Proyecto BIO-CLIMA, Noviembre 2018.

Map 1: Deforestation years 1969 – 2015, and location of Bio-CLIMA project areas: BOSAWAS and Indio Maíz protected areas; Waspam and Prinzapolka forest management and restoration areas



15. The population of the CR was estimated at 1.1 million inhabitants (2013)²³ 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 Miskito (72%) and Mestizo (22%), while in the RACCS most people are Mestizo (81%) and Creole (8.5%). 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 communities²⁴, 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. In 2018 in Nicaragua, the female population was the majority, with 3,278,837 women, which represents 50.71% of the total, compared to 3,186,676 men who are 49.29%. While gender differences and disadvantages have been reduced steadily in Nicaragua inequality between men and women persists: Nicaragua ranks at place 55 of 129 countries with a gender equality index of 60.4²⁵. Employment rate (+13 years of age) is much higher for rural men (86.6%) than for rural women (62%)²⁶. Nicaragua is part of a select group of 10 countries worldwide that have closed the gender gap by more than 80%.

²³ In Caribbean Coast Emission Reduction Program Document (ER-PD) submitted to the Forest Carbon Partnership Facility FCPC. Carbon Fund. Nicaragua, May 29, 2018

²⁴ Benefit Sharing Plan of the REDD+ Emission Reductions Program. MARENA. (version February 4, 2020)

²⁵ Equal Measures 2030, Harnessing the power of data for gender equality, Introducing the EM2030 SDG Gender Index, Retrieved from: https://www.equalmeasures2030.org/wp-content/uploads/2019/07/EM2030_2019_Global_Report_English_WEB.pdf on 07/08/2019

²⁶ Atlas de las mujeres rurales de América Latina y El Caribe. FAO, 2017.

16. 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 titled²⁷. While in some indigenous territories there is the presence of non-indigenous families that have settled and live there, this does not affect 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 community²⁸. 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. Nevertheless, due to strong migration pressure from the western part of the country, encroachment into indigenous territories by colonists and land conflicts occur, exacerbating cultural and gender inequalities, since the presence of local public institutions and the rule of law is still weak. Although the Law of Agrarian Reform from 1981 of Nicaragua was a pioneer in recognizing equal rights for women and men as its beneficiaries the relation of women to men that was granted land titles was 10 to 90. This relation improved slightly during the Agrarian Land Titling Program of the nineties but improved a lot after the joint action taken by UNAG/INIM in 1995 where a rate of 31% in favor of women could be achieved. At a national level the percentage of women that owned the land or had other form of land access was 19.9% in the year 2005. In order to contribute to development, it was proposed in 2015 to have Law No. 717, Law Creating the Fund for the Purchase of Land with Gender Equity for Rural Women, setting forth the right to property, equality and the right to decent housing. Likewise, it is the official government policy that in the process of legalizing the property, free titling with gender equality is guaranteed. Yearly they are more families headed by women; currently in rural areas 26% and in urban areas 46.7%²⁹.

17. A recent survey undertaken on 359 non-indigenous settler families living on the deforestation front around BOSAWAS³⁰ 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 agreements, and innovative financial instruments at high concessionality and grants, if the problem of deforestation and poverty reduction is to be tackled.³¹

18. Poor level of organization of the cocoa sector hinders its effective development. While three investors have introduced better quality plants in the region, most small producers³² are not trained for running business, and their organization into cooperatives or association is limited. It is necessary to develop the collection and processing network in the region, to improve the quality of the cocoa and its market access. Additionally, the producers do not have access to improved genetic material which results in low productivity. Technical assistance to producers' families is insufficient. Most of the producers are not properly trained on technical aspects, production costs and knowledge of the cocoa business (especially production costs). Approximately 30% of the cocoa plantations that exist in the CR are unproductive areas, poorly planned and old, and suffer of pests and diseases, which is why production currently decreased by 25-30% (Nicaraguan Cocoa Sector Commission, APEN, SDC, 2018). It can also be added that the producer does not know management methods and products to combat *Monilia* and black pod diseases, the latter being the most problematic. In the same way, the plantation is managed

²⁷ Information about the tenure of these remaining 2% is unclear.

²⁸ 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.

²⁹ INIDE 2019

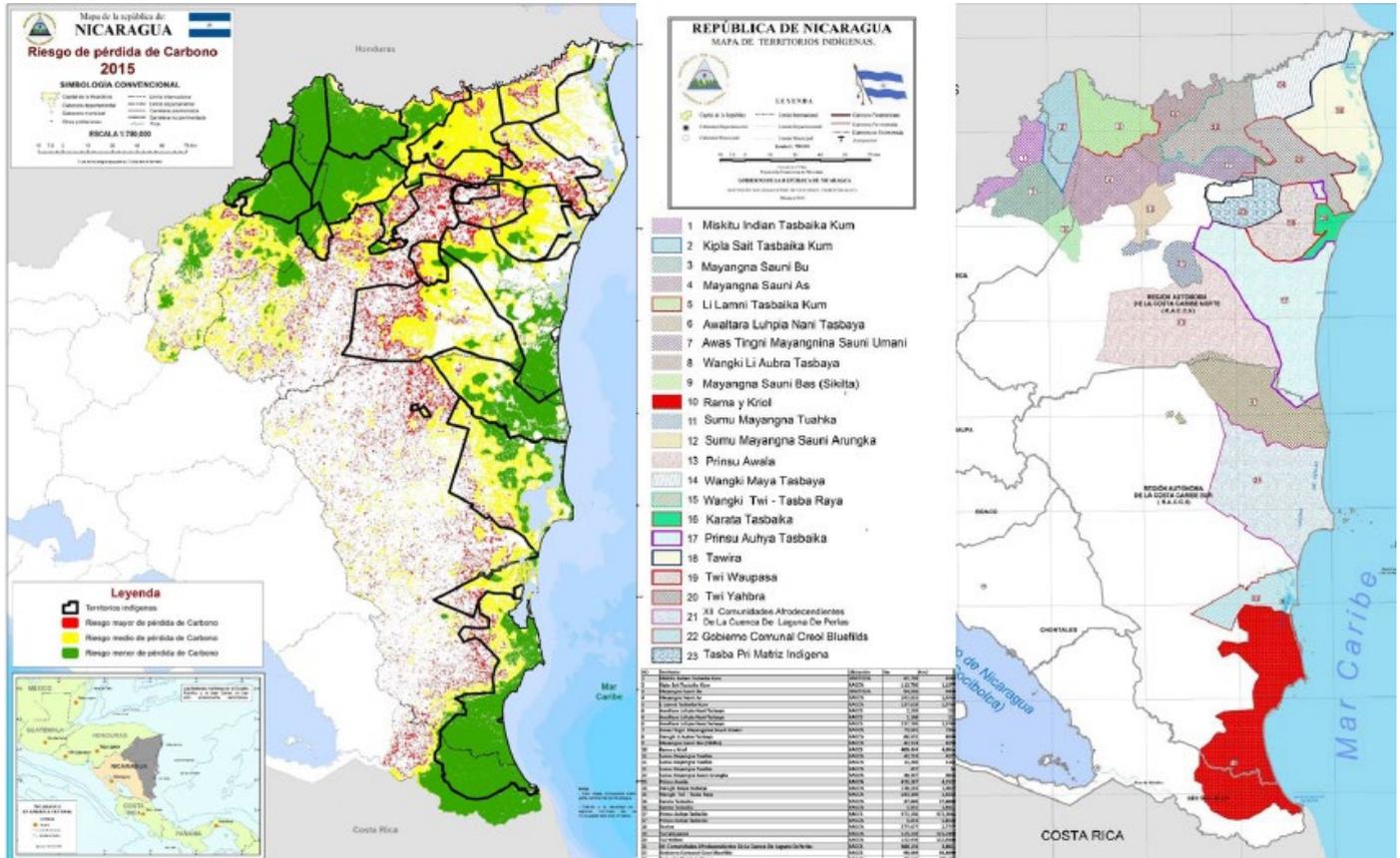
³⁰ Duriaux Chavarría JY, 2017. Cornell University Ornithology Lab 2017. Improving smallholder's livelihoods through reforestation around BOSAWAS Reserve, Nicaragua.

³¹ Since 2018 Nicaragua is implementing the Second Land Administration Project "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 region.

³² The term "producer" is commonly used in Nicaragua as a synonym to "farmer"

with a minimum investment due to the absence of technical and market assistance, and financing mechanisms and products appropriate to the sector.

Map 2-a: Risk of loss of forest carbon (left panel-red highest) and Communal Indigenous Territories.



CLIMATE RATIONALE

19. 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 impact mostly the CR of Nicaragua, caused damage to infrastructure, displaced people from their homes, and produced losses to the agriculture sector. In 1998 Hurricane Mitch hit the CR of Nicaragua causing losses of US\$1.3 billion, of which US\$244.6 million was in the agriculture sector. Many of the 162,000 people who suffered significant damages from Hurricane Felix in 2007 have not yet recovered³³. Most recently, in November 2016 Hurricane Otto hit the Río San Juan Biosphere damaging and defoliating severely 22% of the area.

20. Nicaragua is within the ten most vulnerable countries and ranks 6th in the Climate Risk Index rank from 182 countries³⁴. Family farming is particularly vulnerable to climate risk: it encompasses most 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

³³ 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.

³⁴ Germanwatch. 2019. Global Climate Risk Index 2019, Available online at: <https://germanwatch.org/en/download/16411.pdf>.

agricultural production, their output value comprises 89 percent of the total. Their relevance for food security is unquestionable. Family farms contribute an estimated 60 percent of agricultural GDP from production of basic grains (maize, rice, beans, and sorghum) and livestock³⁵. In 2001, one of the most severe droughts on record caused losses of US\$49.1 million, of which US\$41.4 was in agriculture³⁶. Aridity is projected to rise between 10 and 25% in Central Nicaragua in the coming 20 years³⁷. These climate anomalies affect farmers from the dry western and central region of Nicaragua severely, causing migration pressures to the CR impacting on indigenous territories, natural forests and ecosystems. Although the CR has a tropical rainforest climate with average rainfall above 2000mm/year, climate anomalies causing longer periods of draught, combined with reduced water regulation from deforested micro-catchments are increasingly affecting the resilience of vulnerable livelihoods in the Project Region.

21. Future climate scenarios³⁸ for the Caribbean Region forecast a temperature rise of 0.7 °C for the period 2010-2039, and increase in number of days where maximum temperature will surpass 35 °C. The rates of temperature increases are significantly higher in deforested areas, more than 50% higher than average temperature changes in tropical areas³⁹. 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 projected temperatures will increase well above the current suitability range (18–28 °C) for coffee production Bio-CLIMA will support farmers and communities to adapt to the changing climate supporting the transition from coffee towards cocoa cultivation, as a promising alternative crop with higher heat tolerance within agroforestry systems⁴⁰.

22. Rising temperatures will impact on the wellbeing and productivity of livestock, negatively impacting family farmers that depend on them to sustain their livelihoods. Bio-CLIMA shall promote the introductions of trees in Sustainable Silvo-pastoral Systems to provide shade and the regulation of water flows, improving the provision of ecosystem services to increase livelihood resilience of vulnerable family farmers and communities.

23. Finally, an increase of 10% in dry days in the Caribbean Region is predicted for the period 2010-2039, which will affect seasonal water availability for human populations and animals at micro-catchment level. Therefore the restoration and conservation of forest at farm level and landscape level will increase the resilience of ecosystem services to secure the wellbeing and the resilience of livelihood of the local population.

³⁵ Agriculture in Nicaragua: Performance, challenges and options. World Bank, IFAD, Cooperación Suiza. November 2015.

Note: The authors include in the concept of “family farming” all types of farms, only excluding the agro-industries.

³⁶ Agriculture in Nicaragua: Performance, challenges and options. World Bank, IFAD, Cooperación Suiza. November 2015.

³⁷ Aridity actual (annual mean 1981-2010) Time Period 2011-2040. Climate Information. <https://climateinformation.org>

³⁸ Atlas de Escenarios Climáticos de Nicaragua hasta el año 2080. INETER. 2017. Proyecto “Desarrollo de capacidad adaptativa para el Cambio Climático en el sector transporte”. Ministerio de Transporte e Infraestructura, 2015.

³⁹ Gourdj S; Läderach P; Martínez Valle A; Zelaya Martínez C; Lobell D. 2015. Historical climate trends, deforestation, and maize and bean yields in Nicaragua. *Agricultural and Forest Meteorology* 200:270–281.

⁴⁰ Läderach P; Martínez Valle A; Castro N. 2012. Predecir el impacto del cambio climático sobre las áreas de cultivo de cacao en Nicaragua. Managua: International Center for Tropical Agriculture (CIAT).

B.2. Theory of change (max. 1000 words, approximately 2 pages plus diagram)

24. Bio-CLIMA is programmatically embedded within the Theory of Change of the National REDD+ Strategy “ENDE REDD+⁴¹, for which the causes of deforestation and forest degradation, and the major barriers for REDD+ were thoroughly assessed during the Readiness Phase⁴².

25. It was determined, that the structural underlying causes for deforestation and forest degradation in the CR are the demographic pressures caused by droughts in the Pacific and Central Regions of Nicaragua, the expanding road system that have generated migration flows into the CR where “idle” forest-covered land has been abundant, poverty, insufficient and weak institutional capacities to enforce environmental, land planning and forestry laws. These factors combined with low land prices, undervaluation of standing forests, lack of access to technical and financial support and lack of access to responsible markets, have driven settlers to convert forests into extensive pastures, often encroaching into indigenous territories. The main direct vectors for the deforestation identified in the project area are extensive cattle farming and agriculture.

26. The Theory of Change of the ENDE REDD+ includes 37 action lines (AL) for REDD+ which are grouped under the following six pillars:

- Strengthening awareness-raising, education, communication and the fostering of values and information related to the protection of Mother Earth, considering the territorial identity and cosmo-vision of indigenous and Afro-descendant peoples (7 AL)
- Strengthening the national, regional and local coordination and building capacities of governments for the management of land use and natural resources, in accordance with the laws and policies on forests, environment, agriculture and energy (5 AL)
- Provide incentives for the protection, conservation and restoration of landscapes and biological corridors through afforestation, reforestation and natural regeneration in the Caribbean Coast region as well as the Pacific, Central and Northern regions (8 AL)
- Increasing sustainable and low-emission agro-forestry production, as well as the incomes of producers and number of jobs (7 AL)
- Encouraging investments and strengthening forestry and agricultural value chains with a focus on sustainable and low- emission markets, which value sustainability and reduced deforestation (6 AL)
- Strengthening climate change adaptation initiatives in territories of indigenous and afro-descendant peoples of the Caribbean Coast, the Pacific, Central and Northern regions (4 AL)

27. Bio-CLIMAs’ project activities are fully aligned and match the action lines that have been established by the ENDE REDD+ strategy which are relevant for the Project Region. Bio-CLIMA’s 42 activities can be clustered and summarized within the following 11 groups:

- Assist producers and indigenous communities to formulate LUMPs, TDPs with business plans: Activities 1.1.1.1 – 1.1.1.3
- Facilitate landscape restoration / forest conservation agreements between settlers and Indigenous Communities: Activity 1.1.1.4

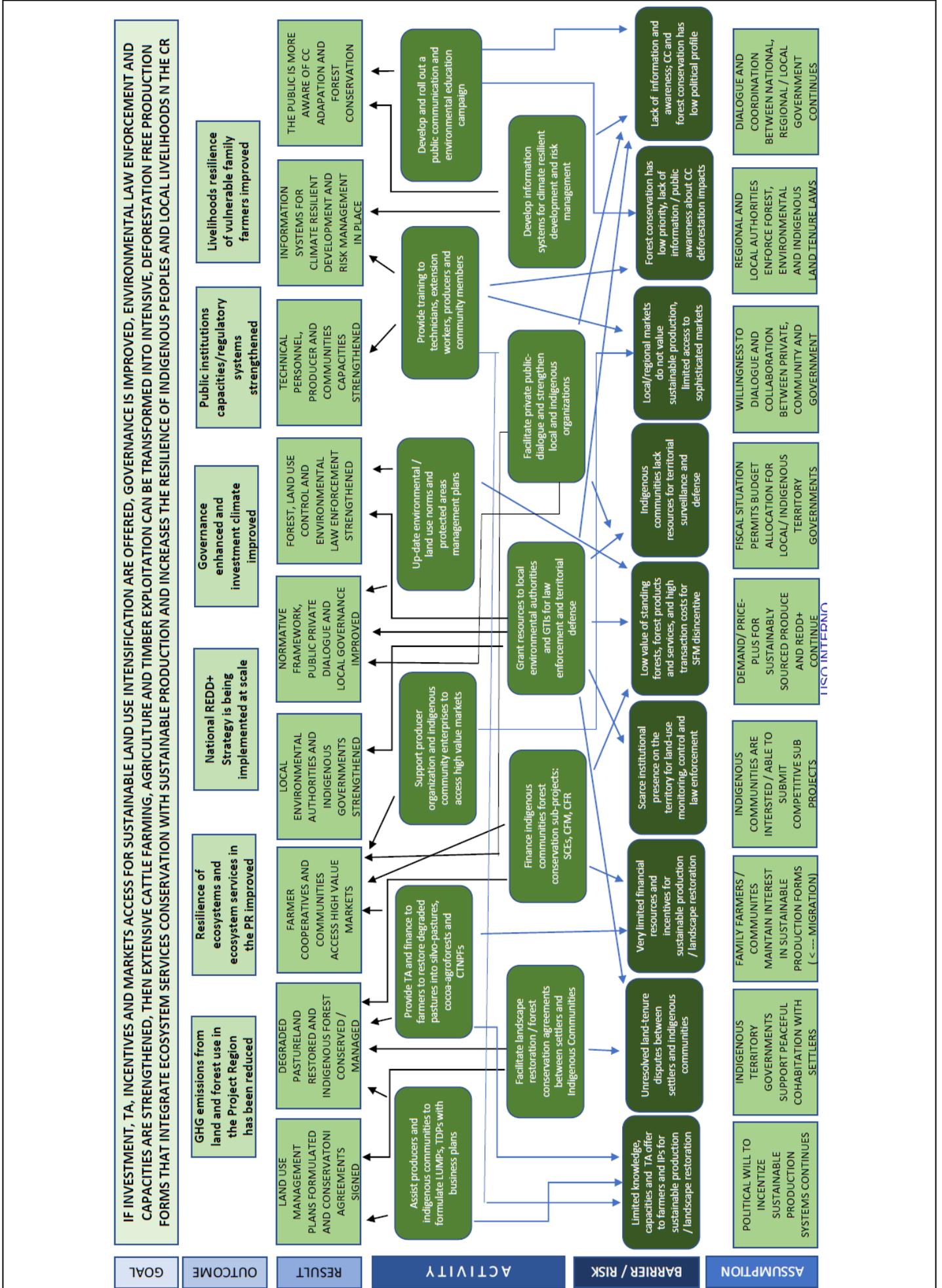
⁴¹ Strategy to reduce emissions from deforestation and forest degradation. MARENA 2017. [http://www.marena.gob.ni/Enderedd/wp-content/uploads/Fases/13.%20Estrategia%20Nacional%20ENDE%20\(English\).pdf](http://www.marena.gob.ni/Enderedd/wp-content/uploads/Fases/13.%20Estrategia%20Nacional%20ENDE%20(English).pdf)

⁴² Study of the causes of deforestation and forest degradation in Nicaragua. “The problem of forest carbon inventories and the strategic focus of the ENDE-REDD+ Program to attend these causes on a national level”. Project Support for Strategy Preparation for the Reduction of Emissions by Deforestation and Forest Degradation (ENDE-REDD+) MARENA 2017. 125 pp.) [http://www.marena.gob.ni/Enderedd/wp-content/uploads/Fases/2.%20Estudio%20Causas%20Desforestaci%C3%B3n%20y%20Degradaci%C3%B3n%20Forestal%20\(English\).pdf](http://www.marena.gob.ni/Enderedd/wp-content/uploads/Fases/2.%20Estudio%20Causas%20Desforestaci%C3%B3n%20y%20Degradaci%C3%B3n%20Forestal%20(English).pdf)

- Provide technical assistance and finance to farmers to restore degraded pastures into silvo-pastures, cocoa-agroforests and close-to-nature planted forests (CTNPFs): Activities 1.2.1.1 – 1.2.1.4
- Finance indigenous communities forest conservation, management and restoration sub-projects (SCEs, CFM, CFR): Activities 1.2.2.1 – 1.2.2.3
- Support producer organization and indigenous community enterprises to access high value markets: Activities 1.2.3.1 – 1.2.3.3
- Grant resources to local environmental authorities and Indigenous Territory Governments (GTIs) for forest law enforcement and territorial defense: Activities 2.1.1.1 – 2.1.1.3; 2.2.2.1 – 2.2.2.3
- Up-date environmental / land use norms and protected areas management plans: Activities 2.1.2.1 – 2.1.2.2
- Facilitate private public-dialogue and strengthen local and indigenous organizations: Activities 2.1.3.1 – 2.1.3.2; 2.2.1.1 – 2.2.1.3
- Provide training to technicians, extension workers, producers and community members: Activities 3.1.1.1 – 3.1.2.2
- Develop information systems for climate resilient development and risk management: Activities 3.2.1.1 – 3.2.1.7
- Develop and roll out a public communication and environmental education campaign: 3.3.3.1 and 3.3.3.2

28. As illustrated in the Theory of Change diagram below, these activities shall contribute to overcome the main barriers and risks for REDD+ that have been identified, and shall produce the 13 project outputs that have been summarized in the diagram, and the outcomes needed to significantly contribute to the Project objective of “Transforming extensive cattle farming, agriculture and timber exploitation into more intensive deforestation-free production forms that integrate ecosystem services conservation with sustainable production that increases the resilience of indigenous peoples and local livelihoods in the Caribbean Region of Nicaragua”.

29. Bio-CLIMA shall contribute 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”; and additional adaptation co-benefits under GCF Result Areas A.1 “Increased resilience and enhanced livelihoods of the most vulnerable people”, and A.4 “Improved resilience of ecosystems and ecosystem services, as can be seen from the summarized graph that illustrates the Paradigm Shift diagram presented on the following pages.



USO INTERNO

Bio- CLIMA PARADIGM SHIFT

Transform extensive cattle ranching, agriculture and timber exploitation that causes deforestation and forest degradation into sustainable, more intense, deforestation-free production forms that integrate ecosystem and ecosystem services conservation with production, in deforestation hot-spots of the Caribbean Region of Nicaragua.

FUND LEVEL IMPACT RESULTS

M.4 Reduced emissions f. land use, deforestation, forest degradation and through sust. management of forests and conservation and enhancement of forest carbon stocks

OUTCOMES

M.9 Improved management of land or forests areas contributing to emissions reductions (ha)

OUTPUTS

C 1. Conserving and producing

- (Number) of sustainable land-use management (LUMP) and territorial development (TDP) plans formulated
- (Area ha) of pastures and degraded land restored
- (Area ha) of natural forests conserved and restored
- (Number) of producer organizations and communities have access to high value markets

C 2. Good governance

- (Number) of environmental authorities of the Caribbean Region strengthened
- (Number) of public policies, instruments and tools updated
- (Number) of dialogue mechanisms and roundtables strengthened
- (Number) of producer organizations / associations created or strengthened
- (Number) of indigenous territories authorities / governance mechanisms strengthened
- Forest use and land use change control systems strengthened

C 3. Adaptive capacity development

- (Number) of technical personnel from extension services, local promoters and innovative producers (FIIT) trained
- (Number) of producers trained
- (Number) of control and monitoring systems strengthened and operative (incl.-LULUC-MRV-System, Timber Tracking, others)
- Communication strategy and education program implemented
- Public capacities for Project management, monitoring and evaluation strengthened

ECONOMIC /PRODUCTIVE BARRIERS

- Limited knowledge, capacities, financial resources, incentives and TA to invest in more intensive sustainable production methods by producers
- Local/regional markets do not recognize quality/sustainable production and limited access to more demanding/sophisticated markets
- Low value of standing forest, forest products and environmental services
- High transaction costs of environmental/forest law compliance disincentive SFM

INSTITUTIONAL/CULTURAL BARRIERS

- Forests/ecosystem conservation has low profile in sectoral plans and budgets
- Scarce institutional presence on the territory for land-use monitoring, control and law enforcement
- Insufficient coordination between government levels related to rural development
- Lack of information about impacts of CC, dissemination and public awareness

PROBLEMS

Annual deforestation in the Caribbean Region of Nicaragua between 2000 and 2015 was of 147,201 ha/yr, equivalent to emissions of 15.65 Mt CO_{2eq}/yr. The main direct cause of deforestation is extensive livestock and agricultural production. The main direct causes for forest degradation, which is estimated to produce an additional 3.5 Mt CO_{2eq}/yr is attributed to forest fires, firewood use and illegal logging. Landscapes get increasingly degraded and reduce the provision of environmental services and livelihood resilience to increasing climate anomalies. Natural capital and cultural heritage of indigenous and afrodescendant communities is being eroded, as invaluable biodiversity is being lost.

B.3. Project/programme description (max. 2000 words, approximately 4 pages)

30. In the framework of National Program of Human Development, the National Climate Change Adaptation and Mitigation Policy, and the National REDD+ Strategy, 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. Project actions will directly benefit the most vulnerable people of the CR supporting adaptation and reducing the negative effects climate change have on their livelihoods through improved resilience of ecosystems and ecosystem services.

31. Bio-CLIMA is embedded within the programmatic approach Nicaragua has chosen to implement the National REDD+ Strategy “ENDE-REDD+”⁴³, which was formulated, broadly consulted and agreed upon during a long and intensive multi-sectoral dialogue process with the contribution of all relevant societal actors⁴⁴. The preparation of the ENDE-REDD+ Strategy and its key elements, systems and policies had the technical and financial support of the World Bank through the FCPF Readiness Fund since 2011. This support which ends in June 2020, involved readiness organization and consultation, various assessments including drivers of deforestation and alternatives for REDD+, economic feasibility of Strategy implementation, incentive schemes; social and environmental safeguard assessment (SESA), framework and monitoring; FRELS, MRV capacity building, institutional strengthening, land tenure and other relevant studies. Bio-CLIMA builds on this important process and on all the relevant outputs of this REDD+ Readiness Phase.

32. To be able to advance from REDD+ Readiness to Strategy implementation, Nicaragua has decided to request GCF and GEF-7 grant finance, which together with substantive loans will be invested in order to unlock Result Based Payments that have been agreed upon within the Nicaragua’s Emission Reduction Program (ER-P) for the Caribbean Region with the FCPF.

33. Bio-CLIMA’s transformative vision to produce paradigmatic change shall be achieved through a three-pronged strategy of mutually reinforcing interventions organized within three project components:

- I.) 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 ecosystems and ecosystem services, and conserving the natural resources on their farms and territories.
- II.) 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.) 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.

34. **Component 1 Conserving and producing for life:** Bio-CLIMA’s strongest investment will be put on the deforestation fronts where the risks of forest carbon and biodiversity loss are the highest: These are located on two core intervention areas: i.) Indigenous territories within the BOSAWAS Reserve, the *Indio Maíz* Biological Reserve, and their buffer zones and; ii.) In twelve indigenous territories with the highest risk of deforestation in the areas of Waspam and Prinzapolka (see Maps 1 - 3).

35. Sub-component 1.1 Land use and management planning for landscape restoration, forest conservation and climate-resilient production.

Output 1.1.1 Land use/management plans formulated; and restoration/conservation agreements signed/formalized with beneficiaries. Climate responsive land use and business planning at individual farm and community level shall be supported through the provision of technical support, as also facilitation and

⁴³ Strategy to reduce emissions from deforestation and forest degradation ENDE REDD+. MAREAN, June 2017.

[http://www.marena.gob.ni/Enderedd/wp-content/uploads/Fases/13.%20Estrategia%20Nacional%20ENDE%20\(English\).pdf](http://www.marena.gob.ni/Enderedd/wp-content/uploads/Fases/13.%20Estrategia%20Nacional%20ENDE%20(English).pdf)

⁴⁴<http://www.marena.gob.ni/Enderedd/>

legal support to reach peaceful cohabitation and forest conservation agreements between indigenous communities and non-indigenous settlers.

Activity 1.1.1.1 Assist small producers to formulate Land Use-Management Plans (LUMPs) with business plans (BPs).

Activity 1.1.1.2 Assist indigenous communities to formulate Territorial Development Plans (TDPs) including business plans (BPs).

Activity 1.1.1.3 Assist middle sized producers to formulate Land Use-Management Plans (LUMPs) with business plans (BPs).

During the first two years, indigenous and non-indigenous family farmers, and indigenous communities and Indigenous Territorial Governments (GTI) 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. The outputs of these participatory processes are Land Use Management Plans for individual families (LUMP), and Territorial Development Plans (TDP) for indigenous communities. 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 financially viable and sustainable. Agreements will ensure equitable participation of young and adult indigenous and non-indigenous women in decision-making, particularly access by women-headed households.

36. These two planning instruments will need to fulfill the following minimum requirements:
- Be formulated in a participatory manner to assure the inclusion of the knowledge, needs and perspectives of all, especially indigenous and non-indigenous male and female youth and adult women
 - 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) that will contribute to the economic empowerment of indigenous and non-indigenous women.

37. Activity 1.1.1.4 Facilitate celebration and formalization of landscape restoration and forest conservation agreements. Non-indigenous families (so called “*terceros*”) that have settled within indigenous territories will be supported by the Project to legalize their land use and occupation through a “Peaceful Co-habitation Regime Agreement”⁴⁵ with the GTI only if following conditions are met, which are in alignment with the Benefit Sharing Plan of the ERPD⁴⁶:

- The GTI has requested to begin 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 formally commits 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 any ownership claim to the land and explicitly recognize land ownership of the respective GTI. This cession will involve that any,

⁴⁵ Land tenure within the project region and the legal status of different actors within indigenous territories has been thoroughly assessed within the ESMF (Annex 6) based on the document “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. 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

⁴⁶ Please see Benefit Sharing Plan in Annex 24, Section 2.2.1 (parag. 23, page 14) of the Benefit Sharing Plan of the ERPD (version July 2020) which has been undergone public consultation processes at regional and local level. Selection criteria will be further elaborated and refined through the Operational Manual.

present and future GHG Emission Reduction benefits or payments shall accrue to the GTI and be considered as a compensation for the right to use or rent the land.

38. Bio-CLIMA will benefit 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 described in the next Project sub-component, beneficiaries will need to agree and sign landscape restoration and forest conservation agreements with the landowners (the Indigenous Territorial Government). These dialogue and agreement processes shall be facilitated by independent, specialized entities entrusted with this process that will be selected and overseen by MARENA as Executing Entity. 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.

39. Sub-component 1.2 Investments in landscape restoration, forest conservation and climate-resilient production. Only after the land use and management planning has been successfully concluded (LUMPs +sib, TDPs +sib), and conservation and/or peaceful cohabitation agreements have been signed, productive investments in productive landscape restoration and forest conservation will be supported through three productive landscape restoration models (Sustainable Silvo-pasture, Cocoa-Agroforestry and Close-to-Nature Planted Forests); and sub-project for three community forest conservation and restoration models (Sustainable Community Enterprises, Community Forest Management and Community Forest Restoration), that are described in detail further below. Support modalities 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 (see also paragraph 47) and shall be further refined in the Operational Manual. As beneficiaries are mainly family farmers and indigenous communities living in poverty, support shall be given mainly through grants, and eventually also through loans with a very high level of concessionality, linked mainly to social and environmental outcomes.

40. Output 1.2.1 Degraded pasture-and rangeland restored: Landscape restoration through cocoa-agroforestry, sustainable silvo-pastures and close-to-nature- planted forests will be promoted and financed by two specific Trust Funds⁴⁷, in the South-western part of BOSAWAS, in the buffer and connectivity zone between BOSAWAS and the protected areas Cerro Saslaya, Cerro Cola Blanca and Cerro Banacruz. In the Indio Maíz Biological Reserve these interventions will be done only in the buffer zone as the category of Indio Maíz as a Biological Reserve does not permit productive uses as agroforestry or silvo-pasture within the protected area (in difference to BOSAWAS). In alignment and complementarity with the Benefit Sharing Plan for RBPs (Annex 24, Section 2.2, eligibility criteria for beneficiaries of these landscape restoration models include:

- Sustainable land management and business plan (LUMP+sib or TDP+sib) done
- Commitment to forest land restoration and to no further deforestation
- Legal Land Ownership; or Peaceful Cohabitation Agreement signed with the GTI
- Small / medium landowner 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

41. Activities 1.2.1.1 and 1.2.1.2 Small and medium producers restore degraded pastures into sustainable biodiverse silvo-pastoral systems (SSPS). It includes a) rotational grazing with electric fences;

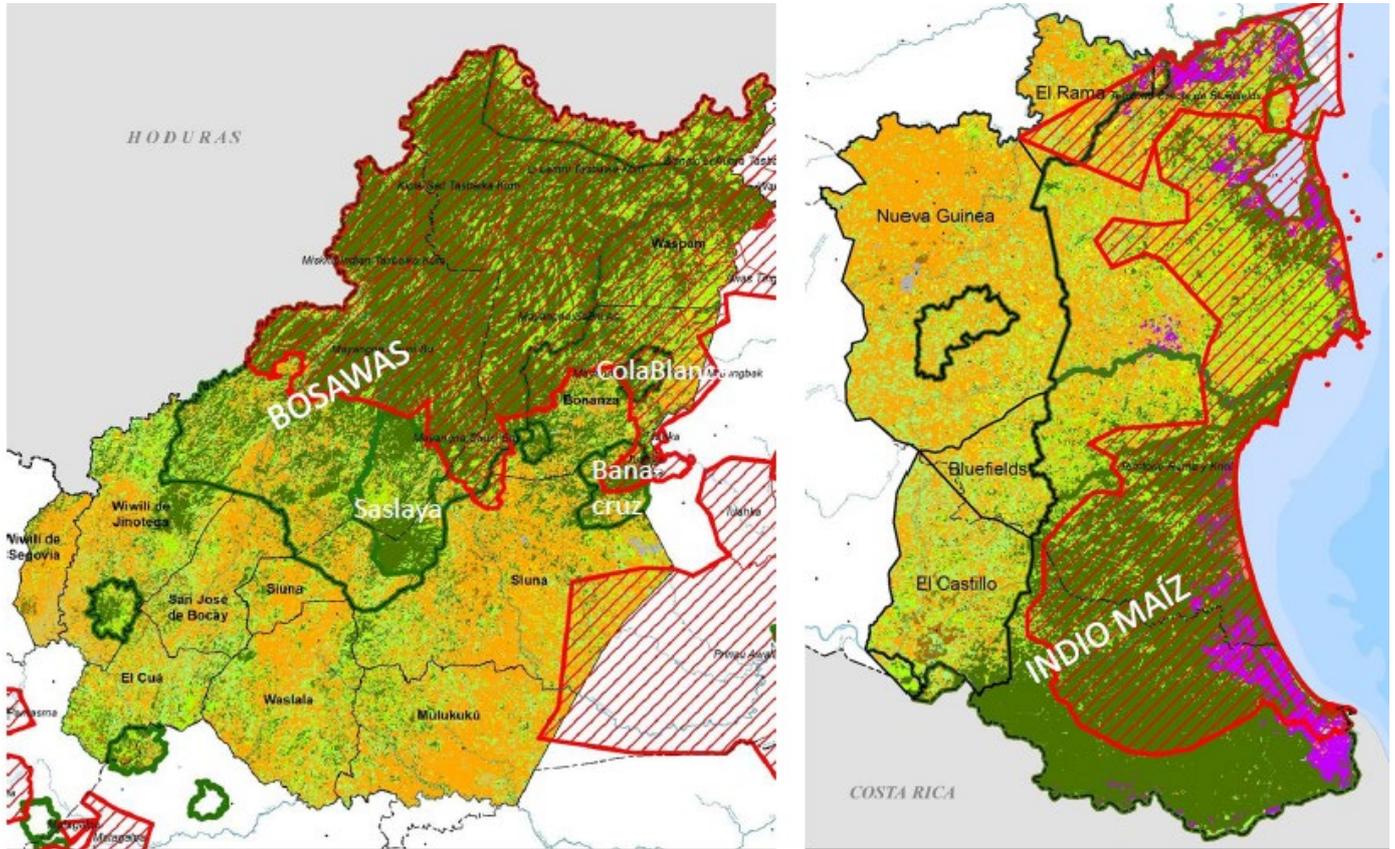
⁴⁷ These Trust Funds are described in detail in Section B.4.

b) Introduction of improved deep-rooting forages for pastures and cut-and-carry grasses with live fences consisting of protein producing shrubs. These practices, together with improved livestock management, improve productivity and reduce greenhouse emissions (11 MtCO₂eq in 20 years⁴⁸) - methane from enteric fermentation and nitrous oxide from manure. The provision and resilience of ecosystem services shall be improved through live tree fences and valuable tree species in pastures that 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 will be improved and stabilized, and the use of herbicide 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 CO₂eq/ha/yr.

42. Bio-CLIMA will support indigenous and non-indigenous small farmers and medium sized farmers (< 50 ha / agricultural land) with TA, inputs to introduce (or expand existing) sustainable silvo-pastoral systems. Smaller farms (< 35 ha) will be supported to improve pastures up to 10 ha / farm, while medium sized farmers (> 35 ha) 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. II.) The introduction (small farmers) or increase (medium farmers) of cut-and-carry grasses to increase general feed availability, especially during the drier months. III.) 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.

⁴⁸ Assuming only 50% of the emission reduction target

Map 2-b: 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.



43. 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 CO₂eq/ha/yr. The adoption of these models on 12,144 ha in the Project region shall therefore reduce GHG of at least 1.1 MtCO₂eq in 20 years⁴⁹. As requested by the GCF no GCF finance will be invested in livestock activities.

⁴⁹ 50% emission reduction target

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 CO ₂ e/kg milk)	9.69	4.51	5.22	3.91	3.67
GHG emissions (kg CO ₂ e/kg meat)	78.33	51.85	87.05	68.44	39.82
GHG emissions (t CO ₂ e/ha)	3.23	4.97	3.48	5.45	7.59
Carbon stock change (t CO ₂ e/ha)	1.14	8.92	1.14	6.26	23.90
Balance GHG emissions - C-stock change (tCO ₂ e /ha)	2.09	-3.95	2.34	-0.81	-16.30

44. Activity 1.2.1.3 Producers restore degraded pastures into biodiverse cocoa agroforestry systems (CAS). Indigenous and non-indigenous small family farmers will 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 with a density of 1734 trees/ha, including 816 cocoa trees, 816 banana plants, 51 forest trees, and 51 of other fruit trees. 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 create 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, ensure food security with crop diversification increasing the livelihood resilience of the most vulnerable rural people and communities. 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 the companies Ritter Sport and Ingelmann can rise 5 to 10 times in relation with the traditionally dried, “red” cocoa that are sold to local retailers⁵⁰. Carbon sequestration rises from 2.1 in BAU situation to 11.2 tCO₂ eq/ha/yr in the improved cocoa agroforest.

45. Activity 1.2.1.4 Reforest degraded land on slopes >50% into biodiverse, Close-to-nature Planted Forests (CTNPF)⁵¹: 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 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 incentives and TA will support farmers to learn and apply simple silvicultural 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

⁵⁰ 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

⁵¹ 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).⁵¹

increase the resilience of ecosystem 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.

46. While the main objective of the implementation of the three models above, at farm and community level, is to stabilize the agricultural frontier to reduce deforestation and improve local livelihoods, their mitigation impact in this zone has been estimated to be 5.4 MtCO_{2 eq}⁵² in 20 years.

47. Output 1.2.2 Natural forest ecosystems and forest land conserved, restored and sustainably used. Indigenous and afro-descendant communities located within the Indigenous Territories of the CR of Nicaragua (Map 2-b) will be called to present proposals to conserve and sustainably use forest ecosystems and natural forest lands on an area that covers nearly a million hectares (Table 2 b). 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 (Result Based Payments Trust Funds and National Sectoral Funds, incl. Forestry Development and Environmental Fund) and their governing bodies (inter-institutional committees). As the Project will support the communities to prepare these sub-projects together will well-structured business plans (see also Activities 1.1.1.2; 3.1.2.2), the grant/loan ratio and counterpart requirement will have to be decided individually by sub-project in accordance with selection criteria described in paragraph 51, and procedures to be further specified in the Operational Manual. Depending on their location respective to protected areas, the legal status and their protection category, these sub-projects are divided in three broad categories: Sustainable Community Enterprises, Community Forest Management, and Community Forest Restoration sub-projects.

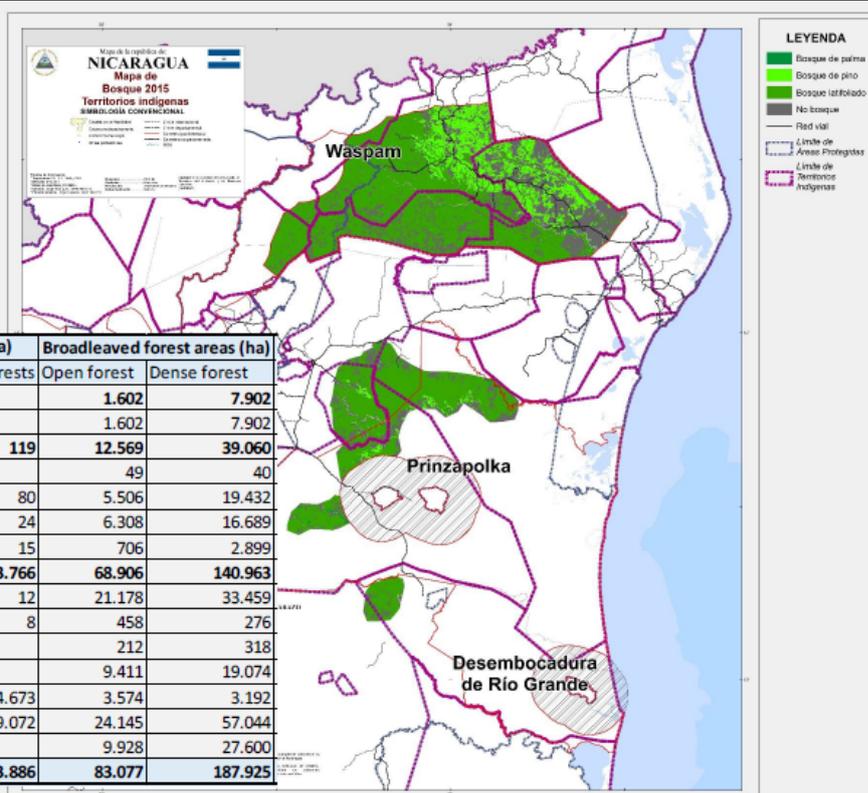
48. Activity 1.2.2.1 Finance Sustainable Community Enterprises (SCEs) in indigenous territories. This activity will be located within the core and buffer zones of BOSAWAS and Indio Maíz protected areas where forest cover is conserved. In accordance with the Management Plan of the protected area and according 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 livelihood resilience of the communities through forest and biodiversity conservation. Each SCE and “+bin” will need to have a gender action plan (GAP) that conforms with the overall Project GAP. These sub-projects could include ecological and ethnic tourism activities, handicrafts, goldsmith and indigenous jewelry, fine wood artisan making and fine wood products, non-timber forest products, resins and medicinal substances and/or other productive community enterprises. These sub-projects will be supported on a competitive basis with an average estimated financial contribution of US\$ 54,000 per sub-project, but the level of financial support shall be tailored to each project depending on the merits and needs guided on criteria and ceilings to be further defined in the Operational Manual. On these basis and 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-a); and have a mitigation impact of 8.9 Mt CO_{2 eq}⁵³ in 20 years.

49. Activities 1.2.2.2 and 1.2.2.3 Finance Community Forest Management (CFM) and Community Forest Restoration (CFR) sub-projects in indigenous territories outside protected areas. These activities 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.

⁵² 50% emission reduction target

⁵³ 50% emission reduction target

Map 3: Community forest management (dark green) and forest restoration (light green) areas located in 12 indigenous territories outside protected areas in the Waspam and Prinzapolka zones



50. 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 FONADEFO with viable technical and financial support documentation in order to compete for funding. CFM sub-project may finance the design, approval and implementation of forest management plans, low-impact selective tree cutting and hauling, local timber processing and added value of timber forest products. CFR sub-project may include activities needed for the productive restoration of forest landscapes like the harvesting of seed, the establishment of local nurseries, promotion of the natural regeneration of regrowth of successional forest and natural regeneration, enrichment plantings and other related activities. Each CFM and CFR will need to have a gender action plan (GAP) that conforms with the overall GAP. 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 5.5 Mt CO₂ eq in 20 years⁵⁴.

51. In alignment and complementarity with the Benefit Sharing Plan (see Annex 24) the Funds will publish calls for proposals to submit SCE, CFM and CFR sub-projects which 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:

- Formulated by an indigenous or afro-descendant community located within the implementation region of (as to maps 2 and 3)
- Provide a significant contribution to sustainable livelihoods within the community
- Include participatory mechanisms to ensure the knowledge, needs and individual and collective rights of male and female youth and adult women in their design, implementation, monitoring and evaluation are taken into account
- Contribute to intercultural gender equality and women's economic empowerment through both access to financing and other resources and generation of tangible and measurable benefits.

⁵⁴ 50% reduction emission target

- Contribute to emissions reduction and/or carbon sequestration
- Contribute to ecosystem services and biodiversity conservation
- Make reasonable technical proposals, have sound financial indicators
- Make a contribution to strengthen the capacities and entrepreneurship within the community
- Private sector co-finance and participation will be positively valued for project evaluation

52. Output 1.2.3 Farmer cooperatives, producer organizations and community enterprises access high-value markets. In order 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 this output will strive to provide support to mixed-gender and men- or women-only producer organizations, women's 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 producers 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).

Activity 1.2.3.1 Cooperatives, producer organizations and indigenous community (SCEs and CRMR) will be supported to reach high-value markets. Training, expert support and coaching will be provided to support farmer cooperatives, producer organizations and indigenous communities to improve the quality, to add value to and enhance the merchandising of their products and services in order to reach and sell to high-value markets, and promote women's empowerment and intercultural gender equality.

Activity 1.2.3.2 Targeted business contacts between producer organizations and indigenous communities' enterprises with high value markets shall be facilitated. This will be done by supporting the participation of producer and indigenous community organizations in national and international fairs, business events and through the facilitation of commercial exchanges, in collaboration with the corporate private sector already active in Nicaragua (Ritter Sport). Indigenous and non-indigenous male and female youth and adult women will equitably participate in and benefit from these opportunities, including by receiving training and translation/interpretation if needed.

Activity 1.2.3.3 Producer organizations and community enterprises shall be supported to obtain international certification for the products and services they offer. Support to get fair-trade, sustainable forest management and similar international certification will be provided during the first years of the project. This will require equitable participation and decision-making processes; resources and benefits will be distributed equitably among indigenous and non-indigenous men and women.

Component 2: Good Governance.

53. Subcomponent 2.1 Regional natural resources governance strengthened. More than 10.29% of Bio-CLIMAs' budget will be invested to create an enabling environment for investment for natural resources management and conservation in the 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 climate responsive 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. These state and institutional building activities will be financed mainly by the public debt from CABI, and not through GCF resources (see Table 8).

54. Support shall be provided to analyze and update forestry, environmental and land-use normative framework at national level, regional and local level, as also to update the management plans

of the two protected areas BOSAWAS and Indio Maíz. While Nicaragua's legislation, norms and instruments for Sustainable Rural Development are solid Land-use Planning (LUMPs), instruments need 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. Also, forest and protected areas legislation will need to be updated 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 sectors and actors and promote public participation to facilitate these 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, including being translated into local languages, 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.

55. Bio-CLIMA will facilitate and promote societal dialogue involving all relevant local actors and institutions, producer organizations, indigenous peoples, communities and academia, which shall also foster social control and transparency. Complementarily, Bio-CLIMA will facilitate public-private dialogue processes involving all relevant actors and the private sector to create the investment facilities (Trust Funds) needed, through 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.

56. Undue 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.

57. Output 2.1.1 Environmental authorities present at the regional and local levels, including municipalities and Indigenous Territorial Governments strengthened. These institutions will be strengthened through the credit component of the Project to make sure enough financial resources are available to equip the local offices of the environmental authorities with legal competencies at the regional, local and protected areas level (including MARENA, INAFOR, SERENA, municipalities and Indigenous Territorial Governments). Nowadays these institutions are severely understaffed and do not have the minimum resources to undertake their mandatory duties of regulation and oversight of such a vast territory like the CR of Nicaragua. Adequate financial resources shall be allocated through the public budget to these institutions for operational expenditure (fuel, vehicle maintenance, stationery, etc.). These expenses shall be completely financed through CABEL loan.

Activity 2.1.1.1 Hire new technical, extension and control personnel to work in the project area and indigenous territories. New and additional technical, extension and control personnel will be hired to work in the project area, protected areas, indigenous territories and local offices of the environmental authorities with legal competencies at the regional, local and protected areas level (including MARENA, INAFOR, SERENA, municipalities and Indigenous Territorial Governments) in order to undertake their mandatory duties of regulation, oversight and territorial defense of such a vast territory like the CR of Nicaragua. Priority will be placed on hiring indigenous and local personnel and an equitable proportion of women and men, and, if possible, who speak at least two local languages.

Activity 2.1.1.2 Procure material, equipment and vehicles for regional and local institutions. Regional and local environmental authorities shall be provided with necessary material, equipment and vehicles in order to be able to undertake their statutory duties according to their mandate.

Activity 2.1.1.3 Grant public budget for operational expenses to regional/local environmental authorities, including Indigenous Territorial Governments. Public budget for operational expenses to regional/local environmental authorities, including Indigenous Territorial Governments will be granted. This includes also to grant enough financial resources through the public budget that is allocated to these institutions for operational expenditure (fuel, vehicle maintenance, stationery, etc.).

58. Output 2.1.2 Legal and normative framework updated. Expert support to analyze normative gaps and needs for up-dating of norms and procedures (including operation norms of National Forest Fund and National Fund of the Environment, Forest Law and Norms on sustainable commercial use of timber and non-timber forest products within protected areas and its buffer zones, among others) will be provided, presented and discussed in a participatory manner through workshops and facilitation, involving all relevant stakeholders, in order to produce drafts to be enacted by relevant authorities. To grant for a participatory planning of these innovations, the management plans of BOSAWAS Natural Reserve and Indio Maíz Biological Reserve will also have to be updated. Expert support will be provided to up-date these management plans, including ecological, social and geospatial studies, as well as participatory processes involving all stakeholders within and around protected areas, especially the indigenous communities and Indigenous Territorial Governments. These will use equitable participatory processes with adult and young women and men of the different territories and promote intercultural gender equality and women's empowerment.

Activity 2.1.2.1 Analyze and update forestry, environmental and land-use normative framework at national level; and Activity 2.1.2.2 Support regional / local environmental authorities to actualize the normative framework. Expert support to analyze normative gaps and needs for up-dating of norms and procedures (e.g. FAN, FONADEFO and Trust Funds operation, sustainable commercial use of timber and non-timber forest products within protected areas and its buffer zones, among others) will be provided, presented and discussed in a participatory manner through workshops and facilitation, involving all relevant male and female stakeholders from relevant territories and promote intercultural gender equality and women's empowerment, in order to produce drafts to be enacted by relevant authorities.

Activity 2.1.2.3 Update the management plans of the two protected areas: BOSAWAS and Indio Maíz. Expert support will be provided to update these management plans, including ecological, social and geospatial studies, as well as participatory processes involving all male and female stakeholders within and around protected areas, especially the indigenous communities and Indigenous Territorial Governments, and promote livelihood resilience, intercultural gender equality and women's empowerment.

59. Output 2.1.3 Public-private dialogue and cooperation strengthened. Activities will include support to the Ministry of Family and Rural Economy (MEFCCA), to MARENA and partner institutions to convene relevant public, private and community actors to improve the climate for sustainable investment opportunities between the private sector and indigenous communities and farmer cooperatives. This public-private dialogue shall result in cooperation agreements to establish and manage sectoral investment facilities to strengthen the SPCC in the CR through three specific Trust Funds: i.) the Result Based Payment, ii.) the Silvo-pastoral and; iii.) the Cocoa-Agroforest Trust Funds. These shall be settled by the MHCP, but administered as an autonomous worth entrusted and managed by a private financial institution, as described in detail in Section B.4. To this end, expert, legal and facilitation support will be provided to involve relevant public, community and private actors in the governance and oversight mechanisms of this funds. Dialogue will also be sought to improve the law enforcement and control system with community and private participation. These mechanisms will promote intercultural gender equality and there will be equitable participation of men and women from indigenous and non-indigenous groups.

Activity 2.1.3.1 Facilitate sectoral public-private dialogue at regional and local level. Expert and facilitation support will be provided to support MEFCCA and partner institutions to convene relevant public, private and community actors to improve the climate for sustainable investment opportunities between the private sector and indigenous communities and farmer cooperatives. Dialogue will also be sought to improve the law enforcement and control system with community and private participation.

Activity 2.1.3.2 Strengthen the Production, Consumption and Marketing System (SPCC) at regional level. Long term sectoral investment facilities will be created to strengthen the SPCC in the CR through three Trust Funds: The Result Based Payment, the Silvo-pastoral and the Cocoa-Agroforest Trust Funds that will be administered by a private financial service provider. To this end, expert, legal and facilitation support will be provided to involve relevant public, community and private actors in the governance and oversight mechanisms of these Funds to grant for efficient and transparent use of resources.

60. Sub-component 2.2 Local organization, territorial oversight and law enforcement strengthened.

Output 2.2.1 Territorial governments and local organizations strengthened. Indigenous Territorial Governments and local producer organizations will be strengthened.

Activity 2.2.1.1 Provide institutional strengthening to Indigenous Territorial Governments (GTIs). All 23 GTIs 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 women and men and adult women in community decision making processes and integrating mechanisms that promote intercultural gender equality and women's participation and decision-making.

While Activity 2.2.1.1 above will benefit all 23 GTIs in the Caribbean Region, the following two Activities 2.2.1.2 and 2.2.1.3 will focus only on producer organizations, farmer cooperatives and indigenous community enterprises located within the two core Project Intervention Areas for Component 1, which are the following: i.) Indigenous territories within the BOSAWAS Reserve, the *Indio Maíz* Biological Reserve, and their buffer zones and; ii.) In twelve indigenous territories with the highest risk of deforestation in the areas of Waspam and Prinzapolka (see also Maps 1 - 3).

Activity 2.2.1.2 Provide organizational support to local producer organizations (indigenous and non-indigenous). 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. These organizational improvements will promote intercultural gender equality and women's participation.

Activity 2.2.1.3 Provide legal support to legalize producer organizations, cooperatives and indigenous community enterprises. 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.

61. Output 2.2.2 Forest, land-use and land use change administration, control and environmental law enforcement strengthened. The activities that are needed to produce this output include to operate mobile units and fixed control posts to control timber transport; to operate 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, as also to operate indigenous people territorial defense and resources control brigades in indigenous communities within the Caribbean Region.

Activity 2.2.2.1 Operate mobile units and fixed control posts to control timber transport.

Activity 2.2.2.2 Operate deforestation control and forest fire prevention brigades.

Activity 2.2.2.3 Operate indigenous people territorial defense and resources control brigades.

62. **Component 3 Capacity development for productive landscape restoration and forest conservation.** Subcomponent 3.1 Capacity development through training. 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, climate responsive land use management and planning (TDPs, LUMPs), implementation and maintenance of productive landscape and ecosystem services 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.

63. Output 3.1.1 Technical personnel, extension workers and promoters trained. 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 climate responsive 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, improving the resilience of ecosystem and ecosystem services including biological connectivity and biodiversity conservation, and intercultural gender equality and the project's gender action plan (GAP).

Activity 3.1.1.1 Train technicians and extension workers in participatory land use planning (LUMP-b, TDPs-b)

Activity 3.1.1.2 Train stakeholders to use the updated sectoral legal and normative framework

Activity 3.1.1.3 Train technicians and extension workers to implement Productive Landscape Restoration / Forest Conservation Models

64. Output 3.1.2 Producers and members of organizations/communities trained. The Project will strive to provide organizational, management, financial and marketing training to producers and members of organizations/communities. 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 climate responsive land and territory planning and natural 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.

Activity 3.1.2.1 Provide organizational, management, financial and marketing training to producers and members of organizations/communities. Capacity building will integrate intercultural gender equality and implementing the gender action plan (GAP), among others. Budget and other resources will be allocated to facilitate indigenous and non-indigenous women's participation in training events.

Activity 3.1.2.2 Train producers in LUMP, TDP and Productive Landscape Restoration / Forest Conservation Models

65. Subcomponent 3.2 Development of tools and instruments.

Output 3.2.1 Information systems for climate resilient sustainable development and risk management are in place. Information systems, tools and instruments for climate responsive land use planning and monitoring and to respond to climate change and variability will be put in place.

Activity 3.2.1.1 Set up a deforestation and forest fires early-warning system (SAT) for the CR

This SAT should build on systems already developed and tested. 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.

Activity 3.2.1.2 Up-date and roll out the forest products administration and control system a forest products administration and control system.

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.

Activity 3.2.1.3 Monitor LULUC, deforestation and forest degradation.

MARENAS REDD+ Units' operation will be supported to be able to continue undertaking the LULUC, deforestation and forest degradation monitoring activities. The project will support through provision of technical support, consultant honoraria and workshop expenses.

Activity 3.2.1.4 Install and monitor permanent plots of the National Forest Inventory (NFI) in the CR.

The Project will support 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 variables. This encompasses 70 plots that will be financed by the Bio-CLIMA project in the Caribbean Region.

Activity 3.2.1.5 Monitor biodiversity indicator species in 10% of plots of the NFI in the CR.

Support will be provided to monitor biodiversity indicator species in the CR for which expert support, training and methodological assistance and operational expenses.

Activity 3.2.1.6 Monitor climate change adaptation, mitigation and biodiversity impact of implemented productive landscape restoration/forest conservation models.

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.

Activity 3.2.1.7 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.

66. 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. 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.

Activity 3.3.3.1 Develop and roll-out a public communication strategy. 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. This will emphasize indigenous knowledge, needs and rights regarding conserving and restoring biodiversity and will promote intercultural gender equality. The relevant outputs will be pluri-lingual and will be developed using participatory methods.

Activity 3.3.3.2 Undertake environmental education in local schools and communities. Expert support to update the environmental curricula of the public-school 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 include biodiversity and climate issues and number of education events successfully held. Curricula will reflect indigenous and non-indigenous knowledge, needs and rights and will promote intercultural gender equality.

67. Bio-CLIMAs' activities are complementary and mutually reinforcing and contribute to the achievement of GCF Impact Result Area M.4 "Reduced emissions from land use, deforestation, forest degradation and through sustainable management of forests and conservation and enhancement of forest carbon stocks (12.80 Mt CO_{2eq})⁵⁵" in 7 years of project implementation; with adaptation co-benefits on Result Areas 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 Table 2 b: 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 an extension equivalent to the sum of the territories of Belgium and the Netherlands.

⁵⁵ 50% emission reduction target

68. 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 47.3 MtCO₂ in 20 years in a conservative scenario of reaching only 50% of the emission reduction target (see also Table 8). 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 a: Eligibility criteria

Project Activity ⁵⁶	Eligibility criteria
1.1.1.1 Assist small producers to formulate Land Use-Management Plans (LUMPs) with business plans (BPs).	<ul style="list-style-type: none"> - Indigenous, afro descendant, and non-indigenous/afro descendant family farmers with a total farm size of less than 35 ha - Located in BOSAWAS core and buffer zones; and in Indio Maíz Buffer Zone as to Map 2-b - Willingness to include the knowledge, needs and perspectives of all, male and female youth, and adult women - Interested in landscape restoration with sustainable silvo-pastures, and/or cocoa agroforestry, combined with forest restoration and conservation systems on their farms
1.1.1.2 Assist indigenous communities to formulate Territorial Development Plans (TDPs) including business plans (BPs).	<ul style="list-style-type: none"> - Only indigenous and afro descendant communities (not individual families) - Located in demarcated indigenous and afro descendant territories in BOSAWAS, Indio Maíz (Map 2-b), and the community forest areas of Waspam and Prinzapolka (Map 3) - Willingness to include the knowledge, needs and perspectives of all, male and female youth, and adult women - Interested in landscape restoration with sustainable silvo-pastures, and/or cocoa agroforestry; and/or forest restoration and conservation systems, initiatives and sub-projects in their community
1.1.1.3 Assist middle sized producers to	<ul style="list-style-type: none"> - Indigenous, afro descendant and non-indigenous middle sized producers / family farmers

⁵⁶ Eligibility criteria have been included for applicable activities but not for institutions, for example. Please refer to the detailed description of these activities along this section.

<p>formulate Land Use-Management Plans (LUMPs) with business plans (BPs).</p>	<ul style="list-style-type: none"> - Total farm size between 35 and 50 ha - Willingness to include the knowledge, needs and perspectives of all, male and female youth, and adult women - Interested in landscape restoration with sustainable silvo-pastures, and/or cocoa agroforestry, combined with forest restoration and conservation systems on their farms
<p>1.1.1.4 Facilitate celebration and formalization of landscape restoration and forest conservation agreements.</p>	<ul style="list-style-type: none"> - Indigenous, afro descendant communities and non-indigenous/afro descendant AND small and middle sized family farmers, or community of settlers (“terceros); which are located within indigenous and afro descendant territories in BOSAWAS, Indio Maíz (Map 2-b), and the community forest areas of Waslala and Prinzapolka (Map 3) - The GTI has requested to begin the dialogue process to reach a landscape restoration and forest conservation agreement - The settler family is interested in landscape restoration with sustainable silvo-pastures, and/or cocoa agroforestry, combined with forest restoration and conservation systems on their farm - To benefit from this activity, the family or community of settlers will have to: <ul style="list-style-type: none"> o Have used the land peacefully for at least five years o 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 o Renounce to any ownership claim to the land and explicitly recognize land ownership of the respective GTI o Agree that this cession involves that any benefits or payments generated by GHG Emission Reduction on the farm shall accrue to the GTI to be considered as a compensation for the right to use / rent the land.
<p>1.2.1.1 Small producers (farm size < 35 ha) restore degraded pastures into climate resilient, biodiverse sustainable silvo-pastoral systems.</p>	<ul style="list-style-type: none"> - Indigenous, afro descendant, as well as non-indigenous/afro descendant family farmers with a total farm size of less than 35 ha interested in restore degraded pastureland with up to 10 ha of sustainable silvo-pastures - Located in BOSAWAS core and buffer zones; and in Indio Maíz Buffer Zone as to Map 2-b - Willingness to include the knowledge, needs and perspectives of all, male and female youth, and adult women - Commitment to comply with the LUMP/TDB+sib, specifically to restore degraded land on soils with a slope steeper than 50% (26.6 degrees) with Close-to-Nature-Planted Forests (CTNPF) and conserve remnants of natural forest on the farm
<p>1.2.1.2 Middle sized producers (farm size > 35 ha) restore degraded pastures into biodiverse silvo-pastoral systems.</p>	<ul style="list-style-type: none"> - Indigenous, afro descendant, as well as non-indigenous/afro descendant family farmers with a total farm size between 35 and 50 ha interested in reduce their traditional pastureland by 10 ha and converted them into sustainable silvo-pastures - Located in BOSAWAS core and buffer zones; and in Indio Maíz Buffer Zone as to Map 2-b - Willingness to include the knowledge, needs and perspectives of all, male and female youth, and adult women

		<ul style="list-style-type: none"> - Commitment to comply with the LUMP/TDB+sib, specifically to restore degraded land on soils with a slope steeper than 50% (26.6 degrees) with Close-to-Nature-Planted Forests (CTNPF) and conserve remnants of natural forest on the farm
1.2.1.3	Producers restore degraded pastures into biodiverse cocoa agroforest systems.	<ul style="list-style-type: none"> - Indigenous, afro descendant, as well as non-indigenous/afro descendant family farmers with a total farm size of less than 35 ha interested in restore degraded pastureland with up to 2 ha of sustainable biodiverse cocoa agroforestry systems - Located in BOSAWAS core and buffer zones; and in Indio Maíz Buffer Zone as to Map 2-b - Willingness to include the knowledge, needs and perspectives of all, male and female youth, and adult women - Commitment to comply with the LUMP/TDB+sib, specifically to restore degraded land on soils with a slope steeper than 50% (26.6 degrees) with Close-to-Nature-Planted Forests (CTNPF) and conserve remnants of natural forest on the farm
1.2.1.4	Reforest degraded land on slopes (> 50%) into biodiverse, Close to Nature Planted Forests (CTNPFs).	<ul style="list-style-type: none"> - (same as 1.2.1.1 to 1.2.1.3 above)
1.2.2.1	Finance Sustainable Community Enterprises (SCE) in indigenous territories within protected areas for natural forest ecosystems conservation and use.	<ul style="list-style-type: none"> - Formulated by indigenous and afro descendant communities only (not by individual families) that are located in demarcated indigenous and afro descendant territories within BOSAWAS and Indio Maíz Protected Area Core Zones (Map 2-b) - Provide a significant contribution to sustainable livelihoods within the community - Include participatory mechanisms to ensure the knowledge, needs and individual and collective rights of male and female youth and adult women in their design, implementation, monitoring and evaluation are taken into account - Contribute to intercultural gender equality and women's economic empowerment through both access to financing and other resources and generation of tangible and measurable benefits. - Contribute to emissions reduction and/or carbon sequestration, ecosystem and biodiversity conservation - Make reasonable technical proposals, have sound financial indicators - Make a contribution to strengthen the capacities and entrepreneurship within the community, private sector co-finance and participation will be positively valued for sub-project evaluation - Commitment to comply with the TDB+sib, specifically to restore degraded land on soils with a slope steeper than 50% (26.6 degrees) with Close-to-Nature-Planted Forests (CTNPF) and to conserve the natural forest of the indigenous territory
1.2.2.2	Finance commercial Community	<ul style="list-style-type: none"> - Formulated by indigenous and afro descendant communities only (not individual families) that are located in demarcated indigenous

<p>Forest Management (CFM) sub-projects with business plans prepared by indigenous communities outside protected areas.</p>	<p>and afro descendant territories within the Community Forest Management and Restoration Zone (Map 3)</p> <ul style="list-style-type: none"> - Provide a significant contribution to sustainable livelihoods within the community - Include participatory mechanisms to ensure the knowledge, needs and individual and collective rights of male and female youth and adult women in their design, implementation, monitoring and evaluation are taken into account - Contribute to intercultural gender equality and women's economic empowerment through both access to financing and other resources and generation of tangible and measurable benefits. - Contribute to emissions reduction and/or carbon sequestration, ecosystem and biodiversity conservation - Make reasonable technical proposals, have sound financial indicators - Make a contribution to strengthen the capacities and entrepreneurship within the community, private sector co-finance and participation will be positively valued for sub-project evaluation - Commitment to comply with the TDB+sib, specifically to restore degraded land on soils with a slope steeper than 50% (26.6 degrees) with Close-to-Nature-Planted Forests (CTNPF), and to conserve and sustainably manage the natural forest in the indigenous territory
<p>1.2.2.3 Finance commercial Community Forest Restoration (CFR) sub-projects with business plans prepared by indigenous communities outside protected areas.</p>	
<p>1.2.3.1 Support cooperatives, producer organizations and indigenous community (SCEs and CRMR) to reach high-value markets.</p>	<ul style="list-style-type: none"> - Cooperatives, producer and indigenous community organizations that aggregate Project beneficiaries from the activities 1.2.1.1 to 1.2.2.3, that are located within the Project interventions zones of the BOSASWAS and Indio Maíz protected areas core and buffer zones, and (Map 2-b) as also in the Community Forest Management and Restoration Zone (Map 3) - Organization has the objective to provide a significant contribution to sustainable livelihoods - Include participatory mechanisms to ensure the knowledge, needs and individual and collective rights of male and female youth and adult women are taken into account - Contribute to intercultural gender equality and women's economic empowerment through both access to financing and other resources and generation of tangible and measurable benefits - Make a contribution to strengthen the capacities and entrepreneurship within the organization, private sector co-finance and participation will be positively valued.
<p>1.2.3.2 Facilitate targeted business contacts between producer organizations and indigenous communities' enterprises with high value markets.</p>	
<p>1.2.3.3 Support producer organizations and community enterprises in voluntary certification processes.</p>	
<p>2.2.1.1 Provide institutional strengthening to Indigenous Territorial Governments (GTIs).</p>	<ul style="list-style-type: none"> - All 23 Indigenous Territorial Government shall be strengthened, therefore no eligibility criteria applies, but the Free, Prior and Informed Consent of the Community to benefit from this Project Activity

<p>2.2.1.2 Provide organizational support to local producer organizations (indigenous and non-indigenous).</p>	<ul style="list-style-type: none"> - Cooperatives, producer and indigenous community organizations that aggregate Project beneficiaries from the activities 1.2.1.1 to 1.2.2.3 above that are located within the Project interventions zones of the BOSASWAS and Indio Maíz protected areas core and buffer zones, and (Map 2-b) as also in the Community Forest Management and Restoration Zone (Map 3) - Include participatory mechanisms to ensure the knowledge, needs and individual and collective rights of male and female youth and adult women are taken into account - Contribute to intercultural gender equality and women's economic empowerment through both access to financing and other resources and generation of tangible and measurable benefits - Make a contribution to strengthen the capacities and entrepreneurship within the organization.
<p>2.2.1.3 Provide legal support to legalize producer organizations, cooperatives and community enterprises.</p>	
<p>2.2.2.1 Operate mobile units and fixed control posts to control timber transport.</p>	<ul style="list-style-type: none"> - Public institutions at the national, regional and local level (including GTIs) that are strategically located within the Project interventions zones of the BOSASWAS and Indio Maíz protected areas core and buffer zones, and (Map 2-b) as also in the Community Forest Management and Restoration Zone (Map 3) - Institutions and actors with a clear legal mandate to undertake control and law enforcement activities. - Participation of the local community in control and oversight schemes to grant transparency and accountability.
<p>2.2.2.2 Operate deforestation control and forest fire prevention brigades.</p>	
<p>2.2.2.3 Operate indigenous people territorial defense and resources control brigades.</p>	
<p>3.1.1.1 Train technicians and extensionists in participatory land use planning (LUMP-b, TDPs-b).</p>	<ul style="list-style-type: none"> - Members of public institutions and non-governmental institutions at the national, regional and local level (including GTIs) that are located and act in the areas of influence of the Project interventions zones of the BOSASWAS and Indio Maíz protected areas core and buffer zones, and (Map 2-b) as also in the Community Forest Management and Restoration Zone (Map 3) - Members of institutions and actors with a mandate to undertake training and extension activities in the areas of sustainable agriculture and forest conservation and management - Individuals who speak at least two local languages will be prioritized, and gender equality sought
<p>3.1.1.2 Train stakeholders to use the up-dated sectoral legal and normative framework.</p>	
<p>3.1.1.3 Train technicians and extension workers to implement Productive Landscape Restoration / Forest Conservation Models.</p>	
<p>3.1.2.1 Provide organizational, management, financial and marketing training</p>	<ul style="list-style-type: none"> - Indigenous, afro descendant, and non-indigenous/afro descendant family farmers with a total farm size of less than 50 ha

to producers and members of organizations/communities.	<ul style="list-style-type: none"> - Located in BOSAWAS core and buffer zones; and in Indio Maíz Buffer Zone as to Map 2-b - Willingness to include the knowledge, needs and perspectives of all, male and female youth, and adult women
3.1.2.2 Train producers in LUMP, TDP and Productive Landscape Restoration / Forest Conservation Models.	<ul style="list-style-type: none"> - Interested in landscape restoration with sustainable silvo-pastures, and/or cocoa agroforestry, combined with forest restoration and conservation systems on their farms and communities

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

Landscape restoration /forest conservation models	Area impacted (ha) /potential area ⁵⁷	Productive units ⁵⁸	Direct beneficiaries	Disaggregation	
				Female	Male
Output 1.2.1 Degraded pasture- and rangeland restored	61,209 /122,610	8,060	40,302	20,554	19,748
<i>Cocoa Agroforestry - Systems</i>	8,850 /14,048	4,425	22,126	11,284	10,842
<i>Sustainable Silvopastoral Systems</i>	12,144 /61,593	2,429	12,144	6,193	5,950
<i>Close to Nature Planted Forest</i>	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
<i>Sustainable Community Enterprises</i>	332,033 /554,096	95	9,487	4,838	4,648
<i>Community Forest Management and Restoration Sub-Projects</i>	209,793 /425,859	262	1,311	669	642
Sub-total	603,035 /1,102,565	8,417	51,100	26,061	25,039
Components 2 and 3: Forest area benefitted from improved governance and law enforcement	1,716,325				
Total area impacted by Bio-Clima	2,319,359 /7,023,700				
Indirect beneficiaries (number)			614,721	307,684	307,037

⁵⁷ 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.

⁵⁸ Productive Units refers to the number of individual farms or community territories to directly benefit from Project activities and investments, specifically Sub-component 1.1 and 1.2

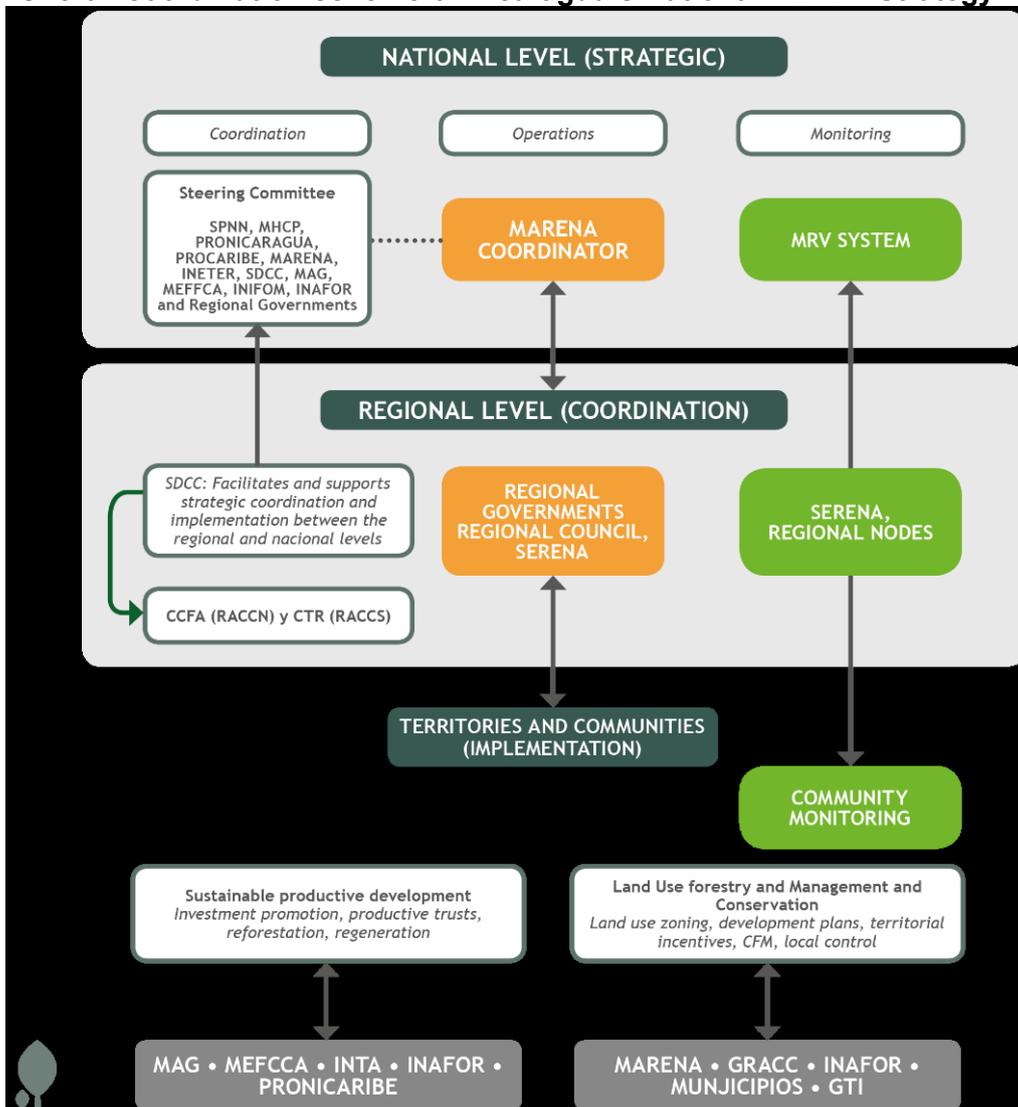
B.4. Implementation arrangements (max. 1500 words, approximately 3 pages plus diagrams)

OVERALL COORDINATION SCHEME OF THE NATIONAL REDD+ STRATEGY

69. As Bio-CLIMA and Nicaragua’s Emissions Reduction Program (ERP) are fully complementary and will act synergistically within a programmatic approach in the implementation of the National REDD+ Strategy, both will operate under the same institutional coordination architecture, which is structured hierarchically at three levels: a national strategic level, a regional coordination level, and a technical implementation level locally. The National Level provides for strategic guidance and inter-institutional coordination through a National Steering Committee, coordinated by the MARENA, in which the relevant sectoral institutions in charge of sectoral policy setting and programming will participate, including INAFOR, INTA, MEFFCA, INTUR, INETER; and the MHCP, which is the NDA to the GCF.

70. The coordination with the Regional Governments (RG) and entities, and with the Indigenous Territorial Governments within the Steering Committee is facilitated by the Secretariat for the Development of the Caribbean Coast (SDCC), which assures that national, regional and territorial interests are duly balanced. Regional Governments support MARENA with coordination, monitoring and evaluation, together with the regional delegations in the CR of sectorial national entities. The Indigenous Territory Governments (GTI) support Strategy implementation within their territories at territory and community levels.

**Figure 1:
Overall coordination scheme of Nicaragua’s National REDD+ Strategy**

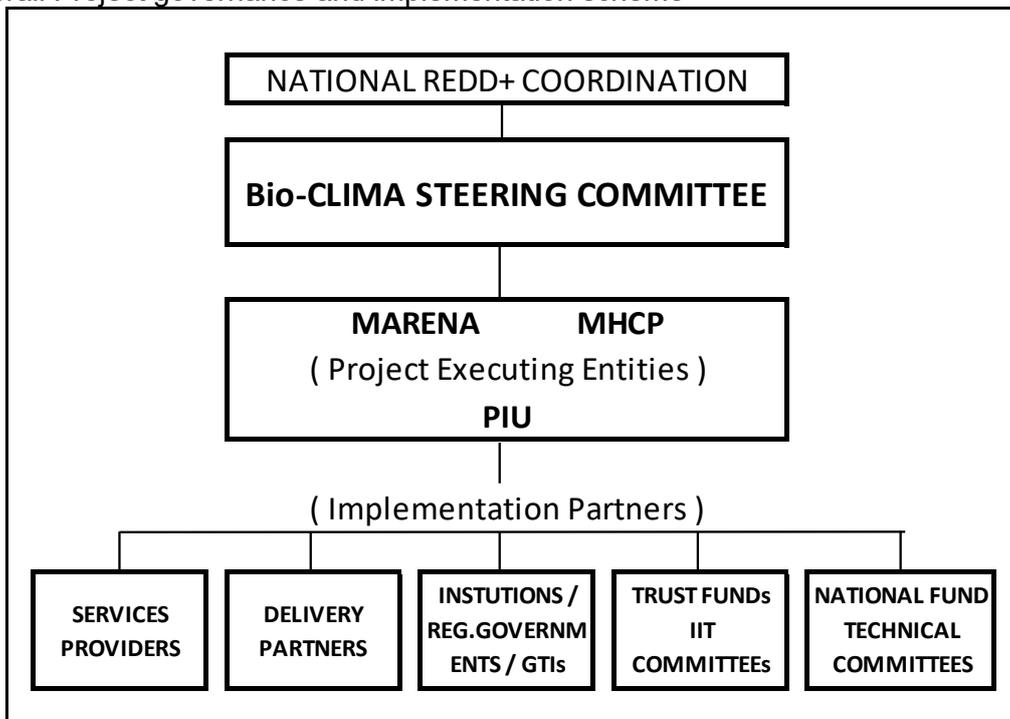


(Source: Caribbean Coast Emissions Reduction Program, MARENA 2019)

Bio-CLIMAs PROJECT GOVERNANCE AND INSTITUTIONAL ARRANGEMENTS

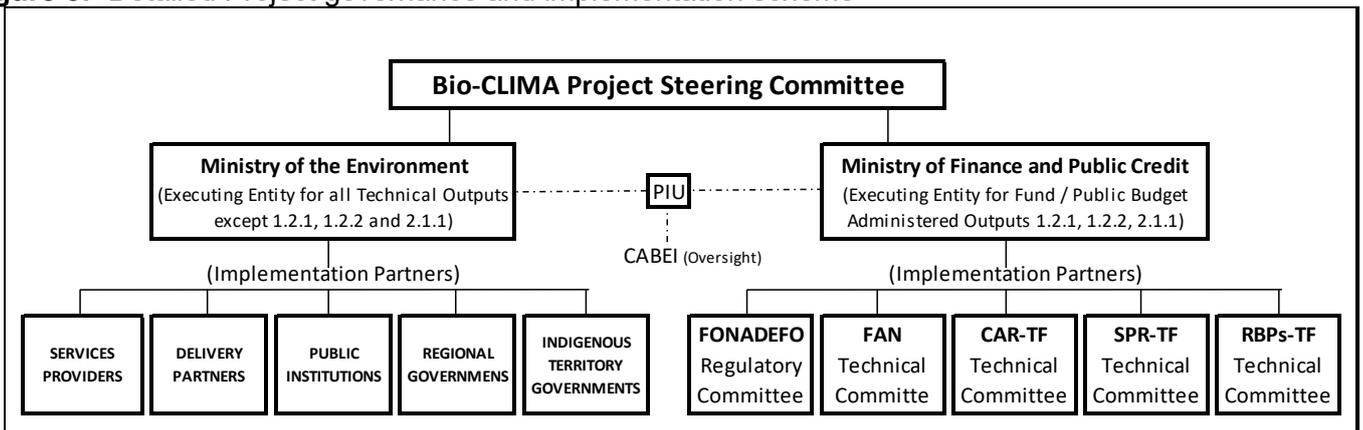
71. Bio-CLIMA shall be governed by a multi-sectoral Project Steering Committee (PSC) with the participation of the relevant sectors and actors. The PSC shall be chaired the MARENA. One high level representative of each of the following institutions and sectors shall participate: MHCP, MAG, MEFFCA, INAFOR, INETER, SDCC, SPPP, Regional Government RACCN, Regional Government RACCS, GTIs North CR, GTIs South CR, Governments Alto Wangki Bocay, Cocoa Private Producers, Livestock Private Producers and the Academia (17 members). Both Executing Entities, the MARENA and the MHCP shall report to the Project Steering Committee. Implementation of Project Activities shall be done with the support of several Implementation Partners.

Figure 2: Overall Project governance and implementation scheme



72. Technical Project execution, coordination and monitoring will be carried out by the MARENA, who shall set up and run the Project Implementation Unit (PIU). MARENA shall execute all “technical” project outputs that are not going to be financed and implemented through Funds or the public budget, since these are going to be executed by the MHCP. For the delivery of Project outputs and implementation of activities MARENA and the MHCP shall sign specific implementation agreements or contracts with Implementation Partners, selected according to their specific competencies and mandates.

Figure 3: Detailed Project governance and implementation scheme



73. The main functions of the different Project Entities, as well as the institutions that perform these functions are presented in the table below:

Table 3 a Project Entities, participating institutions and main functions

PROJECT ENTITY	INSTITUTION (S)	MAIN FUNCTIONS
STEERING COMMITTEE	MARENA (Chair); and one high level representative of each of the following institutions and sectors: MHCP, MAG, MEFFCA, INAFOR, INETER, SDCC, SPPP, Regional Government RACCN, Regional Government RACCS, GTIs North CR, GTIs South CR, Governments Alto Wangki Bocay, Cocoa Private Producers, Livestock Private Producers, Academia (17 members)	<ul style="list-style-type: none"> • Provide political decision makers information on project progress, results and impacts. • Provides political and strategic orientation • Secures good inter-institutional coordination • Provides transparency, accountability and participation • Reviews and approves Annual Working Plan and Budget prepared by each Executing Entity • Reviews and approves the selection of Implementation Partners and Trust Funds presented by the EEs
EXECUTING ENTITY (for all non-Trust Fund, National Fund and Public Budget financed Outputs)	MARENA	<ul style="list-style-type: none"> • Sign the Subsidiary Agreement with the AE • Sign grant agreement with the GEF • Sign Emission Reduction Program Agreement ERPA with the World Bank / FCPF • Execute loan and grant resources under its responsibility • Procure the provision of technical services, goods and inputs needed to achieve Outputs according to Annual Operative Plan and Budget approved by the SC • Select and contract implementing partners after approval of the Steering Committee • Celebrate project implementation agreements with implementing partners (public, national and international) • Undertake monitoring and evaluation of implementation performance and safeguard compliance on each implementation partners mandate • Prepare calls for proposals, selects and contracts services providers • Prepare and monitor execution of Annual Working Plan and Budget • Approve Implementation Reports presented by Implementation Partners • Prepare and submit quarterly, semesterly and yearly follow-up and monitoring reports to the AE (CABEI) • Prepare and submit specific reports on demand of AE • Set up and operate the Project Implementation Unit (PIU)
EXECUTING ENTITY (for all Trust Fund, National Funds and Public Budget financed Outputs, mainly Outputs 1.2.1, 1.2.2 and 2.1.1)	MHCP	<ul style="list-style-type: none"> • Sign the loan agreement with CABEI • Sign the Subsidiary Agreement with CABEI • As settler of the Trust Funds, celebrate and sign the Trust Fund contract with the Financial Institution(s) selected as Trustee for Trust Funds (RBPs, CAF, SPR) • Transfer loan and grant resources to Trust Funds and to National Funds • Monitor execution of Annual Working Plan and Budget presented by Trust Funds and National Funds

		<ul style="list-style-type: none"> • Transfers budgetary resources to regional and local authorities (Output 2.1.1) • Prepare and submit quarterly, semester-ly and yearly follow-up and monitoring reports to the AE (CABEI) • Prepare / submit specific reports on demand of the AE
TRUST FUND INTER-INSTITUTIONAL COMMITTEE (IICs)	<p>The RBP-Trust Fund IIC members include: MHCP (Chair), MARENA, SDCC, GRACCN, GRACCS, AWB, GTIs (2), Private Producers, Academia.</p> <p>CAF and SPR Trust Funds IIC members shall be defined during first year of Project Implementation (Output 2.1.3)</p>	<ul style="list-style-type: none"> • Revise and approve the Annual Working Plan and Budget presented by the Trust Funds • Approve Trust Fund Contract, Operational Manual and Selection Criteria for Sub-Project financial incentives • Ratify signed Trust Fund Contract • Review and approve selection presented by the Trustee of the Community Sub-Projects to be financed through the Trust Fund • Revise, discuss and approve financial statements and annual auditing reports, and recommends corrective action if needed • Supervise correct and efficient resources use • Approve any re-capitalization or exchange rate gain
TRUSTEE	Financial Institution(s) of the Nicaraguan Financial Sector	<ul style="list-style-type: none"> • Manage entrusted financial resources according to Trust Fund Contract celebrated with the MHCP • Procure the provision of technical services, goods and inputs needed to achieve the outputs commissioned by the IIC according to Annual Operative Plan • Select the sub-projects prepared by indigenous and afro descendant communities in accordance with the eligibility criteria contained in the Trust Fund Contract and the Operational Manual approved by the IITC • Sign an financing agreement with each of the beneficiaries • Make payments for Emission Reductions according to ER Benefit Sharing Plan (Annex 24) • Prepare and submit quarterly and yearly reports to MARENA, the IIC and CABEI on the management of the proceeds and implementation of entrusted project activities
GEF IMPLEMENTING AGENCY	FAO	<ul style="list-style-type: none"> • Execute GEF-7 grant resources and provide inputs to co-financing reports to the GCF
ACCREDITED ENTITY	CABEI	<ul style="list-style-type: none"> • Sign the Funding Activity Agreement (FAA) with the GCF (loan and grant tranches) • Sign the loan agreement with the MHCP • Sign the Subsidiary Agreement with the Executing Entities MARENA and MHCP • Appraise and finalize project implementation arrangements and advise Executing Entities (EE's) on PIU establishment, including mission travel • Advise on / participate in project inception workshops • Assist the EE's to draft terms of reference (TOR) and provide advice on the selection of experts or implementation partners • Conduct at least one supervision mission per year, including briefing operational focal points on project progress. As necessary, include technical consultants during supervision missions to provide advice and assistance to EE's and implementing partners, as needed • Provide technical guidance and support, as necessary, for project implementation

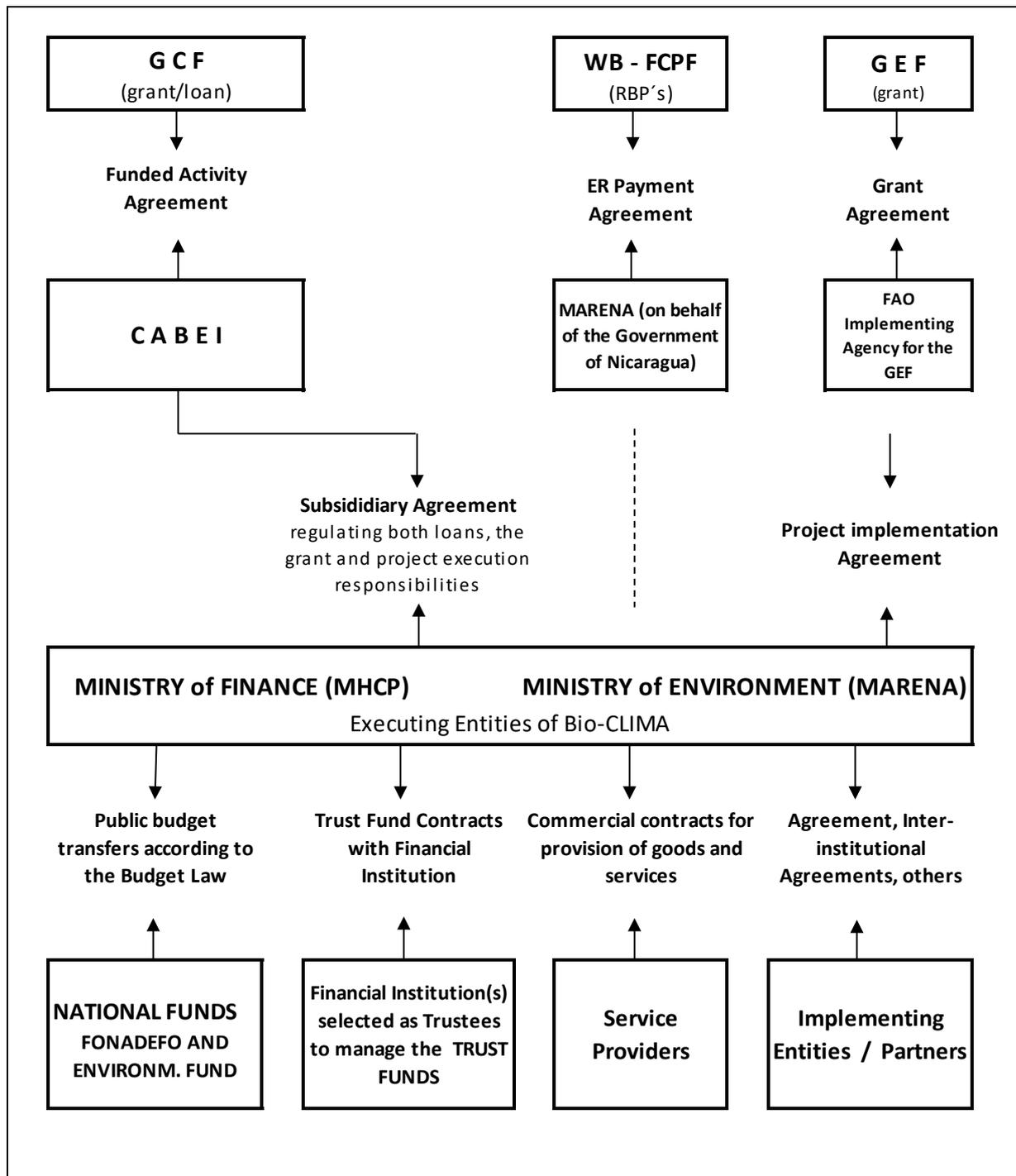
		<ul style="list-style-type: none"> • Disburse funds to the EEs, monitor and review project expenditure and review financial reports • Oversee procurement and financial management to ensure implementation is in line with CABEL's policies, procedures and timelines, ensuring that any entity relevant to the project complies with IFRS accounting standards. • Oversee the preparation of the required reports for submission to GCF Secretariat • Prepare periodic revisions to oversee if changes have been made in annual expense category budgets • Assist/oversee the audit process throughout the project life cycle • Undertake the Project Midterm Review • Oversee the preparation of the project completion report/independent final evaluation, and submit the report to the Secretariat of the GCF • Prepare project closing documents, including financial closure, for submission to the Secretariat of the GCF
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74. Project implementation modalities: Both Executing Entities shall select and contract specialized implementation partners. The main typologies, contracting modality and selection of Bio-CLIMA's implementation partnerships are presented in the table below:

Table 3 b Implementation partnerships and modalities

PARTNER	CONTRACT	SELECTION	ENTITY
SPECIALIZED NATIONAL OR INTERNATIONAL SERVICES PROVIDERS	Contract between EE and selected service provider	Competitive national or international bidding process according to AE and EE procurement policies and procedures	Private consultancy firms, NGO's and/or services providers
NATIONAL OR INTERNATIONAL DELIVERY PARTNERS	Letter of Agreement, Project Activity Implementation Agreement, or similar applicable instrument	Analysis of options and decision by the Project Steering Committee	Technical agencies of the UN System, Universities, Research Institutes, or similar entities
TRUSTEE(S) FOR THE TRUST FUNDS	Trust Fund Contract between MHCP and the selected Financial Institution to act as Trustee, according to Law No.741	Competitive national bidding process and selection by the Project Steering Committee	Private Financial Institution of the Nicaraguan Financial System
PUBLIC INSTITUTION	Inter-institutional Letter of Agreement	Analysis of options and decision of the Project Steering Committee, according to institutional capacities and legal mandate	National, regional and local public entities, including GTIs
NATIONAL FOREST DEVELOPMENT FUND	Provisions of Forest Law No.462 (Article 50), its Regulations and Operative Manuals	Project Steering Committee Decision, according to legal mandate	FONADEFO (Fondo Nacional de Desarrollo Forestal)
NATIONAL FUND OF THE ENVIRONMENT	Environment and Natural Resources Law No.217 (Articles 51 – 53), its Regulations and Operative Manual	Project Steering Committee Decision, according to legal mandate	FAN (Fondo Nacional del Ambiente)

Figure 4: Main contractual arrangements



TRUST FUNDS AND NATIONAL FUNDS

75. It is envisaged that three specific trust funds, the Silvo-pastoral Restoration Trust Fund (SPR-TF), the Cocoa-Agroforestry Restoration Trust Fund (CAR-TF) and the REDD+ Result Based Payments Trust (RBP-TF) will be set up with Program facilitation and technical support. These Trust Funds will be commended to procure goods and services and to make the payments needed to support the activities for landscape restoration, forest conservation and climate-resilient production included in Project Outputs

1.2.1 and 1.2.2., complementarily with the National Forest Fund (FONADEF) and the National Fund of the Environment (FAN).

76. Each Trust Fund will be governed by an Inter-Institutional Committee (IIC) where relevant sectoral institutions and actors participate. In the case of the RBP-TF it has already been agreed upon that its IIC will be chaired and coordinated by the Ministry of Finance (MHCP), and will include the MARENA, the Secretariat for the Development of the Caribbean Region (SDCC), one representative from each of the two Regional Governments of the Caribbean Coast (GRACCN-North and GRACCS-South), a representative of the coordination of the GTIs of the Alto Wangki y Bocay (AWB), one representative of the Indigenous Territorial Governments for each Region (North CR and South CR), one representative of private producers, and one representative from the academia. Other relevant entities like the Protected Area System (SINAP), the municipalities of the CR, INAFOR, SDCC, INETER, INTA, MAG and other relevant actors may be included, depending of the specific issues to be discussed and decided. The duration of the RPB-TF shall be the same as the duration of the ERP agreed upon with the World Bank/FCPF, which is 7 years, and the settler will be the MHCP (The roles and responsibilities of different actors and entities are included in Annex 24⁵⁹).

77. The Silvo-pastoral Restoration - (SPR-TF) and the Cocoa-Agroforestry Restoration Trust Fund (CAR-TF) will be set up during the first year of project implementation with intensive technical, legal and facilitation (see Output 2.1.3 "Public-private dialogue and cooperation strengthened"). The Project will strive to achieve the participation of producer organizations and corporate private actors of both the livestock and the cocoa sectors with the objective to create long term investment facilities as investment vehicles for the private sector to incentivize sectoral transformation, sustainable development and growth. Therefore, these two Trust Funds should have a duration of at least 10-15 years or more. To this End a private-public dialogue will be facilitated by a neutral trusted party in the role of an honest broker, which will make sure that legitimate and independent participation of relevant stakeholders is granted, and that internal cross-checks and balances guarantee transparency and accountability in the use of the funds. These principles, as also a Grievances and Redress Mechanism, shall be included in each of the Trust Fund contract and operationalized through its Operational Manuals as result of the dialogue, negotiation and consensus process that shall take place during the first year of Project implementation.

78. The financial, operational and administrative management of these three Trust Funds will be commended to one or various private financial institutions active in the Nicaraguan financial sector that will act as Trustees and shall be selected through an open, competitive bidding process. CABEL, as AE, will complete a capacity assessment of the financial institutions taking into consideration a risk assessment of their financial management and procurement policies, procedures, and controls, including their ability to implement and comply with CABEL's policies.

79. As to Nicaraguan Law (No. 741⁶⁰ on Trust Fund Contracts) and as in most Latin American countries, Trust Funds (*fideicomisos*) constitute an autonomous worth that can be used by the Trustee exclusively for the purposes set in the Trust Fund Contract, according to the specific instructions given by the Settler. A *fideicomiso* is not a juridical person, but a wealth or group of assets which is transferred to the Trustee, who acts as legal representative for its purposes. Pursuant to the Law, the *fideicomiso* as autonomous patrimony is separated from the Trustee's patrimony, and as such cannot be affected by claims from third parties filed against the Trustee. The Trust Fund Contract will have to be vetted by the Inter-institutional Committee, who will also oversee the activities carried out by the Trustee and approve annual operational plans and budgets. Given these attributes, *fideicomisos* are often used in Latin-American countries to efficient and transparent use of resources and shield them off from unduly political interferences and corruption.

⁵⁹ Section 5, Institutional Roles and Arrangements, Benefit Sharing Plan of the ERP (Annex 24)

⁶⁰ Ley No.741 Sobre el Contrato de Fideicomiso (La Gaceta No. 11, Enero 2011) y Decreto No.69-2011: Reglamento a la Ley 741.

80. Three specific trust fund contracts shall to be signed between the selected trustee(s) and the MHCP. These trust fund contracts will specify the responsibilities that the trustee will have regarding the management of the financial resources and the activities it should undertake to achieve relevant project outputs. The trust fund contracts will contain exact instructions for the trustee to carry out the specific tasks, procure goods and services needed in order to produce Project outputs in an efficient and transparent way. The contract shall also include provisions for the operation of an efficient and transparent geo-referenced monitoring and reporting system to make sure any double-dipping is avoided. Initial capitalization for the Trust Funds will come from blended FCPF/GCF grant and loan resources; as from CABEL loan resources. As all these three Trust Funds will not be investment, but resources administration trust funds it is not envisaged that any significant surplus will be generated from them. Nevertheless, if such surplus occurs for any reason, these resources shall be spent only for the purposes defined in the trust fund contracts which is the financing of sub-project of landscape restoration or forest conservation.

81. Preliminary criteria to select the financial institution that will act as trustee for these Trust Funds shall in be in accordance with the Benefit Sharing Plan of the ERP (attached as Annex 24) and include⁶¹:

- Financial Institution duly established under Nicaraguan Law
 - Experience in the establishment and management of Trust Funds as Trustee
 - No legal nor administrative limitations to undertake such duties
 - Willingness of build-up presence in the Project area to guarantee disbursements to local beneficiaries
 - Offer of a variety of different instruments to make monetary disbursements
 - Technical capacity to prepare and execute competitive bidding processes and sub-projects
 - Ability to manage and oversee socio-environmental programs
 - Diversification of financial instruments for sustainable livestock and agroforestry sub-projects
 - Access to funding sources interested in forest landscape restoration and avoided deforestation
- CABEL as AE will complete a capacity assessment of the financial institution chosen, taking into consideration a risk assessment of their financial management and procurement policies, procedures and controls, including their ability to implement and comply with CABEL's policies.

82. The financial resources to co-finance the sub-projects for Sustainable Community Enterprises, Community Forest Management and Restoration included in "Output 1.2.2 Natural forests ecosystems and forest land conserved, restored and sustainably used" shall be administered by the National Funds, which are the Forest Development Fund FONADEFO operative since 2003, and the National Fund of the Environment (FAN). These Funds will provide non-reimbursable incentives to beneficiaries according to their respective regulations and operating manuals. Their governance and operation is ruled by legal procedures and regulations that have been duly assessed by the Program⁶² and are audited by the General Comptroller of the Nation (*Contraloría General de la República*). The governance mechanisms of both Funds allow for the participation of sectoral governmental institutions and non-governmental entities and actors, setting the basis for participation, transparency and accountability.

83. The FONADEFO⁶³ is managed by the co-Directorate at the National Forestry Institute INAFOR and is governed by an inter-institutional Regulating Committee composed of INAFOR, MARENA and the MHCP. INAFOR's co-Directorate has to inform twice a year to the National Forest Commission CONAFOR about the development of the projects and programs. The CONAFOR counts with other

⁶¹ Benefit-sharing plan of the ERP of the Caribbean Coast of Nicaragua. Plan de Distribución de Beneficios. Programa de Reducción de Emisiones para la Costa Caribe de Nicaragua. MARENA 2019; see also Section H, Annex 24), according to norm SIBOIF-677-2-MAY66-2011, Superintendencia de Bancos y Otras Instituciones Financieras.

⁶² Please refer also to the institutional and operational assessment of the FONADEFO within ERPD, Annex 16 that can be accessed at: https://www.forestcarbonpartnership.org/system/files/documents/ANNEXES_Nicaragua%20final%20ERPD_English_%20042818.pdf

⁶³ FONADEFO was created by Forest Law No. 462 and is ruled by Administrative Resolution No. CODF 59-2018 (La Gaceta, Official Diary No.73, April 12th, 2019)

governmental entities from the national level (IPSA, MEFCCA, INAFOR, MAG, MIFIC, MARENA, MINED, INTUR), as well as both Regional Governments from the CR, the Association of Municipalities (AMUNIC) and sectoral private and non-governmental representatives, as well as members from professional associations.

84. The FAN⁶⁴ is governed and overseen by a Board of Directors that is put together by a very wide spectrum of representatives from four National Ministries (MARENA, MHCP, Agriculture, Industries and Commerce); the Executive Director of the National Committee for Sustainable Development, a representative of the Municipalities (AMUNIC), and three representatives from organized civil society organizations (E-NGO's, private sector, academia). This Board takes relevant strategic decisions, sets funding policies, approves the annual operation plan and budget, and appoints on the Executive Director of the Fund who is accountable to the Board. The ample participation of different entities and sectors shall allow for a transparent and efficient use of the financial resources allocated to this Fund. The following Table 3.c summarizes Project executing and implementation roles and responsibilities for the delivery of each of Bio-CLIMA's Project Outputs

⁶⁴ The National Fund for the Environment FAN was created by Law No.217/1996 and is normed by its regulations issued by Presidential Decree No.91-2001 (La Gaceta, Official Diary No.195, 15.10.2001)

Table 3 c Project executing and implementation roles and responsibilities

OUTPUTS	EXECUTING ENTITY	IMPLEMENTATION PARTNER	ROLE
Output 1.1.1 Land use and management plans formulated; and restoration/conservation agreements signed/formalized with beneficiaries	MARENA	Specialized national or international services providers and/or national or international delivery partners.	Provide technical assistance to undertake participatory, gender sensitive land uses, business and resources planning to individual families and indigenous communities. Facilitate the celebration peaceful cohabitation, landscape restoration and forest conservation agreements.
Output 1.2.1 Degraded pasture- and rangeland restored	MHCP	Trustee of the Silvo-pastoral Restoration - (SPR-TF) and the Cocoa-Agroforestry Restoration Trust Funds (CAR-TF).	Procure the provision of technical services, goods and inputs needed to achieve the outputs commissioned by the ITC according to Annual Operative Plan
Output 1.2.2 Natural forests ecosystems and forest land conserved, restored and sustainably used	MHCP	FONADEFO, NATIONAL ENVIRONMENTAL FUND (FAN), and Trustee of the REDD+ RBP TRUST FUND	Provide financial incentives to communities for sub-projects submitted according to Operational Manuals. Make payments and procure goods and services to beneficiaries according to ER-Benefit Distribution Plan.
Output 1.2.3 Farmer cooperatives, producer organizations and community enterprises access high-value markets	MARENA	Specialized technical assistance services providers and/or national or international delivery partners.	Provide training, expert support and coaching to farmer cooperatives, producer organizations and indigenous communities.
Output 2.1.1 Environmental authorities present at the regional and local level, including municipalities and Indigenous Territorial Governments (GTIs) strengthened	MHCP	Environmental authorities present at the regional and local levels (MARENA, INAFOR, SERENA RACCN and RACCS, municipalities and Indigenous Territory Governments (GTIs)	Undertake mandatory duties of regulation, oversight and forest and environmental law enforcement, and territorial defense and natural resources conservation.

Output 2.1.2 Legal and normative framework updated	MARENA	Specialized technical assistance services providers and/or national or international delivery partners.	Provide expert and facilitation support to update technical and administrative norms and procedures; as to update management plans of protected areas
Output 2.1.3 Public-private dialogue and cooperation strengthened	MARENA	Specialized technical assistance services providers and/or national or international delivery partners.	Provide expert and facilitation support to improve the business climate, involve the private sector and community and set-up the SPR and CAR Trust Funds
Output 2.2.1 Territorial governments and local organizations strengthened	MARENA	Specialized technical assistance services providers and/or national or international delivery partners	Provide organizational, technical and legal support to strengthen the GTIs, local producer organization and local producer organizations.
Output 2.2.2 Forest, land-use and land use change administration, control and environmental law enforcement strengthened	MARENA	Environmental authorities present in the region, including Regional and Local Governments and Indigenous Territory Governments (GTIs)	Set up and operate mobile and fixed timber transport, deforestation and forest fire prevention and territorial and resources defense control brigades.
Output 3.1.1 Technical personnel, extension workers and promoters trained	MARENA	Specialized technical assistance services providers and/or national or international delivery partners	Provide training to technical personnel and extension workers from public entities at the regional and local levels.
Output 3.1.2 Producers and members of organizations/communities trained	MARENA	INTA, INAFOR, MEFCCA, SERENAs (RACCN and RACCS), and GTIs.	Provide training to farmers, producers and members of indigenous and non-indigenous organizations.
Output 3.2.1 Information systems for climate resilient sustainable development and risk management are in place	MARENA	Specialized technical assistance services providers and/or national or international delivery partners	Provide expert support to set-up / update land use, land use change and natural resources and GHG emissions information and monitoring tools and systems.
Output 3.1.1 The public is more aware of the need for climate change adaptation/mitigation and forest ecosystem restoration and conservation	MARENA	Specialized technical assistance services providers and/or national or international delivery partners	Provide expert support and consultancy services to develop and roll out a communication strategy and environmental education campaign.

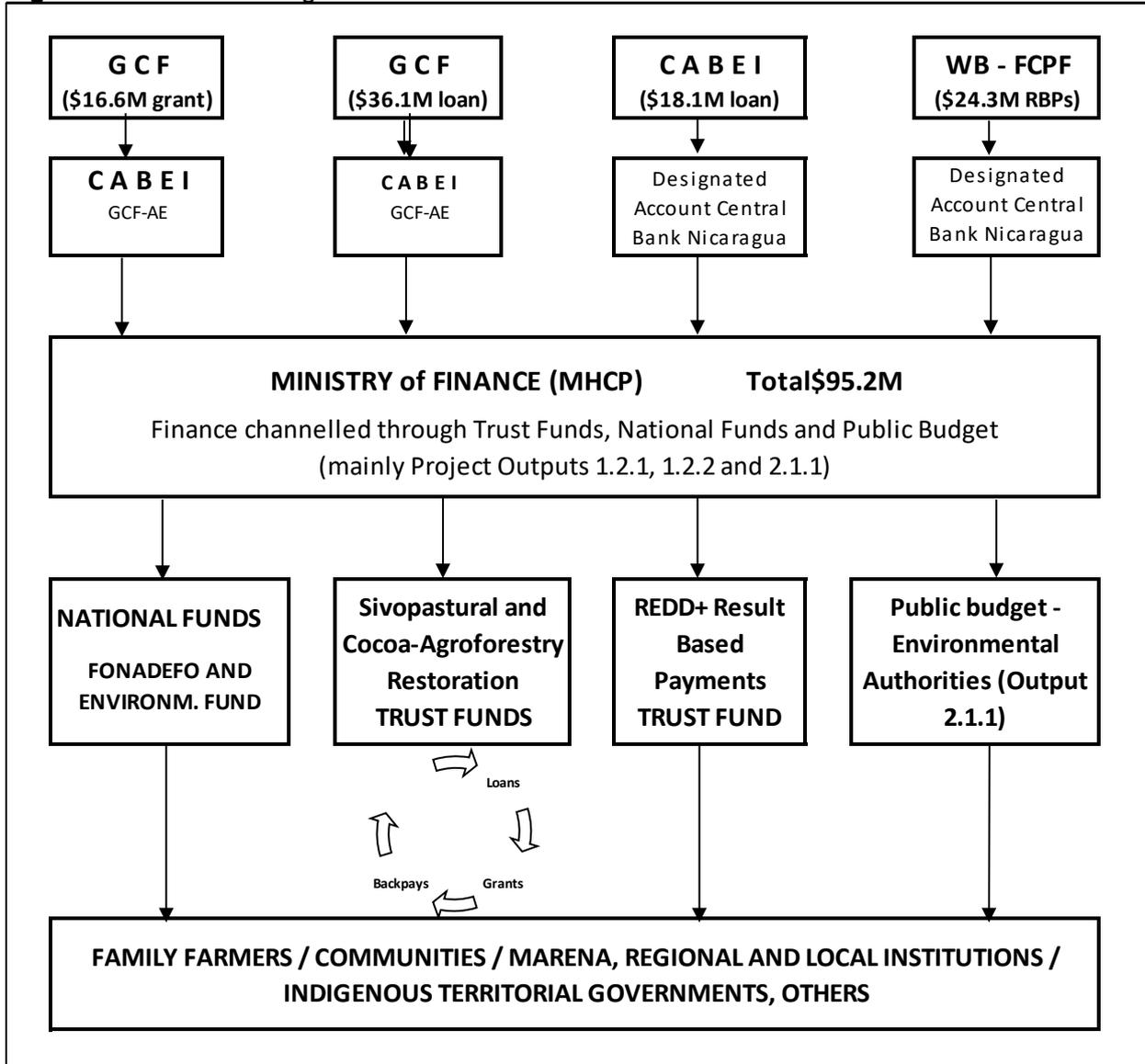
Table 3d Financial instruments for Trust Funds and National Funds disbursements

FINANCIAL INSTRUMENT OR ENTITY	MODALITY OF DISBURSEMENTS
<p>Silvo-pastoral Restoration Trust Fund (SPR-TF)</p>	<ul style="list-style-type: none"> • Procurement of the provision of technical assistance and professional services • Procurement of goods and inputs • Loans for middle sized producers
<p>Cocoa Agroforestry Restoration Trust Fund (CAR-TF)</p>	<ul style="list-style-type: none"> • Procurement of the provision of technical assistance and professional services
<p>REDD+ Result Based Payments Trust Fund (RBP-TF)</p>	<ul style="list-style-type: none"> • Grants to co-finance community sub-projects • Procurement of goods and inputs for communities • Cash payments to private owners (ERPD BSP, not included in Bio-CLIMA budget)
<p>National Forest Fund (FONADEFO)</p>	<ul style="list-style-type: none"> • Grants to provide financial incentives / co-finance community sub-projects: Sustainable Community Enterprises (SCEs), Community Forest Management (CFM), and Community Forest Restoration (CFR)
<p>National Fund of the Environment (FAN)</p>	

FLOW OF FUNDS⁶⁵

85. MARENA and the MHCP as Project Executing Entities shall receive the financial resources for the Bio-CLIMA Project from the different funding sources (GCF, GEF, CABEI, FCPF) using the specific disbursement mechanisms and regulations of each of them. In the operational phase these will identify, select and engage the different implementation partners as to the typologies and modalities described above, who will be responsible for the implementation of Project activities and delivery of Project Outputs, for which the financial resources shall be transferred, according to the schematic flow diagrams that are shown in the diagrams below:

Figure 5: Fund Flow Diagram for the MHCP



86. It is envisaged that through the Silvo-pastoral Restoration - (SPR-TF) and the Cocoa-Agroforestry Restoration Trust Funds (CAR-TF) approximately US\$18.6 million shall be invested to finance the activities for the restoration of degraded pasture and rangeland included under Output 1.2.1.

⁶⁵ The values presented in Tables 4, 5, 6, 7 and Figures 5 and 6 represent the flow and management of funds and are not directly comparable with those presented in Tables 9 and 10, which present the general budget and include all funding sources (e.g. GEF-7 funding which will not be managed through Trust Funds), according to the respective format.

Most of investment are material and equipment for the establishment of the silvo-pastoral, cocoa-agroforestry and CTNPF reforestation (87.28%) by family farmers, and activities related to the training and technical assistance, as shown in the table below:

Table 4 Funds to be channeled through the SPR and CAR Trust Funds, by sources and budget categories

SILVO-PASTORAL AND COCOA-AGROFORESTRY RESTORATION TRUST FUNDS						
Budget categories	Total Cost (\$US)	Funding Sources				%
		GCF (Grant)	GC(Loan)	CABEI (Loan)	GEF (Grant)	
Materials and Equipment	16,220,291	4,231,252	7,757,296	4,231,743	- 0	87.28%
Training, workshops, and conference	408,230	53,100	97,351	257,779	- 0	2.20%
Travel	636,472	53,100	97,351	486,021	- 0	3.42%
Professional/ Contractual Services	1,319,233	212,402	389,403	717,428	- 0	7.10%
TOTAL	18,584,225	4,549,855	8,341,400	5,692,970	- 0	100.00%
	%	24.48%	44.88%	30.63%	0.00%	

87. On the other hand, a financial volume of approximately US\$42.5 million shall be invested into conservation, restoration and sustainable use forest ecosystems by indigenous and afro-descendant communities through Sustainable Community Enterprises, commercial Community Forest Management CFM and Community Forest Restoration (CFR) sub-projects. These resources shall be administered by the National Funds: the FONADEFO and the National Fund of the Environmental (FAN). Most resources (79.28%) shall be invested by the communities in material, equipment, construction and infrastructure, as presented in the table below:

Table 5 Funds to be channeled through the National Funds, by sources and budget categories

NATIONAL FUNDS: FONADEFO AND FAN						
Budget categories	Total Cost (\$US)	Funding Sources				%
		GCF (Grant)	GCF (Loan)	CABEI (Loan)	GEF (Grant)	
Materials and Equipment	15,335,735	4,216,172	10,360,723	758,840	0 -	36.06%
Construction cost	18,367,033	5,315,466	11,736,245	1,315,323	0 -	43.19%
Training, workshops, and conference	1,035,095	301,811	658,123	75,161	0 -	2.43%
Travel	1,441,116	421,421	927,569	92,126	0 -	3.39%
Professional/ Contractual Services	6,351,240	1,845,235	4,084,860	421,146	0 -	14.93%
TOTAL	42,530,220	12,100,105	27,767,519	2,662,596	0 -	100.00%
	%	28.45%	65.29%	6.26%	0%	

88. Result Based Payments from the World Bank/FCPF addressed to producers and indigenous communities to be channeled through the RBP-TF shall complement and co-finance the before-mentioned activities included in Project Sub-component 1.2 for the investments in landscape restoration, forest conservation and climate-resilient production up to an amount to US\$24.3 million:

Table 6 Funds to be channeled through the Result Based Payments Trust Fund, by sources and budget categories

REDD+ RESULT BASED PAYMENTS TRUST FUND		
Budget categories	Total Cost (\$US)	%
Materials and Equipment	11,608,969	47.74%
Construction cost	7,600,004	31.25%
Training, workshops, and conference	650,152	2.67%
Travel	1,145,487	4.71%
Professional/ Contractual Services	3,311,861	13.62%
Total	24,316,473	100.00%

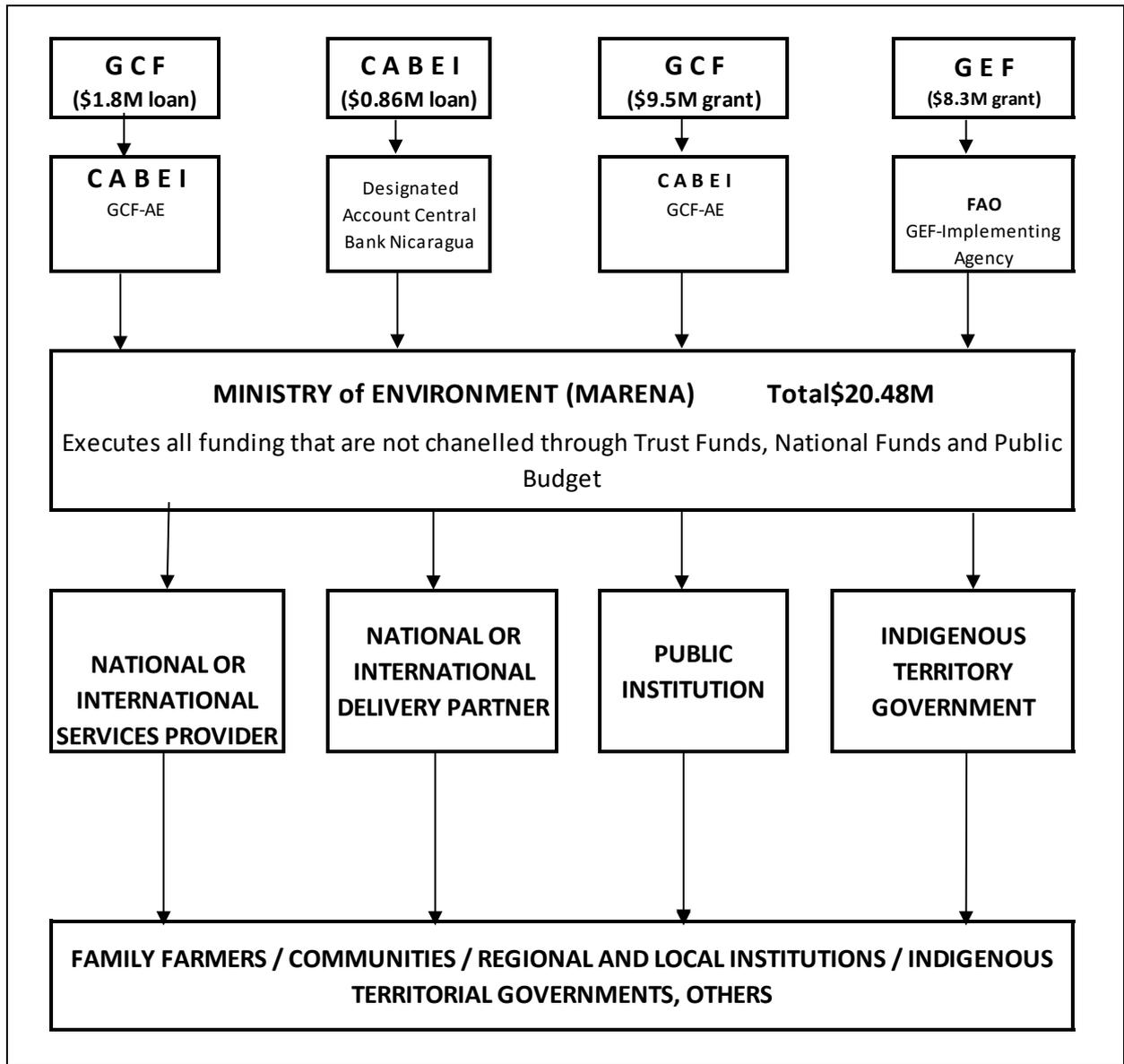
89. The total amount to be executed by the MHCP is of US\$95,213,236, from which US\$85,430,918 shall be flow through the abovementioned mechanisms (Trust Funds and National Funds).

90. The total finance to be executed by the MARENA (and the FAO as GEF-Implementing Agency on its behalf) for the implementation of the “technical” and monitoring activities to be implemented in collaboration with implementing partners amounts to US\$20,479,009 and is illustrated as to the fund flow diagram below:

Table 7 Funds to be executed by MARENA (FAO for the GEF) , by sources and budget categories

Budget categories	Total Cost (\$US)	Funding Sources				%
		GCF (Grant)	GCF (Loan)	CABEI (Loan)	GEF (Grant)	
Local consultants	1,275,278	583,566	285,711	-	406,001	6.23%
International consultant	396,000	244,714	28,800	-	122,486	1.93%
Materials and Equipment	4,535,862	1,615,508	261,083	175,355	2,483,917	22.15%
Construction cost	1,649,115	230,700	132,127	61,395	1,224,893	8.05%
Training, workshops, and conference	1,361,698	721,028	82,053	20,641	537,976	6.65%
Travel	1,251,650	551,757	127,233	67,203	505,458	6.11%
Professional/ Contractual Services	10,009,406	5,541,836	929,035	537,052	3,001,483	48.88%
TOTAL	20,479,009	9,489,108	1,846,042	861,646	8,282,213	100.00%
	%	46.34%	9.01%	4.21%	40.44%	

Figure 6: Fund Flow Diagram for the MARENA



B.5. Justification for GCF funding request (max. 1000 words, approximately 2 pages)

91. The International Monetary Fund has classified Nicaragua as a moderately risky country. In this very complex and challenging economic context the Government of Nicaragua will be making an enormous fiscal effort to achieve the transformational change proposed through Bio-CLIMA, which can only be achieved with an equivalent big grant portion from the GCF and the GEF needed to create the state building measures, institutional capacities, normative and governance conditions, and an investment climate to enable deforestation reductions in the CR. GCF and GEF grant funding is needed, in addition to CABEI, and FCPF REDD+ RBPs co-finance in order to reach the most vulnerable population, indigenous and afro-descendant people, targeting especially the women and the young at the agricultural frontier in Nicaragua: they have very limited market access, limited access to financial markets and agricultural and climate technological advice, and suffer from poor basic infrastructure. Bio-CLIMA will support the creation of the enabling institutional environment, improved business climate to de-risk private finance and better market access to catalyze a long-lasting transformation that will enable that the REDD+ RBP continue supporting forest conservation and rural livelihoods in the medium and longer term after project End.

92. Therefore, it cannot hire high indebtedness and must therefore prioritize concessional debt. Due to the lack of solvency to obtain loans under market conditions, legal and policy instruments have been designed - General Public Debt Act (Law 477), Debt Strategy and Annual Public Indebtedness Policy - to establish public borrowing ceilings to maintain control of the level of debt and sustainability of public finance. In additionally to the already stringent financial panorama Nicaragua is facing, the effects of the COVID-19 crisis might force the Government of Nicaragua to assign additional budget resources to the health sector and to the reactivation of the economy. The CR of Nicaragua, especially the vast and remote areas within the buffer zones of BOSAWÁS and Indio Maíz protected areas have a very weak presence of any of the institutions: not only public regulators, technical assistance or service providers of any nature, but also financial service providers and financial markets are completely absent. Private financial institutions are not present in the region, thus new and specially tailored instruments to provide financial incentives, TA and market access, like the Trusts Funds will need to be created. Vulnerable groups such as women, youth, and indigenous peoples are particularly disadvantaged. GCF grant support will allow for the transformation of farming techniques, restoring degraded landscaped through climate smart and resilient agricultural production systems that sequester carbon, conserve ecosystems and ecosystem services. Without the grant that is being requested by Nicaragua for this Project, the country could not invest in all the actions required to achieve the challenges posed by the transformational process needed to revert the vicious cycle of poverty, natural resources depletion and deforestation in the vast territory of the Caribbean Region, which has and extension of the national territories of the Netherlands and Belgium, together.

93. Within such a challenging environment public investment (national and international) need to first create an enabling environment to catalyze sustainable development and arrange for the provision of public goods. While the financial analysis shows that for all models the IRR is higher than the discount rate of 8%, a high level of concessionality will be necessary to act as a real incentive to trigger the behavioral change needed. Return on investment happens only after 7 and up to 14 years, which makes models attractive only with a strong incentive since the project are has extremely complex conditions regarding public infrastructure, accessibility and services that are completely absent, and that must also be taken into consideration.

B.6. Exit strategy and sustainability (max. 500 words, approximately 1 page)

94. The productive landscape restoration and forest conservation modules that will be introduced by the Project will generate financial benefits that are much higher than the investment initially mobilized and have a financial IRR between 11.2 and 16.4%, while SCE, CFM and CFR sub-projects are estimated to range between 10.2 and 21.6 financial IRR; thus respectively producing important financial benefits for the beneficiaries in the middle and long term. The linked to high value markets with project support, and additional technical capacities and strengthened extension services at local level, these models will quickly be scaled up to cover the entire CR and produce forest conservation and livelihood improvement benefits.

95. The Project will initially impact on 8,417 productive units and 603, 035 ha of forests within the project implementation areas to be then scaled-up to additional beneficiaries and communities in the 23 indigenous territories. This will be achieved through i.) INTA's Innovation and Research Farm (FIIT) – model through which farmers share knowledge using the farmer field school methodologies, ii.) The REDD+ Result Based Payment scheme that will continue to support sustainable forest conservation initiative put forward and executed by indigenous and afro-descendant communities and; iii.) Incentives to sustainable forest management and reforestation sub-projects to be financed through the FONADEFO and the other the Environmental Fund. While Nicaragua is expected to sign an Emission Reduction Agreement for its first REDD+ RBP program with the World Bank before the End of year 2020 for a total of 11 M t CO_{2eq} until year 2025, a follow-up agreement for emission reductions payments will follow, be this with the FCPF, the GCF "REDD+ window", or with another interested party. The carbon flows and its potential market value reach far beyond the 7-year duration of the Bio-CLIMA project and its future RBPs will secure a forest conservation and sustainable development pathway in the medium and long term.

96. Bio-CLIMA and the ERP are complementarily for the implementation the national REDD+ Strategy ENDE REDD+: Bio-CLIMA will provide catalytic investment, create the technical conditions, capacities and provide the enabling environment for REDD+, the ERP will allow for REDD+ Result Based Payments that will benefit directly private land owners and indigenous communities in the long term with a RBP potential⁶⁶ of more than US\$ 473 million, which will be additional to those generated by the financial returns from the restoration and conservation models mentioned above. As shown in Table 8 below, even in the most pessimistic scenario of achieving only 50% of the emission reduction targets set in the ERP, the financial flows accruing the REDD+ RBP Trust Fund in order to benefit local communities and producers that restore landscapes and/or conserve forests will reach a monetary value for more than US\$78.9 million at year 8 when Bio-CLIMA is expected to End.

97. Once the Silvo-pastoral and Agroforestry Restoration Trust Funds have been set up by Bio-CLIMA a stronger involvement of the private sector will be facilitated by the Project in order to include them into the scheme to partner with the objective to promote sustainable, carbon neutral and fair-trade production schemes. During project preparation possible private partners which include Ritter Sport, Cacao Oro, Atlantic and Ingelmann (cocoa); as the Association of Cattle Farmers and Meat Exporters (FEDEGAN, CANICARNE) have been contacted. The project will strive to integrate small, medium and larger producers and companies through financial support, technical assistance and market support.

98. The substantive investment the Government of Nicaragua is doing in order to strengthen local institutions and capacities will be the basis for replication and scaling-up of best practices introduced by Bio-CLIMA at the regional level. This, together with an updated legal and normative framework for climate-smart sustainable land and forest use, governance conditions and a general enabling environment will permit scaling-up to the whole CR.

⁶⁶ 100% emission reduction target

Table 8 Projected emission reductions and its estimated monetary value

Year	Marketable carbon according to the emission reduction targets (US\$ 5/tCO ₂ eq)								Source (Result Based Payment/ Potential carbon market)
	25%		50%		75%		100%		
	MtCO ₂ eq	Value (US\$)	MtCO ₂ eq	Value (US\$)	MtCO ₂ eq	Value (US\$)	MtCO ₂ eq	Value (US\$)	
1	0.55	2,767,226	1.11	5,534,451	1.66	8,301,677	2.21	11,068,903	a) REDD+ (FCPF - WB)
2	1.28	6,390,444	2.56	12,780,887	3.83	19,171,331	5.11	25,561,774.	
3	2.27	11,326,066	4.53	22,652,132	6.80	33,978,198	9.06	45,304,264	
4	3.37	16,829,950	6.73	33,659,899	10.10	50,489,849	13.46	67,319,798	
5	4.55	22,752,439	9.10	45,504,878	13.65	68,257,317	18.20	91,009,756	
6	5.57	27,832,128	11.13	55,664,257	16.70	83,496,385	22.27	111,328,514	
7	6.40	31,995,899	12.80	63,991,797	19.20	95,987,696	25.60	127,983,595	
8	7.89	39,447,693	15.78	78,895,386	23.67	118,343,079	31.56	157,790,772.	
9	9.31	46,565,033	18.63	93,130,065	27.94	139,695,098	37.25	186,260,130	
10	10.67	53,347,918	21.34	106,695,835	32.01	160,043,753	42.68	213,391,66	
11	12.03	60,130,803	24.05	120,261,605	36.08	180,392,408	48.10	240,523,211	
12	13.38	66,898,380	26.76	133,796,761	40.14	200,695,141	53.52	267,593,521	
13	14.67	73,330,920	29.33	146,661,841	44.00	219,992,761	58.66	293,323,681	
14	15.95	79,763,460	31.91	159,526,921	47.86	239,290,381	63.81	319,053,842	
15	17.24	86,196,000	34.48	172,392,001	51.72	258,588,001	68.96	344,784,002	
16	18.52	92,613,233	37.05	185,226,466	55.57	277,839,699	74.09	370,452,932	
17	19.81	99,030,466	39.61	198,060,931	59.42	297,091,397	79.22	396,121,863	
18	21.09	105,440,044	42.18	210,880,089	63.26	316,320,133	84.35	421,760,178	
19	22.37	111,849,623	44.74	223,699,247	67.11	335,548,870	89.48	447,398,493	
20	23.65	118,259,202	47.30	236,518,404	70.96	354,777,607	94.61	473,036,809	

C. FINANCING INFORMATION						
C.1. Total financing						
(a) Requested GCF funding (i + ii + iii + iv + v + vi + vii)		Total amount			Currency	
		64,094,029			million USD (\$)	
GCF financial instrument		Amount	Tenor	Grace period	Pricing	
(i)	Senior loans	37,954,962	40 years	10 years	0.00 %	
(ii)	Subordinated loans	Enter amount	Enter years	Enter years	Enter %	
(iii)	Equity	Enter amount	Enter years		Enter % equity return	
(iv)	Guarantees	Enter amount				
(v)	Reimbursable grants	Enter amount				
(vi)	Grants	26,139,067				
(vii)	Results-based payments	Enter amount				
(b) Co-financing information		Total amount			Currency	
		51,598,216			million USD (\$)	
Name of institution		Financial instrument	Amount	Currency	Tenor & grace	Seniority
CABEI *		Senior Loans	18,999,530	million USD (\$)	25 years 5 years	senior
FCPC - Results-based payments **		Grant	24,316,473	million USD (\$)	Enter years Enter years	Options
GEF 7		Grant	8,282,213	million USD (\$)	Enter years Enter years	Options
(c) Total financing (c) = (a)+(b)		Amount			Currency	
		115,692,245			million USD (\$)	
(d) Other financing arrangements and contributions (max. 250 words, approximately 0.5 page)		<p>* Nicaragua will apply to CABEI's Poverty Reduction and Social and Economic Exclusion Program (PRPEES) for this Loan.</p> <p>** Result-based payments for emission reduction are marked as "grant" since the template does not provide a more exact choice.</p>				

C.2. Financing by component

99. Nicaragua has decided to focalize its Emission Reduction Program in the Caribbean Region, which has an area of more than 7 million hectares, a territory of the size of the Netherlands and Belgium put together. To achieve the enormous challenge to reduce deforestation and improve ecosystem and livelihood resilience is such a vast, remote and poorly developed territory, a programmatic approach was chosen through which different funding sources and instruments are used complementarily and synergistically. Therefore, the financial structure by component and by activity shown in Tables 9 and 10 below show how different funding sources and instruments complement each other.

Table 9 Financing sources by project components

Components	Total cost (US\$)	GCF Financing and Co-Financing (by Funding sources and financial instruments)					GCF (Grant)	(%)
		GCF (Grant)	GCF (Loan)	CABEI (Loan)	FCPF REDD RBPs	GEF (Grant)		
Component 1	94,455,226	20,198,029	36,108,920	8,355,566	23,745,066	6,047,646	81.64%	
Component 2	11,905,361	113,378	690,347	10,106,912	377,007	617,717	10.29%	
Component 3	8,382,836	5,479,855	1,009,900	537,052	194,400	1,161,629	7.25%	
Project Management	738,821	242,805	145,795	-	-	350,221	0.64%	
Independent Evaluation	210,000	105,000	-	-	-	105,000	0.18%	
Total	115,692,245	26,139,067	37,954,962	18,999,530	24,316,473	8,282,213	100.00%	
(%)		22.59%	32.81%	16.42%	21.02%	7.16%		

100. **The mutual complementarity of funding sources results in a blended grant and loan finance for most activities.** This has been combined with assigning a bigger weight to a given funding source and instrument depending of activities and/or thematic areas: For example, land use and management planning for landscape restoration, forest conservation and climate resilient production (Subcomponent 1.1) are financed solely by the GCF and the GEF grant finance since these are preparatory activities for any investment. On the other hand, restoration of degraded pastures into silvo-pastoral systems (Activities 1.2.1.1 and 1.2.1.2) have a much stronger finance component originated from credit and RBPs, but not at all by GCF finance. Reforestation of degraded land on steep slopes into CTNPF (Act. 1.2.1.4) and the conservation and restoration of natural forest ecosystems and forest lands mainly in indigenous territories (Activities 1.2.2.1 – 1.2.2.3) involves a blend of all funding sources. It should also be noted that all investments and costs to strengthen the environmental authorities and the regional and local level included in Output 2.1.1 (e.g. personnel, equipment, material and operational costs) will be covered by credit; while capacity development activities included in Output 3.1.1.1 and 3.1.1.2 shall be exclusively financed through grants (GCF and GEF).

Table 10 a Total cost, financial instrument for all funding sources per project output and activity

COMPONENTS, SUB-COMPONENTS, OUTPUTS AND ACTIVITIES	Funding by sources (in '000 US\$, rounded values)					
	TOTAL	GCF (Grant)	GCF (Loan)	CABEI (Loan)	FCPF (RBPS)	GEF-7 (Grant)
COMPONENT 1: CONSERVING AND PRODUCING FOR LIFE	94,455	20,198	36,109	8,356	23,745	6,048
Sub-component 1.1 Land use and management planning for landscape restoration, forest conservation and climate-resilient production	3,898	3,147	-	-	-	752
<i>Output 1.1.1 Land use/management plans formulated; and restoration/conservation agreements signed/formalized with beneficiaries</i>	3,898	3,147	-	-	-	752
1.1.1.1 Assist small producers to formulate Land Use-Management Plans (LUMPs) with business plans (BPs).	2,094	1,529	-	-	-	565
1.1.1.2 Assist indigenous communities to formulate Territorial Development Plans (TDPs) including business plans (BPs).	695	660	-	-	-	35
1.1.1.3 Assist middle sized producers to formulate Land Use-Management Plans (LUMPs) with business plans (BPs).	216	145	-	-	-	71
1.1.1.4 Facilitate celebration and formalization of landscape restoration and forest conservation agreements.	894	813	-	-	-	80
Sub-component 1.2 Investments in landscape restoration, forest conservation and climate-resilient production	90,557	17,052	36,109	8,356	23,745	5,296
<i>Output 1.2.1 Degraded pasture- and rangeland restored.</i>	26,352	4,550	8,341	5,693	6,739	1,028
1.2.1.1 Small producers (farm size < 35 ha) restore degraded pastures into climate resilient, biodiverse sustainable silvo-pastoral systems.	3,349	-	-	1,574	1,239	536
1.2.1.2 Middle sized producers (farm size > 35 ha) restore degraded pastures into biodiverse silvo-pastoral systems.	5,024	-	-	2,010	2,663	352
1.2.1.3 Producers restore degraded pastures into biodiverse cocoa agroforest systems.	15,166	4,550	8,341	-	2,275	-
1.2.1.4 Reforest degraded land on slopes (> 50%) into biodiverse, Close to Nature Planted Forests (CTNPFs).	2,812	-	-	2,109	562	141
<i>Output 1.2.2 Natural forest ecosystems and forest land conserved, restored and sustainably used.</i>	62,403	12,100	27,768	2,663	17,006	2,867
1.2.2.1 Finance Sustainable Community Enterprises (SCE) in indigenous territories within protected areas for natural forest ecosystems conservation and use.	5,123	1,178	2,254	-	1,076	615
1.2.2.2 Finance commercial Community Forest Management (CFM) sub-projects with business plans prepared by indigenous communities outside protected areas.	23,998	3,600	13,199	-	5,280	1,920
1.2.2.3 Finance commercial Community Forest Restoration (CFR) sub-projects with business plans prepared by indigenous communities outside protected areas.	33,282	7,322	12,315	2,663	10,650	333
<i>Output 1.2.3 Farmer cooperatives, producer organizations and community enterprises access high-value markets.</i>	1,802	402	-	-	-	1,400
1.2.3.1 Support cooperatives, producer organizations and indigenous community (SCEs and CRMR) to reach high-value markets.	82	16	-	-	-	65
1.2.3.2 Facilitate targeted business contacts between producer organizations and indigenous communities' enterprises with high value markets.	540	173	-	-	-	367
1.2.3.3 Support producer organizations and community enterprises in voluntary certification processes.	1,180	212	-	-	-	968

COMPONENT 2: GOOD GOVERNANCE	11,905	113	690	10,107	377	618
Sub-component 2.1 Regional natural resources governance strengthened	10,366	28	152	9,782	10	395
<i>Output 2.1.1 Environmental authorities present at the regional and the local level, including municipalities and indigenous territory governments (GTIs) strengthened.</i>	9,782	-	-	9,782	-	-
2.1.1.1 Hire new technical, extension and control personnel to work in the project area and indigenous territories.	6,804	-	-	6,804	-	-
2.1.1.2 Procure material, equipment and vehicles for regional and local institutions.	1,806	-	-	1,806	-	-
2.1.1.3 Grant public budget for operational expenses to regional/local environmental authorities, including Indigenous Territorial Governments.	1,172	-	-	1,172	-	-
<i>Output 2.1.2 Legal and normative framework up-dated.</i>	376	28	96	-	-	252
2.1.2.1 Analyze and up-date forestry, environmental and land-use normative framework at national level.	187	-	84	-	-	103
2.1.2.2 Support regional / local environmental authorities to actualize the normative framework.	78	-	12	-	-	66
2.1.2.3 Up-date the management plans of the two protected areas: BOSAWAS and Indio Maíz.	111	28	-	-	-	83
<i>Output 2.1.3 Public-private dialogue and cooperation strengthened.</i>	208	-	56	-	10	143
2.1.3.1 Facilitate sectoral public-private dialogue at regional and local level.	23	-	-	-	10	13
2.1.3.2 Strengthen the Production, Consumption and Marketing System (SPCC) at regional level.	185	-	56	-	-	130
Sub-component 2.2 Local organization, territorial oversight and law enforcement strengthened	1,539	86	539	325	367	223
<i>Output 2.2.1 Territorial governments and local organizations strengthened.</i>	700	86	391	-	-	223
2.2.1.1 Provide institutional strengthening to Indigenous Territorial Governments (GTIs).	621	62	373	-	-	186
2.2.1.2 Provide organizational support to local producer organizations (indigenous and non-indigenous).	33	10	-	-	-	23
2.2.1.3 Provide legal support to legalize producer organizations, cooperatives and community enterprises.	46	14	18	-	-	14
<i>Output 2.2.2 Forest, land-use and land use change administration, control and environmental law enforcement strengthened.</i>	839	-	148	325	367	-
2.2.2.1 Operate mobile units and fixed control posts to control timber transport.	195	-	102	94	-	-
2.2.2.2 Operate deforestation control and forest fire prevention brigades.	182	-	-	-	182	-
2.2.2.3 Operate indigenous people territorial defense and resources control brigades.	462	-	46	231	185	-
COMPONENT 3: CAPACITY DEVELOPMENT FOR PRODUCTIVE LANDSCAPE RESTORATION AND FOREST CONSERVATION	8,383	5,480	1,010	537	194	1,162
Sub-component 3.1 Capacity development through training.	1,029	881	-	-	-	148
<i>Output 3.1.1 Technical personnel, extension workers and promoters trained.</i>	145	76	-	-	-	70
3.1.1.1 Train technicians and extensionists in participatory land use planning (LUMP-b, TDPs-b).	67	33	-	-	-	33

3.1.1.2 Train stakeholders to use the up-dated sectoral legal and normative framework.	21	2	-	-	-	19
3.1.1.3 Train technicians and extension workers to implement Productive Landscape Restoration / Forest Conservation Models.	57	40	-	-	-	17
<i>Output 3.1.2 Producers and members of organizations/communities trained.</i>	883	805	-	-	-	78
3.1.2.1 Provide organizational, management, financial and marketing training to producers and members of organizations/communities.	22	4	-	-	-	18
3.1.2.2 Train producers in LUMP, TDP and Productive Landscape Restoration / Forest Conservation Models.	861	801	-	-	-	60
Sub-component 3.2 Development of tools and instruments	5,410	3,368	1,010	537	-	495
<i>Output 3.2.1 Information systems for climate resilient sustainable development and risk management are in place.</i>	5,410	3,368	1,010	537	-	495
3.2.1.1 Set up a deforestation and forest fires early-warning system.	504	353	-	-	-	151
3.2.1.2 Up-date and roll out the forest products administration and control system.	680	680	-	-	-	-
3.2.1.3 Monitor LULUC, deforestation and forest degradation.	2,244	2,087	-	-	-	157
3.2.1.4 Install and monitor permanent plots of the National Forest Inventory (NFI) in the CR.	911	-	456	456	-	-
3.2.1.5 Monitor biodiversity indicator species in 10% of plots of the NFI in the CR.	444	133	280	-	-	31
3.2.1.6 Monitor adaptation, mitigation and biodiversity impact of implemented productive landscape restoration/forest conservation models.	339	-	102	81	-	156
3.2.1.7 Monitor climate, hydro-meteorological (including tropical storms, hurricanes, droughts) and pest risk phenomena in order to inform and emit alerts.	288	115	173	-	-	-
Sub-component 3.3 Development of public awareness	1,944	1,231	-	-	194	518
<i>Output 3.3.1 The Public is more aware of the need for climate change adaptation, mitigation, landscape restoration and forest conservation.</i>	1,944	1,231	-	-	194	518
3.3.3.1 Develop and roll-out a public communication strategy.	216	22	-	-	22	173
3.3.3.2 Undertake environmental education in local schools and communities.	1,728	1,210	-	-	173	346
PROJECT MANAGEMENT AND EVALUATION	739	243	146	-	-	350
<i>Project Management Unit (PMU) in operation.</i>	567	186	146	-	-	235
Set-up and operate the PMU.	486	146	146	-	-	194
Strengthen MEFCCA/MARENA project oversight and steering capacities.	81	40	-	-	-	40
<i>Project M&E and reporting system implemented. Environmental and Social Impact Assessment and Management and Mitigation Plan in place.</i>	172	57	-	-	-	116
Set-up the project monitoring, evaluation and reporting system.	88	41	-	-	-	47
Systematize findings and lessons learnt and communicate project results.	84	16	-	-	-	68
INDEPENDENT EVALUATION (Mid-term Review and Final Evaluation)	210	105	-	-	-	105
TOTAL	115,692	26,139	37,955	18,999	24,316	8,282

Table 10 b Portion of Project funding per Output channeled through Funds (Trust Funds and National Funds)

Activities	Total (\$US)	Trust Funds				
		FONADEF	FAN	SPR-TF	CAR-TF	RBP-TF
Output 1.2.1 Degraded pasture- and rangeland restored	25,323,528	-	-	5,692,970	12,891,255	6,739,302
Output 1.2.2 Natural forest ecosystems and forest land conserved, restored and sustainably used	59,535,984	39,097,944	3,432,276	-	-	17,005,764
Output 2.1.3 Public-private dialogue and cooperation strengthened	10,077	-	-	-	-	10,077
Output 2.2.2 Forest, land-use and land use change administration, control and environmental law enforcement strengthened	366,930	-	-	-	-	366,930
Output 3.3.1 The Public is more aware of the need for climate change adaptation, mitigation, landscape restoration and forest conservation	194,400	-	-	-	-	194,400
TOTAL	85,430,918	39,097,944	3,432,276	5,692,970	12,891,255	24,316,473

C.3 Capacity building and technology development/transfer (max. 250 words, approximately 0.5 page)

C.3.1 Does GCF funding finance capacity building activities? Yes No

C.3.2. Does GCF funding finance technology development/transfer? Yes No

101. Bio-CLIMAs' Outputs 1.1.1, 1.2.3 and its entire Component 3 have the objective to build capacities at the regional and local level, and to strengthen or develop tools and instruments to support climate resilient sustainable development, Component 3 costing 7.25% of total project cost. Community members and small farmers will receive training and will be provided with technical assistance to establish productive landscape restoration agroforestry and silvo-pastoral models, restore degraded land and manage their natural forest in an integrated way. Capacities will be built for participatory, sustainable land use management planning (LUMP), integrated territorial development planning (TDP) combined with business plans, added value, organization and marketing.

102. Information systems including a Deforestation and Forest Fire Early Warning System (SAT) and the Timber Tracking System (TTS) will be developed and technology will be transferred to regional and local environmental authorities and the LULUC and REDD+ M-MRV System operated by MARENA will be strengthened and regional and local authorities will be trained to strengthen their capacities for regional and local oversight, monitoring and forest law enforcement.

D. EXPECTED PERFORMANCE AGAINST INVESTMENT CRITERIA

This section refers to the performance of the project/programme against the investment criteria as set out in the GCF's [Initial Investment Framework](#).

D.1. Impact potential (max. 500 words, approximately 1 page)

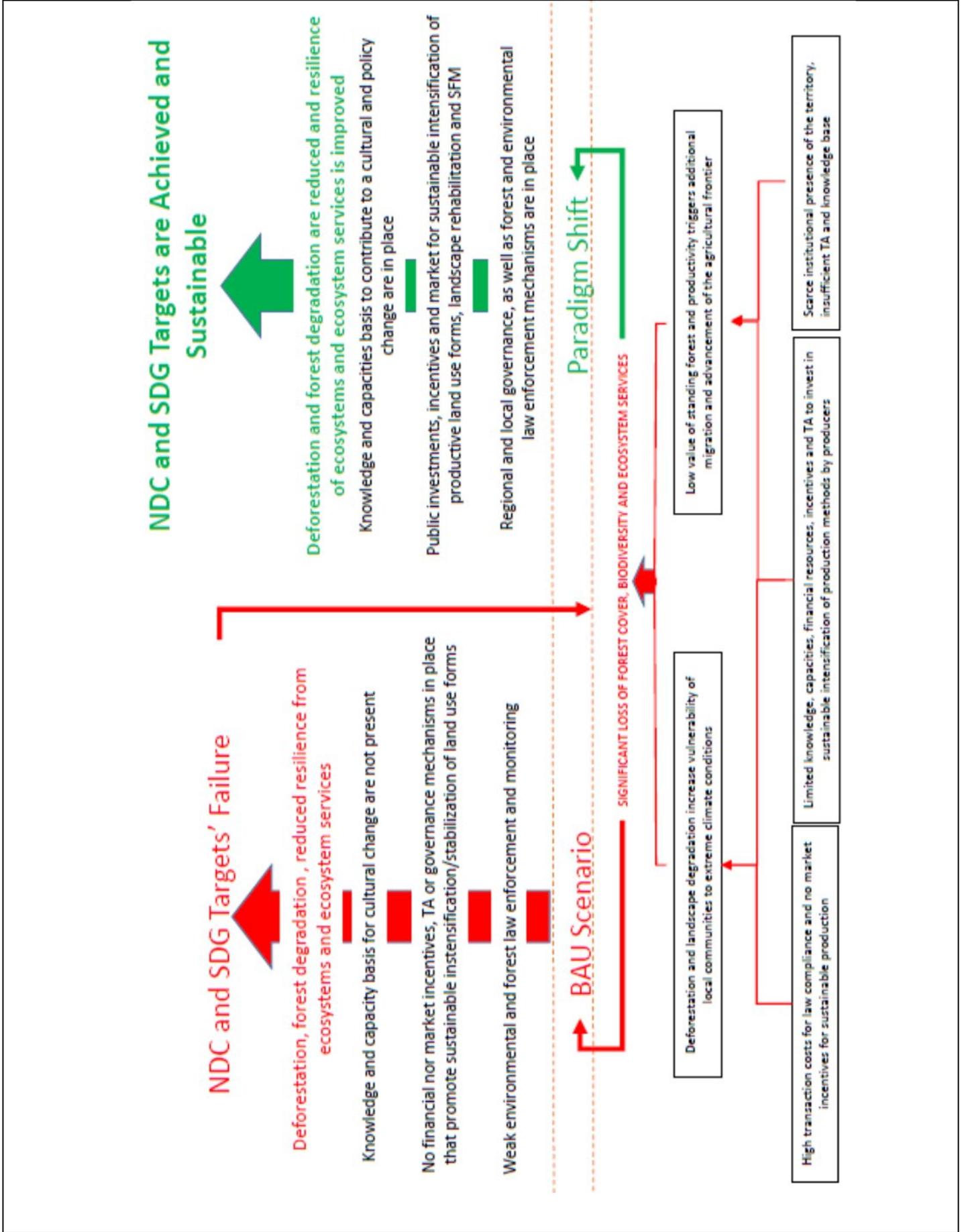
103. **While Bio-CLIMAs' impact is mainly on climate change mitigation, it will have significant adaptation co-benefits: Mitigation (Impact Result M.4)** The Project will contribute to a shift towards a low-emissions sustainable development pathway by creating an enabling environment (investment, knowledge transfer, markets and governance) for climate smart production, landscape restoration and forest conservation covering the most endangered forest areas in indigenous territories in the CR. It has been estimated that Bio-CLIMA will contribute to reduce 12.8Mt CO_{2eq} in 7 years of project implementation, through better land use and sequestration in productive landscape restoration systems and through CTNPF, sustainable community enterprises and community based sustainable forest

management and forest restoration, including GHG emissions avoided through reduction of methane emission from improved livestock management. The total mitigation impact is estimated to be 47.3M tCO₂ eq in 20 years, assuming a conservative scenario of only 50% performance of the ERP.

104. Co-benefits on climate change adaptation Impact Results A.1 and A.4: Bio-CLIMA will contribute to increased-climate resilient development through following results: Resilience of ecosystems and ecosystem services will be improved on approximately 2.3 million ha of restored landscapes, forest and ecosystems in the CR with an emphasis on the BOSAWAS and San Juan Biosphere Reserves as also on endangered forests of 12 indigenous territories. Introduction of climate smart landscape restoration agricultural practices of cocoa in agroforestry systems and silvo-pastures, and improved land management tools and instruments will strengthen the adaptive capacity and reduce the exposure to climate risks of more than 51,100 direct project beneficiaries (0.8%/pop.), the most of them being indigenous and afro-descendant, living in marginalization and poverty, and 614,721 indirect beneficiaries (9.8% of the population).

105. Through Bio-CLIMA relevant institutional systems within MARENA, MEFCCA, INAFOR and the Regional Governments of the CR for land use and planning, environmental protection and forestry development will be strengthened through additional personnel, resources and capacities that will empower them to implement the integrated LUMPs and TDPs and promote the climate smart development approach the project will introduce. The Project will also improve the generation and use of climate information in decision making through support to INETER (climate risk and weather alerts); INFONA (Deforestation Early Warning and Fire Detection System) and MARENA (LULUC MRV). This information will feed the public awareness and information campaign Bio-CLIMA will also support.

106. Bio-CLIMAs innovative approach of integrating GEF-7 funds will also lead to impact on biodiversity conservation, land restoration and climate change mitigation; the latter impact area reinforced by the fact that the Project also includes finance from REDD+ Result Based payments from the FCPF until year 7 and other possible sources from year 8 onwards.



D.2. Paradigm shift potential (max. 500 words, approximately 1 page)

107. Scaling-up and replication: Once the productive landscape restoration models have been implemented successfully by farmers and communities and show positive financial returns and livelihood improvement they will be implemented at bigger scale on the same farm and community as agreed upon in the LUMP and the TDPs. This effect should spill-over to neighbors, the community and the whole indigenous territory with the aim to change the development paradigm in the whole CR. The innovative approach applied by the Project could also be applied to other areas of tropical rain forest and indigenous territories in the Central American Region where deforestation in some protected areas is advancing.

108. Sustainable Community Enterprises (SCE) that will be supported on a competitive basis as far as they are financially viable and socially sound will trigger community driven development initiatives to further develop community business and enterprises that capitalize the rich natural capital of which indigenous and afro-descendant peoples are owners and custodians to benefit their livelihoods and culture: the notion that forests and biodiversity are an enormous asset still needs to be put into concrete practice to benefit those that nowadays own it, but live in relative poverty.

109. Bio-CLIMA will be mobilizing important investment to create capacities and the enabling environment for REDD result-based payments within the overall framework of Nicaragua's Emission Reduction Program. Receiving a payment for forest and eco-system conservation will produce a change in the perception of the value of standing conserved forests and ecosystems for their owners and trigger the expectation of future income from landscape restoration and forest conservation, leading to a long-term virtuous transformation process.

110. Knowledge and learning: A significant investment will be done in training and capacity building to strengthen the knowledge basis at the local level, strengthen institutions and human capital basis.

111. Enabling environment: Through the Trust Fund to be set up with Project support, costs and risks to invest in climate smart agriculture and sustainable cattle ranching and forest conservation will be reduced, and market access and development improved. The Trust and REDD+ RBPs provide for long-term financially sustainable continuity of activities and removes barriers, thus catalyzes impact beyond the scope to the project.

112. 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, to private operators, farmers and communities and to the general public in general. This will be done through an intensive and efficient public communication strategy and a specifically designed and targeted education program for schools and universities.

113. Regulatory environment: The project will contribute to the advancement of the national land use planning regulations in two steps: first operationalizing the LUMP and TDPs within project field operations and, second adjust and improve the LUMP through open and participatory dialogue process with the objective to update and improve the already existing regulation to be further enacted. The legal and normative framework that regulate forest management, harvesting and transport of forest products will be supported with the objective to propose simple and transparent legislation that farmers and communities can apply and comply with, removing red tape and reducing their transaction costs.

D.3. Sustainable development (max. 500 words, approximately 1 page)

114. Environmental co-benefits: Bio-CLIMA will contribute to the protection of the most threatened and biodiversity rich ecosystems in Nicaragua: The BOSAWAS Biosphere Reserve has an area of approximately 2 million ha, 15% of the nation's total land area and as such the second largest rainforest in the western hemisphere, after the Amazon. The Indio Maíz Biological Reserve, which is part of the Rio San Juan Biosphere, is the second largest area of lowland rainforest reserve in Nicaragua and contains a higher number of tree, bird, and insect species than all of Europe. Taken together, these areas are home to some 35 different ecosystems, thirteen of the nation's 21 most important watersheds, and close to one

million inhabitants⁶⁷. The livelihoods of these residents, mostly indigenous and afro descendant depend upon these forest and ecosystems, and they are highly vulnerable to impacts driven by climate change.

115. The international literature has widely documented the multiple ecosystem services provided by agro-forestry and silvo-pastoral production systems (AFS) indicating their suitability for restoring degraded soils⁶⁸: Besides increasing resilience to climate change⁶⁹, AFS can buffer the effects of extreme climate events, lower temperatures and provide alternative sources of food during droughts or floods⁷⁰. Moreover, AFS are known to improve the microclimate⁷¹. They are also effective at controlling erosion and landslides and at producing organic matter and cycling nutrients⁷². Agroforests have also been shown to regulate the quantity and availability of water, improve water quality, increase groundwater recharge and provide riparian buffers⁷³.

116. In difference to traditional forest plantations that are exposed to rising risks associated with climate change (including drought, forest fires, pests), Close to Nature Planted Forests (CTNPF) that are diverse in genotypes, species, structure and function are better able to adapt to changing environmental conditions⁷⁴ and are particularly suitable for the productive rehabilitation and restoration of degraded landscapes⁷⁵. If managed properly, mixed planted forests from guided and enriched natural regeneration can offer higher productivity and ecological gains in terms of the provision of multiple ecosystems services⁷⁶ since biomass production and the delivery of ecosystem services and biodiversity improves⁷⁷.

117. Social co-benefits: Regarding socio-economic benefits, productive agroforestry landscapes provide promising options for poverty reduction and for sustaining livelihoods⁷⁸. These enable diversified production systems because of various intercrops, and reduce risks associated with pests and diseases, while also enabling a wider diversity of products, which reduces the ebb and flow of seasonal harvests⁷⁹. Bio-CLIMA will specifically target families that have been pushed to migrate to the most remote and marginal zones of the Caribbean Region of Nicaragua. Project interventions will support these families to stabilize their livelihoods at the agricultural frontier procuring higher income from deforestation free, sustainable production schemes, which improve both their livelihood and climate resilience. Through the Trust Fund mechanisms, organizational and market access support Bio-CLIMA will support these vulnerable households to have more equitable and fair benefits from their produce. The Project will also attain improvements in the nutritional quality of the diets of participating families, as an indirect benefit resulting from increases in crop diversity aimed at reducing exposure to the risks of CC-related crop failure, and improved social cohesion as a result of support to community-based governance mechanisms. Improved livelihood resilience and sustainable agricultural family farming will be vital for the population of the CR to recuperate from the effects of the COVID-19 crisis.

118. Economic co-benefits: There is strong evidence that biomass production and delivery of ecosystem services improves with tree diversity and that forest plantations that are diverse in species, structure and function are better able to adapt to changing environmental conditions than monocultures.

⁶⁷ ER-PD, ibid

⁶⁸ Miccolis Andrew et al 2017: Restoration through agroforestry: options for reconciling livelihoods with conservation in the Cerrado and Caatinga biomes in Brazil. Cambridge University Press doi:10.1017/S001447971700013

⁶⁹ Jacobi, J., Schneider, M., Bottazzi, P., Pillco, M., Calizaya, P. and Rist, S. (2013). Agroecosystem resilience and farmer's perceptions of climate change impacts on cocoa farms in Alto Beni, Bolivia. *Renewable Agriculture and Food Systems* 30(2):170–183.

⁷⁰ Lasco, R. D., Delfino, R. J. P. and Espaldon, M. L. O. (2014). Agroforestry systems: Helping smallholders adapt to climate risks while mitigating climate change. *Wiley Interdisciplinary Reviews: Climate Change* 5:825–833.

⁷¹ Kandji, S. T., Verchot, L. V., Mackensen, J., Boye, A., Noordwijk, M., Tomich, T. P., Ong, C., Albrecht, A. and Palm, C. (2006).

Opportunities for linking climate change adaptation and mitigation through agroforestry systems. Chapter 13. In *World Agroforestry into the Future*, 113–123 (Eds D. Garrity, A. Okono, M. Grayson and S. Parrott). World Agroforestry Centre.

⁷² Souza, M. de and Piña-Rodrigues, F. (2013). Desenvolvimento De Espécies Arbóreas Em Sistemas Agroflorestais para Recuperação de Áreas Degradadas na Floresta Ombrófila Densa, Paraty, RJ. *Revista Árvore* 37(1):89–98.

⁷³ Araújo Filho, J.A. de (2013). Manejo Pastoral Sustentável da Caatinga, 200. Recife, PE: Projeto Dom Helder Camara. Bargués Tobella, A., Reese, H., Almaw, A., Bayala, J., Malmer, A., Laudon, H. and Ilstedt, U. (2014). The effect of trees on preferential flow and soil infiltrability in an agroforestry parkland in semiarid Burkina Faso. *Water Resources Research* 50:2108–2123.

⁷⁴ Van Hensbergen 2006; Bauhus et al. 2010 in Verheyen et. al., 2015

⁷⁵ Lamb, 1998; Carnevale and Montagnini, 2002; Gunter et al, 2009 in Kanninen, 2010

⁷⁶ Erskine et al, 2006; Petit and Montagnini, 2006; Piotto, 2008 in Kanninen, 2010

⁷⁷ Nadrowski et al. 2010; Scherer-Lorenzen 2014 in Verheyen et. al., 2015

⁷⁸ Bene et al., 1977; Sinclair, 2004; Vira et al., 2015, in Miccolis A 2017

⁷⁹ Izac, a. M. N. and Sanchez, P. a. (2001). Towards a natural resource management paradigm for international agriculture: The example of agroforestry research. *Agricultural Systems*. 69(1-2):5–25.

Projected climate scenarios predict a much higher frequency of forest fires and a growing incidence of pests to which monocultures are much more vulnerable compared to mixed, sustainable, multi-functional “Close-to-Nature Planted Forests” (CTNPF) that will be introduced through this project. Through Bio-CLIMA sustainability of land management will be enhanced, including improvements in soil fertility and organic matter content, as a result of climate-smart agriculture and landscape restoration, including increases in the numbers of trees on farms and pastureland, and a reduction in the use of fire. Bio-CLIMA will strive to stabilize migration flows, not only at the agricultural frontier, but also migration from the countryside to the cities and abroad.

119. Gender-sensitive development: All activities within Bio-CLIMA, like for example the LUMPs at farm level or TDP at community level, as also the formulation of the SCEs or the CFMR plans will ensure women’s participation and accounting for their specific needs in decision-making. The leadership role of women in land management and agriculture will be promoted and women’s participation in agroforestry, silvo-pastoral, restoration and forest management activities will be enhanced. The use and conservation of traditional knowledge in the use of non-timber forest products will be especially fostered and taken into consideration when financing the competitive forest conservation initiatives by communities.

120. Women are the main transmitters of the culture they play a significant role in the dynamics related to women, gender and land rights. Women’s participation in institutional decision-making, agriculture, conservation, restoration and climate adaptation and mitigation are essential for the sustainability of families and communities. They understand the reforestation and preservation of land have significant implications for defending regional autonomy and their main concern relates to inheriting a healthy environment to future generations. The traditional knowledge of the Caribbean region is guarded by the women of indigenous and afro descendant communities, who are fortified by their strong will and connection to mother earth. Indigenous and afro-descendant peoples’ identity, spiritual, health practices are tied to the land, if they are displaced, their identity and culture are severely impacted.

121. The project’s approach to land in the Caribbean region will be based on intercultural gender analysis, so that it reflects individual and collective land rights and indigenous understandings of territory, which encompass the whole environment and its fundamental connection to indigenous identities as well as spiritual, health and other practices, in addition to sustainable use for subsistence and income-generation. This approach is also particularly helpful in understanding the women’s collective rights and their activism to defend their land rights. The Caribbean coast of Nicaragua is a racially and ethnically diverse region that has faced some of the highest rate of violence against women and children in the country.

D.4. Needs of recipient (max. 500 words, approximately 1 page)

122. Vulnerability of the country: According to the 2016 Standard of Living Survey by the National Development Information Institute, general poverty in Nicaragua dropped from 29.6 to 24.9 percent between 2014 and 2016; while in the same period extreme poverty fell from 8.3 to 6.9 percent. Despite this progress, poverty remains high. Nicaragua is still one of Latin America’s least developed countries facing persistent high fiscal deficits and public debt which are a major barrier to making effective and long-term public-sector investments,⁸⁰with the COVID-19 crisis putting severe additional strains on the country. Should Nicaragua be able to grow at 3.6 percent in per capita terms (its average growth since 2010), it would still take 79 years in order to reach the average GDP per capita of Latin America and the Caribbean⁸¹. Nicaragua is undertaking a strong effort to continue reducing poverty through targeted public investment, international cooperation and alliances with the private sector.

⁸⁰ Nicaragua Country Profile. <http://www.worldbank.org/en/country/nicaragua/overview>, visited November 11, 2018.

⁸¹ Nicaragua. Systematic Country Diagnostic. World Bank 2017.

123. Vulnerable groups and gender aspects: The Caribbean Region, which has been singled out within Nicaragua's National Human Development Plan as a high priority, since it contains 54% of the national territory most of Nicaragua's forestland, the majority of the nation's indigenous populations, a quarter of the country's most vulnerable people and accounts for the large majority of national deforestation. While it is true that both poverty and extreme poverty have been halved since 2005, Nicaragua is the second poorest country in the Western Hemisphere, and the RACCS, RACCN and Río San Juan department have the lowest human development indices (0.50-0.55) of Nicaragua. Bio-CLIMA will put in place a bottom-up approach targeted at indigenous, non-indigenous and afro-descendant people in which each family will first plan on-farm development and investment through a LUMP and a business plan: none of these instruments will be done without full involvement of all family members, securing that rights and needs of women and also the perspectives of the young people are being duly considered. Women headed households will be prioritized as beneficiaries.

124. Need for strengthening institutions and implementation capacity: The Government of Nicaragua is well aware of the urgent need to strengthen institutional presence in the CR, the Alto Wangki y Bocay to reduce deforestation and therefore plans to invest significant budgetary resources in governance, institutions and state-building measures through the Bio-CLIMA Project are a priority to create an enabling environment for sustainable development and investment.

D.5. Country ownership (max. 500 words, approximately 1 page)

125. Through Bio-CLIMA Nicaragua seeks not only to implement the country's international commitments under the United Nations Framework Convention on Climate Change (UNFCCC) in the areas of climate change mitigation and adaptation, but also seeks to accomplish the three main goals of the Convention on Biological Diversity (CBD) which are conservation of biodiversity; the sustainable use of biodiversity; and the fair and equitable sharing of the benefits arising from the use of genetic resources.

126. Bio-CLIMA is fully aligned with the National Human Development Plan 2018-2021⁸² and the National REDD+ Strategy and will directly implement following four strategic lines of action of the National Climate Change Mitigation and Adaptation Policy⁸³: Nr.1."Development of agriculture that is resilient to actual climate variability and future climate change, with actions that favour low GHG emissions"; Nr.5."Use and conservation of ecosystem services to achieve low-carbon sustainable development that is adapted to climate change", Nr.6."Conservation, restoration and rational use of forests, as the promotion of planted forests in forest land-use zones" and Nr.7."Promote knowledge, research, finance and information about climate change mitigation and adaptation, as the modernization and strengthening of alert and early-warning systems".

127. In its NDCs⁸⁴ Nicaragua proposes to implement following concrete measures in the AFOLU sector: i.) Encourage agro-ecological production of permanent crops under tree shade, more resilient to the impacts of climate change, ii.) Reduce extensive cattle grazing and introduce silvo-pastoral systems, iii.) Establish planted forests on idle or degraded forest land, prioritizing the use of natural regeneration of native tree species, iv.) Extend the use of bio-digesters, v.) Restore and conserve ecosystems and ecosystem services, taking advantage of adaptation and mitigation synergies, with special emphasis on watersheds management and risk reduction, as conservation of biological diversity and protected areas. Through these measures, which will be implemented also by Bio-CLIMA, Nicaragua will raise its carbon absorption capacity by 14% in relation with the reference scenario to 2030⁸⁵.

128. Likewise, Bio-CLIMA will support following priority measures to improve the countries capacity to adapt to CC are listed in the NDCs: i.) Modernization of hydro-meteorological services to produce relevant climate information and early warning alerts⁸⁶, ii.) Raise the efficiency for the protection

⁸² Ejes del Programa Nacional de Desarrollo Humano 2018-2021. Diciembre 2017. Managua.

⁸³ Política Nacional de Mitigación y Adaptación al Cambio Climático. Gobierno de Reconciliación y Unidad Nacional. Managua, Nicaragua 2018.

⁸⁴ 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.

⁸⁵ *ibid*

⁸⁶ Density of weather stations in the CR and precipitation is shown in Annex 1, Figure 14

of the biosphere reserves through land-use-planning and reforestation, iii.) Cooperation to strengthen capacities in climate finance, iv.) Capacity development, access to technologies and finance for the agricultural sector, and v.) Implement programmes to manage prioritized ecosystems in a resilient way through a landscape approach.

129. Within Nicaragua's REDD+ Strategy, Bio-CLIMA has been designed to be complementarily and act synergistically with the Emission Reduction Programme (ERP) that Nicaragua agreed with the Forest Carbon Partnership Facility. Bio-CLIMA is being developed since April 2018 by the "*Grupo Técnico Interinstitucional*" lead by MARENA, with the active participation of MHCP (as NDA), MEFCCA, INTA, INETER, INAFOR and the technical support of the FAO. Full ownership of the country is demonstrated by the fact that the Government of Nicaragua will co-finance Bio-CLIMA through loans with the CABEL and the GCF, backed by a sovereign guarantee; as also by allocating the entire GEF-7 STAR allocation to co-finance Bio-CLIMA.

130. Capacity of accredited / executing entity to deliver:

CABEL is a multilateral bank for the development of Central America. CABEL's mission is to promote economic integration and the balanced economic and social development of its founding member countries, attending and aligning itself with their national policies and development priorities. CABEL supports public and private development projects that create jobs and contribute to improving the productivity and competitiveness of its member countries, as well as increasing human development indicators in the Region. During the last 60 years, CABEL's support to the Region has resulted in credit approvals of more than US\$38.05 billion and disbursements of more than US\$30.39 billion. Derived from CABEL's mission and vision, CABEL's Institutional Strategy 2020-2024 focuses on four axes: (i) Regional Integration Axis, through regional initiatives in specific sectors, financing and promoting the region as an integrated market. (ii) Human Development and Social Inclusion Axis, which generates social capacities that lead to achieving the objective of improving the well-being and quality of life of the Central American region. (iii) Transversal Axis of Environmental and Social Sustainability, through the approval of programs and projects that favor social appropriation and that address the need to preserve the environment. (iv) Transversal Gender Equity Axis, through programs and projects that promote equal opportunities and economic and social conditions in the population.

131. MARENA will be responsible for overall coordination and the together with MHCP, responsible for the execution of the Project, with implementation support of MEFCCA, INTA, INETER, INAFOR and the Regional and Territorial Governments of the Caribbean Coast, the Alto Wangki y Bocay. They will be supported by national and international implementing partners and entities. All these institutions are experienced in executing rural development projects with financial support of different cooperation partners including the World Bank, the European Union, Inter-American Development Bank, IFAD, and CABEL. Bilateral cooperation projects include Germany, Norway, Switzerland, among others. Lessons learnt, especially the flaws, and best practices will be capitalized by Bio-CLIMA. In this regard the sustainable livestock program BOVINOS (21.7 M € - European Union) which is being implemented also in the Municipality of Nueva Guinea (RAACS); as also the program to support climate change adaptation for coffee and cocoa producers NICADAPTA (37.05 M US\$ – IFAD/CABEL), benefitting also indigenous territories of the RAACN and the RAACS, will be especially relevant to build upon. Both projects are being executed in alliance with relevant national and regional institutions through local implementation structures. In difference with both these projects that benefit members of agricultural cooperatives and indigenous communities, Bio-CLIMA will target both indigenous and non-indigenous vulnerable households at the deforestation front within protected areas.

132. The MHCP has solid capacities and long experience in the execution of multi-sectoral projects and has a reliable financial management system with very low risks in execution. As per presidential mandate the MHCP negotiates and contracts loans with financial institutions, represents Nicaragua in the governing bodies of the World Bank, the Inter-American Development Bank (IADB) and the CABEL, and is the NDA for the GCF. The bi- and multi-lateral project portfolio managed and executed directly by the MHCP ranges between US\$10.0 million and 186.0 million and include the following examples among

other projects: a.) Contingency loan for Natural Disasters (US\$186 million), b.) Budget support for the year 2019 (US\$100 million), and c.) Integration Program for the Border Zone, (US\$78.0 million).

133. CABEL has performed a thorough assessment for MHCP and MARENA financial management capacities to be Executing Entities of the Bio-CLIMA project. In this regard, it has concluded that both institutions have an organizational structure, specialized staff and the tools and mechanisms to carry out the required processes and actions to develop this role in the project. Likewise, both have experience in the execution of projects with the magnitude and similar nature of the Bio-CLIMA project.

134. In particular, the MHCP is the governing body of public finances and among its functions it contracts public debts on behalf of the State of Nicaragua. In the last ten years, the MHCP has contracted USD 6,456.4 million in loans for different sectors. The MHCP has a solid capacity and experience in the implementation of multi-sectoral projects and a reliable financial management system that ensure low risks levels in their execution. The General Coordination of Programs and Projects Office (CGPP for its acronym in Spanish), in companion with other areas of the MHCP, such as: the Climate Finance Office, External Cooperation, General Directorate of Financial Management, and the State Procurement and Contracting Directorate, among others, coordinates the execution of the projects efficiently.

135. MARENA on the other hand, according to its functions assigned by law, executes the climate change and environment portfolio with a national level presence. MARENA has a Climate Change Office with a highly qualified staff in adaptation, mitigation, social and environmental safeguards and carbon accounting. Likewise, the General Planning Directorate has an external cooperation area that, in coordination with the Administrative Directorate, monitors the execution of its projects. MARENA is the political and operational focal point to the GEF, Euroclima and currently holds the pro tempore presidency of the Central American Commission for Environment and Development (CCAD for its acronym in Spanish).

136. Engagement of civil society organizations and relevant stakeholders: Both the National REDD+ Strategy as well as the ERP and its Benefit Sharing Plan (Annex 24) have undergone intensive consultation and participation processes in which relevant actors and stakeholders have been involved during the last years. This process is described and extensively documented in Annex 7 and all the meetings that were documented can be found at the hyperlink: <http://www.marena.gob.ni/Enderedd/componentes/dialogos-y-consultas-para-la-preparacion/>

D.6. Efficiency and effectiveness (max. 500 words, approximately 1 page)

The following table summarizes some key indicators that demonstrates the cost-effectiveness the Bio-CLIMA Project will achieve both, on relation with the total investment, as also with the GCF funding:

Table 11 Project cost effectiveness indicators

Cost effectiveness indicators	Over total investment cost (including beneficiary work force cost)	Over total Financial Investment Cost	Over the GCF contribution (grant + credit)	Over the GCF grant
Cost per direct beneficiary (US\$/ha)	291.3	191.9	106.3	43.3
Cost per direct beneficiary (US\$/person)	3437.5	2264.0	1254.3	511.5
Cost per indirect beneficiary (US\$/person)	285.7	188.2	104.3	42.5
Cost per carbon (US\$/tCO ₂ eq, 50% emission reduction target)	3.7	2.4	1.4	0.6

137. The estimated investment costs per beneficiary, area and carbon sequestration reflect the technical particularities of the proposed models to be implemented and the characteristics of the production units in the region in terms of land tenure and demographic composition. In general, these

values are in the average ranges for investment projects in the region considering that the beneficiaries will be groups of small, medium and large producers. The project efficiency will be significantly improved by the social, environmental, institutional and economic externalities generated by the implementation of the resilient modules, the building capacities and the institutional strengthening of the local, regional and national actors involved in the project.

138. Co-financing: It is expected that US\$64,094,029 million, equivalent to 55.40% of the total cost of Bio-CLIMA, will be financed through GCF resources: these would be put together by a US\$26,139,067 million grant (22.59%); and a US\$37,954,962 (32.81%) loan component, backed by Sovereign Guarantee from the Government of Nicaragua. Co-financing would be provided by an additional loan from CABEL of US\$18,999,530 million (16.42%), a grant from the Global Environmental Facility (GEF-7) in the amount of US\$8,282,213 (7.16%). The direct co-finance to Project activities from REDD+ Result Based Payments from the World Bank FCPF of up to an amount of US\$24,316,473 (21.02%) constitute only a fraction of the financial resources that shall be leveraged as REDD+ RBPs by the Project until year 20 of up to US\$236.5 million⁸⁷ (see also Table 8).

139. The GCF grant, which accounts for only 22.59% of total project cost, would be invested mainly in incentives for small-holders and indigenous communities at the agricultural frontier to transform their agricultural practices and restore landscapes; as also in tools, instruments and activities to generate and gather climate relevant information for strategic decision making and monitoring

140. The incentives for landscape restoration through silvo-pastoral systems to be canalized through the Trust Fund, as also the budgetary support for capacity building, good governance and institutional strengthening would be financed by mainly through loan finance. Project management costs account for less than 0.82%. The Logical Framework and Financial and Economic Model included in Annex 3 and Annex 4, presents the detailed tentative costs per activity and financing source.

141. Economic⁸⁸ and financial⁸⁹ viability: Estimates of the project's economic and financial indicators for a 20-year period, a social discount rate of 8%⁹⁰, and valuing the ecosystem services of carbon sequestration and avoided emissions⁹¹ for improved forest governance, show that the investment would have positive returns. The incremental financial and economic NPV would be US\$641,830,701 and US\$1,024,274,776 respectively. Likewise, the value of the financial and economic IRR of the entire project would be 19.7% and 30.9%; Benefit/Cost ratio of 1.8 and investment payback period of 12 years, respectively. As a result of the project implementation, each productive unit would have an additional net income of US\$276.7 per benefitted hectare/year. The following table shows estimates of the economic and financial indicators of the models and community sub-projects (SCE, CFM, CFR) proposed by the project: These estimates of the economic and financial indicators are in the range of returns on and other comparable investment projects carried out in other Latin-American countries. The following table shows the aggregated and disaggregated indicators

⁸⁷ 50% emission reduction target

⁸⁸ Analysis developed using social prices according to the conversion factors used by the Nicaraguan Public investment system

⁸⁹ Analysis developed using market prices

⁹⁰ Referential value to evaluate the feasibility of the public investment in the frame of the Nicaraguan Public investment system

⁹¹ Referential values (ERPD): Carbon market price (5 USD/tCO₂ eq); Carbon social price (30 USD/tCO₂).

Table 12 Project financial and economic indicators

	Financial Indicators				Economic Indicators			
	NPV (US\$)	IRR (%)	B/C	Payback (years)	NPV (US\$)	IRR (%)	B/C	Payback (years)
Bio-CLIMA Project (Aggregation)	641,830,701	19.7%	1.8	12.03	1,024,274,776	30.9%	2.7	10.2
<i>Agroforestry - cocoa</i>	25,786,888	16.3%	1.9 4	8.5	38,133,237	20.2%	2.6	7.35
<i>Silvopasture</i>	18,045,694	16.4%	1.8 6	8.9	17,094,202	17.2%	2.3	8.85
<i>Close to Nature Planted Forest</i>	22,448,711	11.2%	1.1 1	16.7	52,534,193	16.7%	1.6	15.0
<i>Sustainable community enterprises</i>	2,273,931	10.2%	1.1 0	9.9	5,711,626	13.4%	1.3	8.76
Community forest management	111,491,487	21.6%	1.9 3	7.3	131,233,027	25.3%	2.3	5.6
Community forest restoration	193,801,765	13.5%	1.3	14.0	230,016,130	15.1%	1.4	13.5

142. The sensitivity analysis shows that the investment return is sensitive to hypothetical changes in some key variables such as benefitted farms' income (which is directly related to the variation of prices and yields), investment cost and reduction emission target. The results of this analysis are presented in the following table. The results show the level of elasticity of the return on investment considering hypothetical changes of the most important variables related to the proposed investment operation.

Table 13 Sensitivity analysis

Variables	Hypothetical changes	FIRR	EIRR
Income variation (productive models)	-10%	17.0%	27.0%
	-5%	18.4%	28.8%
	5%	21.1%	32.6%
	10%	22.4%	34.5%
Variation in cost of production (productive models)	-10%	22.1%	33.7%
	-5%	20.9%	32.1%
	5%	18.7%	29.4%
	10%	17.7%	28.1%
Investment cost variation	Base scenario - total costs (financial + non financial)	19.7%	30.9%
	Including only financial costs	23.9%	39.4%
	-10%	20.9%	32.8%
	-5%	20.3%	31.7%
	5%	19.3%	29.8%
	10%	18.8%	28.9%
Reduction emission target	100%	32.7%	32.5%
	75%	25.7%	31.6%
	50%	19.7%	30.9%
	25%	14.4%	30.4%



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E. LOGICAL FRAMEWORK

This section refers to the project/programme's logical framework in accordance with the GCF's [Performance Measurement Frameworks](#) under the [Results Management Framework](#) to which the project/programme contributes as a whole, including in respect of any co-financing.

E.1. Paradigm shift objectives

Please select the appropriated expected result. For cross-cutting proposals, tick both.

- Shift to low-emission sustainable development pathways
 Increased climate resilient sustainable development

E.2. Core indicator targets

Provide specific numerical values for the GCF core indicators to be achieved by the project/programme. Methodologies for the calculations should be provided. This should be consistent with the information provided in section A.

E.2.1. Expected tonnes of carbon dioxide equivalent (t CO ₂ eq) to be reduced or avoided (mitigation and cross-cutting only)	Annual	2.4 M t CO ₂ eq
	Lifetime	47.3 M t CO ₂ eq in 20 years
E.2.2. Estimated cost per t CO ₂ eq, defined as total investment cost / expected lifetime emission reductions (mitigation and cross-cutting only)	(a) Total project financing	<u>115,692,245</u>
	(b) Requested GCF amount	<u>64,094,029</u> USD
	Grant: US\$26,139,067 Loan: US\$37,954,962	
	(c) Expected lifetime emission reductions	<u>47.3</u> Mt CO ₂ eq
	(d) Estimated cost per t CO₂eq (d = a / c)	<u>2.4</u> USD / t CO ₂ eq
(e) Estimated GCF cost per t CO₂eq removed (e = b / c)	<u>1.4</u> USD / t CO ₂ eq	
E.2.3. Expected volume of finance to be leveraged by the proposed project/programme as a result of the Fund's financing, disaggregated by public and private sources (mitigation and cross-cutting only)	(f) Total finance leveraged	<u>51,598,216</u>
	(g) Public source co-financed ⁹²	<u>27,281,743</u>
	(h) Private source finance leveraged ⁹³	<u>24,316,473</u>
	(i) Total Leverage ratio (i = f / b)	<u>0.81</u>
	(j) Public source co-financing ratio (j = g / b)	<u>0.43</u>
	(k) Private source leverage ratio (k = h / b)	<u>0.38</u>
E.2.4. Expected total number of direct and indirect beneficiaries, (disaggregated by sex)	Direct	51,100 (51% of total female: 26,061)
	Indirect	614,721 50.1% of total are female beneficiaries: 307,684
	<i>For a multi-country proposal, indicate the aggregate amount here and provide the data per country in annex 17.</i>	
E.2.5. Number of beneficiaries relative to total population (disaggregated by sex)	Direct	0.8% (Expressed as %) of country(ies)
	Indirect	9.9% (Expressed as %) of country(ies)
	<i>For a multi-country proposal, leave blank and provide the data per country in annex 17.</i>	

⁹² As this template does provide a specific space for other grant finance than GCF grants. Therefore, this figure includes the GEF-7 grant as well as the CABEL loan; both of them being of public, as opposed to private finance.

⁹³ These are the REDD+ Result Based Payments from the FCPF that co-finance Project activities until year 7 and benefit indigenous communities and land owners directly as a result of community and private emission reduction efforts. This figure is only a fraction of the US\$ 236.5 million RBPs that shall be unlocked by Bio-CLIMA, as shown in Table 8

E.3. Fund-level impacts						
Expected Results	Indicator	Means of Verification (MoV)	Baseline	Target		Assumptions
				Mid-term Year 4	Final Year 7	
M4.0 Reduced emissions from land use, reforestation, reduced deforestation, and through sustainable forest management and conservation and enhancement of forest carbon stocks	M4.1 Tonnes of carbon dioxide equivalent (t CO ₂ eq) reduced or avoided (including increased removals) - forest and land use	National System of Measurement, Monitoring Reporting and Verification (SNM-MRV)	0 (MtCO ₂ eq)	6.7 MtCO ₂ eq	12.8Mt CO ₂ eq	Methodology applied is: removal and avoided emission in a with-project situation – removal and avoided emission in a without project situation. Please refer to Annexes 22.a, 22.b Project lifetime: 20 years; annual emission reductions: 2.4 tCO ₂ eq. Lifetime emission reductions: 47.3 tCO ₂ eq (assuming a performance of the ERP of only 50% emission reductions)

E.4. Fund-level outcomes						
Expected Outcomes	Indicator	Means of Verification (MoV)	Baseline	Target		Assumptions
				Mid-term)	Final	
M9.0 Improved management of land or forest areas contributing to emissions reductions	M9.1 Hectares of land or forests under improved and effective management that contributes to CO ₂ emission reductions	National SNM-MRV System	0 ha	1,265 (in 000 ha)	2,319.4 (000ha)	Total areas to be benefitted with the improvement of the forest governance

E.5. Project/programme performance indicators

The performance indicators for progress reporting during implementation should seek to measure pre-existing conditions, progress and results at the most relevant level for ease of GCF monitoring and AE reporting. Add rows as needed.

Expected Results	Indicator	Means of Verification (MoV)	Baseline	Target		Assumptions
				Mid-term Year 4	Final Year 7	
Beneficiary family income from deforestation free, climate adapted sustainable land use forms in the project region has been increased.	Yearly monetary and non-monetary benefit of beneficiary families (indigenous and non-indigenous), disaggregated by gender, age and ethnicity	Project beneficiary household survey	Baseline to be determined at Project onset	15% increase	30% increase	Stability for prices and markets for sustainable sourced products and services.
Enhanced environmental and territorial governance contributes to the improvement of the investment climate for the private sector, NGOs, and the indigenous communities to invest in deforestation free, climate adapted sustainable land use forms.	Share of private / NGO sector co-financing into total Agroforestry and Silvo-pastoral Trust Funds budget. Co-financing private and NGO partners in Indigenous Community Enterprises (SCE, CFM, CFR)	Share of private and NGO sector co-finance reported by the Trustee	CAF-Trust Funds 0	5%	10%	Political will to incentivize sustainable production systems; and willingness for dialogue and collaboration continues.
			SSP- Trust Fund 0	5%	10%	
			Average private/ NGO co-finance share in Community Sub-Projects 0	2%	10%	
The general public, institutions, media and other relevant actors have access to and use the environmental and climate related information systems set up/improved with Project support.	Number of citations and references published and accessed to the Environmental Information System, if adequate disaggregated by gender, age & ethnicity	Media reports from MARENA Communications Access to the Environmental Information System	Number at project start Data at project onset	Increase 12%	Increase 20%	Dialogue and good coordination between national, regional and local governmental entities continues.
Intercultural gender equality and participation, decision making of young and adult indigenous, afro descendant and non-indigenous women have increased.	% of women participating, deciding on and benefitting equitably from: family income and spending, climate-resilient production, strengthened governance mechanisms and capacity development; disaggregated by gender, age & ethnicity	Project beneficiary household survey and qualitative methods (e.g.Focus Discussion Groups) disaggregated by gender, age & ethnicity	Data collected from baseline at Project onset	Increase 15%	Increase 25%	Existing GCF guidelines, government policies and project approach to gender equality are applied in planning, resource allocation, implementation and M&E.

E.6. Activities					
Activities	Description	Deliverables			
		Indicator	Unit	Value	
COMPONENT 1: CONSERVING AND PRODUCING FOR LIFE.					
Subcomponent 1.1 Land use and management planning for landscape restoration, forest conservation and climate-resilient production.					
Output 1.1.1 Land use/management plans formulated; and restoration/conservation agreements signed/formalized with beneficiaries.					
1.1.1.1 Assist small producers to formulate Land Use-Management Plans (LUMPs) with business plans (BPs).	During the first two years of Project implementation, individual producer families and indigenous communities will be provided with intensive technical assistance to undertake participatory intercultural and 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 farm, productive unit or indigenous territory, which may include some or all of the productive landscape restoration and forest conservation models. TDP may include Sustainable Community Enterprises with their business plans. Finally, the maps and the agreements regarding the land use, restoration and conservation commitments, as also the carbon rights, will be formally signed in a legally binding agreement with the farmer, land owner and/or indigenous community in order to make any next step for further support by the Project. All agreements will have gender action plans (GAPs) in conformity with overall project GAP that ensure equitable participation of young and adult, indigenous and non-indigenous women in decision-making, especially from women-headed households, and that LUMPs, TDPs and BPs contribute to increasing intercultural gender equalities.	Number of LUMPs with BPs formulated by small producers. Percentage of women and men beneficiaries by age and ethnicity.	# %	6444	
		Evidence of gender action plans (GAP) that conforms with the overall project GAP	y/n		
1.1.1.2 Assist indigenous communities to formulate Territorial Development Plans (TDPs) including business plans (BPs).		Number of TDPs with BPs for SCEs/CFMR sub-projects formulated by indigenous communities. Percentage of women and men beneficiaries by ethnicity.	# %	107	
		Evidence of GAP that conforms with the overall project GAP	y/n		
1.1.1.3 Assist middle sized producers to formulate Land Use-Management Plans (LUMPs) with business plans (BPs).		Number of LUMPs with BPs formulated by middle sized producers and percentage of women and men beneficiaries by ethnicity.	#, %	1714	
		Evidence of GAP that conforms with the overall project GAP	y/n		
1.1.1.4 Facilitate celebration and formalization of landscape restoration and forest conservation agreements.		Number of conservation / restoration agreements/contracts signed and legalized.	#, %	8265	
		Evidence of GAP that conforms with the overall project GAP	y/n		
Sub-component 1.2 Investments in landscape restoration, forest conservation and climate-resilient production.					
Output 1.2.1 Degraded pasture- and rangeland restored.					
1.2.1.1 Small producers (farm size < 35 ha) restore degraded pastures into climate resilient, biodiverse sustainable silvo-pastoral systems.	Technical assistance (TA) and inputs will be provided to restore degraded pastures into sustainable silvo-pastoral systems (SSPS) on land with slope under 50%. Small farmers with pasture area of less than 10 ha will be provided with grants, while medium sized producers with pastures of more than 10 ha will be provided with concessional credits through the Trust Fund to be determined further.	Small producers pasture area restored to SSPSs.	ha	4858	
1.2.1.2 Middle sized producers (farm size > 35 ha) restore degraded pastures into biodiverse silvo-pastoral systems.		Middle sized producers pasture area restored to SSPSs.	ha	7286	
1.2.1.3 Producers restore degraded pastures into biodiverse cocoa agroforest systems.		Technical assistance, inputs and clones of improved, climate adapted cocoa plants will be provided to small producers to establish up to 2 ha of cocoa agroforest per family.	Pasture- and rangeland area restored to Cocoa AFS.	ha	8850
1.2.1.4 Reforest degraded land on slopes (> 50%) into biodiverse, Close to Nature Planted Forests (CTNPFs).		Technical assistance and inputs will be provided to demarcated and protect land with slope steeper than 50% in order to allow the natural restoration process to happen. TA and inputs will be provided to establish	Pasture/rangeland area restored to CTNPF.	ha	40215

	simple communal nurseries of native species if necessary and undertake enrichment planting.			
Output 1.2.2 Natural forest ecosystems and forest land conserved, restored and sustainably used.				
1.2.2.1 Finance Sustainable Community Enterprises (SCE) in indigenous territories within protected areas for natural forest ecosystems conservation and use.	Sub-projects with business plans prepared by indigenous communities within BOSAWAS and Indio Maíz core areas and its buffer zones shall be selected on a competitive basis and financed through the RBP Trust Fund in order to support Sustainable Community Enterprises (eco-tourism, ethno-tourism, handicrafts, indigenous goldsmith-ship/jewelry, among other initiatives) up to a maximum financial contribution of US\$ 54,000 / project. Each SCE project should grant the conservation of approximately 3000 ha of natural forest ecosystem.	Number of SCE sub-projects financed. % of SCE sub-projects with gender action plans (GAP); Evidence that conforms with overall project GAP	# % y/n	95
1.2.2.2 Finance commercial Community Forest Management (CFM) sub-projects with business plans prepared by indigenous communities outside protected areas.	CFM sub-projects prepared by indigenous communities on the basis of the TDPs and business plans will be financed on a competitive basis by FONADEFO to undertake sustainable, commercial forest management and harvesting activities. Each CFM sub-project could have a maximal financial contribution of US\$ 245,553 and protect approximately 800 ha per project.	Number of CFM sub-projects financed. % of SCE sub-projects with GAP; Evidence that conforms with overall project GAP	# % y/n	98
1.2.2.3 Finance commercial Community Forest Restoration (CFR) sub-projects with business plans prepared by indigenous communities outside protected areas.	CFR sub-projects prepared by indigenous communities on the basis of the TDPs and business plans will be financed on a competitive basis by FONADEFO to undertake sustainable, commercial forest restoration/reforestation activities. Each CFR project could have a maximal financial contribution of US\$ 202,313 and protect an area of approximately 800 ha per project.	Number of CFR sub-projects financed. % of SCE sub-projects with GAPs; Evidence that conforms with overall project GAP	# % y/n	165
Output 1.2.3 Farmer cooperatives, producer organizations and community enterprises access high-value markets.				
1.2.3.1 Support cooperatives, producer organizations and indigenous community (SCEs and CRMR) to reach high-value markets.	Training, expert support and coaching will be provided to support mixed-gender, men- or women-only farmer cooperatives or producer organizations and indigenous communities to improve the quality, to add value and enhance the merchandising to their products and services in order to reach and sell to high value markets. This will also be done by supporting the participation of these organizations and communities in national and international fairs, business events and through the facilitation of commercial exchanges, in collaboration with the corporate private sector already active in Nicaragua (Ritter Sport). Support to get fair-trade, sustainable forest management and similar international certification will be provided during the first years. These will promote women's empowerment and intercultural gender equality through equitable participation, decision-making, and distribution of resources and benefits. Indigenous and non-indigenous male and female youth and adult women will equitably participate in and benefit from these opportunities, including by receiving training and translation/interpretation if needed.	Number of organizations that participated in fairs or business events, disaggregated by gender, age and ethnicity of individual participants/ organization	#, %	12
1.2.3.2 Facilitate targeted business contacts between producer organizations and indigenous communities' enterprises with high value markets.		Number of commercial visits/exchanges facilitated, disaggregated by gender, age and ethnicity of individual participants/ organization.	#, %	12
1.2.3.3 Support producer organizations and community enterprises in voluntary certification processes.		Number of organizations/cooperatives /enterprises to certify their products/services, disaggregated by gender, age and ethnicity of individual participants/ organization.	#, %	12
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.				
2.1.1.1 Hire new technical, extension and control personnel to work in the project area and indigenous territories.	The budget of these institutions will be increased through the credit component of the Project to grant enough financial	Number of new annual contracts to hire technicians at local level,	#, %	1080

	resources to hire personnel, procure vehicles and equipment for the local offices of the environmental authorities with legal competencies at the regional, local and protected areas level (including MARENA, INAFOR, SERENA, municipalities and Indigenous Territorial Governments). These institutions are severely understaffed and do not have the minimum resources to undertake their mandatory duties of regulation and oversight of such a vast territory like the CR of Nicaragua. This includes also to grant enough financial resources through the public budget that is allocated to these institutions for operational expenditure (fuel, vehicle maintenance, stationery, etc.). Priority will be placed on hiring indigenous and local personnel and an equitable proportion of women and men, and, if possible, who speak at least two local languages.	disaggregated by gender and ethnicity		
2.1.1.2 Procure material, equipment and vehicles for regional and local institutions.		Number of institutions equipped.	#	13
2.1.1.3 Grant public budget for operational expenses to regional/local environmental authorities, including Indigenous Territorial Governments.		Number of local institutions with increased operative budget.	#	13
Output 2.1.2 Legal and normative framework updated.				
2.1.2.1 Analyze and update forestry, environmental and land-use normative framework at national level.	Expert support to analyze normative gaps and needs for up-dating of norms and procedures (e.g. FONADEFO and Trust Funds operation, sustainable commercial use of timber and non-timber forest products within protected areas and its buffer zones, among others) will be provided, presented and discussed in a participatory manner through workshops and facilitation, involving all relevant stakeholders, in order to produce drafts to be enacted by relevant authorities. These will use equitable participatory processes for adult and young women and men of the different territories and promote intercultural gender equality and women's empowerment.	Number of legal instruments updated (at national level) Evidence that they promote intercultural gender equality	# y/n	6
2.1.2.2 Support regional / local environmental authorities to actualize the normative framework.		Number of institutions supported to update legal instruments (at regional and local level). Evidence that they promote intercultural gender equality	# y/n	6
2.1.2.3 Update the management plans of the two protected areas: BOSAWAS and Indio Maíz.	Expert support will be provided to up-date these management plans, including ecological, social and geospatial studies, as well as participatory processes involving all male and female stakeholders within and around protected areas, especially the indigenous communities and Indigenous Territorial Governments and promote intercultural gender equality and women's empowerment.	Number of management plans that have been updated. Evidence of provisions for intercultural gender equality	# y/n	2
Output 2.1.3 Public-private dialogue and cooperation strengthened.				
2.1.3.1 Facilitate sectoral public-private dialogue at regional and local level.	Expert and facilitation support will be provided to support MEFCCA and partner institutions to convene relevant public, private and community actors to improve the climate for sustainable investment opportunities between the private sector and indigenous communities and farmer cooperatives. Dialogue will also be sought to improve the law enforcement and control system with community and private participation. These mechanisms will improve intercultural gender equality and there will be equitable participation of men and women from indigenous and non-indigenous groups. Documents produced in local languages	Number of public private round tables supported. Evidence of provisions for intercultural gender equality	# y/n	13
2.1.3.2 Strengthen the Production, Consumption and Marketing System (SPCC) at regional level.	Investment facilities will be created to strengthen the SPCC in the CR through three Trust Funds: The Result Based Payment, the Silvopastoral and the Cocoa-Agroforest Trust Funds that will be administered by a private financial service provider. To this end, expert, legal and	Number of instruments (Trust Funds) agreed upon and operative.	#	3

	facilitation support will be provided to involve relevant public, community and private actors in the governance and oversight mechanisms of these funds that will contribute to intercultural gender equality and have equitable participation of men and women from indigenous and non-indigenous groups.			
Sub-component 2.2 Local organization, territorial oversight and law enforcement strengthened.				
Output 2.2.1 Territorial governments and local organizations strengthened.				
2.2.1.1 Provide institutional strengthening to Indigenous Territorial Governments (GTIs).	All 23 GTIs 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 men and women and adult women and integrating mechanisms that promote intersectional gender equality and women's participation.	Number of GTIs strengthened Evidence of content that promotes intersectional gender equality	# y/n	23
2.2.1.2 Provide organizational support to local producer organizations (indigenous and non-indigenous).	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. Organizational improvements will promote intercultural gender equality and women's participation.	Number of organizations created/strengthened. Evidence of content that promotes intercultural gender equality % women members and decision-makers disaggregated by ethnicity	# y/n %	26
2.2.1.3 Provide legal support to legalize producer organizations, cooperatives and community enterprises.	Targeted legal support will be provided to local producer organizations, cooperative and community enterprises to legalize and/or update their legal status as an organization in order to allow them to sign contracts, interact in commercial and financial transaction and acquire credit.	Number of organizations legalized.	#	26
Output 2.2.2 Forest, land-use and land use change administration, control and environmental law enforcement strengthened.				
2.2.2.1 Operate mobile units and fixed control posts to control timber transport.	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, as also to operate indigenous people territorial defense and resources control brigades in indigenous communities within the Caribbean Region.	Number of control units operative.	#	13
2.2.2.2 Operate deforestation control and forest fire prevention brigades.		Number of control operatives/check points that have been supported.	#	72
2.2.2.3 Operate indigenous people territorial defense and resources control brigades.		Number of community surveillance operations supported.	#	144
COMPONENT 3: CAPACITY DEVELOPMENT FOR PRODUCTIVE LANDSCAPE RESTORATION AND FOREST CONSERVATION.				
Subcomponent 3.1 Capacity development through training.				
Output 3.1.1 Technical personnel, extension workers and promoters trained				
3.1.1.1 Train technicians and extensionists in participatory land use planning (LUMP-b, TDPs-b)	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,	Number of trainers trained (gender and ethnicity disaggregated).	#, %	540
3.1.1.2 Train stakeholders to use the up-dated sectoral legal and normative framework.		Number of persons trained (gender and ethnicity disaggregated).	#, %	172
3.1.1.3 Train technicians and extension workers to implement Productive Landscape Restoration / Forest Conservation Models.		Number of persons trained (gender and ethnicity disaggregated).	#, %	463

	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, inter-cultural gender equality and implementing the gender action plan (GAP), among others.			
Output 3.1.2 Producers and members of organizations/communities trained.				
3.1.2.1 Provide organizational, management, financial and marketing training to producers and members of organizations/communities	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, BPs 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. Capacity building will integrate intercultural gender equality and implementing the gender action plan (GAP), among others. Budget and other resources will be allocated to facilitate indigenous and non-indigenous women's participation in training events	Number of persons trained (gender and ethnicity disaggregated).	#, %	173
3.1.2.2 Train producers in LUMP, TDP and Productive Landscape Restoration / Forest Conservation Models.		Number of persons trained (gender and ethnicity disaggregated).	#, %	8158
Subcomponent 3.2 Development of tools and instruments.				
Output 3.2.1 Information systems for climate resilient sustainable development and risk management are in place.				
3.2.1.1 Set up a deforestation and forest fires early-warning system.	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.	System is in operation.	y/n	1
3.2.1.2 Up-date and roll out the forest products administration and control system.	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.	System is in operation.	y/n	1
3.2.1.3 Monitor LULUC, deforestation and forest degradation.	MARENAS REDD+ Units' operation will be supported to be able to continue undertaking the LULUC, deforestation and forest degradation monitoring activities. The project will support consultant salaries and operational expenses.	Bi-annual reports from the MARENA's ENDE REDD+ Team.	#	12
3.2.1.4 Install and monitor permanent plots of the National Forest Inventory (NFI) in the CR.	Nicaragua is about to undertake its Second National Forest Inventory 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.	Permanent plots installed.	#	70
3.2.1.5 Monitor biodiversity indicator species in 10% of plots of the NFI in the CR.	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 and gender in the CR.	Number of capacity building and training events, on the job training and monitoring events/visits.	#	12
3.2.1.6 Monitor adaptation, mitigation and biodiversity impact of implemented productive landscape restoration/forest conservation models.		Evidence of intercultural gender approach	y/n	22

3.2.1.7 Monitor climate, hydrometeorological (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.	Number of bi-annual reports emitted.	#	12
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.				
3.3.3.1 Develop and roll-out a public communication strategy.	Expert support, consultancy services will be financed to develop and roll out a public communication strategy at regional level in the CR. This will emphasize indigenous knowledge, needs and rights regarding conserving and restoring biodiversity and will promote intercultural gender equality. Strategy will be plurilingual and will be developed using participatory methods	Strategy document developed and quarterly reports of communication campaign implementation. Evidence of intercultural gender equality content.	y/n	24
3.3.3.2 Undertake environmental education in local schools and communities.	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. Curricula will reflect indigenous and non-indigenous knowledge, needs and rights and will promote intercultural gender equality.	Environmental curricula in schools of the CR includes biodiversity and climate issues and number of education events successfully held. Evidence of intercultural gender equality content. Equitable participation male and female youth/ children in events.	y/n y/n %	216

E.7. Monitoring, reporting and evaluation arrangements (max. 500 words, approximately 1 page)

143. Monitoring, reporting and evaluation will be conducted in accordance with CABEI and GCF procedures by the project team and the CABEI Country Office (CABEI CO). The Logical Framework Matrix provides impact and outcome indicators for project implementation, along with their corresponding means of verification. The M&E plan includes: an inception report, project implementation reviews, a mid-term review and final evaluation. The following sections outline the principal components of this plan. The project's M&E plan will be presented and finalized at the project's Inception Meeting following a collective fine-tuning of indicators, means of verification, and the full definition of project staff M&E responsibilities.

144. Project start MARENA and MHCP will call for a Project Inception Workshop will be held within the first 2 months of project start, involving all institutions and actors with assigned roles in the project organization structure, the CABEI CO and, where appropriate, public entities and technical advisors, as well as other possible implementing partners and stakeholders. The Inception Workshop is crucial to building ownership of the project results and to plan the first-year annual work and procurement plan.

145. Annual Project Report This key report will be prepared by the Project Executing Entities MARENA and MHCP and will be consolidated by the Project Manager and approved by the Project Steering Committee to monitor progress made since project start and for the previous reporting period. This report includes, but is not limited to, reporting on progress made toward project objective and project outcomes – each with indicators, baseline data and end-of-project targets (cumulative); project outputs delivered per project component (annual); lessons learned/good practices; and annual work plan and other expenditure reports. It will include reporting on co-financing of activities from funding sources different to the GCF which shall be reported by MARENA and the MHCP to the AE CABEI, which will report these to the GCF.

146. Mid-term of project review The project will undergo an independent mid-term review at the mid-point of project implementation. The mid-term review will determine progress being made towards

the achievement of outcomes and will identify course correction if needed. It will focus on the effectiveness, efficiency and timeliness of project implementation; will highlight issues requiring decisions and actions; and will present initial lessons learned about project design, implementation and management. Findings of this review will be incorporated as recommendations for enhanced implementation during the final half of the project's term. The final MTR report will be available in English.

147. **End of Project** An independent final evaluation will take place three months prior to the closure of the project, undertaken in accordance with CABEI and GCF guidance. The final evaluation will focus on the delivery of the project's results as initially planned (and as corrected after the mid-term review, if any such correction took place). The final evaluation will look at impact and sustainability of results, including the contribution to capacity development and the achievement of global environmental benefits. The final evaluation will also provide recommendations for follow-up activities and requires a management response. The final report will be cleared by CABEI and will be approved by the Project Steering Committee. CABEI CO will include the planned project terminal evaluation in the evaluation plan.

148. **Monitoring and Reporting on Land Use and Land Use Changes** The National Measurement, Monitoring, Reporting and Verification System (SNM-MRV) is a robust and transparent system that provides information for the design and implementation of land-use management policies, forest governance and natural resource management. In the context of REDD+ activities, the SNM-MRV will allow the monitoring and reporting of LULUC activities, incorporating monitoring and MRV processes. Its main function is to have periodic information on results achieved through national measures and actions, linked to conservation, sustainable forest management and restoration, for strengthening forest governance, as well as provided measurable, reportable and verifiable data for international estimations and reports on forest emissions and absorptions.

F. RISK ASSESSMENT AND MANAGEMENT

F.1. Risk factors and mitigations measures (max. 3 pages)

149. 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. However, because of the work with non-indigenous farmers, communities and indigenous peoples in areas of critical habitats and given the external factors prevalent in the project region, the overall project risk has been rated as "moderate" and measures have been designed to ensure risks are kept to a minimum.

150. The design of the project builds on the comprehensive safeguards determined for the National REDD+ Strategy and the ERP 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, the GEF 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 that mitigate the risks identified, establishing a strong platform for cooperation and limited risk. Financial and operational risks have also been identified and specific mitigation measures incorporated into the design accordingly.

151. Nicaragua has signed and ratified the UN Convention against Corruption and has institutionalized this mandate through the National Commission for the Integral Development of a Good Public Management⁹⁴, the Special Law to Fight Corruption No.581/2006⁹⁵, and the Code of Conduct for

⁹⁴ Ley 581/2010. Comisión Nacional para el Desarrollo Integral de la Buena Gestión Pública (2010). Acuerdo Presidencial No.227-2010. La Gaceta, Diario Oficial No.185. 29.09.2010

⁹⁵ Ley No.581/2006. Ley Especial del Delito de Cohecho y Delitos contra el Comercio Internacional e Inversión Internacional

Public Servants of the Executive Branch⁹⁶. These instruments build a solid basis to allow for the transparent and efficient use of public resources.

152. Furthermore, CABEL's anti-fraud, anti-corruption controls are immersed in the due diligence, monitoring, auditing, supervision, and procurement rules under which operations are analyzed, approved and executed, proper follow up is held. If red flags or issues arise, CABEL addresses this red flags or issues, mitigating them or incorporating new controls, every decision is taken on a case by case basis. All CABEL contracts also include anti-fraud, anti-corruption clauses, which allow CABEL to investigate matters in case it is necessary and if prohibited practices arise take measures and sanction parties. As a development bank all of our controls are intended to secure that all our operations meet its development objectives.

153. Antifraud, Anticorruption and Other Prohibited Practices Policy and Manual is applied and observed in all CABEL's activities. CABEL has implemented several mechanisms (web, email, voice mail, among others) in which reports and allegations of irregularities, unethical situations, the commission of prohibited practices or regulatory breaches in the use of its funds or resources administered by CABEL can be submitted. Reports about environmental and/or social issues or damages related to CABEL's projects can be reported as well. Any natural or juridical person, including CABEL's staff members may submit a report. Anonymously reports are permitted.

154. On the other hand, the Caribbean Region is one of the prioritized zones by the current Nicaraguan government considering its geographic, productive and development potential; as well as its existing natural resource base and current environmental problems that affect it, such as the accelerated process of deforestation and recurrent natural phenomena. This is why the need for financial resources in these territories has been one of the main actions carried out by the Nicaraguan authorities to preserve, conserve and protect the cultural and natural heritage and existing livelihoods in these geographical zones.

155. The Project will invest a very big effort to provide technical assistance and support to put the indigenous and afro descendant communities in the capacity to formulate ambitious sub-projects to conserve, restore and manage forest landscapes in their territories within and outside both protected areas (BOSASWAS and Indio Maíz – see maps 2 a and 3), which include most forest covered areas in the Caribbean Region of Nicaragua. Through its operational structure, the Bio-Clima Project will guarantee an effective and inclusive socialization and promotion process with the intention that the inhabitants / communities can know the objectives of the project, the eligibility requirements to participate in it, as well as the productive areas and services that will be provided by it, with the intention of generating in the short and medium term a portfolio of initiatives to be financed by Bio-Clima.

156. These efforts to be carried out by the Bio-CLIMA Project will be complemented by the investments that the Nicaraguan government has recently made in support of the development of the Caribbean Region; These efforts include the improvement of the road network, access to energy sources, water and sanitation projects, development of artisanal fishing, productive and rural development, among others. These synergies will guarantee an economic reactivation sustained on the basis of equitable social, economic and environmental development.

157. Similarly, and at the time of project start-up, it is estimated that the needs for financial services and technical assistance will be significant considering the current limitations of mobility and commercial

⁹⁶ Código de Conducta Ética de los Servidores Públicos del Poder Ejecutivo. Decreto Ejecutivo 35-2009. La Gaceta, Diario Oficial No. 113, 18.06.2009.

flow to these territories, considering the current COVID-19 pandemic, and therefore, the need for financial resources could be increased.

158. A phased approach to the funds allocated for sub-projects has been considered in the design of financial flows as showed in the Table below:

Table 14 National Funds Yearly Allocation

Total (USD)	FONADEFO AND NATIONAL ENVIRONMENTAL FUND (FAN)						
	Year						
	1	2	3	4	5	6	7
42,530,220	0	2,977,115	10,186,570	10,632,555	9,356,648	6,379,533	2,997,798

Selected Risk Factor 1

Category	Probability	Impact
Technical and operational	Low	Medium

Description

The productive land restoration modules, specifically the cocoa agroforestry and silvopastoral systems may be that attractive to the beneficiaries, so that they may want to expand them further into non-deforested areas and cause further increase in deforestation.

Mitigation Measure(s)

Bio-CLIMA will provide strong technical, financial and market incentives to promote sustainable land intensification to put indigenous and non-indigenous farmers in a position to optimize their land use and to improve their livelihood on the land that is already deforested and degraded. On the other hand, Bio-CLIMA will support and strengthen local governance, especially of the indigenous territory governments to monitor and control the land-use plans and territorial development plans to be formulated and agreed upon. On the other hand, REDD+ Result Based Payments will accrue and benefit those indigenous and afro-descendant owners of the land and re-inforce their role as custodians of their forestlands. Finally, Bio-CLIMA will strengthen LULUC monitoring and control capacities/systems, strengthen public forest law enforcement, and will also support community deforestation and forest fire control brigades.

Selected Risk Factor 2

Category	Probability	Impact
Governance	Medium	Medium

Description

Bio-CLIMA will be implemented in indigenous and afro-descendant territories some of them with the presence of non-indigenous, poor settler families (or third parties), most of them that have been living in peaceful neighborhood for years and even decades, but there have also been events of violent encroachment by settlers. On the other hand the project could lead to adverse impacts on enjoyment of the rights of the affected population and particularly of marginalized groups because duty-bearers might not have the capacity to meet their obligations or because right holders might not have the capacity to claim them.

Mitigation Measure(s)

Nicaragua's National Constitution and Law 455 provide a very solid framework to protect land tenure rights of indigenous and afro-descendant people. Nevertheless, some right holders may not have the full understanding and the capacities to exercise and defend them. The Project will strengthen the capacities of the Indigenous Territory Governments (GTIs) to exercise and defend their land rights and natural resources and will invest important effort to facilitate peaceful co-habitation agreements between GTIs and "third parties", and to formalize them within a "win-win situation" Bio-CLIMA will also invest in strengthen the capacities, technological and logistical means of local public institutions to enforce the law. On the other hand, Bio-CLIMA will be in close coordination with the ongoing World Bank financed PRODEP II project

which is investing important resources on land conflict resolution and titling, especially in the Alto Wangki y Bocay Region.		
Selected Risk Factor 3		
Category	Probability	Impact
Other	Low	Low
Description		
<p>The project will develop land use and management plans (LUMPs) and territorial development plans (TDP) to optimize land uses, restore degraded pastureland and reduce the pressure on forest areas and increase protection of forest fragments at the farm and production landscape level. Some of these land-use plans may place restrictions on existing and future land uses. Although the project does not envisage physical displacement, land-use restrictions may increase the possibility of economic displacement, especially for poorer and marginalized individuals, who may not have resources to change current production practices.</p>		
Mitigation Measure(s)		
<p>Bio-CLIMA includes specific actions to address this risk. First, land-use planning will only take place through participatory processes and support will be given for the inclusion of representatives of marginalized groups. Second, the productive restoration and forest conservation models offer higher income and market opportunities than the current practices. This includes supporting technical and business planning assistance in the short-term and strengthening supply chains of deforestation-free produce to increase income in the medium-term. These target different groups of stakeholders, including small-scale farmers and communities. In addition, REDD+ result-based payments will be channeled to communities and indigenous people, many of whom are amongst the poorest and most vulnerable.</p>		
Selected Risk Factor 4		
Category	Probability	Impact
Governance	Medium	Medium
Description		
<p>The project depends on actions of multiple institutions and stakeholders, ranging from different national line ministries, regional and local governments including indigenous territorial governments, agricultural producers and communities. Sub-optimal coordination, duplication and overlap of responsibilities between and within the different levels may undermine implementation and pose an operational implementation.</p>		
Mitigation Measure(s)		
<p>Project Component 2 has been designed to strengthen the institutional setting in the CR and to improve governance and inter-institutional coordination will address this risk. Its outcome 2.3 specifically includes the strengthening of dialogue and decision-making mechanisms to engage key stakeholders at all levels under the lead of the SDCC and the Territorial and Indigenous Governments of the Caribbean Coast, the Alto Wangki and Bocay.</p>		
Selected Risk Factor 5		
Category	Probability	Impact
Technical and operational	Low	Low
Description		
<p>Institutions in the CR of Nicaragua are relatively young and weak. The lack of institutional culture and stability could lead to underperformance in Project implementation and/or to inadequate use of funds.</p>		
Mitigation Measure(s)		
<p>Bio-CLIMAs' Project Components 2 and 3 shall invest huge resources and important efforts to strengthen the institutional capacities of public and communal actors of the CR at the regional and the local the levels in order to support the overall State building and strengthening measures that are being undertaken by the Government if the Region. To guarantee transparent and efficient use of financial resources, the bulk of resources that shall be invested through Bio-CLIMA shall be channeled through <u>five different financial mechanism</u>, each one with its own governance and oversight structures that are independent from one each other (please refer to Trust Funds (3) and National Funds (2) governance and oversight in Section B.4). All of them are governed by inter-institutional instances with the participation of various sectors and actors to allow societal participation, accountability and transparency. The Project will specifically support a public-private dialogue to establish the CAR and SPR Trust Funds through which major Project investments will be channeled to beneficiaries. These Trust Funds will result from a private-public dialogue that will be facilitated</p>		

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by a neutral trusted party in the role of an honest broker, which will make sure that legitimate and independent participation of relevant stakeholders is granted, and that internal cross-checks and balances guarantee transparency and accountability in the use of the funds. These principles shall be operationalized in the Trust Fund contracts and Operational Manuals as result of dialogue, negotiation and consensus process that shall take place during the first year or Project implementation. Furthermore, for this operation, the executing entities of the Republic of Nicaragua will be applying CABEL's procurement policy, which includes antifraud/anticorruption controls. The Integrity and Compliance Office with the support of other technical areas of CABEL will offer training to improve capacities of executing agencies and their personnel regarding AML/CFT, Integrity and Sanctions. Also, technical areas of CABEL will be in charge of including antifraud, anticorruption controls in the different operational manuals, guidelines, and procedures that will be designed and applied for this operation.

Selected Risk Factor 6

Category	Probability	Impact
Other	Low	Low
Description		
Uncertainties with regard to future REDD+ results-based payments are a potential financial risk for the full implementation of the National REDD+ Strategy (ENDE REDD+). While this may not directly affect Bio-CLIMA which will have secured this co-financing until year 2025 through the Emission Reduction Programm Agreement (ERPA) to be signed with the World Bank FCPF, it poses a potential risk factor for the sustainability of Bio-CLIMAs' actions and its impacts.		
Mitigation Measure(s)		
The GCF, BCIE and GEF investments aim to provide the means and the know-how to communities and producers for sustainable landscape restoration, production and the enforcement of land-use zoning (LUMP and TDP) that will trigger changes in land use trajectories in order to secure emission reductions and the payments from the FCPF. The financial risk associated with this is low. However, if the ERPA with the World Bank FCPF failed to materialize for any reason, Nicaragua would offer these emission reductions to another multilateral or private entity, including the REED+ window of the GCF, in order to secure the sustainability of Bio-CLIMA's activities and the implementation of national ENDE REDD+ Strategy under the UNFCCC REDD+ process. If these REDD+ RBPs fail to materialize the financial sustainability of the ENDE REDD+ will be at risk. Nonetheless, the project will minimize these risks supporting the preparation of a diversified REDD+ RBP portfolio for Nicaragua from year 2025 onwards.		

G. GCF POLICIES AND STANDARDS

G.1. Environmental and social risk assessment (max. 750 words, approximately 1.5 pages)

159. Bio-CLIMA has been thoroughly assessed by CABEL and due to its complementarity with the ERP approved by the FCPF, also with the World Bank Group safeguards and operational policies. As to CABEL's Environmental and Social Management Manual (SIESMAS), since Bio-CLIMA will be implemented on indigenous territories, it must be rated Environmental and Social Risks Category "A" (high risk). Furthermore, the socio-political context in Nicaragua is sensitive because of the social protests unleashed since the forest fires in Indio Maíz in 2018 and the social unrests these protests triggered which caused a critical political moment in Nicaragua. There is also an accumulation of tensions stemming from conflicts between indigenous communities and agricultural frontier colonist, land grabbing, coupled with competing interests and demands of different land holders and people without land title, and illegal logging activities. An Environmental and Social Management Framework (ESMF) and related instruments according to this context that have been prepared included in Annex 6 and has been published on MARENA's website since February 2020 at: <http://www.marena.gob.ni/Enderedd/otros/proyecto-bio-clima/>.

160. Environmental. The Project is not likely to generate a wide range of significant adverse risks and impacts on the environment. The risks and impacts themselves are mostly temporary, predictable and/or reversible. 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 environmental and conservation objectives of the Project, reducing emissions from deforestation and forest degradation, effects on biodiversity and

living natural resources. Furthermore, Bio-CLIMA will foster the adoption of sustainable and productive landscape restoration and forest conservation modules. Some examples of potential adverse risks and impacts on the environment are related to the implementation of infrastructure such as the opening of new paths, that can generate risks such as the opening of new deforestation fronts, run-off, 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 the increased risk of fires. Forest management and restoration activities could generate risks associated with the use of fertilizers and pesticides in nurseries, and hydrocarbon pollution by the use of machinery. Risks related to the cocoa and livestock production chain can also be associated with the purchase of seeds and seedlings, or even the use of timber for fencing. Most 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, MARENA has developed environmental safeguard instruments, such as the ESMF, the Integrated Pest Management Guidelines (IPMG), the Guidelines for a Biodiversity Action Plan (GBAP) and Guidelines for the Forest Management Plans (GFMP) and others that are included in Annex 6.

161. Social. The Bio-CLIMA Project per se is 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 through the improvement of sustainable livelihoods, the increase in income and opportunities to access high value, fair trade markets. Bio-CLIMA will specifically target the improvement of the livelihoods of indigenous and non-indigenous people living from small land properties. Furthermore, Bio-CLIMA is also expected to enhance livelihoods through a more coordinated support from various public programs that would generate increased revenues from sustainable practices (cocoa agroforestry, small and medium scale sustainable silvo-pastures, sustainable forest use and conservation). There will be no situation of land acquisition or resettlement, and any activity that could produce such impacts will be screened out of the project activities. Furthermore, a strong focus will be put on the capacity building of the social and safeguards team of the Project Management Unit of MARENA, which will foster the continuity of social and environmental considerations throughout and after the life cycle of the Project.

162. Land tenure. As for the social impacts associated to the ER Program and the Bio-CLIMA Project, the socio-political context of Nicaragua regarding land tenure is very sensitive, as a result of the accumulation of tensions stemming from conflicts between indigenous communities, and non-indigenous farmers that have been occupying land for longer time periods, and agricultural frontier colonist. Land grabbing, illegal and informal land leases, coupled with competing interests and demands of different land holders and settlers without a land title are very frequent. Furthermore, there are risks identified related to indigenous territories and forms of forest administration; restriction to indigenous populations of traditional access to natural resources, and local social conflicts for the distribution of the benefits from the Emission Reductions. All these structural factors can contribute to create potential conflicts in the project area, which shall be addressed by various specific project activities including Activity 1.1.1.4 and several interventions to improve dialogue and governance, and to strengthen the local institutions and indigenous governments included in Project components 2 and 3.

163. In order to mitigate or avoid the risks and impacts mentioned, an Environmental and Social Impact Assessment (ESIA) will be carried out by MARENA at the beginning of the Project when the exact areas of implementation, investments and actions have been defined and agreed upon with the beneficiaries within the prior informed consent process. Only then Bio-CLIMA will formulate and implement site-specific measures, as well as ESIA and Indigenous Peoples Plan (IPP) in the GTI. The ESIA will consider all relevant environmental and social risks and impacts in each Territorial Development Plan in the GTIs, and Land Use Management Plan on-farm level, as also for Forest Management and Restoration Plans, and Management Plans for the protected areas. The ESIA will also include an analysis of any situation of conflict or violence in the selected areas, and the specific measures to avoid or mitigate the impact according with ESS guidelines.

164. MARENA has also developed a Process Framework (PF) which purpose is to describe the process to be followed by which potentially affected communities and affected population will participate in planning, designing and agreeing on the restrictions regarding to protected areas, as well as in proposing the mitigation measures. A large part of the Bio-CLIMA beneficiaries is expected to be indigenous and afro descendant peoples, and it is not expected that activities of the Bio-CLIMA project will have a negative impact on indigenous, afro descendent people or other minorities.

165. MARENA has also developed an Indigenous Peoples Planning Framework (IPPF), with which the potential positive and negative impacts on IPs are identified and recommendations on how to screen for them and avoid them are provided; but also, how to promote IP participation in the project and benefits. The Project focuses on productive landscape restoration and forest conservation activities, the improvement of livelihoods, and sustainable land management practices in which physical cultural resources are likely to be found in forest or rural areas, and some of the objects identified may be pre-Hispanic structures, sacred sites, protected land, inter alia. Chance finds procedures are considered through a Guideline on Cultural Heritage, which is an annex to the ESMF and to the IPPF and IPP Plan. The Bio-CLIMA project will be implemented primarily by government staff from the implementing public institutions at national, regional and local level and the implementing partners, and by the beneficiaries themselves. Project activities may also include community based sub-projects (SCEs, CFMPs, CFRPs), and projects where most activities are carried out by contractors and subcontractors from the Trust Funds. In the case of community labor, MARENA assessed whether there is a risk of child labor or forced labor and identified those risks consistent with social standards.

166. A Labor Management Procedure (LMP), was developed as an annex to the ESMF and includes specific provisions for each type of expected labor. The LMP will serve as the basis for preparation of more specific Labor Management Plans as needed during implementation, applying any requirements that are relevant given the nature of the activity.

167. Participation and stakeholder engagement: Another way to manage the possible risk in the Project is through a participatory approach applying 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 Stakeholder Engagement Plan (SEP) that has been developed provides inputs to generate strategies to avoid, minimize or mitigate the risks mentioned above. Also, a feedback and Grievance Redress Mechanism (GRM), will be in place linked with the safeguard information system and will be monitored by an independent third-party. The GRM will enable to receive and facilitate resolution of concerns and grievances, and ensure agility, access, prompt response timeframes, and respect for confidentiality.

168. Consultation Process. From September 19 to 24, 2019, MARENA consulted the following ESS instruments: Environmental and Social Management Framework (ESMF,) and the annexes. The consultation was carried out in the localities of San Andres in Alto Wangki Bocay, September 19 to 20; Bilwi RACCN September 19 to 20 and in Bluefields RACCS September 23 to 24, 2019 with an approximate of 76 participants per event, out of which: approximately 26% are women, 57 % are 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, Távira, Karatá, Wangki Twi Tasba Raya, Kiplasait, M.S.B, Kukra Hill, Awaltara, Rama Creole,) Municipal Governments (Rosita, Bonanza, Waspam, Prinzapolka, Bluefields, Rama), University BICU, URCACCAN; Producers, association of farmers and fishermen, ONGs (CEDEHCA, Nación Mayangna, AMICA, PANA PANA, Guardabarranco), the press and radio, 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 and all the evidence and documentation of the consultation have been published by MARENA in the following link: <http://www.marena.gob.ni/Enderedd/componentes/dialogos-y-consultas-para-la-preparacion/>.

169. During the consultation process, stakeholders expressed support for the Program involving the ERP and Bio-CLIMA, and all its safeguards instruments. The main comments that were addressed as a result of the consultation were incorporated in the respective ESS instruments, by MARENA and shared with the FAO, CABEL and the World Bank. More detailed information can be found in Annexes No.6.

G.2. Gender assessment and action plan (max. 500 words, approximately 1 page)

170. The regional autonomy normative framework and laws, as well as laws, policies and specialized programs at the national and regional levels that promote gender equality are important instruments to defend women's rights. Nevertheless, women in the CR have suffered various forms of gender and ethnic discrimination⁹⁷.

171. In general, the RACCN and RACCS suffer from higher rates of poverty and lower rates of development. The Human Development Index (2005) was 0.698 at the national level, but 0.466 for the RACCN and 0.454 for the RACCS. Women and men in the CR also have lower life expectancy than the national averages (68.2 in the CR compared to nation rate of 72.9 for women; 63.6 compared to 68.1 for men).

172. Rates of motherhood are higher for girls and teens in the RACCN and RACCS compared to national averages, where Nicaraguan rates are already among the highest in Latin America. Family planning rates are lower and women's unsatisfied need for contraception are higher in the RACCS and RACCN than national rates. Various forms of domestic and sexual violence are a tremendous problem for women and girls in the CR, where girls and adolescents in particular suffer from high rates of sexual violence⁹⁸. Furthermore, their access to health services and redress mechanisms are more difficult. Nonetheless, since 2010 there have been various networks and coordination bodies established in both the RACCS and RACCN involving women's organizations and state agencies.

173. Recent global and regional gender indices show very different rankings for gender equality in Nicaragua. In 2018 global indices, Nicaragua ranked in fifth place in the World Economic Forum's Global Gender Gap report, which emphasized women's formal political representation, education and others⁹⁹. Using this metric, Nicaragua was one of only ten countries around the world to reduce the gender gap by more than 80%¹⁰⁰. At the same time, Nicaragua ranked 105 of 189 countries in the United Nations' Gender Inequality Index which tracked labour force participation, gendered health and other factors¹⁰¹. Nicaragua also held position 15 of 29 Latin American and Caribbean countries for rate of death by current or former intimate partner¹⁰².

174. Increased deforestation has had many severe negative effects related to environmental, socio-economic and cultural factors. Increased flooding and soil degradation have affected and sometimes destroyed crops as well as drastically reduced flora and fauna. Women and men now have to go much farther from their homes to practice subsistence agricultural and hunting activities. This has also affected indigenous and Afro-descendant people's spirituality practices and traditional medicine because both are also closely tied to their stewardship and care of Mother Earth. Nonetheless, many indigenous production practices are effective for conservation and climate change mitigation, and afro-descendants of the region share these beliefs and practices.

175. Women's experiences with conservation, biodiversity and climate change and defending individual and collective rights are complex. On the one hand, they have suffered greatly because of the

⁹⁷ The data for the Gender Assessment (GA) was gathered from: (a) three consultations held in September 2019 with 27% women overall (62 of 231 participants) and (b) an extensive literature review. Note that there is very limited quantitative data, especially that is disaggregated by gender and ethnicity. There is very little recent data available.

⁹⁸ Statistics from the Women's Police Stations for RACCN, RACCS and Rio San Juan Department reported in Voces Caribeñas, 2014, p. 24.

⁹⁹ World Economic Forum, 2018, The Global Gender Gap Report 2018. http://www3.weforum.org/docs/WEF_GGGR_2018.pdf

¹⁰⁰ GRUN, 2019, Informe Nacional sobre el Avance en la Aplicación de la Estrategia de Montevideo para la Implementación de la Agenda Regional de Género en el marco del Desarrollo Sostenible hacia 2030, p. 5.

¹⁰¹ UNDP, 2020 *Tackling Social Norms*, Human Development Perspectives.

¹⁰² CEPAL, [Observatorio de Igualdad de Género](https://oig.cepal.org/es/indicadores/muerte-mujeres-ocasionada-su-pareja-o-ex-pareja-intima) de América Latina y el Caribe, "Muerte de mujeres ocasionada por su pareja o ex-pareja íntima". <https://oig.cepal.org/es/indicadores/muerte-mujeres-ocasionada-su-pareja-o-ex-pareja-intima>

increasing lack of biodiversity since it has made their responsibilities and cultural practices more difficult. Women and children now must go farther and spend more time to fetch water. Women make a clear connection between their concerns as mothers attempting to provide for their families and the broader future of their communities. Their efforts to secure and preserve their communal lands is about more than just making money. Rather, they are also concerned about the maintenance of cultural traditions. Women have also suffered different forms of gender and ethnic inequality, discrimination and violence. On the other hand, they are (sometimes) recognized as leaders because of the vital roles they play in defending communal land rights and continuing and adapting ancestral conservation practices.

176. The project's Gender Action Plan (GAP) uses an intercultural¹⁰³ gender transformative approach. A gender transformative approach seeks to contribute to increasing women's and girls' empowerment in various areas (economic, political, social, etc.) by breaking down the barriers that maintain and reproduce inequalities. There are three intertwined dimensions of change that will be applied in the various project components: (i) individual capacities (knowledge, attitudes and skills) that emphasize agency and actions that challenge gender norms and inequality; (ii) social relations at the household, community, enterprise (etc.) and focus on norms embedded at those levels; and (iii) social structures and institutional rules and practices that (re)produce gender inequality¹⁰⁴.

177. The budget for the GAP is USD13,550,668 or 11.7% of the entire Bio-CLIMA budget: Hiring practices is one main line of action. 50% of all those hired as technical and professional staff, as well as contracted services, will be women. 30% of staff hired (men/women) will be indigenous or afro-descendants from the Caribbean Region (CR) who speak Spanish and at least one local language. These rates will be stipulated in all procurement agreements. Affirmative action measures will be implemented; women and men and women will receive equal pay for work of equal value. All staff and consultants will be trained in the GAP and will have responsibilities to implement it corresponding to their roles.

178. Gender equality components and mini gender action plans are requisites for all plans in Output 1.1.1 and will be developed and monitored using participatory and popular methods. Households, territorial governments, enterprises, cooperatives and others will identify intercultural gender equality results and indicators and strategies to meet them, for which they will be monitored. Women and youth may use them as instruments to promote greater equality and their own empowerment.

179. Women who head households will be prioritized for project benefits. The project will provide families with childcare and other measures to ensure women's full participation and engagement in decision-making, such as sessions at times and locations that are safe and adapted to women and youth's daily activities by community.

180. Consultations and regular meetings using popular methodologies are built into most project outputs. These involve mixed-gender and gender-separate moments for reflection. Local Indigenous and Afro-descendant elders will be engaged to train both staff and beneficiaries in traditional conservation beliefs and practices. All events and materials will be carried out or produced in local languages. Training and other sessions, as well as resulting materials, will document both constraints to intercultural gender equality and measures to address them. These will relate to both conservation and production practices as well as revisions to legal and normative frameworks and other outputs.

181. Violence against women and girls will be addressed in various ways through the project, including training, monitoring, and reporting. The project will establish a Grievance and Redress Mechanism for violence against women. 100% of those hired or contracted by executing entities and implementing partners against whom a complaint is lodged and verified will be fired and not rehired.

¹⁰³ *Interculturality* means 'relationship between cultures', and refers to making the best use of each culture, so there will be reciprocity, knowledge, appreciation, understanding, interaction, participation, horizontality, respect and solidarity with other cultures. Universidad de las Regiones Autónomas de la Costa Caribe Nicaragüense (URACCAN), 2008, "Guía de investigación intercultural de la URACCAN", Bilwi: URACCAN.

¹⁰⁴ Wong, F. and Pyburn, R. 2019, "Reflections on Gender Transformative Approaches in Agriculture: The Promise and Cautionary Tales," CGIAR webinar. <https://www.slideshare.net/CGIAR/gta-prez-meeting-cgiar-webinar-june-2019-final>

182. The public awareness strategy and environmental education sub-component will promote gender equality, women's empowerment and non-violent masculinities. It will emphasize indigenous knowledge, needs and rights regarding conserving and restoring biodiversity and will promote intercultural gender equality.

183. The monitoring framework will be designed to collect quantitative and qualitative data to measure gender equality results and indicators. The main topics to be measured are: (i) women's and men's decision-making at the family/household level, enterprise/organization, community, TGI, municipal and regional governments; (ii) women's and men's more equitable participation in the care economy (including time use); (iii) non-violent and equality-promoting masculinities; (iv) access and control of resources, including spending and distribution of income; (v) awareness of positive intercultural gender and conservation norms; and (vi) mainstreaming of gender across technical components – capacity building; legal and normative framework, and public awareness. All person-related data will be cross-tabulated by gender, age and ethnicity.

G.3. Financial management and procurement (max. 500 words, approximately 1 page)

184. The CABEL is a multilateral bank for the development of Central America. CABEL's mission is to promote the economic integration and the balanced economic and social development of its founding member countries, attending and aligning itself with the interests of all of its member countries. CABEL supports public and private development projects that generate jobs and contribute to improving its member countries productivity and competitiveness, as well as contribute to increasing the Region's human development indicators. During the last 60 years, CABEL's support to the Region has resulted in credit approvals of more than US\$38.05 billion and disbursements of more than US\$30.39 billion.

185. Since 1985, the CABEL has participated in supporting various project initiatives focused on agricultural and rural development, promoting the Central American sector of micro, small and medium-sized enterprises (MSMEs), by increasing access to credit lines through intermediate financial institutions. The Bank's support to the sector has been provided through its own resources and with the resources of cooperative partners from bilateral and multilateral sides.

186. CABEL has extensive experience working with international funds and has a good track record in implementing programs that use international financial management practices. For Bio-CLIMA, CABEL will be responsible for the fiduciary aspects and will be responsible for all financial and investment activities financed by the GCF (unlike GEF and the REDD+ RBP from the FCPF). For the reception of GCF resources, CABEL will set up a special account out of its balance sheet from where disbursements will be made at the request of the MHCP and the Project Management Unit (PMU) attached to MARENA, and to the Silvo-pastoral and Cocoa-Agroforestry Restoration Trust Funds, that will be managed by a financial institution, selected through an international bidding process. These disbursements will have technical and financial support from the CABEL Country Office in Nicaragua.

187. Once these disbursements have been made, they will have technical and financial support from the CABEL Supervision Unit through its team at headquarters in Tegucigalpa, Honduras, and also from the CABEL Country Office in Nicaragua. Project monitoring and evaluation will be provided during the lifespan of the project until guaranteeing its accounting and financial closure before the GCF.

188. For all disbursements, CABEL must receive from the borrower a disbursement request letter duly signed by authorized representatives, including complete and correct payment instructions regarding the transfer of funds. The request must have the supporting documentation and evidence of the destination of the funds attached, in accordance with the requirements of the executed contract or agreement, as well as any other documentation required by CABEL.

189. All documents are added to CABEL's systems. Once validated by the CABEL Project Supervision Area that the technical requirements have been met, the role is transferred to the Country Lawyer to validate the legal conditions. Likewise, the Analyst of the Environmental and Social Sustainability Office reviews that the environmental and social conditions have also been fulfilled, also reflected in the Loan Contract and in the Environmental and Social Action Plan created for the project. Once all the technical areas of CABEL have been validated, the role goes to the Financial Operations

Control Area which is in charge of executing the transfer of resources through the Electronic Payment System. In the event of any contractual breach, the disbursement will not be made until the breach has been remedied.

190. The procurement of goods and services (including consultant services) for GCF-funded activities will be carried out following CABEL standard practices and procedures, which are aligned with GCF procedures, as well as with national laws and regulations.

191. The financial information will include at least the following documentation that CABEL shall provide to the GCF in the framework of the Accreditation Master Agreement (AMA) and the Funded Activity Agreement (FAA): i.) Annual performance reports on the status of project implementation, including disbursements made during the relevant period, progress reports, or more, if so requested by the GCF; ii.) Annual audited financial statement of the specific account, prepared by an independent auditing body. CABEL will observe the highest ethical standards during the acquisition and execution of Bio-CLIMA. CABEL will guarantee the quality of project implementation and the effective use of assigned international and national resources.

G.4. Disclosure of funding proposal

- No confidential information:** The accredited entity confirms that the funding proposal, including its annexes, may be disclosed in full by the GCF, as no information is being provided in confidence.
- With confidential information:** The accredited entity declares that the funding proposal, including its annexes, may not be disclosed in full by the GCF, as certain information is being provided in confidence. Accordingly, the accredited entity is providing to the Secretariat the following two copies of the funding proposal, including all annexes:
- full copy for internal use of the GCF in which the confidential portions are marked accordingly, together with an explanatory note regarding the said portions and the corresponding reason for confidentiality under the accredited entity's disclosure policy, and
 - redacted copy for disclosure on the GCF website.

The funding proposal can only be processed upon receipt of the two copies above, if containing confidential information.

H. ANNEXES

H.1. Mandatory Annexes (All Annexes are accessible at:

<https://bcie2014.sharepoint.com/:f:/r/sites/DAECI/Informacin%20Externa/Bio-Clima%20Funding%20Proposal/A%20Bio-CLIMA%20Funding%20Proposal%20+%20Annexes%20Final%20Sep%202020?csf=1&web=1&e=XCRm2q>
(If access is denied for any reason, please request access to CABI: Mr Rubén Avila, email: avilar@bcie.org)

- Annex 1 NDA no-objection letter(s)
- Annex 2 Feasibility studies: a.) Strategic-Institutional, b.) Sustainable-Silvopasture, c.) Cocoa-Agroforestry d.) Deforestation and Forest Degradation Analysis
- Annex 3 a.) Economic and/or financial analyses in spreadsheet format (integrated calculation model)
b.) Explanatory notes on general assumptions and parameters used in the EFA
- Annex 4 Detailed budget plan ([template provided](#)) ([Annex 4.A](#), [Annex 4.B](#))
a.) General detailed budget plan
b.) Detailed budget plan of for the Project Implementation Unit
- Annex 5 Implementation timetable including key project/programme milestones ([template provided](#))
- Annex 6 Environmental and Social Management Framework (ESMF)([ESS disclosure form provided](#))
- Annex 7 Summary of consultations and stakeholder engagement plan
- Annex 8 a.) Gender assessment and project/programme-level action plan ([template provided](#))
b.) Detailed budget of the Gender Action Plan
- Annex 9 Legal due diligence (regulation, taxation and insurance)
- Annex 10 Procurement plan ([template provided](#))
- Annex 11 Monitoring and evaluation plan ([template provided](#))
- Annex 12 AE fee request ([template provided](#))
- Annex 13 Co-financing commitment letters, if applicable ([template provided](#))
- Annex 14 Term sheet including a detailed disbursement schedule and, if applicable, repayment schedule

H.2. Other annexes as applicable

- Annex 15 Evidence of internal approval ([template provided](#))
- Annex 16 Map(s) indicating the location of proposed interventions
- Annex 17 (Not applicable) Multi-country project/programme information ([template provided](#))
- Annex 18 Appraisal, due diligence or evaluation report for proposals based on up-scaling or replicating a pilot project
- Annex 19 Procedures for controlling procurement by third parties or executing entities undertaking projects financed by the entity
- Annex 20 First level AML/CFT (KYC) assessment
- Annex 21 Operations manual (Operations and maintenance)
- Annex 22 GHG Emissions
a.) Explanatory note on assumptions and methodology
b.) Detailed GHG calculation model (Excell Sheet)
- Annex 23 Studies for the prioritization of intervention areas for Bio-CLIMAs at Concept Note Stage
- Annex 24 ERP Benefit Sharing Plan
- Annex 25 a.) Financial Management Capacity Assessment of MHCP as Executing Entity

List of Abbreviations and Acronyms

AWB	Alto Wangki Bocay Region
BAP	Biodiversity Action Plan
“bis”	Including Business Plans
CABEI	The Central American Bank for Economic Integration
CAR-TF	Cocoa Agroforestry Restoration Trust Fund
CFM	Community Forest Management
CFR	Community Forest Restoration
CIAT	International Centre for Tropical Agriculture
CR	Caribbean Region of Nicaragua
CTNPF	Close-to-Nature Planted Forest
ERP	Nicaragua’s Emission Reduction Program
ENDE REDD+	National REDD+ Strategy
ESMF	Environmental and Social Management Framework
SIEMAS	CABEI’s Environmental and Social Management Manual
ESS	Environmental and Social Standards
ESIA	Environmental and Social Impact Assessment
FCPF	Forest Carbon Partnership Facility
FAO	Food and Agriculture Organization of the United Nations
FREL	Forest Reference Emission Levels
GFMP	Guidelines for Forest Management Plans
GCH	Guidelines for Cultural Heritage
GCF	Green Climate Fund
GRACCN	Autonomous Regional Government North Caribbean Coast
GRACCS	Autonomous Regional Government South Caribbean Coast
EHS	Environmental, Health, and Safety Guidelines
GRM	Grievance Redress Mechanism
GTI	Indigenous Territorial Government
IADB	Inter-American Development Bank
INAFOR	National Forestry Institute
INETER	Institute of Territorial Studies
IPM	Integrated Pest Management
IFC	International Finance Corporation
IPSA	Institute of Plant Health Protection
IPP	Indigenous Peoples Plan
IPPF	Indigenous Peoples Planning Framework
ITO	International Labor Organization
LMP	Labor Management Procedure
LULUC	Land Use and Land Use Change
LUMP	Land Use Management Plan
UNFCCC	United Nations Framework Convention on Climate Change
MARENA	Ministry of the Environment and Natural Resources
MHCP	Ministry of Finance and Public Credit
MEFCCA	Ministerio de Economía Familiar, Comunitaria, Cooperativa y Asociativa de Nicaragua
MRV	Monitoring, Reporting and Verification
SNMRV	National Forest Monitoring System, safeguards and non-carbon benefits
NFI	National Forest Inventory
ONG	Organization No Governments
PRODEP II	Second Land Administration Project
RACCN	Autonomous Region of the Caribbean North Coast of Nicaragua
RACCS	Autonomous Region of the Caribbean South Coast of Nicaragua
REDD+ RBPs	REDD+ Result Based Payments
RBP-TF	Result Based Payments Trust Fund
SIS	Safeguard Information System
NGO	Non-Governmental Organization
SCE	Sustainable Community Enterprise

SESA	Strategic Environmental and Social Assessment
SDCC	Secretariat for the Development of the Caribbean Region of Nicaragua
SPR-TF	Silvo-pastoral Restoration Trust Fund
SERENA	Regional Secretariat of the Environment (North CR or South CR)
SEPLAN	Secretaría Técnica de Planificación y Cooperación
SINAP	Sistema Nacional de Áreas Protegidas de Nicaragua
SEP	Stakeholders Engagement Plan (SEP)
SPPP	Private Policy Secretariat of the Presidency of the Republic
TDP	Territorial Development Plan
UNIDO	United Nations Industrial Development Organization
WRI	World Resources Institute

No-objection letter issued by the national designated authority(ies) or focal point(s)



Gobierno de Reconciliación
y Unidad Nacional
El Pueblo, Presidente!

**Aquí nos ilumina,
un Sol que no declina
El Sol que alumbra
las nuevas victorias**
RUBÉN DARÍO

2019

Mr. Yannick Glemarec
Executive Director
Green Climate Fund
G-Tower, 24-4 Songdo-dong, Yeonsu Incheon City,
Republic of Korea

November 08, 2019

DGCP-UPA-0807-11-2019

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Re: Funding proposal for the GCF by CABEI regarding Bio-CLIMA: Integrated climate action to reduce deforestation and strengthen resilience in BOSAWÁS and Rio San Juan Biospheres

Dear Mr. Glemarec

We refer to the project Bio-CLIMA: *Integrated climate action to reduce deforestation and strengthen resilience in BOSAWÁS and Rio San Juan Biospheres* in Nicaragua as included in the funding proposal submitted by the Central American Bank for Economic Integration to us on November 8

The undersigned is the duly authorized representative of Ministry of Finance and Public Credit, the National Designated Authority of Nicaragua.

Pursuant to GCF decision B.08/10, the content of which we acknowledge to have reviewed, we hereby communicate our no-objection to the project as included in the funding proposal.

By communicating our no-objection, it is implied that:

- (a) The government of Nicaragua has no-objection to the project as included in the funding proposal;
- (b) The project as included in the funding proposal is in conformity with Nicaragua's national priorities, strategies and plans;
- (c) In accordance with the GCF's environmental and social safeguards, the project as included in the funding proposal is in conformity with relevant national laws and regulations.

We also confirm that our national process for ascertaining no-objection to the project as included in the funding proposal has been duly followed.

We acknowledge that this letter will be made publicly available on the GCF website.

Kind regards,

**CON FE Y
ESPERANZA!**

R. Uriel Pérez

Director General of Public Credit
Ministry of Finance and Public Credit-Nicaragua



CRISTIANA, SOCIALISTA, SOLIDARIA!



Ministerio de Hacienda y Crédito Público
Dirección General de Crédito Público
Avenida Bolívar, Frente a la Asamblea Nacional;
Teléfono 22224956

Environmental and social safeguards report form pursuant to para. 17 of the IDP

Basic project or programme information	
Project or programme title	Bio-CLIMA: Integrated climate action to reduce deforestation and strengthen resilience in BOSAWÁS and Rio San Juan Biospheres
Existence of subproject(s) to be identified after GCF Board approval	Yes
Sector (public or private)	Public
Accredited entity	Central American Bank for Economic Integration (CABEI)
Environmental and social safeguards (ESS) category	Category A
Location – specific location(s) of project or target country or location(s) of programme	Nicaragua: Autonomous Region of the Caribbean North Coast (RACCN), Autonomous Region of the Caribbean South Coast (RACCS), Alto Wangki / Bocay Region, and Río San Juan Department.
Environmental and Social Impact Assessment (ESIA) (if applicable)	
Date of disclosure on accredited entity's website	Tuesday, June 23, 2020
Language(s) of disclosure	English and Spanish
Explanation on language	Spanish is the official language of Nicaragua and is spoken and understood in the Project location.
Link to disclosure	<p>English: https://www.bcie.org/fileadmin/user_upload/Annex_6_English_Bio-Clima_Environmental_and_Social_Safeguards_Management_Framework.pdf</p> <p>Spanish: https://www.bcie.org/fileadmin/user_upload/ANNEX_06_Bio-CLIMA_Marco_de_Gestion_Ambiental_y_Social.pdf</p>
Other link(s)	https://www.bcie.org/operaciones-y-adquisiciones/operaciones-en-proceso/detalle-operaciones-en-proceso/bio-clima-nicaragua
Remarks	A simplified ESIA consistent with the requirements for a Category A project is included in the “Environmental and Social Management Framework”, and shall be further refined during first year of Project implementation when precise intervention sites and beneficiaries are defined. Confirmation that the Environmental and Social Management Framework is consistent with the requirement of the Category A project is subject to further due diligence on the Funding Proposal.
Environmental and Social Management Plan (ESMP) (if applicable)	
Date of disclosure on accredited entity's website	Monday, June 22, 2020
Language(s) of disclosure	English and Spanish
Explanation on language	Spanish is the official language of Nicaragua and is spoken and understood in the Project location.

Link to disclosure	<p>English: https://www.bcie.org/fileadmin/user_upload/Annex_6_English_Bio-Clima_Environmental_and_Social_Safeguards_Management_Framework.pdf</p> <p>Spanish: https://www.bcie.org/fileadmin/user_upload/ANNEX_06_Bio-CLIMA_Marco_de_Gestion_Ambiental_y_Social.pdf</p>
Other link(s)	https://www.bcie.org/operaciones-y-adquisiciones/operaciones-en-proceso/detalle-operaciones-en-proceso/bio-clima-nicaragua
Remarks	<p>A simplified ESMP consistent with the requirements for a Category A project is included in the “Environmental and Social Management Framework”, and shall be further refined during first year of Project implementation when precise intervention sites and beneficiaries are defined.</p> <p>Confirmation that the Environmental and Social Management Framework is consistent with the requirement of the Category A project is subject to further due diligence on the Funding Proposal.</p>
Environmental and Social Management (ESMS) (if applicable)	
Date of disclosure on accredited entity’s website	N/A
Language(s) of disclosure	N/A
Explanation on language	N/A
Link to disclosure	N/A
Other link(s)	N/A
Remarks	N/A
Any other relevant ESS reports, e.g. Resettlement Action Plan (RAP), Resettlement Policy Framework (RPF), Indigenous Peoples Plan (IPP), IPP Framework (if applicable)	
Description of report/disclosure on accredited entity’s website	Tuesday, June 23, 2020
Language(s) of disclosure	Spanish, with English summary.
Explanation on language	Spanish is the official language of Nicaragua and is spoken and understood in the Project location.
Link to disclosure	https://www.bcie.org/operaciones-y-adquisiciones/operaciones-en-proceso/detalle-operaciones-en-proceso/bio-clima-nicaragua
Other link(s)	N/A
Remarks	<p>a.) Indigenous Peoples Planning Framework (IPPF)</p> <p>b.) Process Framework for involuntary restrictions of access to resources in protected areas (PF)</p> <p>c.) Stakeholder Engagement Plan (SEP) and Grievances Redress Mechanism (GRM)</p> <p>d.) Integrated Pest Management (IPM)</p> <p>e.) Biodiversity Action Plan (BAP)</p> <p>f.) Labor Management Procedures (LMP)</p> <p>g.) Guidelines for Forest Management Plans (GFMP)</p> <p>h.) Guidelines for Cultural Heritage (GCH)</p>

Disclosure in locations convenient to affected peoples (stakeholders)	
Date	Tuesday, February 25, 2020
Place	http://www.marena.gob.ni/Enderedd/otros/proyecto-bio-clima/ The documents have been shared with the autonomous regional authorities and the local authorities. The documents will be socialized through these local institutions. Also note that the documents have been published by MARENA in its website since February 2020, in Spanish.
Date of Board meeting in which the FP is intended to be considered	
Date of accredited entity's Board meeting	TBC
Date of GCF's Board meeting	Friday, October 23, 2020

Note: This form was prepared by the accredited entity stated above.

Environmental and social safeguards report form pursuant to para. 17 of the IDP (revised)

Basic project or programme information	
Project or programme title	Bio-CLIMA: Integrated climate action to reduce deforestation and strengthen resilience in BOSAWÁS and Rio San Juan Biospheres
Existence of subproject(s) to be identified after GCF Board approval	Yes
Sector (public or private)	Public
Accredited entity	Central American Bank for Economic Integration (CABEI)
Environmental and social safeguards (ESS) category	Category A
Location – specific location(s) of project or target country or location(s) of programme	Nicaragua: Autonomous Region of the Caribbean North Coast (RACCN), Autonomous Region of the Caribbean South Coast (RACCS), Alto Wangki / Bocay Region, and Río San Juan Department.
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Other link(s)	https://www.bcie.org/operaciones-y-adquisiciones/operaciones-en-proceso/detalle-operaciones-en-proceso/bio-clima-nicaragua
Remarks	An ESIA consistent with the requirements for a Category A project is contained in the “Environmental and Social Management Framework”.*
Environmental and Social Management Plan (ESMP) (if applicable)	
Date of disclosure on accredited entity's website	Monday, June 22, 2020
Language(s) of disclosure	English and Spanish
Explanation on language	Spanish is the official language of Nicaragua and is spoken and understood in the Project location.
Link to disclosure	English: https://www.bcie.org/fileadmin/user_upload/Annex_6_English_Bio-Clima_Environmental_and_Social_Safeguards_Management_Framework.pdf

	Spanish: https://www.bcie.org/fileadmin/user_upload/ANNEX_06_Bio-CLIMA_Marco_de_Gestion_Ambiental_y_Social.pdf
Other link(s)	https://www.bcie.org/operaciones-y-adquisiciones/operaciones-en-proceso/detalle-operaciones-en-proceso/bio-clima-nicaragua
Remarks	An ESMP consistent with the requirements for a Category A project is contained in the "Environmental and Social Management Framework".*
Environmental and Social Management (ESMS) (if applicable)	
Date of disclosure on accredited entity's website	N/A
Language(s) of disclosure	N/A
Explanation on language	N/A
Link to disclosure	N/A
Other link(s)	N/A
Remarks	N/A
Any other relevant ESS reports, e.g. Resettlement Action Plan (RAP), Resettlement Policy Framework (RPF), Indigenous Peoples Plan (IPP), IPP Framework (if applicable)	
Description of report/disclosure on accredited entity's website	Tuesday, June 23, 2020
Language(s) of disclosure	Spanish, with English summary.
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Other link(s)	N/A
Remarks	a.) Indigenous Peoples Planning Framework (IPPF) b.) Process Framework for involuntary restrictions of access to resources in protected areas (PF) c.) Stakeholder Engagement Plan (SEP) and Grievances Redress Mechanism (GRM) d.) Integrated Pest Management (IPM) e.) Biodiversity Action Plan (BAP) f.) Labor Management Procedures (LMP) g.) Guidelines for Forest Management Plans (GFMP) h.) Guidelines for Cultural Heritage (GCH)
Disclosure in locations convenient to affected peoples (stakeholders)	
Date	Tuesday, February 25, 2020
Place	http://www.marena.gob.ni/Enderedd/otros/proyecto-bio-clima/ The documents have been shared with the autonomous regional authorities and the local authorities. The documents will be socialized through these local institutions. Also note that the documents have been published by MARENA in its website since February 2020, in Spanish.
Date of Board meeting in which the FP is intended to be considered	
Date of accredited entity's Board meeting	TBC

Date of GCF's Board meeting	Friday, October 23, 2020
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Note: This form was prepared by the accredited entity stated above.

*Subsequent to the disclosure of this form to the Board and active observers on 24 June 2020, the following update has been made: After further due diligence on the funding proposal, the Secretariat has confirmed that the "Environmental and Social Management Framework" is consistent with the requirements for a Category A project.

Secretariat's assessment of FP146

Proposal name:	Bio-CLIMA: Integrated climate action to reduce deforestation and strengthen resilience in BOSAWÁS and Rio San Juan Biospheres
Accredited entity:	Central American Bank for Economic Integration (CABEL)
Country/(ies):	Nicaragua
Project/programme size:	Medium

I. Overall assessment of the Secretariat

1. The funding proposal is presented to the Board for consideration with the following remarks:

Strengths	Points of caution
The project targets the poorest and most vulnerable region in the country and addresses the conservation/adaptive capacity of indigenous peoples and communities in the Caribbean region by piloting innovative approaches in sustainable forest management land use.	The monitoring and operations mechanism of the trust funds established/supported through the project will need to be strengthened.
The project aims to ensure the long-term transformation and sustainability in the entire Caribbean region, including the Bosawás Biosphere Reserve and the Rio San Juan Biosphere Reserve through the establishment of trust funds to sustain and boost investments.	
The project pilots an innovative approach to coherence and complementarity with other funds (GEF-7) and the Forest Carbon Partnership Facility Carbon Fund and creates an opportunity to complement GEF-8 from 2022 onwards.	

2. The Board may wish to consider approving this funding proposal with the terms and conditions listed in the term sheet and addendum XXIII, titled "List of proposed conditions and recommendations", respectively.

II. Summary of the Secretariat's assessment

2.1 Project background

3. The Bio-CLIMA project aims to restore degraded forest landscapes in the most biodiversity-rich region of Nicaragua, the Caribbean region (CR), and to channel investments into sustainable land-use management and forest management. The CR is currently experiencing the highest deforestation and forest degradation rates in the country due to unsustainable management of ecosystems, demographic pressure, and a lack of investments. The CR holds the highest biodiversity in the country, and is part of the important central American biodiversity corridors.

4. The project is seeking USD 64.1 million in GCF financing for a total project cost of USD 115.7 million. GCF is being requested to provide USD 38 million in highly concessional loans, with a grace period of 10 years and tenor of 40 years, as well as USD 26.1 million in grants. The project's budget includes USD 19 million in loans from the accredited entity (AE), CABEI, under the Program for the Reduction of Poverty and Economic and Social Exclusion (PRPEES), and USD 8.28 million from the Global Environment Facility (GEF) through the System for Transparent Allocation of Resources 7 (Star 7) and Food System, Land Use and Restoration (FOLUR) Impact Program. In addition, USD 24.3 million in grants is to be provided as co-financing through the Forest Carbon Partnership Facility (FCPF), unlocking results-based payments (RBPs).

5. The AE has categorized Bio-CLIMA as an environmental and social safeguards (ESS) category A project, noting that the project directly engages with indigenous peoples (IPs) and communities.

2.2 Component-by-component analysis

Component 1: Conserving and producing for life (total cost: USD 94.4 million; GCF cost: USD 20.2 million in grants and USD 36.1 million in loans – for a total of USD 56.3 million)

6. Component 1 is the core of the project, with the majority of the GCF funding and co-finance supporting its activities. The component focuses on addressing the deforestation risks and biodiversity loss of the indigenous territories within the Bosawás Biosphere Reserve, the Indio Maíz Biological Reserve, and their buffer zones, as well as in 12 indigenous territories with the highest risk of deforestation in the areas of Waspam and Prinzapolka. Through a participatory approach focusing on restoration and conservation zoning, business planning and access to markets for poor families and communities, the project will help enable the scaling up of cocoa-agroforestry and sustainable silvopastoral approaches. These will be achieved through:

- (a) Land-use management planning for landscape restoration, forest conservation and climate-resilient production; and
- (b) Productive investments in productive landscape restoration and forest conservation through three productive landscape restoration models: sustainable silvopasture, cocoa-agroforestry, and close-to-nature planted forests.

Component 2: Good governance (total cost: USD 11.9 million; GCF cost: USD 0.1 million in grants and USD 0.7 million in loans – for a total of USD 0.8 million)

7. Under this component, investment is expected to contribute to creating an enabling environment for investment in natural resources management and conservation in the CR that will offer clear and simple norms, efficient local institutions, and transparent governance schemes. Public environmental institutions in the CR will be provided with equipment and capacities to support sustainable land-use planning and environmental/forest law enforcement. The 23 indigenous territory governments of the CR will use the budget transferred to them to improve the oversight and control of their territories, covering an area of 1.7 million hectares (ha). Complementarily, Bio-CLIMA will facilitate the public-private dialogue processes involving

all relevant actors to create the investment facilities (trust funds) to promote and bring to scale the sustainable landscape restoration and forest conservation models, and to simplify norms and procedures to reduce transaction costs for natural resources sustainable management, use and market access. All of these interventions aim to create an enabling regulatory and governance environment, paving the way for transforming extensive and destructive land-use forms into sustainable climate-resilient practices, targeting in particular small vulnerable farmers and households on deforestation fronts.

Component 3: Capacity development (total cost: USD 8.4 million; GCF cost: USD 5.4 million in grants and USD 1 million in loans – for a total of USD 6.4 million)

8. The third component will help transform the sectoral land-use approach into an integrated and sustainable farm, landscape and ecosystem restoration approach. Investments will be made in training efforts and increasing capacity-building to allow participation of personnel from various institutions, extension services, farmer communities and other beneficiaries. The training efforts will focus on, among others, integrated land-use management and planning, territorial development planning, and the implementation and maintenance of productive landscape restoration and forest conservation modules.

9. Capacity development activities will include:

- (a) Provision of training to technical workers, stakeholders and communities;
- (b) Development of tools and instruments, including information systems; and
- (c) Awareness activities for climate change adaptation, mitigation, landscape restoration and forest conservation.

10. Environmental information and management systems to generate data and intelligence to support law enforcement will be put in place, including a deforestation and forest-fire early warning system, and a timber tracking system.

III. Assessment of performance against investment criteria

3.1 Impact potential

Scale: High

11. The project will contribute to a reduction of 12.8 MtCO₂eq over 7 years of project implementation, through better land use and sequestration in productive landscape. Over the project's total lifespan of 20 years, the mitigation impact is estimated at 47.3 MtCO₂eq, assuming a conservative scenario of only 50 per cent performance of the Emission Reduction Programme (ERP), the country's REDD-plus strategy and initiative. The estimated cost is USD 2.4/tCO₂eq, and the estimated GCF cost is USD 1.4/tCO₂eq removed.

12. While the project is a mitigation project, Bio-CLIMA will also contribute to resilience of ecosystems enhancement of 2.3 million ha of restored landscapes, forest and ecosystems in the CR. The introduction of climate-smart agriculture and landscape restoration practices for cocoa in agroforestry systems and silvopastures, and improved land management tools and instruments will strengthen the adaptive capacity, and reduce the exposure to climate risks, of 51,100 people. Most of them are from indigenous and Afro-descendant communities, living in marginalization and poverty. In addition, the project will indirectly benefit an estimated 614,721 people.

13. The project has a high impact potential from both its mitigation and adaptation focus through the significant reduction of greenhouse gas emissions, delivered mainly through restoration and conservation of degraded landscapes.

14. The project provides an alternative to the current “business as usual” scenario. It promotes community ownership and involvement in seeking to restore and manage productive landscapes in a sustainable manner, and in seeking to ensure the long-term prospects of the landscapes for generations to come.

15. The project will enable communities to diversify their livelihood strategies through job creation, further involvement and ownership of the sustainable management of landscapes, and through the innovative support and access to finance from the trust funds.

3.2 Paradigm shift potential

Scale: High

16. The project seeks to promote a long-term, sustainable and very innovative approach in order to restore, conserve and manage productive landscapes, which also function as the key supporting landscapes for many poor and vulnerable communities. The establishment of the trust funds and the opportunity for community groups to access finance will provide a unique opportunity to boost sustainable investments in the CR.

17. The trust funds will continue to exist after the project ends, and continue to support the flow of finance and investments in the CR. There is clear scalability of the project, which can readily be replicated in other regions in the country. The intention of the trust funds and their scope and ambition are very innovative and will provide Nicaragua with an opportunity to test and adjust the models in other regions.

18. The local communities will be empowered and play a key role in the success of the project. Through full ownership and decision-making, they will be able to engage up front in decision-making on investments, subprojects and business plans and planning.

3.3 Sustainable development potential

Scale: High

19. The project activities with communities at the centre will have high co-benefits across environmental, social and economic issues. Through the improved management of natural resources, the project will help create an enabling environment at the local rural level, stimulating economic growth and opportunities for entrepreneurship at the community level. The project will enable communities to diversify their livelihood strategies through job creation, further involvement and ownership of the sustainable management of landscapes, and through the innovative support and access to finance from the trust funds.

20. The strong focus on restoring important biodiversity corridors will have significant positive impact on the CR, one of the most biodiversity-rich regions in the country. Moreover, the communities, being the custodians of these important ecosystems, will be empowered to manage these important landscapes in a more diverse and sustainable manner.

3.4 Needs of the recipient

Scale: High

21. The CR is the most vulnerable and the poorest region in the country. The region has suffered from high deforestation and forest degradation over the years. The project will seek to transform this trend by empowering the communities to diversify livelihoods and boost investments in order to create diversification of livelihoods and promote more sustainable approaches in the region.

22. The project will enable communities to boost investments at the very local level, ensuring a very powerful model to scale up to other parts of the country, with a strong focus on poor communities.

3.5 Country ownership

Scale: High

23. The project will contribute to implementation of the measures in the agriculture, forestry and other land-use sector in the nationally determined contribution, including but not limited to: (i) modernization of hydrometeorological services to produce relevant climate information and early warning alerts;¹ (ii) raising efficiency for the protection of the biosphere reserves through land-use planning and reforestation; (iii) cooperation to strengthen capacities in climate finance; (iv) capacity development, access to technologies and finance for the agriculture sector; and (v) implementation of programmes to manage prioritized ecosystems in a resilient way through a landscape approach. Moreover, the project will seek to accomplish the three main goals of the Convention on Biological Diversity.

24. Bio-CLIMA has been designed to seek complementarity with the country's REDD-plus strategy and initiative, the ERP. The project is also aligned with the National Human Development Plan.

25. The CR is a key biodiversity hotspot in the country and has suffered from high deforestation. The project seeks to boost investments and sustainable management of landscapes in one of the poorest regions, and it is fully aligned with the government's priorities to increase investment and support to the CR.

26. The project is fully aligned with national policies, strategies and priorities. It supports a model integrating the various policies and strategies, and provides a good basis for long-term sustainability and scaling up to other regions in the country.

3.6 Efficiency and effectiveness

Scale: Medium/High

27. The project is to be financed through a very sustainable combination of grants and loans with a very innovative blend of co-finance. It offers a unique opportunity to bring in private sector finance over the years and boost it after the project ends.

28. The use of GEF-7 and the FCPF is considered very innovative – providing an innovative use of significant co-finance in the country, and promoting a very sustainable path for the future. The trust funds will have unique opportunities to continue their existence and attract a variety of finance from other sources in the future.

29. The economic and financial analysis for the 20-year period of the project's lifetime, with a social discount rate of 8 per cent, and valuing the ecosystem services of carbon sequestration and avoided emissions for improved forest governance, show positive investment returns. The forecast financial and economic internal rates of return are 19.6 per cent and 30.7 per cent, respectively, with a benefit–cost ratio of 1.8 and investment payment period of 12 years, respectively. As a result of the project's implementation, each productive unit is expected to have an annual additional net income of USD 270.2 per benefited hectare.

IV. Assessment of consistency with GCF safeguards and policies

4.1 Environmental and social safeguards

30. **Environmental and social (E&S) risk category:** Among the various components of the project, the potential adverse E&S impacts are mainly related to component 1 through the implementation of territorial development plans (TDPs) of indigenous communities, land-use management and business plans of individual families, and sustainable community projects.

¹ Density of weather stations in the CR and precipitation is shown in annex 1, figure 14.

These activities will include, among others: productive landscape restoration; climate-resilient and sustainable livelihood/production; community forest management and reforestation projects, and other forest and biodiversity conservation activities. Based on the project's own development objectives – which in themselves address the existing E&S problems in the area – its overall design, and proposed application of the participatory approach in the planning and implementation of the project activities, the AE has proposed that the project be rated under category A for E&S risks. The potential adverse impacts are likely to be moderate in terms of magnitude and probability of occurring, and would not be irreversible or unprecedented. However, given the current sociopolitical situation in the project area, the project activities could trigger major conflicts. Hence, the Secretariat concurs with the project being classified under category A.

31. **Safeguards instruments and disclosure:** The AE has submitted an E&S management framework (ESMF) along with several stand-alone documents, namely: (i) an indigenous peoples planning framework (IPPF); (ii) a process framework (PF) for involuntary restrictions of access to natural resources in natural protected areas; (iii) a stakeholder engagement plan, with a grievance redress mechanism (GRM); (iv) an integrated pest management plan; (v) a biodiversity action plan (BAP); (vi) labour management procedures; (vii) guidelines for forest management plans; and (viii) guidelines for cultural heritage. An ESMF was prepared instead of an E&S impact assessment because “the specific actors and communities that shall participate in the programme are still to be defined and the types and locations of activities and interventions are still to be determined.” These documents are available on the websites of the AE and GCF, and on that of the Ministry of the Environment and Natural Resources (MARENA).

32. **Key risks and impacts, and proposals for their management:** The project will be implemented by MARENA in frontier areas where deforestation is occurring in the indigenous territories within the Bosawás Biosphere Reserve core zone, the Indio Maíz Biological Reserve and their buffer zones. The sociopolitical situation in these areas is reportedly sensitive because of the ongoing protests regarding the forest fires in the Indio Maíz area in 2018, and the social unrest that these protests triggered. There is also an accumulation of tensions stemming from conflicts between indigenous communities and campesinos–colonos (agricultural frontier colonists), accusations of land-grabbing, competing interests and demands of different landholders and people without land title, and illegal logging activities.

33. The ESMF has identified a number of risks and impacts. Based on the nature and current situation of the project area, the Secretariat has identified the following risks as being significant: (i) the risk of the project violating or not respecting the rights of IPs; (ii) risks of the project intervention aggravating the conflicts between campesinos-colonos and IP communities; (iii) restriction of access of some individuals or groups to land and forest-based resources; and (iv) inadvertent adverse effects on the health of the remaining forest and loss of biodiversity. The programme has developed management measures to address these risks:

- (a) Risk that the project may violate or not respect the rights of IPs: The project area is characterized by a multi-ethnic population represented by the IPs (Miskito, Rama, Mayangna and Ulwa) as well as mestizos, Creoles and Afro-descendant people or Garifuna. Nicaragua's Constitution and laws guarantee the rights of IPs and Afro-descendant people over their territories, from which they cannot be legally displaced by settlers or any other person. The main constraint is the lack of institutional capacity and resources for oversight, territorial defence and law enforcement. These should be improved substantially through Bio-CLIMA. The project will include implementation of TDPs of indigenous communities. In order to ensure IP rights are respected, including in the implementation of TDPs, an IPPF has been prepared to guide the conduct of project activities in the indigenous territories. The project also adopts a strict exclusion criterion, that is: “activities adversely affecting indigenous and Afro-descendant people or where communities have not been consulted or have not provided their support” will

be excluded from the project. Given the high level of engagement with communities, the project may need to be attentive to any potential COVID-19 risk present at the time of implementation.

- (b) Risk of aggravating sociopolitical conflict between campesinos-colonos and the IP communities: This risk may be the most significant for this project. As described in the ESMF, the sociopolitical situation in the project area is sensitive as a result of the accumulation of tensions stemming from unresolved land tenure and land-use conflicts between indigenous communities and agricultural frontier colonists. Land-grabbing and illegal encroachment of colonists into indigenous territories are reportedly rampant in the area. These issues are often complicated by competing interests of different landholders, by people without land titles, and by illegal logging activities. The project intervention could aggravate ongoing conflicts, and these may expand into intergroup conflict. This risk is to be managed by: (i) the application of screening criteria that exclude project activities that would be carried out in relation to the granting of land titles that are under dispute, and activities that would be carried out in lands under dispute; and (ii) facilitating dialogue between indigenous territory governments and non-indigenous parties to achieve peaceful cohabitation through “landscape restoration and forest conservation agreements” in situations where the indigenous territory governments ask for this support and a constructive solution based on the free, prior and informed consent of IPs can be achieved. The E&S assessment of the specific subproject will also include an analysis of any situation of conflict or violence in the areas, with emphasis on the potential conflicts mentioned, and consider more specific mitigation measures.
- (c) Risk of loss or restriction of access to land and forest resources in protected areas: The project has ruled out any need for land acquisition. To ensure there will be no physical displacement of dwellings, any activity that could produce such impacts will be screened out of the project activities. In particular, activities that require the purchase of land and those that may cause involuntary resettlement (formal or informal) will be excluded from the project. However, in certain cases, some project interventions, such as the implementation of land-use plans, may cause involuntary restriction of the use of natural resources in protected areas, thereby affecting forest-based livelihoods. To address this risk, a PF for restriction of access to resources has been developed. The PF sets out the principles to be applied and actions to be undertaken in the event of restriction of access to natural resources. These include the provision of options or alternative solutions to the people affected.
- (d) Inadvertent impacts of the interventions on deforestation and biodiversity: Although the project generally aims to protect the remaining forest and biodiversity, there are activities that may inadvertently negatively affect the health of forest and biodiversity. For example, the opening of new forest paths may facilitate access to the forest and extend the deforestation fronts, and cause erosion and the removal of vegetation. Exotic, fast-growing species of plants may turn out to be invasive species, resulting in the disappearance of local species. These risks are addressed in the ESMF through the exclusion list and other measures in the risk and impacts matrix. Activities that involve conversion, deforestation, degradation or any other alteration of natural forests or natural habitats including, among others, conversion to agriculture or tree plantations, and activities related to illegal harvesting of timber and non-timber products for commercialization will not be funded. The ESMF also includes guidelines for biodiversity management, which require the preparation and implementation of a biodiversity management plan.

34. **Summary of compliance with GCF ESS standards:** The instruments submitted adequately address the key issues and risks relating to GCF ESS standards. Below are summaries of the status of compliance:

- (a) **ESS 1: Assessment and management of environmental and social risks and impacts.** An ESMF has been prepared. The ESMF uses the result of two strategic E&S assessment round tables conducted for Nicaragua's national REDD-plus strategy (ENDE-REDD+). It provides: an assessment of the E&S conditions of the project regions; an analysis of the country's legal framework for E&S safeguards; and a detailed description of the project activities and the process of assessing and managing the E&S risks and impacts of site-specific activities or subprojects during project implementation.
- (b) **ESS 2: Labour and working conditions.** The project may directly hire fieldworkers and aides to assist in the on-the-ground activities during implementation. It may also engage the services of contractors in the small construction works, while rural workers may be hired in project-supported livelihood activities and farm production activities. A guide for labour management (*Guía para la Gestión de Mano de Obra*) has been prepared, based on the country's labour laws and the World Bank's standards for labour and working conditions. The guide provides for: the adoption of occupational health and safety standards; non-discrimination and equal opportunities among workers; worker protection; prohibition of forced and child labour; and ensuring worker's rights and access to a GRM.
- (c) **ESS 3: Resource efficiency and pollution prevention.** The project will have potential impacts on soil erosion and sedimentation of waterways from small-scale construction activities and from silvo/agroforestry activities. These are expected to be minor, highly localized and temporary – ones that can be addressed through site-specific erosion and sediment control measures. For such impacts, the ESMF provides generic measures that may be adapted in the formulation of E&S management plans of individual subprojects. However, the overall impact of the project on soil erosion and sedimentation is expected to be positive because of the project's support to the restoration of degraded lands. Another potential impact could be an increase in the use of pesticides as a result of project support for agricultural production-related activities under agroforestry. This potential impact will be addressed through the implementation of measures in the integrated pest management plan.
- (d) **ESS 4: Community health, safety and security.** Community health and safety risks and impacts are deemed not significant for this project. There is only a very small possibility of increased exposure to, and, hence, increased prevalence of, vector-borne (e.g. malaria) and/or outbreaks of zoonotic diseases among the project-site population and workers due to activities within or near forested areas. These risks, as well as security issues, if any, will be covered during the screening and assessments of individual subprojects.
- (e) **ESS 5: Land acquisition and involuntary resettlement.** The project will avoid impacts from land acquisition and involuntary resettlement. Activities that would involve involuntary resettlement will be screened out from the project through the adoption of the exclusion criteria for subprojects. For the possible restriction of access to natural resources in protected areas, a PF for involuntary restriction of access to natural resources has been prepared. The PF provides for the preparation of action plans, through a participatory approach, for activities that would involve involuntary restriction.
- (f) **ESS 6: Biodiversity conservation and sustainable management of living natural resources.** Inadvertent adverse impacts of project activities on biodiversity and the forest will be minimized by the adoption of the exclusion criteria during screening of

individual subprojects. Activities that would clearly involve conversion, deforestation, degradation or any other alteration of natural forests or natural habitats, and activities related to illegal harvesting of timber and non-timber products for commercialization will not be funded. In addition, a biodiversity action plan has been prepared that will guide the design of project interventions on the ground. Subprojects that would involve negative impacts on biodiversity will include a biodiversity management plan. There are also guidelines for the formulation of forest management plans.

- (g) **ESS 7: Indigenous peoples.** The indigenous communities are main target beneficiaries of this project; principally through the development and implementation of TDPs, and also by facilitating and supporting peaceful co-habitation agreements among IP communities and campesinos-colonos. To avoid adverse impacts on these communities, individual subprojects will be screened in terms of activities deemed to adversely affect IPs and Afro-descendant people, and also activities on sites where communities have not been consulted and have not provided their free, prior and informed consent will be excluded from consideration in the project. For subprojects that benefit IPs, an IPPF has been prepared that provides guidelines on the conduct of free and prior informed consultations and consent.
- (h) **ESS 8: Cultural heritage.** The overall potential risks and impacts of the project on cultural heritage are assessed as low. Activities that involve the removal or alteration of any physical cultural property (including sites of archaeological, palaeontological, historical, religious, or unique natural value) will not be funded. A stand-alone guide for cultural heritage has also been prepared.
- (i) **Stakeholder engagement and grievance redress mechanism.** The preparation of the comprehensive programme for ENDE-REDD+ implementation involved the holding of round tables. These comprised working sessions and workshops to draft the strategic options, social and environmental impacts and risks, and mitigation measures in relation to ESS. The ESMF and its specific stand-alone instruments also underwent a consultation process within the localities involving various institutions and sectors. The ESMF provides a description of the GRM for the project. To address stakeholder engagement during project implementation, a stand-alone stakeholder engagement plan has been prepared. It also includes a more detailed description of the GRM that will be available at the AE level, at the national level and at the project level. The GCF Independent Redress Mechanism and the Secretariat's IP focal point will also be available for assistance at any stage, including before a claim has been made, as required by paragraph 70 of the GCF Indigenous Peoples Policy.

4.2 Gender policy

35. The AE has provided a gender assessment and gender action plan (GAP) and, therefore, has complied with the requirements of the GCF Gender Policy.

36. The gender assessment provides an assessment of the country's commitment to gender equality and women's empowerment. It also provides an assessment and analysis of gender gaps, differences and inequalities in Nicaragua and the Caribbean Coast, the focal region of the project.

37. The Government of Nicaragua has ratified or is a signatory to major declarations and conventions, such as the Convention on the Elimination of all Forms of Discrimination Against Women, and the Inter-American Convention on the Prevention, Punishment and Eradication of Violence against Women (adopted by the Inter-American Commission of Women of the Organization of American States). The 1987 Constitution of Nicaragua recognizes women's equality, and a number of the country's laws and public policies already include a gender

perspective. A variety of government institutions support women. These include the Ministry of Women, Ministry of the Family, and regional institutions such as Women's Secretariat of the Regional Council, North Atlantic Autonomous Region, and Southern Atlantic Autonomous Region. Despite Nicaragua's laws, policies, institutions and development plans that promote gender equality, women continue to face inequalities and are less empowered.

38. The gender assessment indicates that there are six main ethnicities in the CR, with some common and some distinct customs, and varying gender roles, gender-based differences and gender-based gaps. The gaps are evidenced through unequal land ownership, low participation in decision-making, training and access to information, access to and control over economic resources, and limited access to health and social services. In general, men own more and larger sections of land than do women. Moreover, women have far less access to credit. Women's work is often not recognized, and their participation in income generation and decision-making at the household level varies greatly. Participation in economic activity varies widely according to location, territory, gender and ethnicity. In the CR, rates of engagement in the market economy are wider than the national average, especially in rural areas, where women's level of participation in economic activity is only 21.8 per cent, compared with 82.9 per cent for men. In addition, women producers show higher poverty rates, and farms owned by women producers receive less financial support. The rate of access to finance by female-headed households varies widely in the Caribbean macro-region by area and ethnicity, ranging from 21.6 per cent and 25.4 per cent in the North Caribbean Coast Autonomous Region and the South Caribbean Coast Autonomous Region, respectively, to as high as 50 per cent among the indigenous Rama people of the Caribbean Coast. At the community level, women's effective participation in forest- and land-use management is hampered by low levels of community organization, informal sociocultural norms and sanctions, pressure by husbands, time poverty, and household responsibilities, among other barriers.

39. Violence against women is a major problem affecting women in the Caribbean Coast. The Ministry of Justice, courts, and medical-legal institutions all have specific units specialized in family- and gender-based violence. Despite the existence of these institutions, women, girls and adolescents face tremendous obstacles to accessing justice.

40. The AE has provided a GAP that includes specific gender activities to support gender-intercultural and gender-transformative change and the objectives of Bio-CLIMA. The GAP provides activities to address the challenges faced by women, and includes indicators, targets, timelines and budgets. Some baseline information has been collected, and there are plans to collect baselines for the remaining indicators at the beginning of project implementation. The AE will hire a full-time gender expert to mainstream gender throughout the project, including ensuring the inclusion of the gender expert in the various decision-making and management structures of the project. In general, the GAP includes activities to address the interests and needs of women, women-headed households, indigenous women, youth, and older people. It also includes measures to ensure that women can GRMs to address gender-based violence issues.

41. The GAP identifies project outputs and activities that relate to land use and management planning for landscape restoration, forest conservation and climate-resilient production at the household, cooperative, producers organization and indigenous community levels. It includes improved access to high-value markets for women, through women-only and mixed-gender cooperatives, producers organizations and indigenous community groups. Measures to ensure equitable participation of women of the different ethnicities involved in the project will include providing training, exchange visits and other activities in different languages, as well as childcare services where needed. The GAP also targets the legal and normative framework, including the management plans of the Bosawás and Indio Maíz Biosphere Reserves, with activities to update and ensure equitable participatory processes for adult and young women and men of the different ethnicities. In addition, investment opportunities, covering the three

trust funds to be set up by the project, will prioritize proposals that ensure sustainable practices around land, forestry and production that empower women economically and include women in decision-making roles. The project will proactively engage men and women from indigenous and non-indigenous groups in most of the proposals funded as well as in the governance and oversight mechanisms.

42. GAP activities will also target the strengthening of territorial governments and local producers organizations to enable increased women's decision-making authority and power. Organizational, legal, administrative, financial and other support will also contain measures that promote young and adult women's and men's knowledge, interests, practices and priorities of the respective communities and settlements. Exchanges and workshops among indigenous Afro-descendant and non-indigenous women, as well as male and female young people, within particular government and producers organizations, as well as at the regional level, will be carried out for planning, implementation and monitoring at regular intervals throughout the project. These will promote the sharing of knowledge and practices as well as the building of leadership skills. The forestry information system and similar mechanisms will also build on documenting distinctive practices and gathering socioeconomic data that will measure change in intercultural gender equality.

4.3 Risks

4.3.1. Overall programme assessment (medium risk)

43. GCF is requested to provide a senior loan of USD 38 million and a grant of USD 26.1 million to transform extensive cattle farming, agriculture and timber exploitation into more-intensive, deforestation-free production forms in the CR of Nicaragua. The AE will provide a senior loan of USD 19 million. A grant of USD 24.3 million from the FCPF and USD 8.28 million from the GEF will be available as co-financing to the project.

4.3.2. Accredited entity/executing entity capability to execute the current programme (medium risk)

44. The AE, CABEI, has an extensive track record in the region of over 5 decades, and has disbursed USD 26.2 billion through its network of more than 100 intermediate financial institutions, 10 of which operate in Nicaragua.

45. MARENA and the Ministry of Finance and Public Credit (MHCP) are the executing entities (EEs) for this project. MARENA will implement all grant-related activities, while MHCP will implement on-lending-related activities through trust funds. The AE has conducted a financial capacity assessment of the EEs. It has concluded that both institutions have the capacity to implement the proposed project. MARENA is experienced in executing rural development and climate change projects financed by different cooperation partners. MHCP has experience in the execution of multisectoral projects, and has a reliable financial management system with very low risks in execution as per the AE's assessment.

4.3.3. Project-specific execution risks (medium risk)

46. Management of trust funds: The project will set up three specific trust funds under Outputs 1.2 and 2.1.1 managed by MHCP. A total of USD 95.2 million, 82 per cent of total financing under the project, will be implemented via these trust funds. Therefore, the role of trustee of these three funds is critical for the success of the project's implementation. The EE will select one or various private financial institutions in Nicaragua to act as trustees. Comfort can be taken from the fact that CABEI, as the AE, will complete a capacity assessment of the financial institutions, taking into account financial management and procurement policies,

controls, and ability to implement the project activities. In addition, to ensure the transparent and efficient use of financial resources, each fund will be managed by its own governance and oversight structures, which will be independent of each other.

47. Co-financing resources risks: At the time of drafting the assessment, the co-financing from the AE is subject to availability and internal approval, and the agreement with the FCPF for grant co-financing is to be made by the end of 2020. The letters from the Government indicate that all the co-financing amount is “up to” the indicated amount. It is recommended that the proposed co-financing be committed before starting GCF disbursement. In the event that the full amount does not materialize, the estimated impact of the project may be reduced. In addition, the monitoring and reporting arrangements of the co-financing need to be further clarified and included in the term sheet, as two out of three co-financing resources will not be channelled via the AE.

48. Credit risk: GCF is to provide a sovereign loan to the Government of Nicaragua (Moody’s rating B3). The credit profile of the country remains weak. However, the highly concessional loan from GCF with a long-term repayment profile is expected to support the Government in making repayment.

49. Economic and financial viability: The AE has provided an economic and financial analysis over the 20-year horizon, considering the potential for increased producers’ income and carbon emission reduction through the investment under component 1. The level of financial and economic internal rate of return would be 19.6 per cent and 30.7 per cent, respectively. The sensitivity analysis shows that the project still results in positive net present values with a 10 per cent increase in cost or a 10 per cent decrease in benefit.

4.3.4. Compliance risk (medium risk)

50. The AE has confirmed that the project and its activities will not engage with any entity or individual that may be subject to, or listed on, any United Nations Security Council sanctions lists, and that none of the activities to be undertaken in this project are subject to or prohibited by these sanctions listed.

51. CABEI is an international multilateral development bank that has policies and procedures in place regarding sanctions, anti-fraud and anti-corruption, and anti-money-laundering and countering the financing of terrorism that are currently in force and in accordance with current international standards.

52. CABEI states that its policy and procedural manual is applied and observed in all active and passive operations, and in those involving procurement of goods and services in which it interacts or is the counterpart of another natural or juridical person. CABEI is currently in the process of conducting a review of its anti-money-laundering and countering the financing of terrorism, integrity and sanctions due diligence in accordance with its policy and procedural manual.

53. CABEI advises that its money-laundering prevention policy, manual and procedures are currently in force and in accordance with current international standards. The policies and manuals will be applied in order for the project and its activities to conform to any United Nations Security Council sanctions programmes that may be applicable, and to ensure that no entities or individuals involved in the project as counterparties or implementers are listed on any United Nations Security Council sanctions lists.

54. CABEI confirms that it will neither accept nor maintain a commercial relationship or operation if it suspects that funds of a client or potential client may originate from criminal activities.

55. CABEI has advised that the project will involve some disbursement or distribution of commodities or other items of value to beneficiaries directly. As Bio-CLIMA will be co-financed by the FCPF within the ERP, a benefit sharing plan for RBPs has been designed, consulted upon and agreed with beneficiaries.

56. Private beneficiaries that reduce emissions will receive direct payments from the RBP trust fund established for that specific purpose, while indigenous and Afro-descendant communities will benefit from financial support to the subprojects to be financed through the RBPs. Project beneficiaries will receive non-monetary benefits and inputs for the establishment of the agroforestry and silvopastoral systems for landscape restoration, for example, planting material (e.g. cocoa seedlings), barbed wire for fencing, and agricultural inputs.

57. CABEI has implemented several mechanisms (web, email, voicemail, etc.) through which it is possible to submit reports and allegations of irregularities, unethical situations, prohibited practices, or regulatory breaches in the use of funds or resources administered by CABEI. Reports about environmental and/or social issues or damages related to CABEI's projects can also be reported. Any natural or juridical person, including CABEI staff members, may submit a report. Anonymous reports are permitted.

58. CABEI advises that its Integrity and Compliance Office oversees the analysis and proposal of a course of action regarding reports and/or allegations related to prohibited practices via an Integrity Committee. This is in accordance with CABEI's internal regulations and the terms applicable to the different contractual relationships with counterparties.

59. Recommended risk rating: The Office of Risk Management and Compliance (ORMC)/Compliance Team has conducted a review of the project in accordance with relevant GCF Board-approved policies and does not find any material issue or deviation with respect to compliance issues. Based on available information for this funding proposal, the ORMC/Compliance Team has determined a risk rating of "medium", and has no objection to this request proceeding to the next steps for processing.

60. The project involves disbursement or distribution of cash, vouchers, commodities or other items of value to beneficiaries, either directly or indirectly, and it is acknowledged that CABEI intends to take measures to establish appropriate controls to mitigate associated risks. However, it must also be acknowledged that these disbursement modalities increase the risk of money-laundering and/or financing of terrorism and/or other forms of prohibited practices.

61. The ORMC/Compliance Team would like to remind CABEI, as the AE, of its continuing obligations and responsibilities with regard to monitoring and reporting any risks for money-laundering, financing of terrorism, or prohibited practices among the intended counterparties, EEs, beneficiaries, persons involved, or any of the proposed activities.

4.3.5. GCF portfolio concentration risk (low risk)

62. In the case of approval, the impact of this proposal on the GCF portfolio concentration in terms of results areas and single proposal is not material.

4.3.6. Recommendation

63. It is recommended that the Board consider the above factors in its decision.

Summary risk assessment		Rationale
Overall programme	Medium	In addition to the GCF resources, 44% of the project activities will be financed by co-
Accredited entity/executing entity capability	Medium	

Project-specific execution	Medium	financing; this co-financing needs to be materialized in a timely manner. A majority of the project financing (about 82%) is going to be invested through trust funds. The success of the project will depend on the trustee managing these funds efficiently.
GCF portfolio concentration	Low	
Compliance	Medium	

4.4 Fiduciary

64. For this project, CABEI will serve as the AE, while MARENA and MHCP will be the EEs. The project includes a lending component, with additional grant financing, to fund sustainable landscape restoration and management, the creation of an enabling investment environment, and strong local capacities for territorial governance and law enforcement.

65. In its role as the AE, CABEI will oversee procurement and financial management to ensure implementation is in line with its own policies, procedures and timelines. MARENA and MHCP, as project EEs, will receive the financial resources for the Bio-CLIMA Project from the different funding sources (GCF, GEF, CABEI, FCPF) using the specific disbursement mechanisms and regulations of each of them.

66. For the receipt of GCF resources, CABEI will set up a special account out of its balance sheet from where disbursements will be made at the request of MHCP and the project management unit attached to MARENA, and to the silvopastoral and cocoa-agroforestry restoration trust funds. These disbursements will have technical and financial support from the CABEI country office in Nicaragua. Project monitoring and evaluation will be provided during the lifetime of the project until guaranteeing its accounting and financial closure to GCF.

67. MARENA, as an EE, will undertake monitoring and evaluation of implementation performance, and safeguard compliance on each implementation partner's mandate. Monitoring, reporting and evaluation will be conducted in accordance with CABEI and GCF procedures by the project team and CABEI country office.

68. Technical project execution, coordination and monitoring will be carried out by MARENA, which will set up and run the project implementation unit. For the delivery of project outputs and implementation of activities, MARENA and MHCP will sign specific implementation agreements or contracts with implementation partners, selected according to their specific competencies and mandates.

69. The financial information will include at least the following documentation that CABEI will provide to GCF in the framework of the accreditation master agreement and the funded activity agreement: (i) annual performance reports on the status of project implementation, including disbursements made during the relevant period, progress reports, or more, if so requested by GCF; and (ii) annual audited financial statement of the specific account prepared by an independent auditing body. CABEI will guarantee the quality of project implementation and the effective use of assigned international and national resources.

4.5 Results monitoring and reporting

70. The project is a mitigation project focusing on land use, restoration and conservation in Nicaragua. The project follows a three-pronged strategy of mutually reinforcing interventions consisting of investments focused on sustainable landscape restoration and management, the creation of an enabling investment environment, and strong local capacities for territorial governance and law enforcement with the supporting tools and instruments needed. The project interventions are expected to sequester 47.3 MtCO₂eq over 20 years. As a result of the

project, it is expected that 20,994 ha of degraded pasture and rangeland will be restored into sustainable cocoa–agroforestry and silvopastoral systems, 40,215 ha of microcatchments will be reforested, and 541,826 ha of natural forest land will be conserved through sustainable forest management and restoration.

71. The AE has developed a detailed methodology for estimating greenhouse gas emissions, which is attached in annex 22(a) and annex 22(b). The assumptions in the methodology are transparent, conservative and aligned with the assumptions used in the third national communication of Nicaragua to the United Nations Framework Convention on Climate Change, national REDD-plus documents and other relevant documents. As the impact of the project will continue beyond the end of the 7-year implementation period, the AE will need to arrange for impact reporting beyond that.
72. The theory of change demonstrates clear linkages with certain assumptions with respect to the project. The barriers and how the project helps overcome those are clearly articulated.
73. The fund-level impacts and outcome sections (sections E.3 and E.4, respectively) include baselines, midterm and final targets, and are compliant with the GCF results management framework / performance measurement frameworks. In addition, the assumptions on the different indicators are clearly provided.
74. Section E.5 has also been completed and contains relevant indicators to monitor project performance and results. Section E.6 is compliant with the funding proposal format and includes activities and subactivities, and their relevant descriptions.
75. The monitoring and evaluation plan in annex 11 is finalized, and the AE has budgeted for all monitoring and evaluation costs.
76. In relation to the implementation timetable in annex 5, the AE has included the deliverables and key milestones for each activity.

4.6 Legal assessment

77. The Accreditation Master Agreement was signed with the Accredited Entity on 6 September 2017, and it became effective on 16 November 2017.
78. The Accredited Entity has not provided a legal opinion/certificate confirming that it has obtained all internal approvals and it has the capacity and authority to implement the project. It is recommended that, prior to submission of the Funding Proposal to the Board (a) the Accredited Entity has obtained all its internal approvals, and (b) the Fund has received a certificate or legal opinion from the Accredited Entity in form and substance satisfactory to the Fund confirming that all final internal approvals by the Accredited Entity have been obtained and that the entity has the authority and capacity to implement the project.
79. The proposed project will be implemented in the Republic of Nicaragua, a country in which GCF is not provided with privileged and immunities. This means that, amongst other things, GCF is not protected against litigation or expropriation in this country, which risks need to be further assessed.
80. The Secretariat sent a draft agreement (in English and Spanish) on privileges and immunities to the National Designated Authority (NDA) together with a background note on privileges and immunities in April 2018. The NDA confirmed receipt of the draft agreement and background note.
81. The Heads of the Independent Redress Mechanism (IRM) and Independent Integrity Unit (IIU) have both expressed that it would not be legally feasible to undertake their redress activities and/or investigations, as appropriate, in countries where the GCF is not provided with relevant privileges and immunities. Therefore, it is recommended that disbursements by the

GCF are made only after the GCF has obtained satisfactory protection against litigation and expropriation in the country, or has been provided with appropriate privileges and immunities.

82. In order to mitigate risk, it is recommended that any approval by the Board is made subject to the following conditions:

- (a) Delivery by the Accredited Entity to the Fund of a certificate or legal opinion within 120 days of the Board approval confirming that it has obtained all its internal approvals;
- (b) Signature of the funded activity agreement in a form and substance satisfactory to the Secretariat within the later of 180 days from the date of Board approval or the date on which the Accredited Entity has provided a certificate or legal opinion confirming that it has obtained all its internal approvals; and
- (c) Completion of legal due diligence to the satisfaction of the Secretariat.

Independent Technical Advisory Panel's assessment of FP146

Proposal name:	Bio-CLIMA: Integrated climate action to reduce deforestation and strengthen resilience in BOSAWÁS and Rio San Juan Biospheres
Accredited entity:	Central American Bank for Economic Integration (CABEI)
Country/(ies):	Nicaragua
Project/programme size:	Medium

I. Assessment of the independent Technical Advisory Panel

1.1 Impact potential *Scale: High*

1. The Republic of Nicaragua, the largest country in Central America, is located between the Caribbean Sea to the east, and the Pacific Ocean to the west. It covers an area of 129,494 km² and has a population of 6.3 million. It is one of the least developed countries in Central America, with its nominal gross domestic product ranked second-lowest in the Americas.

2. The Caribbean Region (CR), the eastern region facing the Caribbean Sea, constitutes 54 per cent of the country's territory, while its population represents only 15 per cent of the total. Approximately 64 per cent of the country's forests (2.49 million ha) are located in the CR. 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. It is home to most of the country's indigenous peoples and those of African descent, who control most of the closed broadleaf forests.

3. Nicaragua is regarded as one of the countries most vulnerable to climate change. Its geographical position makes the country susceptible to climatic shocks caused by excessive precipitation (hurricanes and tropical depressions) and droughts, sometime associated with the El Niño Southern Oscillation. Natural disasters, mainly hurricanes and tropical storms, cause damage, primarily in the CR, to infrastructure and the agriculture sector, and displace people from their homes.

4. The deforestation rate in the CR has exceeded the national average. In the period 2000–2015, the country lost approximately 90,000 ha of tropical forests annually, at a rate of 2.3 per cent, which was equivalent to emission reductions of about 14 MtCO₂eq per annum. Additional annual emission reduction savings of 2.43 MtCO₂eq are estimated to have been lost due to additional anthropogenic forest degradation. In the Bosawás Biosphere Reserve and Indio Maíz Biological Reserve, a part of Rio San Juan Biosphere Reserve, the annual deforestation rate was reported to be 2.7 per cent. The two areas are regarded as critical for the conservation of biodiversity and the livelihoods and cultures of indigenous peoples and those of African descent.

5. The main underlying causes of deforestation and forest degradation are demographic pressures caused by drought in the Pacific and Central Regions, plus the expanding road system that enabled migration into the CR. Migrating settlers converted forests into extensive pastures with the aim of taking as much land as possible. As a result, 2.2 million ha of forests were cut down and 1.4 million ha of extensive pastureland established in the period 1983–2015.

6. The proposed mitigation project, Bio-CLIMA, aims to promote integrated climate action to reduce deforestation and strengthen resilience in the Bosawás and Rio San Juan Biospheres in the CR. The project will be implemented over seven years.
7. The accredited entity (AE) is the Central American Bank for Economic Integration (CABEI). The Ministry of Environment and Natural Resources (MARENA) and the Ministry of Finance and Public Credit (MHCP) of Nicaragua will implement the project as executing entities (EEs).
8. The project requires a total of USD 115.7 million, to be financed by GCF in the form of a grant and loan (USD 64.1 million, 55.4 per cent), CABEI in the form of a loan (USD 19.0 million, 16.4 per cent), the Forest Carbon Partnership Facility (FCPF) of the World Bank in the form of results-based payments (USD 24.3 million, 21.0 per cent), and the Global Environment Facility (GEF) in the form of a grant (USD 8.3 million, 7.2 per cent). The loans from GCF and CABEI are extended against the sovereign guarantees of Nicaragua.
9. The project consists of three components, one primarily for investments, and two for technical assistance.
10. Component 1 will promote investments in sustainable land-use intensification, landscape restoration and forest conservation through cocoa-agroforestry, sustainable silvopastures, and close-to-nature planted forests (CTNPFs) to be financed through two trust funds. It will provide material and equipment for the establishment of the silvopastoral, cocoa-agroforestry and CTNPF restoration by family farmers. In addition, sustainable community enterprises in indigenous territories are to be promoted to support the communities through forest and biodiversity conservation. The project will also assist producers in obtaining certification for their products of sustainable forest management of timber and non-timber products. This component will be implemented on the deforestation fronts in and around the Bosawás and Indio Maíz Biological Reserves. Community forest management and forest restoration subprojects might also be funded in areas beyond the protected areas.
11. A budget of USD 94.5 million, 81.6 per cent of the total project budget, is allocated for this component. It will be financed with a GCF grant (USD 20.2 million), GCF loan (USD 36.1 million), CABEI loan (USD 8.4 million), FCPF results-based payments (USD 23.7 million), and GEF grant (USD 6.0 million).¹
12. Component 2 will help to create efficient local institutions and transparent governance schemes; thus, it will contribute to promoting an enabling environment and good governance. Public environmental institutions in the CR will be supported to enhance capacities for sustainable land-use planning and environmental/forest law enforcement. The 23 indigenous territory governments of the CR will receive funds to improve the oversight and control of their territories (1.7 million ha). In this component, two trust funds are to be created in coordination with private sector financiers to implement the investments under component 1.
13. Component 2 requires funding of USD 11.9 million, representing 10.3 per cent of the total budget. It will be financed with a GCF grant (USD 0.1 million) and loan (USD 0.7 million), CABEI loan (USD 1.0 million), FCPF results-based payments (USD 0.4 million), and GEF grant (USD 0.7 million).
14. Component 3 offers training and capacity-building programmes to promote an integrated and sustainable farm, landscape and ecosystem restoration approach in the CR. Technical staff and workers of environmental authorities and public extension services at both the regional and local levels will be trained in the use and implementation of the new land and territory planning instruments, legal and normative frameworks, and productive landscape restoration models to be introduced by the project. Environmental information and management systems, such as deforestation and forest-fire early warning systems, and a timber

¹ Figures may not add up due to rounding.

tracking system will be established to support law enforcement. 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, legal and normative frameworks, and productive landscape restoration models. Public awareness will be enhanced through public communication and education programmes designed for local schools and communities.

15. A budget of USD 8.4 million, representing 7.3 per cent of the total budget, is estimated for component 3. The funding will be provided by GCF in the form of a grant (USD 5.4 million) and a loan (USD 1.0 million), and by the GEF in the form of a grant (USD 0.4 million).

16. The AE estimates that 20,994 ha of degraded pasture and rangeland will be restored into sustainable cocoa-agroforestry and silvopastoral systems. In addition, 40,215 ha of micro-catchments will be reforested, and 541,826 ha of natural forestland will be conserved through sustainable forest management and restoration.

17. It is estimated that this component will directly benefit 51,100 people, 0.8 per cent of the country's total population. If indirect beneficiaries are included, the number increases to 614,721, or 9.8 per cent of the total population.

18. The AE estimates that the proposed mitigation project will reduce greenhouse gas (GHG) emissions by 12.8 MtCO₂eq and 47.3 MtCO₂eq in 7 and 20, years respectively, through better land use and sequestration in productive landscape restoration systems, and CTNPFs, together with sustainable community enterprises, and forest management and restoration. The estimation is based on the carbon expected to be sequestered in the areas directly and indirectly impacted and benefited by each activity of the project, and discounted by a half. The estimation also includes GHG emissions avoided through the reduction in methane emissions from improved livestock management.

19. The independent Technical Advisory Panel (TAP) considers the project's impact potential to be high.

1.2 Paradigm shift potential

Scale: Medium/High

1.2.1. Potential for knowledge-sharing and learning

20. The project will establish and demonstrate landscape restoration models to counter accelerated deforestation in Nicaragua. They will be effective for enabling local farmers and communities to improve their livelihoods in the CR. The project will include activities to support farmers and communities to formulate a management and development plan of their lands and territories prior to undertaking investments in sustainable land-use intensification, landscape restoration and forest conservation through cocoa-agroforestry, sustainable silvopastures, and CTNPFs. The success of these project activities will confirm the feasibility of the approaches that the project promotes. An effective role model critical for scaling up and replication can be established.

21. However, the scalability and replicability of the project's approach are dependent on the availability of concessional funding. The AE envisions funding being available from REDD-plus, results-based payments from FCPF, or other REDD-plus funding sources in the future.

1.2.2. Contribution to the creation of an enabling environment

22. The project has technical assistance activities in components 1 and 3 to establish an enabling environment conducive to promoting landscape restoration models in the CR. The components aim to build capacities at the regional and local level, and to help develop tools and instruments to support climate-resilient sustainable development. Training will be organized

for community members and farmers in productive landscape restoration, agroforestry and silvopastoral models, restoration of degraded land, and management of their natural forests in an integrated way. Capacities will be built for participatory sustainable land-use management planning, and integrated territorial development planning combined with business and marketing plans. A public communications strategy will be implemented under component 3, with a special focus on schools and universities.

1.2.3. Contribution to the regulatory framework and policies

23. The project will support enhancement of the regulatory framework and capacities at both the regional and local level to promote landscape restoration models in the CR. In component 2, the project includes technical support for local environment institutions to retain additional equipment and develop operational capacities so that regulatory and legal frameworks can be enhanced, especially for enforcement. Information systems, including a deforestation and forest-fire early warning system, and a timber tracking system will be developed. Land use and land-use change, and a REDD-plus measurement, reporting and verification system operated by MARENA will be strengthened with training of regional and local authorities.

24. With its technical assistance for training and capacity-building, the project will contribute to the creation of an enabling environment as well as to the regulatory framework and policies. However, its scalability and replicability are dependent on the availability of concessional funding. Accordingly, the independent TAP assesses the project paradigm-shift potential as medium to high.

1.3 Sustainable development potential

Scale: High

1.3.1. Environmental co-benefits

25. The project will contribute to the protection of the most biodiversity-rich ecosystems at risk in Nicaragua. The Bosawás Biosphere Reserve, with an area of approximately 2 million ha, is the second-largest rainforest in the western hemisphere after the Amazon. The Indio Maíz Biological Reserve, a part of the Rio San Juan Biosphere, is the second-largest area of lowland rainforest reserve in Nicaragua. These areas are home to some 35 different ecosystems, 13 of the nation's 21 most important watersheds, and almost to one million inhabitants. Deforestation in the reserves has been accelerating, at a rate higher than the average for the country.

26. The project aims to promote better land use and sequestration in productive landscape restoration systems and forest restoration. Agroforestry and silvopastoral production systems are effective for restoring degraded soils and increasing resilience to climate change. Adapting to changing environmental conditions, CTNPFs are effective for the productive rehabilitation and restoration of degraded landscapes.

1.3.2. Economic co-benefits

27. The productive agroforestry that the project aims to promote will help sustain the livelihoods of communities and contribute to poverty reduction. As a result of the sustainable land management and landscape restoration that the project will introduce, soil fertility and organic matter content will improve, leading to higher productivity. As it enables a wider diversity of products, a diversified production system will reduce not only the ebb and flow of seasonal harvests but also risks associated with pests and diseases.

28. The project will extend support, especially to vulnerable households, in the remote areas in the CR. It will help stabilize their livelihoods with higher income from deforestation-free, sustainable production schemes. These schemes will not only improve their livelihoods but

also enhance their climate resilience. The project will further support business development of those vulnerable households through the trust funds.

1.3.3. Gender-sensitive development impact

29. The project will ensure women's participation and accounting for their specific needs in decision-making in all activities. The leadership role of women in land management and agriculture is regarded as critical and will be promoted. Women's participation in agroforestry, silvopastoral, restoration and forest management activities will be enhanced. The project will prioritize support for women-headed households as beneficiaries.

30. Moreover, the project will generate adaptation co-benefits. It will directly benefit vulnerable people and communities in the CR, reducing the negative effects of climate change on their livelihoods by enhancing the resilience of ecosystems and ecosystem services. The resilience of vulnerable livelihoods in the project area is being undermined by long droughts due to changes in climate combined with a reduction in water regulation as a result of deforested micro-catchments. The project's support for farmers and communities to adapt to the changing climate will include promotion of cocoa cultivation, an alternative crop with greater heat tolerance within agroforestry systems than coffee. The restoration and conservation of forests at the farm and landscape level will increase the resilience of ecosystem services and secure the resilience of livelihoods of the local communities.

31. The independent TAP regards the project's sustainable development potential as high.

1.4 Needs of the recipient

Scale: High

1.4.1. Absence of alternative sources of financing

32. Nicaragua is one of the least developed countries in Latin America. With high fiscal deficits and public debt, the country has experienced large capital outflows, which resulted in negative gross domestic product growth of 3.8 per cent in 2018. The sharp contraction in credit, limited external financing, weak foreign direct investment, and lower private portfolio flows will continue to depress investment in Nicaragua.

33. The independent TAP considers that there are few alternate sources of financing for the project other than GCF. The project requires GCF funding of USD 64.1 million in the form of a grant and interest-free loan with a tenor of 40 years. Given the economic downturn that Nicaragua has been experiencing, the Government's fiscal conditions remain tight. The conditions are further tightened as its limited budget resources have to be directed to the health sector to suppress the COVID-19 pandemic. Accordingly, public sources of financing to substitute GCF funding of the proposed size and conditions are judged unavailable. Bank lending has contracted and external financing remains scarce for Nicaragua. Private financial institutions are absent in the CR.

1.4.2. The need for strengthening institutions and implementation capacity

34. The project includes various activities to respond to the country's needs to strengthen institutions and capacity. It will provide technical assistance to indigenous territory governments to enhance effective administration of their territories and resources. Additional technical personnel, equipment and operative capacities will be provided to support sustainable land-use planning and environmental/forest law enforcement. Technical personnel from public extension services, farmers and beneficiaries will be trained in integrated land-use management and planning, implementation and maintenance of productive landscape restoration modules, investment and business planning, innovations in administrative processes, legislation and norms, strengthening of local organizations, quality management, and market access.

35. The independent TAP considers the needs of the project recipient to be high.

1.5 Country ownership

Scale: High

1.5.1. Existence of a national climate strategy

36. The project is in line with Nicaragua's nationally determined contributions (NDCs), under which Nicaragua will raise its carbon absorption capacity by 14 per cent in relation to the reference scenario to 2030. In the agriculture, forestry and other land-use sector, the NDCs propose to implement: (i) promotion of agroecological production of permanent crops under tree shade, more resilient to the impacts of climate change; (ii) reduction of extensive cattle grazing and introduction of silvopastoral systems; (iii) establishment of planted forests on idle or degraded forest land, prioritizing the use of natural regeneration of native tree species; (iv) application of biodigesters; and (v) restoration and conservation of ecosystems and ecosystem services, taking advantage of adaptation and mitigation synergies.

37. The project will further contribute to accomplishing the three main goals of the Convention on Biological Diversity: conservation of biodiversity; sustainable use of biodiversity; and fair and equitable sharing of the benefits arising from the use of genetic resources.

1.5.2. Coherence with existing policies

38. The project is aligned with the country's National Human Development Plan 2018-2021 and the national REDD-plus strategy. It is also in line with four strategic lines of action of the National Climate Change Mitigation and Adaptation Policy: 1. Development of agriculture that is resilient to actual climate variability and future climate change, with actions that favour low GHG emissions; 5. Use and conservation of ecosystem services to achieve low-carbon sustainable development that is adapted to climate change; 6. Conservation, restoration and rational use of forests, as the promotion of planted forests in forest land-use zones; and 7. Promote knowledge, research, finance and information about climate change mitigation and adaptation, as part of the modernization and strengthening of alert and early-warning systems.

39. The project is being developed to complement the Emission Reduction Program (ERP) that Nicaragua agreed with FCPF.

1.5.3. Capacity of accredited entities or executing entities to deliver

40. CABEI, the AE, is a multilateral bank for the development of Central America. It promotes the economic integration and the balanced economic and social development of its founding member countries through public and private sector interventions. During the past 57 years, CABEI has approved financing for USD 30.9 billion and disbursed USD 26.2 billion through more than 100 financial intermediaries, 10 of which operate in Nicaragua.

41. MARENA executes the climate change and environment portfolio at the national level. It has a climate change office with staff in adaptation, mitigation, social and environmental safeguards, and carbon accounting. It will be responsible for overall coordination of the project. Together with MHCP, it will be responsible for executing the project, with implementation support from various government agencies. It has experience in executing rural development projects with financial support from cooperation partners such as the World Bank, European Union, Inter-American Development Bank, International Fund for Agricultural Development, and CABEI. MARENA is the focal point for the GEF and EUROCLIMA, and currently holds the *pro tempore* presidency of the Central American Commission for Environment and Development.

42. MHCP is the governing body for public finances, and contracts public debt on behalf of the State. It manages financial contracts with international financial institutions including the

World Bank, Inter-American Development Bank and CABEL. It directly manages and executes the portfolio of projects with values between USD 10 million and USD 186 million. MHCP is the national designated authority for GCF.

43. The AE's assessment of the past performance and capacity of MARENA and MHCP has confirmed their relevant capacity to operate as EEs for the implementation of the project.

1.5.4. Engagement with civil society organizations and other relevant stakeholders

44. The project has been developed in alignment and to complement the Caribbean Coast ERP, which implements the national strategy for avoided deforestation (ENDE-REDD+). The national REDD-plus strategy as well as the ERP and its benefit-sharing plan have undergone consultation and participation processes involving relevant stakeholders. Consultations were undertaken in two interrelated processes for the ENDE-REDD+ and the ERP. Through the processes, a stakeholder participation plan was developed in the ERP, to which the project also refers, considering the alignment of the activities and territories.

45. A no-objection letter issued by MHCP is attached to the funding proposal.

46. The independent TAP considers the project's country ownership is high. The Government's proposal to avail itself of GCF and CABEL sovereign loans demonstrates its strong country ownership of the project.

1.6 Efficiency and effectiveness

Scale: Medium/High

1.6.1. Cost-effectiveness and efficiency regarding financial and non-financial aspects

47. The AE estimates that the proposed mitigation project will result in reductions of 12.8 MtCO₂eq and 47.3 MtCO₂eq in 7 and 20 years, respectively, through better land use and sequestration, CTNPFs, and sustainable community enterprises and forest management and restoration. As mentioned, in seven years of implementation, the project is expected to achieve an estimated GHG reduction of 12.8 MtCO₂eq, at a cost of USD 5.0 per tCO₂eq and USD 9.0 per tCO₂eq against a GCF contribution of USD 64.1 million and a total project cost of USD 115.7 million. The cost will further come down to USD 1.4 per tCO₂eq and USD 2.4 per tCO₂eq, respectively, if a longer term of 20 years is considered.

1.6.2. Amount of co-financing

48. A co-financing ratio of 0.8 is estimated based on the GCF contribution of USD 64.1 million, which represents 55.4 per cent of the project cost of USD 115.7 million.

49. The AE assumes funding for USD 24.3 million, or 21.0 per cent of the total project cost, will be available from REDD-plus results-based payments from FCPF. The funding represents 10.3 per cent of the estimated total amount of USD 236.5 million, which is only half of the full estimated amount to be realized by FCPF over 20 years.

1.6.3. Programme/project financial viability and other financial indicators

50. The AE expects the project to be financially and economically viable. The financial and economic returns of the project are estimated to be 19.6 per cent and 30.7 per cent, respectively. Financial and economic net present values are calculated to be USD 626.3 million and USD 1.0 billion, respectively. The estimates are the aggregation of the estimated results of various activities of the project.

1.6.4. Industry best practices

51. The project will establish and demonstrate landscape restoration models that are effective for farmers and communities in terms of improving their livelihoods. The approach to be disseminated by the project could be adopted in other communities and indigenous territories at both the regional and national level. Components 2 and 3 of the project contain activities to enhance policy and regulatory framework and capacity, as well as technical supports for communities and local staff. They will contribute to establishing and promoting effective landscape restoration models and practices with crucial community support in Nicaragua.
52. The independent TAP assesses the programme's efficiency and effectiveness as medium to high.

II. Overall remarks from the independent Technical Advisory Panel

53. The independent TAP recommends the Board endorse the proposed project as presented.

Response from the accredited entity to the independent Technical Advisory Panel's assessment (FP 146)

Proposal name:	Bio-CLIMA: Integrated climate action to reduce deforestation and strengthen resilience in BOSAWÁS and Rio San Juan Biospheres
Accredited entity:	Central American Bank for Economic Integration (CABEL)
Country/(ies):	Nicaragua
Project/programme size:	Medium

Impact potential

The project has an important focus on the conservation and restoration of areas degraded by deforestation, through the establishment of agroforestry and silvopastoral systems. We agree with the ITAP on this scale, since through the implementation of this project, 47.3 million tons of Greenhouse Gas (GHG) emissions are expected to be avoided. In addition to this, the project will also generate adaptation co-benefits, as it will improve the livelihoods of people living in the intervention areas, in the Bosawas and Indio Maiz reserves.

Paradigm shift potential

We believe that the project will be innovative, since it will involve the indigenous communities and peoples of these protected areas, in activities to counter accelerated deforestation in Nicaragua, as well as biological restoration and conservation activities. This level of involvement of farmers and communities has not been done before at this level in the country. We agree with the scale that the ITAP has assessed for this criterion, but we believe that the project will also allow the performance of national environmental authorities to improve considerably.

Sustainable development potential

We consider that the project has environmental, economic and gender equity benefits, but also benefits at the social level, since it will allow the participation and involvement of indigenous peoples in conservation and biological restoration activities in protected areas. The Project will allow said actors to have a voice and vote in project decisions through the Project Steering Committee. We agree with the scale that the ITAP has assessed for this criterion.

Needs of the recipient

We agree with the assessment made by ITAP in this criterion. Nicaragua is one of the least developed countries in Latin America and Central America, and requires financial support under the best conditions, as well as technical support and institutional strengthening. Today, due to the health and socioeconomic crisis caused by the COVID-19 pandemic, the country has limited resources to overcome the crisis.

Country ownership

Nicaragua has made efforts in recent years to formulate its main policies for mitigation and adaptation to climate change, and in the commitments embodied in its determined national contributions (NDC's). Additionally, the country has formulated the Emissions Reduction Program (PRE) within which the Bioclima Project is found as one of the most relevant initiatives to achieve the objectives in reducing GHG emissions at the national level. In this sense, we agree with this assessment of the ITAP on this criterion.

Efficiency and effectiveness

We agree with the ITAP assessment of this criterion. However, we consider that the project is efficient in terms of cost benefit, because the cost per tCO₂eq avoided is low considering the investment that the project funders will undertake (including the GCF), and in the total amount of the project, which implies that the project is extremely attractive in terms of benefits, results and profitability. Additionally, we consider that the project has a reasonable co-financing ratio, which allows a significant leverage of resources from various partners, such as CABEL, the World Bank's FCPF and the GEF.

Overall remarks from the independent Technical Advisory Panel:

CABEL as an Accredited Entity appreciates the assessment made by ITAP of the Funding Proposal for the Bio-CLIMA Project. We believe that the ITAP assessment has helped to improve the proposal, and make it technically sound in order to meet the GCF investment criteria and standards. The Project aims to achieve ambitious results in terms of mitigating climate change, through the implementation of activities for the conservation and restoration of biodiversity in the protected areas of Bosawas and Indio Maiz. This project will allow Nicaragua as a country to meet its commitments in terms of reducing GHG emissions and will also have co-benefits in terms of improving the resilience of the population living in the intervention areas.



Bio-CLIMA Nicaragua
“Integrated climate action for reduced deforestation and strengthened resilience and in the Bosawas and Rio San Juan Biosphere Reserves”

Annex 8a:
Gender Assessment and Gender Action Plan

September 2020

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Annex 08b: Detailed Budget for Gender Action Plan (Excel)

LIST OF ACRONYMS AND ABBREVIATIONS

CR	Caribbean Region
ECLAC	Economic Commission of Latin America and the Caribbean (CEPAL in Spanish)
GAP	Gender action plan
GRUN	Government of Reconstruction and National Unity
GTI	Indigenous (and/or Afro-descendant) Territorial Government
INIDE	National Institute of Development Information
MARENA	Ministry of Natural Resources
MHCP	Ministry of Finance and Public Credit
PMU	Project Management Unit
RAAN	North Atlantic Autonomous Region
RAAS	South Atlantic Autonomous Region
RACCN	North Caribbean Coast Autonomous Region
RACCS	South Caribbean Coast Autonomous Region
SERENA	Regional Secretariat of the Environment (RACCN and RACCS)

I. INTRODUCTION

1.1 Project Introduction from an Intercultural Gender Perspective

The “Integrated climate action to reduce deforestation and strengthen resilience in BOSAWAS and Rio San Juan Biospheres” project, called Bio-CLIMA, seeks to transform existing practices of extensive cattle ranching, agriculture and timber exploitation that cause deforestation and forest degradation into more intensive, deforestation-free production forms that integrate ecosystem conservation with production of goods and services for livelihoods. This will be carried out through three components with the following objectives: (i) provide farmers with capacities, technical assistance and solid financial incentives for sustainable intensification of their agricultural practices and on-farm resource conservation; (ii) create an enabling environment in which clear and simple norms, efficient local institutions and transparent governance promotes law enforcement, cuts red tape and environmental impunity; and (iii) strengthen local producer organizations and facilitate access to markets that recognize the real value of quality, sustainable production, climate action and biodiversity conservation.

It will be implemented in the Caribbean Coast region (CR) of Nicaragua, which occupies 54% of the national territory, contains 80% of the country’s forestland, and where the majority of indigenous peoples live. The North Autonomous Caribbean Coast Region (RACCN) and the South Autonomous Caribbean Coast Region (RACCS) are also home to the BOSAWAS Natural Reserve and the Indio Maíz Reserve respectively.

This project will contribute to and benefit from intercultural gender equality and women’s empowerment by way of meeting two key project results. One is by improving the resilience and enhanced livelihoods of the most vulnerable people, communities and regions and the other is by increasing the participation and decision making of young and adult indigenous, Afro-descendant and non-indigenous women. Together they will reduce the unequal power relations that underlie the gender gaps between women and men of different ages within and across communities and settlements in the project area.

The Bio-CLIMA project in general and the gender components in particular will contribute to measurable changes in:

- ✓ Women’s decision-making and participation at various levels: household, family farm (and other production units), community and territorial, municipal and regional governments;
- ✓ Women’s economic empowerment;
- ✓ Capacity building for project personnel, producers and members of organizations/communities that addresses equitable participation (trainers and participants), women’s empowerment, and breaks down obstacles to intercultural gender equality;
- ✓ Strengthened self-organizing capacity of indigenous, Afro-descendant and non-indigenous women within and across communities and settlements;
- ✓ Men’s knowledge, attitudes and practices across age and ethnicity that support gender equality and women’s empowerment;
- ✓ Sufficient financial and other resources allocated and spent;
- ✓ Implementation of the violence against women grievance and complaint mechanism (MRyQ);

- ✓ A perspective grounded in the knowledge, interests, needs, priorities and existing potentials of Coast women across age and ethnicity;
- ✓ Development of public awareness;
- ✓ Monitoring and evaluation to generate evidence and contribute to knowledge management; and
- ✓ High-level accountability.

Overall, the project will address gendered climate threats to food and nutritional security through building increased resilience and enhanced livelihoods of the most vulnerable people, communities and regions. It will use an intercultural gender approach to increase gender equality in all ethnicities.

1.2 Objective and Rationale of the Gender Assessment

1.1.1 Rationale

The Nicaraguan government has repeatedly manifested its commitment to gender equality at the highest levels. At international and regional levels it has signed and/or ratified:

- the Sustainable Development Goals (2015-2030);
- the Beijing Declaration and Platform for Action (1995);
- the Cairo Declaration and Programme of Action (1992);
- the Convention on the Elimination of all Forms of Discrimination Against Women (CEDAW, 1979);
- UN General Assembly Resolution on measure to prevent crime and for criminal justice for the elimination of violence against women (A/RES/52/86; 1998);
- the Durban Declaration (2001);
- the General Assembly's Declaration of the Rights of Indigenous Peoples (2007);
- International Labour Organization (ILO) Convention 169 on Indigenous and tribal peoples (2010); and
- Organization of American States (OAS), Inter-American Convention on the Prevention, Punishment and Eradication of Violence against Women (Belem do Pará, 1996).

1.1.2 Objective of the Gender Assessment

The objective of this Gender Assessment is to provide the foundation for the Bio-CLIMA project's effective contribution to women's empowerment and intercultural gender equality. The Assessment is composed of:

- a) an analysis of the current situation of gender relations and structures with respect to needs, interests, priorities and existing potentials of women and men of different age groups within and across the various ethnic communities in Nicaragua and the project region; and
- b) an explanation of how the intercultural gender transformative approach will be applied in the Bio-CLIMA project to contribute to measurable improvements in gender equality and women's empowerment.

II. METHODOLOGY

The material used in this gender assessment was taken from two main sources: the consultations done to develop this funding proposal as well as an extensive literature review.

Three two-day consultative workshops were held for the development of the proposal for Bio-CLIMA in 2019¹. The consultation for the RACCS on September 23-24, 2019² included 31% women (i.e., 28 of 90 participants). The consultation for the RACCN, held September 19-20, 2019, in Puerto Cabezas³, had 32% women (i.e., 23 of 71 participants). The consultation for the Alto Wangki and Bocay region also took place September 19-20, 2019 in San Andrés de Bocay⁴ with only 16% women (i.e., 11 of 70 participants)⁵. A total of 62 of the 231 participants were women (27%). Note that youth were calculated separately from adults and the figures were not gender-disaggregated.

Participants consisted of members of territorial governments (GTI), central and regional governments, municipal governments, regional universities, and civil society organizations. The latter included a small number of women's organizations. All three workshops collected information from potential beneficiaries on the following topics, among others: the social and environmental management framework; social and environmental standards and impacts; distribution of benefits; and the grievance and complaint mechanism.

The documents cited rely on data collected from a range of official sources and, to a lesser extent, academic ones. There are major limitations to the data. One, there are almost no historical analyses of gender relations in the Caribbean region. Another is that updated and adequately disaggregated data by gender, age, ethnicity and/or location are not available. The most recent comprehensive and gender-disaggregated data dates from between 15 and 20 years ago. These include official censuses and surveys from the National Institute of Development Information (INIDE) quantitative studies such as the agricultural census (CENAGRO, 2011), the urban census of the RAAN and RAAS⁶ (2010), the demography and health survey (ENDESA, 2006-7), the standard of living survey (2009), and the Population and Housing Census (2005). They also compile data collected from relevant government and state institutions. Due to limited time it was not possible for the author to analyze the original data sets. For

¹ MARENA, 2020, "Marco de Gestión Ambiental y Social - Evaluación y Gestión de Riesgos e Impactos Ambientales y Social," 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 and Proyecto Bio-CLIMA, Acción Climática Integrada para reducir la deforestación y fortalecer la resiliencia en las Reservas de la Biósfera BOSAWÁS y Río San Juan, p. 42.

² MARENA, 2019a, "Ayuda Memoria Taller Consulta sobre el Marco de Gestión Ambiental y Social del programa de Reducción de Emisiones (ERPD)", Bluefields (RACCS), 23-24 September.

³ MARENA, 2019b, "Ayuda Memoria Taller Consulta sobre el Marco de Gestión Ambiental y Social del programa de Reducción de Emisiones (ERPD)", Bilwi (RACCN), 19-20 September.

⁴ MARENA, 2019c, "Ayuda Memoria Taller Consulta sobre el Marco de Gestión Ambiental y Social del programa de Reducción de Emisiones (ERPD)", San Andres de Bocay (RACCN), 19-20 September.

⁵ The attendance data for all three workshops were not cross-tabulated by age or ethnicity.

⁶ From 1987 the official terms for the two autonomous Caribbean regions were "North Atlantic Autonomous Region (RAAN)" and "South Atlantic Autonomous Region (RAAS)". The respective official terms are now "North Caribbean Coast Autonomous Region (RACCN)" and "South Caribbean Coast Autonomous Region (RACCS)".

this reason, the sources cited in the text consist of studies by bilateral and multilateral agencies such as UN organizations, the World Bank and others that compiled and analyzed official and/or academic data. As much as possible the literature used either particularly addressed the Caribbean Coast regions or particular communities or a specific issue, or compared the situation on the Caribbean Coast with the national level.

III. BRIEF HISTORICAL OVERVIEW FROM A GENDER PERSPECTIVE OF THE NICARAGUAN CARIBBEAN REGION SINCE INDEPENDENCE

Prior to European colonization, there were several different Indigenous populations on either side of present-day Nicaragua. Those living on the Pacific side had emigrated south as part of Mesoamerica, while those on the Caribbean side migrated north from Colombia. Although Nicaragua can be drawn into different divisions, these two 'sides' were separated by a natural ecological barrier. During the European colonial period, the Spanish came to the Caribbean coast of Nicaragua in 1523 but moved quickly to the centre and Pacific of the country and conquered the existing Indigenous population and established settlements and colonial rule. On the Caribbean side, a British trading company began establishing commercial relations with Indigenous populations in 1633, and an alliance was formed between the Mosquito⁷ Kingdom and the British. Only small British settlements existed in the area between 1742 and 1894⁸.

In terms of religion, the Spanish started to convert the Indigenous populations to Catholicism from the time of their arrival. On the Caribbean, eventually the dominant religious presence was that of the Moravian church, which did not arrive to the Mosquito Coast until 1849. On the Caribbean coast, there were two modes of production. One was communal production in the form of hunting, fishing and gathering, which gradually shifted to include trade with the British. The other consisted of profit-oriented exploitation of the natural resources in the form of an enclave economy. The British established sugar cane and cotton plantations with slave labour they forcibly brought from Africa. The British also began commercial logging in the eighteenth century. The first British Protectorate, established in 1638, ended when Britain recognized Spanish sovereignty in Central America in 1786. Nonetheless, Britain maintained its economic interests and "special relationship" with the Indigenous populations of the Mosquito Kingdom throughout the Mosquito Coast (a territory that covered parts of Nicaragua and Honduras).

The tumultuous nineteenth century saw the creation of the Republic of Nicaragua and its eventual political control over the entire territory as well as growing international interest in exploiting the natural resources of the Caribbean coast. The United Provinces of Central America, including Nicaragua, achieved independence from Spain in 1821, and in 1838, each of the five provinces became a separate state. Slavery was abolished in the British Caribbean in 1841. From 1844 to 1860, the second British Protectorate was established, principally to ensure British economic interests. In 1860 Great Britain released more control, and the Mosquito Reserve was created, which was autonomous from the

⁷There are various spellings, but generally Miskitu is used by the people themselves, Mosquito by the British, and now Miskito is commonly used in English and Spanish.

⁸ Woods Downs, S., 2015, "'Guardians of Autonomy and Human Rights:' The Roles Played and Challenges Faced by NGOs and Civil Society in Promoting Autonomy in the Caribbean Autonomous Regions of Nicaragua". International Research Seminar on Non-governmental Organizations in Autonomous Region: Roles and Responsibilities. Permanent Mission of Morocco to the UN, New York.

Nicaraguan state. In 1894, the Nicaraguan state incorporated all the Mosquito Reserve (i.e. all the territory of the Caribbean side of the country) and the region was named Zelaya province after the then-president⁹. The Nicaraguan government called this move “reincorporation”, a term that is still rejected by the Caribbean communities because it negates the region’s separate history and identity¹⁰.

Under the Somoza family dictatorship (1936-1979), the central Nicaraguan government had little involvement in economic, political and social life in the Caribbean region. Separate from the communal economy, US concessions not only controlled the commercial economy, their contracts required them to build infrastructure (roads, schools, health centres) to and in the local communities. The Moravian church provided education in English and some health services, including in rural communities that might not have had access to public health care. During the twentieth century, as during the previous two hundred years, the people of the Caribbean coast had little contact with the Pacific side of Nicaragua, and their ties were greater with the Caribbean, England, the United States, and Europe.¹¹ In the 1970s, indigenous and Afro-descendent communities began to organize in different ways in the north and south of the country. Organizations of indigenous people in the north demanded collective land rights, education in indigenous languages, and broader political and cultural rights; an indigenous and Creole organization in the south sought improved economic development, education and political participation¹².

The start of the Sandinista Popular Revolution in 1979 until autonomy was granted in 1987 was a period of great upheaval for the Caribbean Coast and its inhabitants. The revolution came to power seeking to unify all Nicaraguans as part of its national liberation struggle to rid the country of not only the dictatorship, but also US commercial and military interests that propped it up. It also sought to improve people’s lives especially the urban and rural poor, for example through land reform, free health care and education for all, an expanded social welfare net and even promoting popular culture. The nationwide 1980 literacy campaign was only designed in Spanish initially, but through MISURASATA¹³, Coast leaders were able to convince the central government to offer literacy in indigenous languages and Creole. This process was later seen as significant for bolstering demands for autonomy at the community level.

Although very little history of the Caribbean Region from a gender perspective has been written to date, since the nineteenth century women were organized to fight for their rights, prior to the revolution of the 1970s. That said, during the Sandinista Popular Revolution (1979-1990), women were able to access higher education and jobs. There were also more formal and informal opportunities for women to participate in and become leaders in society and politics. However, no funding was assigned to women

⁹ Romero Vargas, 1996, op cit.

¹⁰ Ibid.

¹¹ Major shifts took place among the indigenous and Afro-descendent populations over this period, although there is not enough space here to give an adequate treatment. Please see Romero Vargas (1996) for an in-depth discussion.

¹² González, M. and Figueroa, D., 2009, “Nicaragua multicultural: autonomía regional en la Costa Caribe”. In Salvador Martí i Puig y David Close (eds.) *Nicaragua y el FSLN [1979-2009] ¿Qué queda de la revolución?* Barcelona: Edicions Bellaterra, 313-349.

Gordon, E., 1998, *Disparate Diasporas: Identity and Politics in an African-Nicaraguan Community*. Austin: University of Texas Press.

Hale, C.W., 1994, *Resistance and Contradiction: Miskitu Indians and the Nicaraguan State, 1894-1987*, Stanford, CA: Stanford University Press.

¹³ MISURASATA, (a mass organization for indigenous people on the Caribbean coast; *Miskitos, Sumos, Ramas Sandinistas Unidos*).

so it was very difficult for them to organize, especially given how vast the Caribbean region is and the lack of roads. Since the 1960s and 1970s, some forms of women’s activism has taken the form of artistic expression, which women have used to portray their own narratives of identity and culture. One very important feature of Caribbean Coast women’s cultural production over time has been the representation of the multiple intersections of their collective action, race, ethnicity and geographical location.

It was a significant achievement to get the autonomy law (law 28) passed in 1987. The bill was developed using a participatory process that involved many actors with various perspectives, some of which were contradictory. At the same time, this culmination point was also the start of the complex process of implementation. The autonomy law will be discussed in greater detail in the following section.

IV. CONSTITUTIONAL, LEGAL AND INSTITUTIONAL FRAMEWORK OF GENDER EQUALITY AND AUTONOMY IN NICARAGUA AND THE CARIBBEAN COAST REGIONS

4.1 Constitution

The 1987 constitution of Nicaragua¹⁴ recognized both women’s equality as well as the autonomy of the North Caribbean Coast Autonomous Region (RACCN) and the South Caribbean Coast Autonomous Region (RACCS), commonly referred together as “the Coast,” and the autonomy law recognizes women’s equality.

To be more specific, article 5 of the constitution states:

Liberty, justice, respect for the dignity of the human person, political, social and ethnic pluralism, the recognition of different forms of property, free international cooperation and respect for the free self-determination of peoples are principles of the Nicaraguan nation.

Article 48 establishes the state’s duty to take affirmative action to ensure equality of conditions.

Article 89 states that:

The communities of the Atlantic Coast have the right to preserve and develop their cultural identities within the national unity, to provide themselves with their own forms of social organization, and to administer their local affairs according to their traditions.

Constitution, article 180:

The communities of the Atlantic Coast have the right to live and develop themselves under the forms of social organization that correspond to their historic and cultural traditions.

The Nicaraguan state recognizes the existence of indigenous peoples who enjoy the rights, duties and guarantees designated in the Constitution, and especially those to maintain and develop their identity and culture, to have their own forms of social

¹⁴República de Nicaragua, 2014, 1987 Constitution and its reforms.

organization and administer their local affairs, as well as to preserve the communal forms of land property and their exploitation, use, and enjoyment, all in accordance with the law. For the communities of the Atlantic Coast, an autonomous regime is established in the present Constitution.

For the last thirty years, legal and institutional structures and public policy have been put in place that constitute the autonomy regime of the RACCN and RACCS. In each region, they are 45 members, elected by subscription for a 5 years term. The community's representation assure 6 ethnic groups participation in the regional council establish under law 28.

4.2 Autonomy Statute and Laws, Including Collective Land Rights and Legal Pluralism

The Autonomy Law, first implemented under the Sandinista National Liberation Front (FSLN) government in 1987, sought to redress the injustices created by centuries of foreign and internal colonialism. The autonomy process legitimizes and acts upon the demands of Coast peoples to reclaim their historic right to the natural resources of the region as well as the right to defend, preserve, and promote their identity, history, culture and traditions. Woods Downs called it "the highest aspiration of Coast people. ... People think of autonomy as their best chance to be able to decide for themselves"¹⁵.

According to Law 28, Article 11, the inhabitants of the Communities of the Atlantic Coast (today Caribbean Coast) have the following rights:

1. Absolute equality of rights and responsibilities, regardless of the size of their population and level of development.
2. To preserve and develop their language, religions, and cultures.
3. To use, enjoy, and benefit from the communal waters, forests, and lands, within the plans for national development.
4. To freely develop their social and productive organizations, in accordance with their own values.
5. Education in their mother tongue and in Spanish, by means of programs, which include their historical heritage, their value system, and the traditions and characteristics of their environment, all in accordance with the national education system.
6. Communal, collective, or individual forms of property and the transfer of property.
7. To elect their own authorities, or be elected as such in the Autonomous Regions.
8. To scientifically safeguard and preserve the knowledge of natural medicine accumulated throughout their history, in coordination with the national health system.

In this context, autonomy constitutes an important component of a new strategy for regional development. It was established to address the unique social, political, cultural and economic needs of the CR. It aims to promote "equality in diversity" by encouraging equitable and sustainable development while fostering cultural pluralism and strengthening the cultural identities of the local peoples¹⁶.

The autonomy law (law 28, article 23) states that the autonomous governments are responsible for women's full participation in all sectors, political, economic, social and cultural. This responsibility is further defined in the regulatory legislation of the Nicaraguan autonomy statute (Decree 3584, article

¹⁵ Woods, S., 2005, " I've Never Shared this with Anybody" Creole women's Experience of Racial and Sexual discrimination and Their Need for self- Recovery. CEIMM-URACCAN, Bluefields, Nicaragua, p. 47.

¹⁶ URACCAN, 1999, "Política de cátedras de Género de la Universidad URACCAN", Managua.

28), which includes the establishment of a specialized body to ensure that women are fully engaged. The four forms of participation recognized are: participation in policy and advocacy activities regarding programmes, policies and projects; equal participation in the leadership of the regional autonomous governments and the regional councils; as well as informing the population about laws, programmes etc. from the central government and monitoring their implementation.

The normative framework for autonomy contains fairly comprehensive provisions to ensure the population's human rights. Yet even the most complete normative framework on paper cannot guarantee its implementation of all areas of the law. To ensure that national laws and programmes uphold the collective property rights of indigenous peoples to the land, in 2003 the Nicaragua government granted collective land rights to the indigenous and ethnic communities of the Caribbean Coast and provided the parameters for making communal land claims under law no. 445, the law of the communal property regimen of the indigenous peoples and ethnic communities of the Autonomous Regions of the Atlantic Coast of Nicaragua and the Bocay, Coco, Indio, and Maiz Rivers". Law 445 represents the "ineludible commitment of the State of Nicaragua to respond to the claim for the titling of the lands and territories of the indigenous peoples and ethnic communities of the former Mosquitia of Nicaragua. ... This right to the land is recognized in the 1987 Political Constitution of Nicaragua and in the Statute of Autonomy of the Autonomous Regions of the Atlantic Coast" ¹⁷.

Law 445, also refers to the more cultural aspects of land communal property. This includes "the collective property constituted by the lands, water, forests, and other natural resources." The law also extends to include intellectual property regarding biodiversity and other assets that have traditionally belonged to these communities.

The autonomous Caribbean Regions of Nicaragua are currently inhabited by six ethnic groups: Creole and Garifuna (Afro-descendant); Miskitu, Mayagna and Rama (indigenous); and mestizos. The mestizos are the majority of the population: over recent decades more peasant farmers from other regions of Nicaragua have moved to the Caribbean regions to settle. However, the indigenous and Afro-descendant communities hold the historical title to these territories under law 445.

Among other criteria, the autonomy process: enriches national culture; recognizes and strengthens ethnic identity; respects the specificity of cultures, identities and religious freedoms; regulates values; respects history; and recognizes property rights over communal lands. It also rejects any type of discrimination and interference that imposes national unity¹⁸.

The communities have the right to practice traditional forms of leadership and organization, as well as the formalization and regulation of diverse histories and traditions. The law also allows for the even distribution of taxes derived from exploitation of natural resources inside communal lands. It also affirms Indigenous and Afro-descendent communities' right to co-manage along with the Ministry of Natural Resources (MARENA) of the central government both nature reserves and protected areas located inside communal territories.

¹⁷ República de Nicaragua, 2003, National Assembly Decree No. 3584. Reglamento a la Ley no. 28 "Estatuto de autonomía de las regiones de la Costa Atlántica de Nicaragua", 9 July 2003, p. 75.

¹⁸ PATH e Intercambios, 2013, Dialogo de Saberes sobre la Violencia contra las Mujeres Indígenas. Aproximaciones Metodológicas a la investigación Intercultural. Foro Internacional de mujeres. México: PATH e Intercambios.

There are also other laws that make it possible for people of the RACCN and RACCS to claim their rights and redress the historical contradictions between the CR and the rest of the country. One of these is the Law of Official Use of the Languages of the Communities of the Atlantic Coast of Nicaragua (law 162) of 1996. Another is law 759, the Law of Traditional Ancestral Medicine (2002). These laws are widely used in the CR.

Article 62 of the organic law of the judiciary (law 260), establishes that the administration of justice in the autonomous regions will be carried out so as to reflect the cultural particularities of its communities, including a respect for legal pluralism. In other words, it recognizes the customary law of indigenous and Afro-descendant groups. Customary law is a rich, historical practice rooted in ancestral tradition, although it has been adapted to the needs of the communities. Every Miskito, Mayagna, Rama, Creole and Garifuna community has an elected *wihta* (traditional leader and local judge) and *Sindigo* (person responsible for natural resources), while other communities and settlements on the various territories have a coordinator. Indigenous and Afro-descendant communities have their own justice traditions of negotiation and conflict resolution, carried out by *wihtas*. A recent reform to the criminal code granted *wihtas* more authority to administer justice. The links between positive law and indigenous and Afro-descendant legal traditions are complex, which may make it difficult to access justice¹⁹.

Among the main institutions that have taken on the responsibility for building the autonomy process are the regional universities, particularly University of the Autonomous Caribbean Coast Regions of Nicaragua (URACCAN). An example of its contribution to autonomy can be found in its intercultural analysis of violence against women. While all women may experience some of the same forms of violence, this approach addresses the cultural dimension of violence. In so doing, it analyzes the context, power relations, the patriarchal system of social organizations, the history, codes, norms, and myths related to violence. Among the issues that are relevant to this approach to studying violence against women are: rituals, values, dialogue of knowledge, family organization, citizenship rights, the appropriation and significance of space, the implications of local judges and self-justice. The intercultural view opens up a range of perspectives based on women's diverse experiences²⁰.

4.3 Regional and Territorial Governments

The autonomy law, law 28, regulates the North and South Caribbean regions and creates a new level of government. Through this autonomy regime, the communities choose their own authorities from among the citizens of their jurisdiction. They have the authority to regulate situations of internal life and the administration of their regional interests²¹.

The purpose of law 445 is to demarcate and title indigenous and Afro-descendant territories to guarantee their rights to property, use, administration and management of their lands and natural resources. The law defines indigenous and ethnic territory: geographic space that covers the entire habitat of a group of indigenous or ethnic communities that make up a territorial unit where they develop, according to their customs and traditions. There is direct communication between the regional

¹⁹ Figueroa Romero, D., and Barbeyto, A., 2014, "Indigenous, Mestizo and Afro-Descendent Women against Violence: Building Interethnic Alliances in the Context of Regional Autonomy" *Bulletin of Latin American Research*, (33:3, 2014).

²⁰ CEIMM-URACCAN, 2006, "Introducción a la metodología intercultural con perspectiva de género".

²¹ Fernando, J.R., 2007, Hacia un Modelo pluralista de administración de justicia en las Regiones Autónomas de la Costa Caribe de Nicaragua. CISP- Comisión Europea-URACCAN- CEDEHCA.

and territorial governments, which is the entity in charge of developing and coordinating the Autonomous Plan of Development and Administration of each indigenous territory, as stipulated in the autonomy law.

The territorial government is formed by two representatives from each communal government. Usually, Twelve representatives usually form the territorial staff. However, the general assembly, which is constituted by the population of the territory, is the highest authority. The general assembly must give its prior and informed consent for any major decisions, such as developing mega projects on the territory.

The communities have the right to practice traditional forms of leadership and organization, as well as the formalization and regulation of diverse histories and traditions. The law allows for the even distribution of taxes derived from exploitation of natural resources inside communal lands. It also affirms Indigenous and Afro-descendent communities’ right to co-manage along with the Ministry of Natural Resources (MARENA) of the central government both nature reserves and protected areas located inside communal territories. Prior to this law, this responsibility was exclusively assigned to the central government²².

4.4 Laws and Policies on Gender Equality

The most recent laws on gender equality are the following.

Law No. 790 amending Law No. 331 the Electoral Act (2012)	<ul style="list-style-type: none"> • Quota law for candidate lists for municipal, parliamentary and Central American Parliament elections
Law 717 (2010)	<ul style="list-style-type: none"> • Creates a fund to buy land for rural women from a gender equality perspective
Criminal Code (2008)	<ul style="list-style-type: none"> • Bans abortion under any circumstances • Penalizes woman and medical professionals for abortion • Removes criminalization of homosexuality
Law of Equal Rights and Opportunities (2008)	<ul style="list-style-type: none"> • Gender perspective in all public policies • Equal human, civil, political, economic, social and cultural rights between women and men • Law is obligatory and includes sanctions

National and Regional Public Policies and Programs

- National Human Development Program (2018-2021)
- Caribbean Coast Human Development Plan (2016-2020)

²² Woods, S. and C. Morris, 2007, “‘Land is Power’: Examining Race, Gender and the Struggle for Land Rights on the Caribbean Coast of Nicaragua”, Bluefields: CACRC.

- Strategies for Gender Equity and Equitable Access to Health Services, Ministry of Health (2010)

The national government also has a number of social programs that are designed to benefit women in particular. These include “Zero Hunger”, which targets poor rural women; “Zero Usury” which offers microcredit to urban women.

Regional Public Policies and Programs on Gender Equality

- Gender Equity Policy, RAAS (2008)
- Parliamentary Agenda of Women Council Members, Regional Council, RAAS
- Gender Equality Policy in the Context of Indigenous Peoples and Ethnic Communities in the RAAN (2010)
- Policy, Strategy and Regional Plan for the Development of Adolescents and Youth in the RAAN (2010-2014)

4.5 Laws on Violence against Women

The most recent laws on violence against women to reconstitute women’s rights are the following.

<p>Law 896 (2015) Law against human trafficking</p>	<ul style="list-style-type: none"> • Recognizes gender equality • Recognizes interculturality (law 28) • Provisions for prevention, protection, reparations and investigations
<p>Law 846 (2013) Modifies law 779</p>	<ul style="list-style-type: none"> • Upholds law 779 based on article 48 of the constitution • Reinstates judicial mediation
<p>Law 779 (2012) Integral Law against Violence towards Women and Reforms to Law 641, the ‘Criminal Code’</p>	<ul style="list-style-type: none"> • Localizes many aspects of Belem do Pará convention • Recognizes violence in public and private spheres • Recognizes new crimes like femicide and economic violence • Establishes specialized violence against women courts • Eliminates judicial mediation • Does not recognize legal pluralism; does not recognize child sexual assault

In addition to these laws, both the RACCS and RACCN have public policies on violence against women ²³.

4.6 Relevant Institutions for Gender Equality

National Institutions

- Ministry of Women (MINIM)
- Ministry of Youth

²³ Montes and Woods, 2008, “Diagnóstico sobre Violencia de Genero en las Regiones Autónomas del Atlántico Norte y Sur de Nicaragua”, Managua: Agencia de cooperación Española (AECI).

- Ministry of the Family

RACCS and RACCN Institutions

- Women’s Secretariat of the Regional Council, RAAN and RAAS
- Regional Youth Commission in RAAN and RAAS (both formed in 2010)

V. CLIMATE CHANGE, FORESTRY AND ENVIRONMENT: LEGAL, POLICY AND INSTITUTIONAL FRAMEWORK FROM A GENDER PERSPECTIVE

5.1 Climate Change and Environment: Laws and Policy

Between 2011 and 2013, forest loss decreased by 9.6% due to the implementation of a national plan for reforestation and a reduction in losses from wildfires. Data from the National Forestry Institute (Inafor) showed that the average amount of deforestation, which had been 70,000 hectares, was reduced to 63,270²⁴.

Nicaragua is already exposed to a high recurrence of extreme events, natural disasters, very high temperatures on the Pacific Coast, and flooding throughout the country, and it is expected that these events will occur more frequently with increased climate change. It is important to note that the estimates made for these scenarios seek to identify the impacts of changes in temperature and precipitation that are attributable to climate change, and therefore, the values of all other variables. The estimates should therefore be interpreted as possible outcomes if adaptation measures are not implemented. The effects of productive practices by humans that undermine sustainability, such as soil degradation and erosion, include contributing to reducing future agricultural production, which in turn can lead to hunger.

The effects of climate change on Nicaragua’s Caribbean region have been severe in the last decade. Authorities and local residents have been forced to take protection and adaptation measures to address the phenomenon that have gradually undermined their safety and changed their way of life. For example, they have experienced a series of hurricanes, floods due to heavy rains or storm surges, environmental pollution and general changes in temperatures, which have caused tremendous economic damage to the local population. The region has historically endured heavy flooding, but something changed for the better: there were very few fatalities, wounded or missing people.

5.2 Forestry Law and Policy

The objective of 2003 forestry law, the Law of Conservation, Fomentation and Sustainable Development of the Forestry Sector is the establishment of a legal regime for the conservation, promotion and sustainable development of the forestry sector. The fundamental aspects are forest management of the natural wooded area, the promotion of plantations, and the protection, conservation and restoration of

²⁴ Central America Data.com, 2014, “Reduced Deforestation in Nicaragua” , CentralAmericaData.com, 27 June. https://en.centralamericadata.com/en/search?q1=content_en_le:%22Forestry+law%22&q2=mattersInCountry_es_le:%22Nicaragua%22

forest areas at the national level. Another important element is the list of trees that cannot be felled anymore. The Law created a National System of Forestry Administration (SNAF), the National Forestry Commission (CONAFOR) and established national protected areas.

The forestry law provides for the organization of forest districts and development of local forest management plans. The Law Prohibiting Logging (Law No. 585) (2006) banned the export of timber, although a Presidential Decree (No. 48 of 2008) allowed the collection of trees fallen by Hurricane Felix in the RAAN for export. Exported timber must be less than eight inches thick, regardless of length, and is subject to a fee assessed on the value of the lumber. Requests for permission to cut timber must be accompanied by a forest management plan and permits are granted on the basis of an operating plan. Precious woods must be processed in sawmills authorized for that purpose²⁵.

In 2008, the Government adopted a National Policy for Sustainable Development of the Forest Sector (Executive Decree No. 69-2008), which emphasizes environmental protection and conservation, as well as sustainable development of the forests to support livelihoods and economic growth. It replaced the Forestry Action Plan (1993).

Although law 445 privileges the land claims of indigenous and ethnic communities, to date there has been no attempt to remove those families who are illegally occupying communal lands. In the meantime, these settlers remain in communal territories using the lands for economic activities that prove to be harmful to the environment such as clearing forests in order to create grazing pastures for cows, deploying slash and burn agricultural practices, and attempting to farm in coastal soils that are unsuited for soil-intensive crops²⁶.

Policy regarding the environment and forestry is of vital interest to indigenous and Afro-descendant communities since continuing their relationship and practices on these lands is essential for the ongoing survival of their communities. Both women and men understand that land as a critical aspect of Coast identity for indigenous and Afro-descendant peoples.

5.3 Natural Resources and Protected Areas: Legal, Policy and Institutional Framework

There are several laws that are relevant to the creation of Bosawás, Indio Maiz and other protected areas in Nicaragua. These include law 217, the "General Law of the Environment and Natural Resources" and its Incorporated Reforms (647) the decree of protected areas of Nicaragua (01-2007) and law 7382. These areas became part of the National System of Protected Areas of Nicaragua. The declaration was developed through various efforts, initiatives and requests made by the Autonomous Regional Government and the Autonomous Regional Council of the South Caribbean Coast of Nicaragua, SERENA, MARENA, as well as the Communal and Territorial Governments.

According to the regulation of protected areas (Decree 01-2007) the provisions for the Management of Protected Areas provides a model for the administration of protected areas, in which MARENA is the

²⁵ Sandrine Frégu in-Gresh, et al., 2016, "Regulations on Access and Property Rights to Natural Resources in Nicaragua and Honduras Literature: Review for Institutional Mapping of the Nicaragua-Honduras Sentinel Landscape", https://agritrop.cirad.fr/574124/1/document_574124.pdf

²⁶ Riverstone, G., 2004, *Living in the Land of Our Ancestors: Rama Indian and Creole Territory in Caribbean Nicaragua*.

administrator of the National System of Protected Areas (SINAP) MARENA can assign the administration of an area to Nicaraguan non-profit organizations and institutions, municipalities, universities, scientific institutions, or cooperatives. Indigenous and Afro-descendant communities are protected and a model of Comanagement provides for a relationship of shared responsibilities, which involves and articulates all the actors that affect the protected area. Laws 445, 28 and the Nicaraguan protected areas regulations (01-2007) mandate MARENA to work under a joint management model in those protected areas that are declared in indigenous and Afro-descendant territories of the Caribbean Coast of Nicaragua²⁷.

Various land reforms laws (mostly from 1979 to 2002) were passed, amended and often repealed. The Law on Agrarian Reform (1981) was a core policy of the Popular Sandinista Revolution regarding agrarian issues. This law governed the process of expropriation of large-scale, often under-utilized, land properties, and allowed the redistribution of these properties to small-holders (mostly former agricultural workers) on an individual basis, as collective tenure (cooperatives) or to newly created large-scale production units (state farms). Since then, the Law on Reformed Urban and Agrarian Properties (1997) allowed for the legalization of agrarian reform lands, while Law on the Regularization/Organization/Titling of Spontaneous Human Settlements (1999) granted titles to some informal settlers for the land they occupied.

These policies tend to hurt the indigenous and Afro-descendant communities that have been constantly threatened by displacement, as have their traditional means of survival. It is the main source of ethnic tensions in the region.

VI. INTERCULTURAL GENDER ANALYSIS IN NICARAGUA AND THE CARIBBEAN COAST: OVERVIEW

6.1 Basic Demographic Statistics

The North Caribbean Coast Autonomous Region (RACCN) and the South Caribbean Coast Autonomous Region (RACCS) are more multicultural and multiethnic than the rest of Nicaragua. About 8.2% of the Nicaraguan population identifies as indigenous or Afro-descendant. The proportion of different ethnicities varies greatly across the two regions, as indicated in tables 1 and 2²⁸. The male/female ratio is close to 50% for all indigenous and Afro-descendant populations²⁹.

A brief introduction to the different ethnicities present on the Caribbean Coast is essential. Article 12 of the autonomy law states that members of the Communities of the Atlantic Coast have the right to define and decide upon their own ethnic identity³⁰. In the CR there are currently six main ethnicities:

²⁷ BICU, 2019, "Plan de Manejo bajo el modelo de manejo conjunto del área protegida RVSCP vigente para el período 2019 – 2024, del Refugio de Vida Silvestre del Sistema de los Cayos Perlas (RVSCP)", Bluefields: BICU.

²⁸ Tables 1 and 2 were taken from Voces Caribeñas, 2014, "Aplicación del enfoque de género en las políticas públicas desagregadas por etnia y edad Región Autónoma del Atlántico Norte (RAAN) y Región Autónoma del Atlántico Sur (RAAS)," Bilwi: Voces Caribeñas, pp. 1-2.

²⁹ Dixon, B. and M. Torres, 2008, "Diagnóstico de Género en las Regiones Autónomas de la Costa Caribe," Washington, DC: Inter-American Development Bank and World Bank.

³⁰ República de Nicaragua, 1987, Law No. 28. Autonomy statute for the Regions of the Atlantic Coast (today Caribbean Coast) of Nicaragua.

two are Afro-descendant (Garifuna and Creole), three are Indigeneous (Miskito, Mayagna and Rama) and mestizos³¹.

MAYANGNAS: There are three socio-linguistic groups: the Twhaskas, Panamakás and Ulwas. The Ulwas are located in the community of Karawala, in the municipality of La Barra of the Rio Grande (RACCS). Twhaskas and Panamakás are generally located in the Bosawás reserve, RACCN. This ethnic group has little mobility within the regions.

RAMAS: This is the least numerous indigenous group today. Most live in Rama Cay Island, south of Bluefields Bay. There are also families scattered along the lower Caribbean coast in the basins and nearby rivers around the Indio Maiz reserve. They mainly fish and practice farming to a lesser extent.

GARIFUNAS: This is the ethnicity that arrived most recently to the Caribbean Coast and traditionally live in the RACCS. They settled in villages in the Pearl Lagoon basin (RACCS) after migrating from Honduras. They are descended from African and indigenous Caribbean Arawak peoples.

MISKITOS: Miskitos live in about 250 communities in various parts of both the RACCN and RACCS, including the Coco or Wangki river, as well as the coastal shores and plains of the municipality of Puerto Cabezas and Pearl Lagoon basin. It is a population of great intra-regional mobility, but with a great sense of roots and belonging to their communities, to which they return after long periods of temporary employment. Their main activities consist of fishing in coastal areas, small farming and artisanal mining in inland areas, and to a lesser extent the service sector in urban centers.

CREOLES: This population identifies as direct descendants of African slaves and the other Blacks from the Caribbean islands. They are mostly located in Bluefields, Corn Island, Laguna de Perlas and the urban area of Bilwi (Puerto Cabezas). Historically they settled in urban centers, often employed as public servants. Many women are nurses or teachers. They fish and farm in the Pearl Lagoon and Bluefields areas. Currently, young men and women seek temporary jobs on international cruise ships after completing their intermediate level studies, while maintaining family ties during their work stay. There are also some Creoles in the Indio Maiz area.

MESTIZOS: The Mestizo population has become a majority in the Caribbean region, and have settled in different urban and rural areas. Since the nineteenth century, Hispanic-speaking mestizo peasants have migrated to the Caribbean from the Pacific and the center of the country, though they migrated in much greater numbers after the 1970s. They have settled illegally on indigeneous territories, including in forests and territorial plots, and have mixed with mestizos with a longer historical presence in both regions. Their main economic activities include cattle farming, timber extraction, and agriculture. Large numbers of Mestizos have settled in the natural reserves of Bosawas and Indio Maiz.

Tables 1 and 2 provide demographic information per ethnicity and municipality for the RACCN and RACCS respectively.

³¹ Mestizos are a “mixed” ethnicity of Spanish settlers and indigenous peoples, or hispanicized indigenous people. They are the majority of the Nicaraguan population.

Table 1: Population per municipality and ethnic group in percentages, RACCN

Municipality	Population	Extension Km2	Density pop/km2	Mestizos %	Miskitos %	Creoles %	Mayagna %	Rama %	Garifuna %
North Atlantic Autonomous Region (RAAN)									
Puerto Cabezas	82,548	5,985	13.8	22%	72.3%	6%	0,3%		
Waspan	55,586	9,342	6.3	4%	91%		5%		
Prinzapolka	24,784	7,020	3.3	20%	79%	1%	0,3%		
Bonanza	83,115	1,898	7.2	47%	8%	0,2 %	45%		
Rosita	28,324	2,205	12.8	72%	11%	0.4%	17%		
Siuna	22,913	5,040	43.8	98%	0.6%	0.1%	0.6%		
Mulukuku	37,815	1,618	23.4	100%					
Waslala	59,707	1,329	44.9	100%					
Total	394,792	32,127	9.4	57%	36%	1.15%	6%		

SOURCE: VIII Population Census and IV Housing Census, 2005 / adapted INIDE 2009

Table 2: Population per municipality and ethnic group in percentages, RACCS

Municipalities	Population	Extensions Km2	Density Pop/km2	Mestizos %	Miskitos %	Creoles %	Mayagna %	Rama %	Garifuna %
South Atlantic Autonomous Region (RAAS)									
Corn Island	12,520	13.1	920	30%	40%	27%			3%
Bluefields	49,292	4,775	10	57%	6%	34%		3%	0.5%
Pearl Lagoon	10,628	3,876	2.74	7%	38%	27%			28%
Kukra Hill	13,200	1,193	11	80%	10%	10%			
Desembocadura del Rio Grande	5,500	1,738	3.2	15%	50%	15%	20%		
La Cruz de Rio Grande	20,000	3,448	5.8	99%	1%				
El Tortuguero	33,844	3,403	9.9	99%	1%				
Bocana de Paiwas	55,000	2,375	23	100%					
El Ayote	15,196	831	18.3	100%					
Muelle de los Bueyes	29,590	1,391	21	100%					
El Rama	63,245	3,753	16.8	100%					
Nueva Guinea	12,800	2,774	46.14	100%					
Total	429,552	27,546	15.6	90%	3%	6%	0.25%	0.3%	0.8%

SOURCE: VIII Population Census and IV Housing Census, 2005 / adapted INIDE 2009

The figures in the above tables provide a snapshot in time, as the situation has continued to change. The main reasons have been socioeconomic: changes in the enclave economy; advance of the agriculture and cattle-ranching frontier; indiscriminate exploitation and depletion of natural resources; and military conflict³².

Tables 1 and 2 also show the low population density in the two autonomous regions. Whereas the two regions make up about half of the country's territory, it has only about 12% of the population³³. The regions are among the most rural areas of the country, where 72% of the RACCN and 63% of the RACCS populations are rural³⁴. This is one important factor that relates to income generation and/or subsistence activities as well as explaining the gender gap with respect to access to health and other social services.

Also, a higher proportion of the population is younger in the Caribbean region compared to the national rate. In the RACCN, 48% is under 15 years old and in the RACCS it is 45%. The national proportion is 37%³⁵.

6.2 Education and Literacy³⁶

In general, there are not many significant gender gaps among population segments regarding literacy and primary and secondary education in the Caribbean Coast regions; however, there are with respect to technical education.

There is a higher illiteracy rate among rural populations in both Caribbean Coast regions (about 50%) as compared with urban populations (20%). The main gender gap found was that rural women in the RACCS are more illiterate (54%) than men (48%).

Education measures mostly show no significant gap in terms of primary education. That said, data indicates about 10% greater enrolment of adolescent girls in secondary school – particularly the retention of adolescent girls in the RACCN – and about 10% higher enrolment of men in adult education. Both of these relate to gender disparities in that adolescent boys are expected to work whereas adult women take much greater responsibility in the care economy and child rearing.

There are significant gender gaps with respect to technical education in terms of both enrolment and specialization. For example, men are far more frequently enrolled in sectors related to forestry and agriculture than women are, though even women are more highly enrolled in these areas than the national average. Also, although there is a small gender gap in technical enrolment at the national level, the gap is significant in both Caribbean regions, and more so in the RACCN (see table 3).

³² UNDP, 2005, op.cit., p. 59

³³ Ibid.

³⁴ Dixon and Torres, 2014, op.cit., p. 5.

³⁵ Ibid.

³⁶ The material in this section was adapted from Dixon and Torres, 2008, op cit.

Table 3: Distribution of enrolment in technical education by gender

Territorial scope	Men	Women
RAAN	74,1%	25,9 %
RAAS	62,4%	37,6 %
Country	48,3%	51,7%

Source: Dixon and Torres, 2008 with data from INEC, 2005a

6.3 Women, Decision-Making and Leadership

6.3.1 Political Representation and Decision-Making

Throughout the country there are two levels of government, national and municipal; meanwhile the RACCS and the RACCN have a third level of government to administer the autonomous regions. Indigenous and Afro-descendant peoples on the Caribbean Coast have four or five levels of government: national, regional, municipal, territorial and communal³⁷. Law 790 and its 50% quota is gradually being implemented in these different levels of government; in a few cases women's representation has already reached close to 50%.

In the national parliament there were 3 deputies for the RACCS and 2 represent the RACCN in the 2012-2016 period. All the RACCN representatives were women (40%) and all the RACCS deputies were men (60%). Their ethnic distribution was 2 mestizo men from the RACCS (40%); 1 miskitu woman from the RACCN and 1 miskitu man from the RACCS (40%); and 1 Creole woman from the RACCN (20%). One study further pointed out that the number of deputies assigned to the RACCS and RACCN was disproportionate to departments with similar population sizes; this had the effect of leaving Coast peoples underrepresented³⁸. The Creole woman in the National Assembly holds the position of First Secretary.

In the Regional Councils of the RACCN and the RACCS, 50% is slowly in the process of being reached, especially since 2010. In the data for the most recent period (2010-2013), women made up just 28.9% of representatives in the RACCN and only 21.2% in the RACCS³⁹.

More recent data for the 2014-2017 period shows that the percentages of women councilmembers increased once again. Table 5 provides both the total numbers of women as well as their ethnic distribution.

Table 4: Ethnic Identity of Women Members of Regional Councils, 2014-2017⁴⁰

Ethnicity	RACCN	RACCS	Total
Mestizo	9	10	19
Miskitu	11	0	11
Creole	1	5	6
Garifuna	0	2	2
Mayagna	1	2	3
Rama	0	1	1
Total	22	20	42

³⁷ As an example, in the Pearl Lagoon Basin each community has a communal government and there is also a territorial government representing all the communities.

³⁸ Voces Caribeñas, 2014, op cit., p. 16.

³⁹ Ibid, p. 17-18.

⁴⁰ Ibid., p. 40.

In contrast to the positive shift towards gender equality in decision-making at the Regional Council level, one study highlights that ethnic distribution has become less representative, particularly in terms of indigenous peoples⁴¹.

Other data point out that at the municipal level, the quota law is being implemented less than at other levels of government. A mere 20% of women in RACCS municipalities particularly in the RACCS. However, at the level of territorial and community governments, there is almost 40% representation of women (see table 6)⁴².

Table 5: Ethnic and gender participation in governments in the RACCS

No.	Level Government /seats	% Women Participants/ Title-holders	Number of Indigenous Women	Number of Afro-descendant Women
1	Regional Council (total 45 seats)	38 %	2	3
2	Municipal Mayors (total 12 municipalities)	20 %	1	1
3	Local or Communal Boards	39.9 %	----	---

Source: CRAAS, 2015.

One analysis found that women’s formal political leadership in Bilwi, Puerto Cabezas has been generated from a historical process of involvement in the Moravian church, the Sandinista revolution and post-1990 development projects⁴³.

Reflecting the growing emphasis on reaching equality in terms of women’s formal decision-making power, participants in all three community consultations for Bio-CLIMA placed great emphasis on the need for women to have equal representation in the territorial governments (GTI). They also insisted on increasing women’s participation and decision-making role, including by developing projects and providing resources⁴⁴.

6.3.2 Leadership

Contrasting to women’s representation in formal politics, women of different populations in the Caribbean region have long been community leaders. They have exercised this role in different manners. At the same time, there are a number of perspectives, positive and negative, about women’s leadership at the community level.

One form of traditional leadership consists of transmitting indigenous and Afro-descendent identities and cultures to the community, for example through story-telling⁴⁵. Another strategy consists of

⁴¹ Ibid.

⁴² Comparative data was not available for the RACCN.

⁴³Herlihy, L.H., 2013, “Mujeres Levantándose Con la Iglesia Morava, la Guerra, y los ONG,” *Ciencia e Interculturalidad*, 13(2) July–December.

⁴⁴MARENA, 2019a, 2019b, 2019c., op cit.

⁴⁵Goett, J.A. 2006, *Diasporic Identities, Autochthonous Rights: Race, Gender, and the Cultural Politics of Creole Land Rights in Nicaragua*. Ph.D. Dissertation, University of Texas at Austin.

research and organizing of women, whether as indigenous or Afro-descendant women, or through intercultural coalitions⁴⁶. Another pertinent way is through the strategic use of women's traditional cultural responsibility as land stewards⁴⁷.

That said, studies have found that women's informal leadership is not always recognized by others in society in general or by those with formal authority. An underlying factor relates to the 'invention of tradition'. For example, people commonly say "she knows more about children so send her home", or "let her work at the marketplace." Not only does this belittle women, it ignores that women of different ethnicities have traditionally been active in various ways in agricultural production and land stewardship⁴⁸. This contradiction signifies that women's participation is sometimes ignored. Also, culture can be viewed as either a positive or negative factor in women's lives (or both), depending on how it constrains or enables women's autonomy⁴⁹. This lack of recognition also points to the existence of a barrier that impedes women who are informal leaders becoming from elected officials.

At the community level, where decisions around forests are made, one study found that women's leadership and decision-making is sometimes undermined. The main obstacles that impede women from participating effectively in forest decision making at the community level relate to: low levels of community organization, pressure by husbands, difficulties in organizing women and informal sanctions. It concluded that improving women's participation in community decisions is directly related to increasing women's decision-making equality at the household level⁵⁰.

Another study found that women are more trusted as community leaders because the population thought they were less corruptible.

6.3.3 Civil Society and Inter-Sectoral Coordination

In the community consultations for Bio-CLIMA, the representative of one indigenous women's organization mentioned that her organization used to be part of an Alliance with the government and the Women's Directorate in particular, but that the coordination had almost stopped. She offered to coordinate with the government again given their presence in all indigenous territories⁵¹.

In all the consultations, participants emphasized that the project should strengthen women's organizing, including through providing resources⁵².

6.4 Economic Activity

Despite the tremendous wealth of natural resources in the Caribbean region, there is still a high degree of poverty and inequality in access and control of resources⁵³.

⁴⁶Figueroa and Barbeyto, 2014, op cit. and Woods Downs, 2005, op cit.

⁴⁷Morris, C.D., 2016, "Toward a Geography of Solidarity: Afro-Nicaraguan Women's Land Activism and Autonomy in the South Caribbean Coast Autonomous Region," *Bulletin of Latin American Research*, 35:3, 355–369.

⁴⁸Woods and Morris, 2007, op cit.

⁴⁹ Woods and Morris, 2007, op cit.

⁵⁰ Evans, K. et al., 2016, "Challenges for women's participation in communal forests: Experience from Nicaragua's indigenous territories", *Women's Studies International Forum*, 65.

⁵¹ MARENA, 2019b, p. 15.

⁵² MARENA, 2019a, 2019b, 2019c, op cit.

Economic activity varies widely according to location, territory, gender and ethnicity⁵⁴. For example, census data from 2005 shows that women's rate of economic activity overall (35%) was less than half of men's (75%). In the CR, the rates were even more exaggerated, especially in rural areas, where women's economic activity was only 21.8% compared with men's rate of 82.9% (see table 7).

Table 6: Net Rates of Economic Activity, Disaggregated by Area and Gender, %

Territorial scope	Men	Women	Total
National	75	35	54.6
Urban	68.5	44.4	55.6
Rural	80.6	25.2	53.7
Caribbean Coast	75.8	29.6	52.4
Urban	65.3	39.2	51.5
Rural	82.9	21.8	53.1

Source: Voces Caribeñas, 2014, p. 5.

This disparity can also be found in the different areas of economic production, as evident in table 7. Just over half of rural women in the Caribbean region (54.1%) participate in agricultural activities compared with a third of women at the national level (33.8%). Meanwhile, the rate of both women and men active in trade, hotels and restaurants are very similar when comparing the national rates with those of the Caribbean region in rural areas (see table 8).

Table 7: Distribution of population per economic activity and gender, %

Sectors of economic activities	Country				Caribbean Coast	
	Rural		Urban		Rural	
	Man	Woman	Man	Woman	Man	Woman
Agricultural Activities	84	33.8	19.5	2.4	85.8	54.1
Services, commercial	3.6	26.4	17.3	39.8	3.2	1.5
Commerce, Hotels, Restaurantz	3.9	23.3	22.8	37.9	2.5	22.8
Manufacturing industry	3.1	13.7	15.2	17	14	6.3
Others	5.4	0.8	25.2	2.9	7.3	0.3

Source: Voces Caribeñas, 2014, p. 5; with data from INEC, 2005a.

Also, the informal sector is slightly larger in the Caribbean region than at the national level for both women and men, where the rates are slightly higher for men than for women in rural areas (84% men; 81% women) and slightly higher for women in urban zones (65% men and 69.3% women)⁵⁵.

6.5 Gender Division of Labour and Access and Control of Resources at the Household Level

Studies have demonstrated a number of critical points regarding the household division of labour and decision-making. These are: (i) women and girls actively contribute to the household; (ii) their work

⁵³ Dixon and Torres, 2008, op cit.; UNDP, 2005, op cit.

⁵⁴ Dixon and Torres, 2008, op cit.; Voces Caribeñas, op cit.

⁵⁵ Voces Caribeñas, 2014, op cit.

varies over time and across communities; (iii) their work is often not recognized; and (iv) their participation in income generation and decision-making at the household level varies greatly and is not necessarily linked to their participation in formal decision-making structures at the community or higher levels.

In her study of women’s agricultural production in the Pearl Lagoon Basin, Barbee maintains that “different traditions, socio-economic structures, cultural values, norms and gender ideologies are all embedded in [women’s] ethnicities and serve to either allow and support women’s farm production or discourage it”⁵⁶.

In general, men own far more land than women do, and the size of the land they own is greater. Furthermore, women have far less access to credit. This unequal relationship is evident at both the national levels and on the Caribbean Coast⁵⁷.

One study of Mayagna and Miskitu communities in the RACCN found a complex relationship regarding extraction of forest products, use of those products and control of income⁵⁸. For example, it found that men do most of the extraction of forest resources (Table 8).

Table 8: Forestry Resources Extracted

Forest products	% respondents extracting		
	Households	Males	Females
Timber	51.0	48.3	2.7
Posts	38.3	37.7	0.7
Firewood	71.3	68.7	2.7
Animals	42.3	42.0	0.3
Fruits	36.3	32.3	4.0
Artisan materials	10.7	8.7	2.0
Herbs	35.3	27.7	7.7
Honey	20.3	20.3	0.0

Source: Evans, et al., 2016, p. 41.

This study found that most of these products are used for household subsistence purposes. Of the wide variety of products that were sold, one third of households participated in sales of posts and timber, where men controlled the income from those and other products, such as animals and fruit. Even though women are largely not involved in extraction, they controlled the money from the products they sold, especially non-wood resources such as fruit, artisan materials, herbs and honey (see table 9).

⁵⁶ Barbee, S., 1997, “Mujeres Productoras Agrícolas en la Cuenca de Laguna de Perlas”, *WANI*, #22, 6-22.

⁵⁷ Voces Caribeñas, 2014, pp. 9-11.

⁵⁸ Evans et al., 2016, op cit.

Table 9: Forest Products Sales and Control of Resources

Resource	% of households that sell	Of those selling, who sells			Who controls money from sales?		
		Man	Woman	Both	Man	Woman	Both
Wood	33.3	55.6	37.4	7.0	28.3	20.2	51.5
Posts	12.0	58.3	38.9	2.8	38.9	16.7	44.4
Firewood	5.7	35.3	23.5	41.2	17.6	11.8	70.6
Animals	16.7	40.8	26.5	32.6	20.4	22.4	57.1
Fruits	12.7	23.7	36.8	39.5	13.2	39.5	47.4
Artisan materials	5.3	25.0	62.5	12.5	6.2	59.2	37.5
Herbs	3.7	36.4	45.4	18.2	18.2	54.6	27.3
Honey	3.0	44.4	44.4	11.1	22.2	55.6	22.2

Source: Evans, et al., 2016, p. 42.

Qualitative methods, including focus groups and observation, found that despite beliefs of shared decision-making, in practice women faced many obstacles to playing an effective role in decision-making both at the household and community levels. The study found that even though women are present in discussions related to decision-making, they do not necessarily influence the decisions made. Furthermore, women are more aware of this dynamic than men⁵⁹.

Other studies have gathered compelling evidence that women in the CR often participate in agricultural production within the family but do not necessarily have access and/or control of the resources. One example relates to cocoa production. Women often cut the cocoa pods because they grow low. Then women and boys and girls cut open the cocoa, dry it and prepare it. Then men set the price and sell the cocoa, followed by deciding how to distribute the income. In the case of rice, the whole family participates in planting, then men do the harvesting. If hulling the rice is industrialized then it is a man's activity; if it is done manually (artisanally), then women and older children do it. Men carry out all the sales. As for beans, mostly men do the planting and harvesting while women and older children dry them. Another example comes from artisanal gold mining. Adult women pan for gold by standing in water laced with cyanide; and in some locations they can only reach the water by climbing in and out of precarious mine shafts. Then adult men take the small piece or pieces of gold they find (the size of a small fingernail or smaller) take them to the city to sell them. The women then go back home to continue working and likely do not have any control over the sale price, and they may not receive any direct income that she can decide how to spend or indirectly in the form of supplies purchased for the family, especially if the man decides to spend some or all of the income by drinking at a bar. This dynamic is frequent in the region and can be found among various ethnicities⁶⁰.

Generally speaking, in the gender division of labour in the CR, rural women are the ones responsible for reproductive care economy, while their participation in production is usually invisible. There is some flexibility, which offers other possibilities for women. In agricultural production, women are seen as helpers of their husbands. For example, men prepare the land and women sow the seeds. Indeed, the organization of agricultural work at the family level relies on the participation of women and men, and

⁵⁹ Evans et al., 2016.

⁶⁰ Woods, S., 2020, Personal communication based on extensive unpublished fieldwork in the RACCN and RACCS.

girls and boys, in various tasks. As ‘helpers’, women do not earn a salary. At the same time, women raise domestic and yard animals and they also care for family members of two generations, their children and their parents. Men are seen as the producers and as head of household. They sell the excess produce, and thus have access and control of productive resources. They often do not bring all the earnings home. That said, women make the decisions regarding use of produce in the household.

One of the main concerns raised in the community consultations for the Bio-CLIMA project was the need to visibilize women’s participation in the community and in the project, particularly in terms of how labour is shared and divided at a community level. An example was given of a highway construction project that only paid men to do the work, but women were actively involved in tasks that complemented and were essential to men’s work⁶¹.

6.6 Women Headed Households

The rate of female headed households varies widely in the Caribbean macro-region by area and ethnicity, as well as over time. National census data shows that women are heads of households in 21.6% of homes in the RACCN and 25.4% in the RACCS, while the national average is 30.3%. Meanwhile Rosita (predominantly a mestiza municipality) has 37%; and ethnically diverse municipalities in the RACCS are yet higher: Corn Island (46%) and Bluefields (50%). Studies from the Caribbean Coast show higher percentages, such as 50% among Rama and 35% among Creole. The 2005 census also showed that the percentages had increased since 1993⁶².

One participant in the community consultations for the Bio-CLIMA project, who represented the indigenous women’s group AMICA, said that in the communities where they work, about 70% of women are single mothers who are raising three or more children, and some have seven or eight⁶³.

6.7 Water and Sanitation

The rate of access to water and sanitation for the RACCS and the RACCN is far below the national average, as can be seen in table 10. While the percentage for households in the RACCN is less than half of the national average, those in the RACCS have a quarter of the national percentage. In terms of sanitation (latrines or toilets) in homes, the percentage is about 20% to 26% less than the national. This has a very negative effect on the health of all members of the family.

Table 10: Access to Water and Sanitation, %

Indicators	RAAN	RAAS	Country
Percentage of households with access to domestic water	24.9	15.1	62.9
Percentage of households with access to excreta disposal (latrines and toilet)	58.5	66.2	84.6

⁶¹ MARENA, 2019b, p. 27.

⁶² Dixon and Torres, 2008, p. 4.

⁶³ MARENA, 2019b, p. 27.

Source: Dixon and Torres, 2008, p. 7; with data from INEC, 2005a.

6.8 Health

Indicators of women’s sexual and reproductive health show a dramatic disparity between the health of Nicaraguan women overall and women of the RACCN and RACCS in particular. This is largely the result of the lack of access to health care facilities. While there are health centres in every community, the services provided and resources available (medicines, etc.) are often limited. There is also a notable difference between the RACCN and RACCS, where in the former there is even less access to the public health care system. This can be explained by the greater proportion of rural population as well as the continued use of indigenous or Afro-descendant traditional practices. Table 11 provides a comparison of select indicators.

Table 11: Selected indicators of sexual and reproductive health

Indicators	RAAN	RAAS	Country
Global Fertility Rate	3.65	3.55	2.94
Birth rate	34	22	24
Women between 14 and 49 years old	45.0	47.2	51.8
Women aged 35+ who have given birth	20.4	16.6	4.0
Adolescents who are already mothers	27.3	30.7	19.9
Girls under 15 years who are already mothers	1.2	1.0	0.8
Maternal mortality rate for 100,000 inhabitants	265.7	166.4	151.7
Coverage of institutional births	36.7	25.0	50.0
Prevalence of use of contraception methods	45.5	62.0	65.5
Unsatisfied need for contraception methods	28.1	16.4	14.7
Access to female sterilization	12.3	18.5	25.3

Source: Dixon and Torres, 2008; with data from INEC, 2005a.

Nicaragua has one of the highest adolescent fertility rates in Latin America and the Caribbean, and the rates of the RACCS and the RACCN were significantly higher than the national one, where the figure in the RACCS is the highest. According to the criminal code, sex under the age of 14 years is statutory rape, so all those girls under 15 who are already mothers (1.2% RACCN and 1.0% RACCS) – and many more who did not get pregnant – were raped. None of them had access to legal abortion. The maternal mortality rate is high at the national level and somewhat higher in the RACCS, but it is notably higher in the RACCN. Use of contraception methods and unsatisfied needs of contraception also showed much greater lack of use and unsatisfied needs in the RACCN than the RACCS.

The most common cause of cancer among women was cervical cancer, where the national prevalence rate is 13.9 cases per 100,000 women in 2002.

In the Caribbean region, adolescent and adult indigenous women may suffer at some point from “Grisi Siknis” (or bla or wakni), which is an endemic cultural syndrome. Symptoms include headaches, loss of consciousness, convulsions, as well as a strong desire to run to a mountain or river and attack anyone who gets in their way. This has a disturbing impact on the victims, as well as the entire community who tries to help those affected⁶⁴.

⁶⁴ Dixon and Torres, 2008, p. 8.

6.9 Migration Patterns

There are two main migration patterns to and from the CR, as well as several tendencies related to them⁶⁵. The main one is the advance of the agricultural frontier, which began in the nineteenth century and became more intense first in the 1960s and even more so since the 1990s. In this flow, the Caribbean Coast is a destination point for mostly rural mestizos from the Pacific and central areas of the country who are in search of fertile land. They settle on land that appears to them to be unused – though is titled to indigenous and Afro-descendant communities – then they cut down all the trees and practice extensive, slash and burn agriculture that deteriorates the soil. For example, between 1995 and 2005 the RACCN had the highest annual increase in population in the country, at almost 4.9%⁶⁶.

The other main dynamic is out-migration. The main tendency is Afro-descendant youths who work on cruise ships out of Miami, referred to as ‘shipping out’, while others may go to certain Caribbean islands. Between 1995 and 2005, the RACCS annual population change rate decreased by 1.2%.

One study of the shipping out dynamic found that Afro-descendant women face combined racial, gender and class discrimination and violence. Since they suffer discrimination and violence while on ships registered in other countries and working mostly in international waters, they have no recourse for justice⁶⁷.

6.10 Religion and Spirituality

Life from a spiritual perspective has a significant positive impact on people's physical and mental health. For most Coast people, spirituality is an integral part of their life, it is understood to be the path to well-being. They summarize spirituality in the following terms.

“Spirituality is that internal force, that inexplicable energy that makes coastal people resilient, it is what we call Faith in God, complete resignation to the all-powerful. That provides us with energy that balances our life, to achieve the well-being that enhances and identifies the coast family”. In the north and south autonomous Caribbean regions, most people understand religion – Christianity – as spirituality in itself. Very few differentiate between religion and spirituality, and those who do are mostly older women. One’s faith in God is considered spirituality⁶⁸.

Coast people acknowledge the existence of different spirits, yet they emphasize that their spiritual practices are religious and Christian practices, which they often call “good practices”. In the Caribbean region, traditional medicine or healing practices (home remedies), is part of spirituality. Nonetheless, from the point of view of some religions it is considered “evil practices or bad spiritual veneration”. For that reason, some do not practice traditional medicine openly. Traditional medicine is a fundamental

⁶⁵ UNDP, 2005, op cit.

⁶⁶ Dixon and Torres, 2008, p. 3.

⁶⁷ Simmons Obando, S.O., 2017, *“Ship Out”: Una aproximación a otra modalidad de empleo y emigración internacional de mujeres jóvenes afrodescendientes de la ciudad de Bluefields*. MA Thesis. Managua: Programa Interdisciplinario de Estudios de Género, Universidad Centroamericana.

⁶⁸ Woods, S. and McCoy, A., 2020, Gender, Violence and Spirituality. Mis creencias, mi fe, una forma de vida, una estrategia de sobrevivencia y de ser resilientes! Bluefields: CEIMM- URACCAN.

part of indigenous and Afro-descendant peoples' identity; it contributes to explaining their very strong bond to Mother Earth, to the territory itself. One main reason why indigenous people without land may perish because they depend solely on nature to provide their needs, such as food, medicine, housing material, transportation (canoe) and traditional heritage. Indigenous people believe the strength of a people comes from the land.

When you ask a Coast woman how she identifies, she would typically reply, "I'm Hilda Allen, a Christian woman, mother of four, creole or miskito..." The order in which she introduces herself demonstrates that her religion is primary, since it is a matter of pride or being good. This example can be found in all indigenous ethnic groups. People in the CR work 6 days a week; Sunday is the day of worship for everyone. Most indigenous and Afro-descendants are Moravians (70%), followed by Anglican, Adventist and Pentecostal. Mestizos are usually Catholic or evangelical.

There may be significant ethnic differences among Mayagnas, Miskito, Rama, Ulwa (indigenous), Creole and Garifuna (Afro-descendants), but they all maintain that preservation and reforestation of land on the Caribbean Coast is essential. That is because land holds the existence of a people; and it is the place where they seek spiritual guidance. Indeed, indigenous peoples have their collective lands organized for different purposes, including sections assigned for gathering plants for traditional medicine and for spirituality practices.

6.11 Gender Equality Indices and Review of Data

In 2018 global indices, Nicaragua ranked in fifth place in the World Economic Forum's Global Gender Gap report, which emphasized women's formal political representation, education and others⁶⁹. Using this metric, Nicaragua was one of only ten countries around the world to reduce the gender gap by more than 80%⁷⁰. At the same time, it ranked 105 of 189 countries in the United Nations' Gender Inequality Index which tracked labour force participation, gendered health and other factors⁷¹. Furthermore, it also held position 15 of 29 Latin American and Caribbean countries for rate of death by current or former intimate partner⁷². The differences among the rankings relate to the issues being compared and the methodology, which underline the complexity and multidimensionality of measures of gender inequality.

That said, women of all ages, ethnicities and locations on the Caribbean coast face even greater barriers to equality than the national averages, which are related to the relatively lower human development index and the power relations based on ethnicity that are intertwined with those of gender (see table 12).

⁶⁹ World Economic Forum, 2018, The Global Gender Gap Report 2018. http://www3.weforum.org/docs/WEF_GGGR_2018.pdf

⁷⁰ Gobierno de Reconstrucción y Unidad Nacional (GRUN), 2019, Informe Nacional sobre el Avance en la Aplicación de la Estrategia de Montevideo para la Implementación de la Agenda Regional de Género en el marco del Desarrollo Sostenible hacia 2030, p. 5.

⁷¹ UNDP, 2020, *Tackling Social Norms*, Human Development Perspectives.

⁷² CEPAL, [Observatorio de Igualdad de Género](https://oig.cepal.org/es/indicadores/muerte-mujeres-ocasionada-su-pareja-o-ex-pareja-intima) de América Latina y el Caribe, "Muerte de mujeres ocasionada por su pareja o ex-pareja íntima". <https://oig.cepal.org/es/indicadores/muerte-mujeres-ocasionada-su-pareja-o-ex-pareja-intima>

Table 12: Selected Demographic Indicators

Indicators	RAAN	RAAS	Country
Percentage of rural population	72.0	63.1	44.1
Percentage of population < 15 years	47.6	44.8	37.3
Working-age population – (%) Men	49.0	51.0	57.0
Working-age population – (%) Women	50.0	53.0	59.0
Women-headed households	21.6	25.4	30.3
Life expectancy at birth – Women*	68.2		72.9
Life expectancy at birth – Men*	63.6		68.1
Human Development Index**	0.466	0.454	0.698

Sources: INEC, 2005a; * ENDESA, 2001; ** PNUD, 2005.

Given these compelling disparities, evident in both the qualitative and quantitative data reviewed in this section, experts insist on the need to address gender inequalities from an intercultural approach that links gender, race and other structural factors⁷³.

VII. VIOLENCE AGAINST WOMEN AND GIRLS IN NICARAGUA AND THE CARIBBEAN COAST

7.1 Situation of Different Forms of Violence against Women, Girls and Adolescents

7.1.1 Quantitative Data⁷⁴ on Gender-Based Violence

Violence against women is one of the main problems affecting women on the Caribbean Coast. The RAACN ranked in third place in prevalence nationally and had the highest frequency of physical violence (31.6%). The RACCS ranked in fifth place overall.

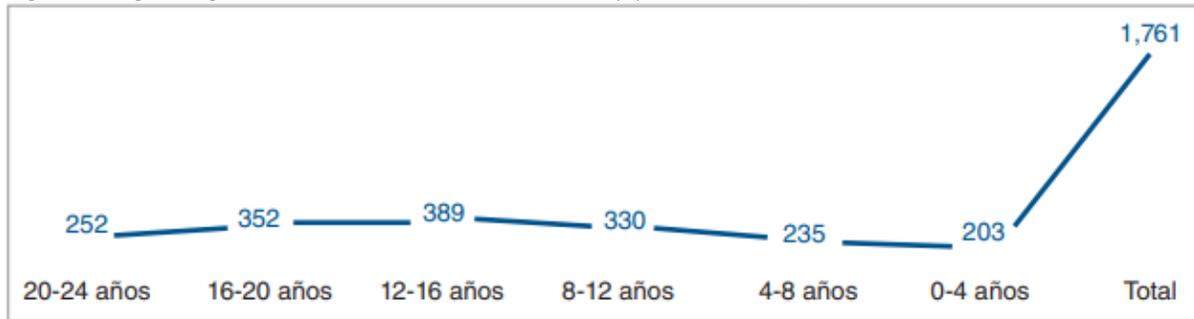
Between January and August 2010, the Women’s Police Stations (WPS) reported 22,161 complaints of family violence nationwide, of which 926 were reported in the RACCN and 500 in the RACCS. During the same period, 453 complaints of sexual violence were registered in the WPSs in total for the RACCN, RACCS and Río San Juan department. Of that total, 55% were of rape. What is particularly remarkable is that for 44% of those cases, the victims were less than 13 years old (see figure 1)⁷⁵.

⁷³ See Morris, C.D., 2010, “Pensar el Feminismo Afronicaragüense,” In Odile Hoffman, ed. *Política e Identidad: Afrodescendientes en México y América Central*, Mexico: Instituto Nacional e Antropología e Historia, UNAM; and Woods Downs, S., 2005, *I’ve Never Shared This with Anybody: Creole Women’s Experience of Racial and Sexual Discrimination and Their Need for Self-Recovery*, 1st ed., Managua: Centro de Estudios e Información de la Mujer Multiétnica, URACCAN.

⁷⁴ Voces Caribeñas, 2014, op. cit., pp. 23-25.

⁷⁵ Voces Caribeñas, 2014, op cit., p. 24.

Figure 1: Age ranges of victims of sexual violence, by years (“años”)



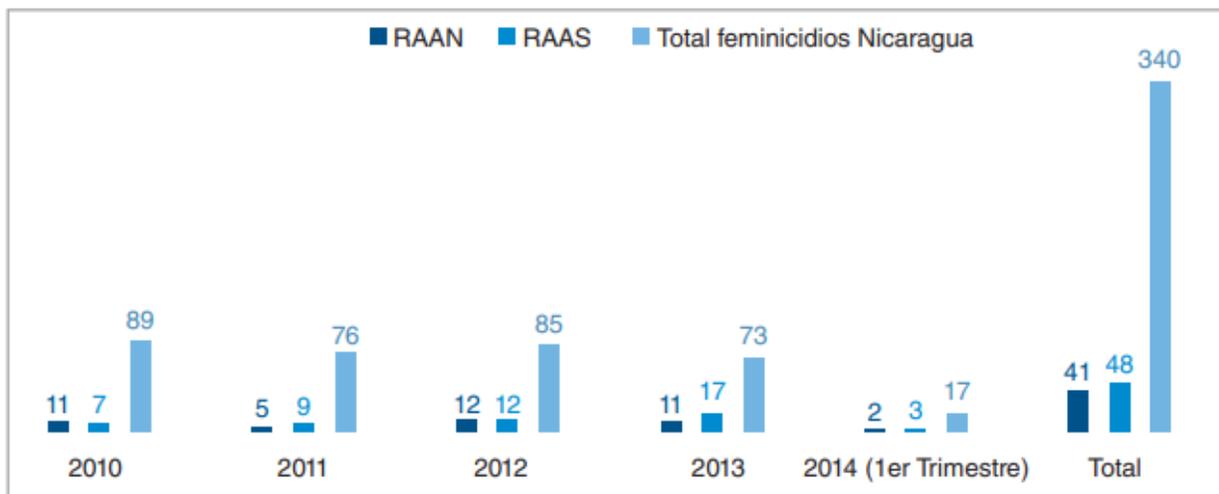
Fuente: Comisarías de la Mujer, PN – Octubre 2010

Source: Women’s Police Stations, National Police, October 2010

Almost all the victims of sexual violence crimes were women or girls (96.2%). In Puerto Cabezas, the vast majority of complainants were miskitas (92.5%) and a small number were mestizas (5%). In Bluefields, mestizas filed complaints most frequently (65%), followed by Creole women (22%). These percentages were roughly comparative to the ethnic distribution of the population in both sites, although in both cases, the ethnicity with the greatest presence in the municipality filed a disproportionately higher percentage of complaints. Many complaints of sexual violence committed against girls are incest⁷⁶.

The most severe form of violence against women is killing a woman. Femicide generally refers to killing a woman for gender reasons; however, the reforms to law 779 reduced the legal definition in Nicaragua to a woman killed by her (ex-)partner. One source found that between January 2010 and March 2014, 340 femicides took place at the national level, of which 26% occurred in the Caribbean Coast regions, (41 cases in the RACCN, and 48 in the RACCS). Given that the population of the Caribbean Coast is only 12% of the national population, this statistic is disproportionate. It underlines the severity of violence against women in the region (see figure 2).

Figure 2: Comparison of femicides between the RACCS, RACCN and national total, Jan. 2010-Mar. 2014



Source: Voces Caribeñas, 2014.

⁷⁶ Dixon and Torres, 2008, p. 11.

7.1.2 Other Forms of Violence against Women

Gender-based violence perpetrated by a current or former partner or family member are the most common forms of violence against women. That said, in-depth, qualitative academic studies also provide evidence of violence against women perpetrated as an expression of combined ethnic- and gender-based inequalities⁷⁷. These forms of violence are not recognized in laws and are not filed as complaints to the authorities.

Sexual violence is also an issue in relation to third parties entering communities on the Caribbean Coast, where these have affected girls and adolescents in particular⁷⁸. For example, when a new harbor was being built in El Bluff (RACCS), there were several incidents of sexual violence reported by adolescent girls, especially Creole girls. Since 2019, recent research has revealed a spike in different forms of violence in both Bluefields and Nueva Guinea that have been connected to the new highway between the two municipalities⁷⁹. In particular, the police rescued several boys from Bluefields who had been captured for human trafficking after the case was publicized on La Costeñísima radio station. Finally, mestiza girls in rural communities in the buffer zones of BOSAWÁS, RACCS and RACCN have been victims of violence when alone at home or travelling to school or other locations.

Analyses of the interactions between different systems of oppression are highly pertinent to indigenous and Afro-descendant women experiences in the Caribbean macro-region. Several academic studies have found that people with multiple subordinated identities endure more prejudice and discrimination than those with a single subordinate identity. For example, violence against indigenous and Afro-descendant women also takes the form of violent confrontations and the dispossession of land⁸⁰. Morris examines how violence and justice are conceived very differently for Afro-descendant women. She argues that gendered violence against women (e.g. domestic or sexual violence) is not the only form of violence they suffer, and that it cannot be privileged in relation to other forms of violence. For this reason, she states that gender justice needs to comprise both gender and economic justice, since all of these struggles are connected⁸¹.

Violence against women and girls as a result of the Bio-CLIMA project was also recognized as a concern by some participants in the community consultations⁸².

7.2 Access to Information, Health, Justice and Grievance Mechanisms

In 2008, there were three women's police stations (WPS) in the RACCN, located in Bilwi, Siuna and Waspán, and two in the RACCS, in Bluefields and Pearl Lagoon⁸³. By 2015 there were 162 WPSs

⁷⁷ Morris, C., 2012, *To Defend This Sunrise: Race, Place, and Creole Women's Political Subjectivity on the Caribbean Coast of Nicaragua*, Unpublished Ph.D. dissertation, University of Texas at Austin; Woods Downs, S., 2005, *I've Never Shared This with Anybody: Creole Women's Experience of Racial and Sexual Discrimination and Their Need for Self-Recovery*. 1st ed. Managua: Centro de Estudios e Información de la Mujer Multiétnica, URACCAN.

⁷⁸ Woods Downs, S., 2015, op cit.

⁷⁹ CEIMM-URACCAN, 2019, unpublished fieldwork.

⁸⁰ Woods and Morris, 2017, op cit.

⁸¹ Morris, C.D., 2010. "Pensar el Feminismo Afronicaragüense." In Odile Hoffman, ed. *Política e Identidad: Afrodescendientes en México y América Central*. Mexico: Instituto Nacional e Antropología e Historia, UNAM.

⁸² MARENA, 2019b, op cit.

operating in the country, but they were shut down in early 2016⁸⁴. In February 2020, Vice President Rosario Murillo made a public announcement that the WPSs were going to be re-opened; the Bilwi WPS was re-launched on July 16, 2020⁸⁵.

The ministry of justice, the courts, and the medical-legal institution all have specific units specialized in family and gender-based violence⁸⁶.

Despite the existence of these institutions, women, girls and adolescents face tremendous obstacles to accessing justice. Some of these are due to pressures on the victim to not report a crime, which may include social norms regarding being “respectable”⁸⁷. Women also fear reprisals against them, their children or their families. Women also contend with the lack of resources to press charges and follow the judicial route. Institutional barriers are multiple and great. Some of these relate to lack of resources. Many women in rural communities, whether indigenous, Afro-descendant or mestiza, live far away from the WPSs and cannot report the crime. Also, given that much transportation takes place using waterways, it may take a woman up to 1-2 days to reach a WPS which would simply not be feasible. Others have to do with the attitudes of officials, even at the WPSs, who do not always choose to file women’s complaints. Furthermore, lack of resources impedes officials from following up on complaints or ensuring adequate numbers of staff⁸⁸.

Urban and rural indigenous communities of the Caribbean Coast practice legal pluralism, in that customary law is meted out by local judges or *wihtas*. Various programs have focused on changing the attitudes of *wihtas* and communities away from the traditional practice of *tala mana*, which involves the perpetrator paying for his crime with money or valuable objects, such as cattle. Women have had very mixed experiences with regards to whether *wihtas* recognized their rights or not⁸⁹.

Both regional capitals had women’s shelters operating for a period of time to protect women in situations of violence. Both shelters operated for some time in the 2000s as part of a development project. The shelter in Bilwi was also run for many years by the Nidia White women’s organization.

The ministry of justice, police and ministry of the family all have hotlines. The ministry of the family hotline in particular was set up for those suffering violence and abuse against children, adolescents and adult women⁹⁰. Also, the current government has carried out a number of campaigns regarding violence against women and family reconciliation.

⁸³ Montes, L. and Woods, S., 2008, op cit., p. 28.

⁸⁴ Neumann, P.J., 2017, “In Nicaragua, a Failure to Address Violence against Women”, [NACLA: Report on the Americas](https://nacla.org/news/2017/04/28/nicaragua-failure-address-violence-against-women), 28 April. <https://nacla.org/news/2017/04/28/nicaragua-failure-address-violence-against-women>

⁸⁵ El 19 Digital, 2020, “Policía Nacional inaugura comisarías y unidades de seguridad ciudadana”, 16 July. <https://www.el19digital.com/articulos/ver/titulo:105286-policia-nacional-inaugura-comisarias-y-unidades-de-seguridad-ciudadana>

⁸⁶ Voces Caribeñas, 2014, op. cit.

⁸⁷ Woods Downs, 2005, op cit.

⁸⁸ Montes and Woods, 2008, op cit.

⁸⁹ Figueroa, D. and Barbeyto, A., 2014, “Indigenous, Mestizo and Afro-Descendent Women against Violence: Building Interethnic Alliances in the Context of Regional Autonomy” *Bulletin of Latin American Research*, (33:3, 2014).

⁹⁰ GRUN, 2019.

One concern that emerges from legal and institutional reforms, academic studies, and the current government programs and education campaigns is that there are mixed messages. On the one hand, the government promotes women's autonomy and capacity to make her own decisions and promote her individual human rights. On the other hand, women do not have the right to choose over their own bodies, women may not be able to file a complaint, or they may be required to mediate with their abusers, which promotes family reconciliation over women's rights⁹¹.

7.3 Coordination and Coalitions for Redress and Prevention

One of the effective responses to violence against women in the Caribbean Coast regions are coalitions of different kinds. Some of these only involve a wide variety of state actors, such as the inter-institutional commissions established by law 779. Others have been set up by local initiatives or different institutions. Even some municipalities without a WPS had set up inter-insectoral networks or commissions⁹².

In Bilwi there was a Municipal Network for Reducing Violence against Women that involved state institutions and women's and other civil society organizations. In Bluefields, the Inter-Sectoral Network for Dealing with Violence was very active during the 2000s. There was also a group called Men Allied against Violence that also participated in the Network. The men's group was set up as part of an initiative within the health ministry to sensitize men to resist and prevent violence. In order to complete the program, participants acknowledge that they themselves had exercised gender-based violence at some point in their lives⁹³.

Other networks and coalitions were set up by civil society actors. One example emerged from training carried out by the Multiethnic Women's Research Center (CEIMM) of the regional university, URACCAN⁹⁴. Other examples were networks in Waspan⁹⁵ and Bonanza⁹⁶.

These coordination mechanisms carried out a variety of functions ranging from training, awareness raising, investigations, prevention and coordinating services.

These coordination mechanisms demonstrate that there is both a growing awareness of the severity of violence against women on the part of a wide range of government and civil society actors as well as increased commitment to take action to stopping it. For example, the University Council of URACCAN made a declaration to carry out studies and work in alliance with government, communities, and all actors to put an end to violence against women⁹⁷.

⁹¹ Neumann, P., 2017, op cit.

⁹² Montes and Woods, 2008, op cit.

⁹³ Informe de la Costa Caribe nicaraguense RAAN-RAAS, 2012.

⁹⁴ Figueroa and Barbeyto, 2014, op cit.

⁹⁵ Woods, 2015, op cit.

⁹⁶ Montes and Woods, 2008, op cit.

⁹⁷ Consejo Universitario de URACCAN, 2017, "Pronunciamiento público del Consejo Universitario de URACCAN", Siuna, Sesión Ordinaria 01-2017, 4 March.

VIII. BELIEFS AND PRACTICES REGARDING LAND, CLIMATE CHANGE, FORESTRY AND PRODUCTION IN BOSAWÁS AND INDIO MAÍZ

8.1 Cosmvision, Beliefs and Practices regarding Land

“Bosawás was created by Executive Decree 44-91 in 1991 by then-President Violeta Chamorro. With minimal recognition of the indigenous peoples living in Bosawás, the Reserve was originally placed under the jurisdiction of the Institute for Natural Resources, now known as the Nicaraguan Ministry of the Environment and Natural Resources (MARENA), and zoned as a strict conservation area or ‘core zone’. Management of Bosawás was restructured in the mid-1990s [in particular after Bosawás was declared a Biosphere Reserve]. As part of the process, the conservation area of Bosawás was rezoned into six separate indigenous territories, and the indigenous residents in each territory established their territorial property rights and land management plans. By 1997, the indigenous residents had established de facto governing rights over their territories. [... and in 2003], the Nicaraguan government formally recognized their tenure rights by granting them territorial titles to their lands”⁹⁸.

It emerged as such in the early 1990s with the Statement of the Natural reserve of Bosawás. The indigenous communities were not consulted when demarcation and titling took place. The area with indigenous people is called the tangible nucleus, while the intangible core is the Waula Zone, as recognized by the indigenous people. This statement brought a new scenario for community members: although it limited their productive activities, it also validated their territorial claims against the advance of the Mestizo ‘colonizers’ (or colonists) and generated a new relationship with the outside world. This was also due to the entry of national and international cooperation organizations with a conservationist vocation, as well as national and foreign research institutes attracted by the environmental and cultural wealth of the area.

Mestizo farmers have also now settled in the area around the Indio Maiz reserve. Studies show that rural mestizos on the Caribbean Coast deforest at high rates and wood resources from forests for income generation, whereas indigenous communities use multiple resources from forests and largely for subsistence purposes and practice sustainable community forestry⁹⁹. Mestizo deforestation practices endanger the relationship between them and both Afro-descendants and indigenous Rama. The advancement of their settlements will continue to negatively impact the future of indigenous and Afro-descendent communities.

8.1.2 An Intercultural Gender Analysis of Land Acquisition through Titles and Inheritance in the Caribbean Region

When asked who made the decisions regarding land use in their communities, women overwhelmingly stated that men disproportionately made these decisions. Women of all ethnicities were clearly

⁹⁸Hayes, T. M., 2007, *Forest Governance in a Frontier: An analysis of the Dynamic interplay between property rights, land use norms, and agricultural expansion in the Mosquitia Forest Corridor of Honduras and Nicaragua*. Ph.D. dissertation, School of Public and Environmental Affairs and Department of Political Science, Indiana University, p. 256.

⁹⁹ Cordon, M.R. and Toledo, V.M., 2008, “La importancia conservacionista de las comunidades indígenas de la Reserva de Bosawás, Nicaragua: Un modelo de flujos”, *Revista Iberoamericana de Economía Ecológica*, Vol. 7: 43-60.

underrepresented in critical decision making processes in politics, as well as with respect to land rights. In accordance with the gendered division of labor in coast communities, land rights (along with other important political struggles) are still considered to be the purview of men. Currently, however, there are significant changes taking place, as women are increasingly demanding more active roles in this type of work¹⁰⁰. Women's vision for the future of their communities and their practical strategies for inclusion encompass women as direct beneficiaries from natural resources and communal land properties.

Although the 1981 Law of Agrarian Reform pioneered recognition of women's and men's equal rights as beneficiaries, the rate of granting women and men land titles was 10 to 90. This relation improved slightly during the Agrarian Land Titling Program of the 1990s; it then improved considerably after the joint action taken by UNAG and INIM in 1995, which led to a rate of 31% of women with land titles. At a national level the percentage of women who owned land or had another form of land access was 19.9% in the year 2005. In 2015, the Law Creating the Fund for the Purchase of Land with Gender Equity for Rural Women was passed, which stipulates the right to property, equality and the right to decent housing. It is also the official policy of the current Government of Reconciliation and National Unity that in the process of legalizing property, free titling with gender equality is guaranteed¹⁰¹.

One relatively older study suggested that "different traditions, socio-economic structures, cultural values, norms and gender ideologies are all embedded in [women's] ethnicities and serve to either allow and support women's farm production or discourage it"¹⁰². Contrary to this static view of culture, the women in this region espoused a much different view of the intersection between race, gender, and cultural identity and how this connection affects their perceptions of communal land rights.

Culture plays an important role with respect to land access and acquisition in the CR, one that often places women of the different ethnicities at a disadvantage. While land is communally owned by the members of a particular indigenous or Afro-descendant community, certain plots are designated to particular families for their use. In Miskitu tradition, this land is inherited through the mother, but in other indigenous and Afro-descendant cultures it is inherited through the father. In such cases, the rules of inheritance within the families and/or community depend on women's social status, i.e., married, single or widowed. In the family, women enjoy the right of usufruct, not ownership. In Afro-descendant and indigenous cultures in the CR, women have access to land either through their husbands, or if they are mothers with children, single daughters who are young adults, or widows¹⁰³.

8.2 Women's Engagement in Land Disputes and Resolution Mechanisms

Land disputes and resolution mechanisms are strictly dealt with under law 445, at local, regional, or national levels. However, in one case when human rights were not recognized (Awas Tigni), the community took their case to the Inter-American human rights system. Land is generally considered a resource under men's control. But over last fifteen years approximately, there has been a shift towards

¹⁰⁰ Barbee, S., 1997, op cit.; Woods, S. and C. Morris, 2007, op cit.

¹⁰¹ INIDE, 2019, op cit.

¹⁰² Barbee, 1997, op cit.

¹⁰³ Cedeño, K. et al., 2018, *Mujeres Miskitu en sus dinámicas comunitarias. Acceso a la tierra y participación en cuatro comunidades del territorio de Tasba Raya. Bilwi, Puerto Cabezas.*

less gender inequality. Women have been very active in conservation and land tenure throughout demarcation, titling and healing processes carried out for a more harmonious life on the territories.

Women generally did not have a clear idea of what feminism meant and did not generally consider it to be relevant to their participation in land rights work. Nonetheless, they do have a clear gender consciousness, as demonstrated in their calls for more egalitarian gender relations between men and women. For example, women often believe that men and women are on the same level. However, their participation in the land titling process is driven by a feeling of belonging (cultural identity and ownership) and their concern to leave something valuable for their children.

Women are becoming increasingly involved in formal institutions and organizations around this topic. Their participation is visible in various institutions such as communal boards, Creole Communal Government, local universities, Pearl Lagoon territorial board, and other organized groups¹⁰⁴. Creole and Garifuna women were significantly more likely to participate in formal organized structures around the land rights process than indigenous women, despite these women's historical relationship to the land in terms of participation in fishing activities and agricultural production and others¹⁰⁵.

8.3 Farming and Agriculture Practices: Pastures, Land, Forests, Cocoa and Silviculture

In the production systems of indigenous and Afro-descendant communities, the distribution of crops depends largely on the size, distance and shape of the plot. Many women mentioned in interviews that it is difficult for them to clean larger areas of crops. People practice mixed cropping arranged in different ways, according to producers' knowledge transmitted by their ancestors. In the case of planting basic grains or annual crops, they use the same space for a certain period, then leave it fallow and prepare to use another site¹⁰⁶.

This period of rest is for approximately four to seven years. Depending on the recovery of the soil or restoration of fertility, they can return to sow or leave it permanently to become a secondary forest. This is a practice of coexistence with the environment or Mother Earth. Fishing is often a supplemental activity, which allows families to generate a bit more income during the year to buy some of the food they do not produce. The farms in indigenous communities consist of a conglomerate of individual farm systems with indigenous cultivated products that are harvested using ancestral practices. They may also have one to five heads of cattle in addition to other small animals such as pigs, which are used for families' own consumption. These constitute the food base for the families of the communities. All these processes reflect cultural and technical considerations.

Indigenous and Afro-descendant populations have traditionally farmed mostly in small amounts for the main purpose of feeding the local population. The mainstay crops continue to be basic grains: corn, beans, rice, musaceae (e.g., plantains and bananas), and roots and tubers (such as cassava and malanga). Various fruits and vegetables are also produced for local consumption. In addition to the family's own use, a sizeable amount of what a household produces is shared with family, friends and neighbours. Any excess is sold.

¹⁰⁴ CRAAS, 2006, Registro de Comunidades Indígenas y Étnicas; Riverstone, 2004, op cit.

¹⁰⁵ Woods and Morris, 2007, op cit.

¹⁰⁶ IREMADES, 2019, Estudio Sistema de producción en Cuenca Laguna de Perlas. IREMADES-URACCAN, Bluefields. IREMADES-Instituto de recursos Naturales y medio ambiente de URACCAN.

In sharp contrast, Mestizo practices require extensive areas of deforested woodland for agriculture and cattle ranching. These practices increase tensions between Mestizo farmers and indigenous and ethnic groups. With the influx of colonists, and illegal land sale for agricultural production has displaced human populations into the depths of the forest. It has also caused migration to urban areas in search of better incomes. Meanwhile the colonists convert the forests to grassland for cattle ranching.

In Nicaragua, cocoa¹⁰⁷ cultivation is a native agricultural (and silvo-pastoral) practice; the entire territory is suitable for cultivating it. According to the Central Bank of Nicaragua (BCN) there are three varieties of cacao (El forastero, criollo and Trinidad), and they are harvested in various areas of the country:

- RACCS: Nueva Guinea, Bluefields, Kukra Hill and the;
- RACCN: Waslala, Río Coco, and Zona de Las Minas (Siuna, Bonanza and Rosita);
- Departments: Matagalpa, Jinotega and Rivas.

In addition, cocoa is a product that contributes to environmental, social and economic sustainability, at the same time that it increases gross domestic product. This crop has also been classified as having a high economic potential for the North Caribbean and South Caribbean regions, where according to the Association of Producers and Product Exporters of Nicaragua (APPEN), these areas offer great opportunities for their development.

In Nicaragua, low yields from cattle herds predominate. Data from the SCAPH project indicate that this causes imbalances in the entire dairy production chain, which is affected by low productivity (less than 1000 kg of milk/ha/year) due to poor herd management and limited use of technology¹⁰⁸.

Good agricultural practices implemented in sustainable livestock models improve productivity by area for farmers, directly impacting the milk yield per lactation per year and weight gain at weaning. Added to this are the environmental benefits linked to silvopastoral systems. They represent an improvement in income for livestock families. These practices have received high levels of acceptance from farmers across the country over the last 25 years.

Several organizations and projects are working in different parts of Nicaragua using silvo-pastoral conservation practices, according to the ministry of agriculture:

- Improvement of the Organizational and Productive Capacities of Cocoa Producers and Producers in the Mining Triangle (PROCACAO);
- Promotion of the Development and Promotion of Entrepreneurship;
- Support for the Increase of Productivity, Food and Nutritional Security in the Nicaraguan Caribbean Coast (PAIPSAN);
- Support for Adaptation to Changes in Markets and the Effects of Climate Change (NICADAPTA);
- Development of Productive, Agricultural, Fishing and Forestry Systems in Indigenous Territories of the RACCN and RACCS (NICARIBE);
- Support to the Livestock Value Chain in Nicaragua (Bovine);

¹⁰⁷ Nicaraguan Central Bank, 2019, 25 March. <https://bagsa.com.ni/donde-se-cultiva-cacao-en-nicaragua/>
BCN- Banco central de Nicaragua, 25 de Marzo 2019.

¹⁰⁸ SCAPH project - Forrajes que cambian la vida de los ganaderos/Forages that change lives of livestock farmers
<http://www.heifernicaragua.org.ni/publicaciones/forrajes-que-cambian-la-vida-de-los-ganaderosforages-that-change-lives-of-livestock-farmers/>

- Strengthening the Tuno Artisan Women in the Sakalwas community, Mayangna Sauni As territory, North Caribbean Coast of Nicaragua (TUNO);
- Development of the Dairy Sector in the Southwest Cattle Basin of Río San Juan and Ruta Santo Tomás to El Rama (PRODERUL);
- Sustainable Development of the Livelihoods of Rural Families in the Dry Corridor of Nicaragua (NICAVIDA); and
- Support for the Insertion of Small Producers in the Value Chains and Market Access (PROCAVAL).

Also, exchange of good practices have been fostered in the process of making and marketing their products¹⁰⁹. The Ministry of the Family Community, Cooperative and Associative Economy (MEFCCA), promotes community actions such as fairs and exchanges of experiences to rescue of indigenous and traditional food culture.

8.4 Organizing Units for Production

For years on the Caribbean Coast, there were smallholder's formers, agricultural workers who work individually (family) or under collective tenure form (Cooperatives). In the last years, the influx of mestizos landlords created large-scale cattle production units.

MEFCCA place enfases on collective form of production in last few years, however most communities reserve their right to continuo smallholder production in family unit. This sentiment are across region of RAAN and RAAS.

In order to increase participation we suggest that communal and regional authorities develop strategies that increase dialogue and direct collaboration with community members. Hosting meetings in spaces that are easily accessible to the community; sharing important information about the progress of the land preservation process on the radio, in bulletins, through churches and schools; and ensuring that all meetings are publicized well in advance and made open to community members if they wish to attend and participate. This would be a useful way of increasing community women's access to participation and decisions making.

8.5 Beliefs and Practices around Climate Change

Women and men are concerned about climate change and what it holds for the future. They participated actively in the demarcation and land titling process, with the hope of guaranteeing a better future for their children. This hope is vanishing before their eyes due to constant changes in the weather: not so long ago they relied on consistent weather patterns for agricultural production and so many aspects of daily life, but they can no longer predict them. At the same time, some believe that climate change is a message from God because people have been disrespectful to nature, and that they must surrender to God's will.

This is why reforestation and education are most helpful and crucial. Women are especially wanting to increase their participation in demarcation, land titling and other processes. Their motivation for doing

¹⁰⁹ https://www.cepal.org/sites/default/files/nicaragua_em_2019.pdf

so stems from a keen awareness of their vulnerable economic position, which is closely related to their experiences of motherhood and childbearing. Women make a clear connection between their concerns as mothers attempting to provide for their families and the larger future of their communities. The attempt to secure and preserve their communal lands is about more than just making money. Rather, they are also concerned about the maintenance of cultural traditions.

8.6 Current Impact and Future Risks of Climate Change

Today, communities in the Caribbean region are experiencing more frequent and severe flooding that destroys crops. As a result, some members reported that they did not always have access to food because they do not have the ability to cultivate extended areas of land or they do not have a permanent job so they can purchase products that they do not produce. Frequently, flooding has a large negative impact on communities' agricultural production since crops are destroyed and habitat for hunting. Many years ago these activities were much easier, as people carried them out fairly close to the communities. The pace of deforestation continues to increase with the arrival of new mestizo settlers. There are more forest fires because of slash and burn agricultural practices and increased contamination of rivers because of the chemicals they use for farming and logging. One of the negative repercussions of these unsustainable practices is that people now need to travel longer distances to hunt or fish¹¹⁰.

Access to drinking water represents a major threat for people when there are floods. Wells may become contaminated and lead to more serious health conditions. According to law no. 620, people have the right to water for domestic purposes. The state grants concessions, licenses, and authorizations for other water uses. Water rights are generally available for periods of 5–30 years, and the law provides some guidelines for the award of rights. However, water rights under the Law are generally not issued, and water for irrigation is often considered an open access resource. An important way for accessing potable water in rural areas is through wells that can be constructed by the families, government or NGOs.

Women are the caretakers of the family, and access to water is fundamental for people's health and wellbeing. Fetching water often requires more work hours for women and youth in communities and rural areas. These issues greatly concern women because they want to secure a future for their children.

Participants in the community consultations held in September 2019 for the Bio-CLIMA also spoke to how climate change has affected the region in multiple ways, including the disappearance of flora and fauna used for food, traditional medicine and other purposes¹¹¹.

A member of the Rama communal and territorial board explained the damage done in the last years to the Biosphere Reserve of Southeast Nicaragua (Indio Maiz). This area is home to 526 species of birds and it is also known as the kingdom of the jaguar (*Panthera onca*). However, nowadays cows appear to be

¹¹⁰ Jose Adan Silva, Nicaragua's South Caribbean Coast Improves Readiness For Climate Change, IPS- Inter Press Service, August 25, 2020. <https://www.google.com/search?client=firefox-b-d&q=nicaragua%e2%80%99s+south+caribbean+coast+improves+readiness+for+climate+change+by+jos%c3%a9+a+d%c3%a1n+silva&spell=1&sa=x&ved=2ahukewjmlohvnlfrahxi1vkkhavhpciqbsgaegqicxal&biw=1366&bih=654>

¹¹¹ MARENA, 2019a; MARENA, 2019b; MARENA, 2019c, op cit.

more common than jaguars¹¹². According to data from the Ministry of the Environment and Natural Resources (MARENA) this area has the equivalent of 10 percent of the planet's species. This is despite the agricultural pressure of the colonists and forest degradation over the last approximately 25 years.

Overall, this section demonstrates that building on sustainable indigenous practices is an effective strategy for conservation and climate change mitigation. These include: only cutting trees needed for survival; small-scale farming with no agrochemicals; no burning of areas; specific zones/areas for farming over certain periods of time, followed by periods of recuperation; respect for nature indaily life; understanding biodiversity as essential to life and survival; and considering deforestation as an offence to God's gift of life. Afro-descendants of the CR share these beliefs. At the same time, these experiences are complex for women. On the one hand, they have suffered greatly because of the lack of biodiversity since it has made their responsibilities and cultural practices more difficult. They also suffered different forms of gender and ethnic discrimination and inequality. On the other hand, they are (sometimes) recognized as leaders because of the vital roles they play in defending communal land rights and continuing ancestral conservation practices.

IX. PROJECT APPROACH AND ELEMENTS THAT CONTRIBUTE TO INTERCULTURAL GENDER TRANSFORMATIVE CHANGE

9.1 Concepts and Principles

9.1.1 Intercultural Gender Transformative Approach

"Interculturality" means 'relationship between cultures', and refers to making the best use of each culture, so there will be reciprocity, knowledge, appreciation, understanding, interaction, participation, horizontality, respect and solidarity with other cultures¹¹³.

A *gender transformative approach* seeks to contribute to increasing women's and girls' empowerment in various areas (economic, political, social, etc.) by breaking down the barriers that maintain and reproduce inequalities. There are three intertwined dimensions of change that will be applied in the various project components.

- Individual capacities (knowledge, attitudes and skills) that emphasize agency and actions that challenge gender norms and inequality;
- Social relations at the household, community, enterprise (etc.) and focus on norms embedded at those levels; and
- Social structures and institutional rules and practices that (re)produce gender inequality¹¹⁴.

¹¹² Unpublished fieldwork carried out in the Rama-Kriol territory (interview with a forest ranger and members of the territorial government members).

¹¹³ Universidad de las Regiones Autónomas de la Costa Caribe Nicaragüense (URACCAN), 2008, "Guía de investigación intercultural de la URACCAN", Bilwi: URACCAN.

The intercultural gender transformative approach will contribute to increasing gender equality and women's empowerment and autonomy at all three levels as relevant throughout the project, which will be intertwined with promoting reciprocity, knowledge sharing, and interactions across the cultures and ethnicities of the people in the CR.

9.1.2 Equity and Equitable Participation

Equity refers to taking affirmative action to reduce the effects of gender inequalities. Laws and public policy designed to promote women's full involvement in decision-making and specialized services that provide redress for violence against women are two examples of equity measures.

Equitable participation refers to equal numbers of women and men, where the proportions are also distributed by age group (youth, adult) and by ethnicity. The intention is to contribute to cross-cutting gender equality across age and ethnicity.

The operations manual and the gender specialist, in consultation with the Gender Secretariats of the regional governments (RACCN and RACCS) will further define the percentages based on the needs, interests, priorities and existing potentials of women within specific communities.

9.1.3 Building on Indigenous Production Practices for Sustainability

Indigenous production practices in the Caribbean macro-region have always relied on mixed cropping, also known as intercropping, for sustainability. This is a system of cropping in which farmers sow more than two crops at the same time. By planting multiple crops, farmers can maximize land use while reducing the risks associated with single crop failure and soil degradation. Intercropping creates biodiversity, which attracts a variety of beneficial and predatory insects to minimize pests and can also improve soil properties in general. While the farmers also practice monoculture, they do so according to the traditional practice of letting the land rest for a few years, after planting the same crops for four consecutive years. During that period of time the soil would recuperate.

By increasing plant biodiversity systems in local communities, farming systems are more resilient to climate variability and extreme weather events, and are more resilient to pests and diseases. These practices are integral to promoting and providing many advantages such as better soil quality, less soil erosion, and more stable yields when compared to monoculture systems.

9.1.4 Increasing Intercultural Gender Equality, Women as Decision-Makers and Non-Violent Masculinities to Improve Resilience and Sustainable Human Development Outcomes

In striving for reforestation and strengthening resilience at the community level, the Bio-CLIMA project will take concrete measures to break down barriers to women's participation and decision-making at all levels. Gender is an organizing principle in almost every farming system, with women and men

¹¹⁴ Wong, F. and Pyburn, R. 2019, "Reflections on Gender Transformative Approaches in Agriculture: The Promise and Cautionary Tales," CGIAR webinar. <https://www.slideshare.net/CGIAR/gta-prez-meeting-cgiar-webinar-june-2019-final>

frequently taking on distinct responsibilities for particular tasks, crops and livestock within a farming system. Women (and their sons and/or daughters) often work alongside men in many jobs in rural areas, from growing seedlings to road construction, as discussed in section 6.5 above.

Contributing to women's empowerment as decision-makers in all areas of their lives alongside men is challenging, yet it is a fundamental condition for achieving poverty reduction and sustainability. Transforming gender relations in this project and across indigenous, Afro-descendant and non-indigenous communities includes building on existing collaborative gender norms and practices at the household and community levels¹¹⁵ and implementing complementary strategies through this project to improve them.

The project will contribute to intercultural gender equality through promoting exchanges among women and men from different ethnicities, in both mixed-gender and separate moments for reflection. These findings will be used to decrease both gender and ethnic forms of discrimination in terms of everyday practices, as well as those that may unintentionally exist in legal and normative frameworks or other structures.

Promoting non-violent, equality-promoting masculinities at the household, community and government levels will contribute to breaking down one of the most important barriers to gender, ethnic and other inequalities. Effective partnerships between women and men based on more equal gender relations is likely to result in higher productivity, increased sources of and amount of household income, as well as other gains.

The project outputs and activities that will contribute to meeting these goals include: equitable numbers of women (across age and ethnicity) as direct and indirect beneficiaries; direct remuneration for women; capacity building for women and men, both project personnel as well as producers and organization/community members; technical accompaniment through extension workers; public awareness; revisions to the legal and normative framework; and monitoring and reporting on formal commitments (see GAP), among others.

Through these strategies, women and men can contribute equitably to making sound economic and political decisions on an equal basis, in order to achieve gender equality, women's empowerment and strengthened resilience, biodiversity, and sustainability.

9.2 Project Components, Outputs and Activities

Land use and management planning for landscape restoration, forest conservation and climate-resilient production, whether at the level of the household, cooperative, producer organization or indigenous community, will ensure that women are actively involved in decision-making, especially those from women-headed households, and that these investments and resources make a measurable contribution to reducing inequalities through the effective implementation of gender action plans.

Indigenous and non-indigenous women will also benefit equitably from the project's facilitation of access to high-value markets, whether in women-only or mixed gender cooperatives or producer

¹¹⁵ See Evans et al. (2016) for a complex discussion of gender equality, women's empowerment and decision-making at the household and community levels in some indigenous communities in the RACCN.

organizations and indigenous communities. Measures to ensure equitable participation of women of the different ethnicities involved in the project will include providing training, exchanges and other activities in different languages as well as childcare.

Analysis and reforms to the legal and normative framework, including the management plans of BOSAWAS and Indio Maíz, will be updated to ensure equitable participatory processes for adult and young women and men of the different ethnicities and will ensure the protection and promotion of the knowledge, needs, interests, rights, practices, priorities and potentials of the communities and settlements intercultural gender equality and women's empowerment.

Investment opportunities made possible through public-private dialogue and cooperation, which also cover the three trust funds set up by the project, will prioritize proposals that ensure sustainable practices around the land, forestry and production, empower women economically and in decision making roles, and involve men and women from indigenous and non-indigenous groups in a majority of the proposals funded as well as in the governance and oversight mechanisms. Dialogue and written materials will be made available in local languages.

Strengthening of territorial governments and local producer organizations will enable increased women's decision-making authority and power. Organizational, legal, administrative, financial and other supports will also contain measures that promote young and adult women's and men's knowledge, interests, practices and priorities of the respective communities and settlements.

Exchanges and workshops among indigenous, Afro-descendant and non-indigenous women, as well as male and female youth, within particular governments and producer organizations as well as at the regional level will be carried out for planning, implementation and monitoring at regular intervals throughout the project. These will promote sharing of knowledge and practices as well as build leadership skills.

The forestry information system and similar mechanisms will build on documenting distinctive practices and gathering socioeconomic data that will measure change in intercultural gender equality. All alerts and bulletins will be accessible to relevant communities and communicated in local languages.

9.2.1 Enabling Women's Participation in Project Activities

A number of measures will be furnished by Bio-CLIMA to enable women's participation in project activities. At a minimum these will consist of:

- (a) sessions held at times and locations that are safe and convenient given women's diverse activities;
- (b) childcare provided during capacity building sessions;
- (c) holding events in local languages or providing translation/interpretation; and
- (d) training and other materials mainstream gender by, in part, reflecting women's needs, interests, priorities and potentials.

Baseline will collect data on how many women need what kind of provisions, then corresponding indicators will be updated throughout the GAP to reflect those figures.

9.2.2 Capacity Building, Technical Accompaniment and Extension Services

Various elements of the capacity building component will contribute to intercultural gender equality.

- (a) All programme staff, including extension workers and promoters will receive training in the following topics (i) mainstreaming intercultural gender equality in relevant technical areas, for example, production, conservation, business plans, etc.; (ii) a specialized component on intercultural gender equality that will address violence against women, care economy, non-violent and equality-promoting masculinities, etc. (see (h) in this sub-section). These topics are directly linked to the project's intercultural gender equality results and indicators.
- (b) All producers and members of organizations and communities will receive the same training as program staff in an adapted format using popular methodologies.
- (c) All those hired to provide capacity building (including personnel) will be ethnic- and gender-sensitive. Priority placed on hiring will be indigenous or Afro-descendant women and men from the Caribbean Region (CR) who speak Spanish and at least one local language.
- (d) Training for project participants and beneficiaries will be provided in their own languages or full translation/interpretation will be available.
- (e) Female and male indigenous and Afro-descendant elders will participate in some capacity-building sessions across ethnicities. They will share their ancestral knowledge to improve intercultural awareness of environmental, conservation and agricultural practices.
- (f) The intercultural gender equality training stream will be conducted with the staff member, producer and other direct beneficiaries along with his/her spouse (or adult child if no spouse)¹¹⁶.
- (g) All technical accompaniment and extension services will involve a component on what kind of production, conservation, and related techniques could improve women's lives and why. This data on the strengths and constraints that women face in each community will be gathered in regularly scheduled meetings to discuss gender and intercultural concerns and will be documented to ensure they are redressed and followed up on in business plans at the household, community, cooperative or enterprise levels; training for conservation and production; legal and normative frameworks; organizational/institutional strengthening and other components or outputs where relevant.
- (h) The intercultural gender equality capacity building stream will break down barriers to equality and empowerment by addressing certain key topics in modules. The modules will be part of a program implemented during the length of the capacity building component. These topics will also be reflected in and coordinated with the public awareness component. The topics to be included include: (i) decision-making at the family/household level, enterprise/organization, community, TGI, municipal and regional governments; (ii) equitable participation in the care economy

¹¹⁶ This builds on the successful experience of the PRODUMER, sesame seed value chain project. See PRODUMER – MEDA, Área de Género, 2009, “Guía Metodológica para talleres que integran la perspectiva de género”, Managua: MEDA.

(including time use); (iii) non-violent and equality-promoting masculinities; (iv) access and control of resources, including spending and distribution of income; (v) violence against women; and positive intercultural gender norms.

- (i) The public communication and education strategies will emphasize indigenous knowledge, needs, rights and priorities regarding conserving and restoring biodiversity and will promote intercultural gender equality. The strategies will be plurilingual and will be developed using participatory methods.

9.2.3 Public Awareness Strategy and Public Education

The public awareness strategy and environmental education sub-component will promote gender equality, women's empowerment and non-violent masculinities. It will do so It will address the same topics outlined in section 9.2.2 (h). This output (3.3.1) will also contribute to reaching the project's gender equality results and indicators (see section 9.8).

It will emphasize indigenous knowledge, needs and rights regarding conserving and restoring biodiversity and will promote intercultural gender equality. The strategy will be plurilingual and will be developed using participatory methods. The contents will take into account teachings by male and female, indigenous and Afro-descendant elders, as well as intercultural gender experts who are familiar with CR.

9.3 Gender Action Plans

The project's Gender Action Plan (GAP, see section X) is based on:

- (a) an analysis of root causes of intercultural gender inequalities between men and women of different ages and ethnicities in the Caribbean region regarding their knowledge, individual and collective rights, roles, priorities and environmental vulnerabilities, and at interpersonal, organizational, enterprise, institutional and structural levels; and
- (b) proposals to decreased gender and ethnic inequalities and discrimination and improve intercultural gender equality.

The project GAP will be executed in all components in the design, implementation, planning, monitoring and evaluation phases. The total budget for the GAP is USD 13,550,668, which is just under 10% of the project's overall budget.

To facilitate it being put into practice, all business plans and other products of component one will measurably contribute to the project's gender equality results and indicators. All land use management plans (LUMPs) for small and medium producers and respective business plans, as well as Territorial Development Plans (TDPs), Sustainable Community Enterprises (SCE), Community Forest Management (CFM) and Community Forest Restoration (CFR) sub-projects will require either a Gender Equality

Component (for LUMPs) or a mini GAP (all others) that conforms with the approach to intercultural gender equality used in the project¹¹⁷.

The gender equality expert will guide this work overall; it will be implemented by local and regional technical personal and extension workers who will also provide follow-up on a regular basis. They will also gather data to be used for monitoring implementation.

Their contents will be:

- (a) Gender analysis: taken from the baseline and initial data gathered from training, workshops and meetings related to household and community relations.
- (b) Results: 1-2 results will be selected from a choice developed at the beginning of the project and included in the operations manual (e.g., increased equality in care activities or decision-making regarding production and conservation activities).
- (c) Indicators: 2-3 indicators for LUMPs OR 5 indicators for other plans; will be selected from a choice developed at the beginning of the project and included in the operations manual. These will feed into the overall monitoring system. All indicators will be measured as party of the monitoring system with all beneficiaries and participants, to feed into the project's impact and outcome statements.
- (d) Strategies and activities: A very brief mention of the strategies and activities to be undertaken. Details people involved disaggregated by gender, age and ethnicity.
- (e) Resources: What financial, human, material and time resources will be dedicated to implementing the GAP.
- (f) Responsibility: Who will be responsible for implementing the GAP.

The content of the GAPs will be developed using participatory processes among young and adult men and women. Beneficiaries will select at the household (LUMP), enterprise, territorial, etc. level which results and indicators they will strive to achieve to motivate their initiative and encourage ownership. The GAPs may be used as an instrument by young and adult women and young men to promote change. These GAPs will contribute to the project reaching its gender equality indicators, including increased resilience by ensuring implementation at the project's most basic level. Even though beneficiaries will decide which results and indicators they will achieve, for the effects of project monitoring and reporting, all indicators will be measured.

The project's operations manual will provide more details.

9.4 An Integral Approach to Violence against Women

This section outlines the project's integral approach to violence against women, in keeping with the high rates of various forms of violence against women in the Nicaraguan Caribbean macro-region; the state's international and regional commitments to preventing, punishing and eradicating violence against women; and the priority placed on reducing and responding to violence against women in the Bio-CLIMA project¹¹⁸.

¹¹⁷ The MARENA Project called PIMCHAS, "Proyecto Integral de Manejo de Cuencas Hidrográficas, Agua y Saneamiento", took a similar approach with the sub-projects implemented at the household level.

¹¹⁸ The Environmental and Social Management Framework (ESMF) states that "finding solutions for reducing and responding to gender-based violence is a critical development imperative, with implications for productivity,

The project will undertake to apply an integral approach to preventing and responding to violence in the project footprint area. The following table indicates the strategies that will be used and in what project component they will be addressed.

Strategy	Project Component and Outputs
Economic empowerment activities for women	Component 1: Outputs 1.1.1, 1.2.1, 1.2.2, 1.2.3
Transformative gender and masculinity training	Component 3: Outputs 3.1.1, 3.1.2
Training strategy on community mental health services	Component 3: Outputs 3.1.1, 3.1.2
Communications strategy	Component 3: Output 3.3.1
Grievance and redress mechanism (GRM or MRyQ)	Environmental and Social Management Framework (ESMF)

Grievance and Redress Mechanism:

The ESMF states that the Grievance and Redress Mechanism (GRM or MRyQ) for gender-based violence will (i) set up and implement the MRyQ with potential victims; (2) remit claimants to gender-based violence service providers and (3) resolve the complaint record¹¹⁹. It will also need to create a culture where women feel empowered and safe to lodge a complaint, which can be built through the other, complementary strategies.

The GRM is highly relevant and appropriate, as development projects from roads to ports, as well as similar interventions, built in the Caribbean Region (CR) have led both directly and indirectly to increased violence against women, girls and boys. Furthermore, access to specialized services is at best extremely limited in the project implementation areas.

For this reason, an expert in gender-based violence with expertise in the CR will be hired to set up the MRyQ and develop the strategies outlined in table 17 in the project’s operations manual.

9.5 Beneficiaries

Equitable numbers of women and men will be direct and indirect beneficiaries of the project. The exact numbers will be calculated based on the baseline conducted in the project implementation area. Beneficiaries are located in the two focus areas: BOSAWAS and Indio Maíz reserve and Biospheres.

Women and men from indigenous (Miskitu, Mayagna, Rama), Afro-descendant (Creole) and non-indigenous (Mestizo) ethnicities will benefit from the project.

To adequately report on how beneficiaries have been included and benefitted from the project, all monitoring and reporting data will be disaggregated by gender, age and ethnicity.

agency and the wellbeing of persons and communities”. Also, table 17 on page 138 of the ESMF outlines both the risks of gender-based violence and the mitigation strategies to be undertaken, particularly the implementation of a complaint mechanism (Mecanismo de Reclamos y Quejas, MRyQ). This section provides an overview of how that will be implemented through the Gender Action Plan (GAP). See MARENA, 2020, Bio-CLIMA Marco de Gestión Ambiental y Social (ESMF), pp. 137, 138.

¹¹⁹ MARENA, 2020, p. 138, table 17.

A special emphasis will be placed through the project on women who are head of households being incorporated and benefitting from production, access to high-value markets and other project outputs.

9.6 Hiring and Procurement of Consultant Services

One of the ways the project will promote intercultural gender equality will be by placing a priority on hiring women as well as indigenous and Afro-descendant technical and professional staff/personnel or consultants who are from the CR. This will be measured throughout the project.

- 50% of technical and professional staff as well as consultants will be women
- 30% of technicians hired will be indigenous or Afro-descendant from the Caribbean Region (CR) who speak Spanish and at least one local language, both men and women
- All will receive equal pay for work of equal value
- Affirmative action hiring policies will be used. For example, if there are equally qualified candidates, executing entities and implementing partners will select a woman instead of a man, and an indigenous or Afro-descendant person instead of a mestizo.
- All technical and professional staff and consultants must practice their respect for women's right to live without violence. 100% of personnel and consultants against whom a complaint is lodged (MRyQ) and verified will be fired and not re-hired.

9.7 Role and Capacity of Project Actors to Address Gender Issues

MARENA's gender policy will be implemented. In November 2019, MARENA held a national level workshop on the gender perspective and environmental management for its staff and management.¹²⁰ Among other issues, it focused on how women's traditional and innovative economic activities care for Mother Earth as they reduce pressure on ecosystems and contribute to the family and local economic development.

The hiring policy for project staff will prioritize indigenous and Afro-descendant candidates and women from the region. If possible, they will speak at least two local languages.

All project personnel, technical personnel, extension workers and promoters at the national, regional and local levels will receive capacity building as outlined in section 9.2.2.

Technical staff will mainstream gender into their capacity building and extension work. These will focus on addressing how to implement the technical components to improve women's lives.

¹²⁰ MARENA, 2019, "MARENA destaca roll de las mujeres". <http://www.marena.gob.ni/2019/11/21/marena-destaca-roll-de-las-mujeres-la-gestion-ambiental-y-desarrollo-del-pais/>

9.8 Monitoring, Evaluation and Knowledge Management

The project monitoring system will be designed to measure for changes in the prioritized elements of gender equality and women’s empowerment. It will reflect a gender transformative approach¹²¹.

- (a) All indicators will be disaggregated and cross-tabulated for gender, age and ethnicity;
- (b) Monitoring will use quantitative and qualitative methods;
- (c) The main topics to be measured are: (i) women’s and men’s decision-making at the family/household level, enterprise/organization, community, TGI, municipal and regional governments; (ii) women’s and men’s more equitable participation in the care economy (including time use); (iii) non-violent and equality-promoting masculinities; (iv) access and control of resources, including spending and distribution of income; (v) awareness of positive intercultural gender and conservation norms; (vi) mainstreaming of gender across technical components: capacity building; legal and normative framework, and public awareness;

Main indicators to measures intercultural gender transformation:

• 25% increase in women’s household decision-making regarding land use/management, conservation and production, disaggregated by age and ethnicity;
• 25% increase in women participating in community organizations, enterprises, cooperatives or government institutions;
• 25% increase in women and men report more equitable time use for productive labour and care economy;
• 25% increase in men’s positive attitudes regarding women’s right to live without violence and paternal responsibility;
• 25% increase in women’s access and control of resources;
• 25% increase in shared household decision-making on income distribution;
• 25% increase in women’s and men’s awareness of positive intercultural gender and conservation norms among direct beneficiaries;
• 25% increase in women’s and men’s understanding of new legal and normative framework and how to use it;
• 25% increase in women’s and men’s awareness of positive intercultural gender and conservation norms among general public
• 25% increase of young and adult men who have positive attitudes towards gender equality at the household and community levels
• 25% increase of young and adult men and women who report improved intercultural gender equality at household and/or community level in at least three indicators ¹²² , disaggregated by age, gender and ethnicity

¹²¹ Hillenbrand, E. et al., 2017, “Measuring Gender-Transformative Change: A Review of the Literature”, American Evaluation Association, Washington, DC: November 9.

¹²² These indicators are specified in output statement 2 above.

Note that prevalence of violence against women will not be monitored given the strict ethical protocols that need to be implemented in such studies to avoid doing harm or gathering information that is not rigorous.

Analysis of quantitative and qualitative data will include forums of women producers, beneficiaries and participants, as well as regional academics and experts. A summary of intercultural gender results and their collective analysis will be made publicly available.

9.9 Project Governance, Institutional Arrangements and Accountability for Gender Results

The project management unit (PMU) (as part of the CABI country office) will be responsible for implementation of the activities and outputs. The monitoring specialist will be responsible for measuring the achievement of the project impact, outcome and output statements.

The title-holders of the Women's Secretariat of the RACCS and RACCN will be members of the project steering committee.

X. BIO-CLIMA - GENDER ACTION PLAN

The Gender Action Plan (GAP) is based on the analysis of root causes of intercultural gender inequalities between men and women of different ages and ethnicities in the Caribbean region regarding their knowledge, individual and collective rights, roles, priorities and environmental vulnerabilities, and at interpersonal, organizational, enterprise, institutional and structural levels. This was developed in sections III to VII of the Gender Assessment. Further explanation of how to implement the GAP can be found in section IX of the Gender Assessment and in the operations manual.

For the most part the indicators and targets are designed by output. In other words, all the indicators are relevant for all the activities of a particular output, unless indicated otherwise.

Activities	Indicators and Targets	Timeline	Responsibilities	Budget (in USD)	Assumption/ Explanation
<p>Impact Statement: A1.0 Improved resilience and enhanced livelihoods of the most vulnerable people, communities and regions</p>	<p>A.1.2 Number of males and females benefiting from the adoption of diversified, climate resilient livelihood options (including fisheries, agriculture, tourism, etc.) <i>Baseline: Women (F) 0; Men (M) 0</i> <i>Targets: Cocoa Agroforestry: F 11,284; M 10,842; Sust. Silvopastures: F 6,193; M 5,950; CTNPFs: F 3,076; M 2,956; SCEs: F 4,838; M 4,648; CFM and CRF: F 669; M 642</i></p>	By end of Project Year 7	MARENA & MHCP as Executing Entities), Project Management Unit (PMU)	Included in regular budget	
<p>Outcome Statement: A7.0 Strengthened adaptive capacity and reduced exposure to climate risks</p>	<p>A7.1 Use by vulnerable households, communities, businesses and public-sector services of Fund-supported tools instruments, strategies and activities to respond to climate change and variability <i>Baseline: TBD (based on project baseline)</i> <i>Targets:</i></p> <ul style="list-style-type: none"> 50% increase in supported producer organizations and indigenous community enterprises that access high value markets 50% increase in persons' access to high value markets and control of income, disaggregated by gender, age and ethnicity 	By end of Project Year 7	MARENA & MHCP as Executing Entities), Project Management Unit (PMU)	Included in regular budget	
<p>Output 1 Statement: Beneficiary family income from deforestation free, climate adapted sustainable land use forms in the project region has been increased.</p>	<p>Yearly monetary and non-monetary benefit of beneficiary families (indigenous and non-indigenous), disaggregated by gender, age and ethnicity <i>Baseline: TBD (based on project baseline)</i> <i>Target: 30% increase F and M</i></p>	By end of Project Year 7	MARENA & MHCP as Executing Entities), Project Management Unit (PMU)	Included in regular budget	
<p>Output 2 Statement: Intercultural gender equality and</p>	<p>% of women participating, deciding on and benefitting equitably from: family income and spending, climate-</p>	By end of Project Year	MARENA & MHCP as	Included in regular	

Activities	Indicators and Targets	Timeline	Responsibilities	Budget (in USD)	Assumption/ Explanation
participation, decision making of young and adult indigenous, afro descendant and non-indigenous women have increased.	<p>resilient production, strengthened governance mechanisms and capacity development; disaggregated by gender, age & ethnicity</p> <p><i>Baseline: TBD (based on project baseline)</i></p> <p><i>Targets: 25% increase women (F) and men (M)</i></p> <ul style="list-style-type: none"> • 25% increase in women's household decision-making regarding land use/management, conservation and production, disaggregated by age and ethnicity; • 25% increase in women participating in community organizations, enterprises, cooperatives or government institutions; • 25% increase in women and men report more equitable time use for productive labor and care economy; • 25% increase in men's positive attitudes regarding women's right to live without violence and paternal responsibility; • 25% increase in women's access and control of resources; • 25% increase in shared household decision-making on income distribution; • 25% increase in women's and men's awareness of positive intercultural gender and conservation norms among direct beneficiaries; • 25% increase in women's and men's understanding of new legal and normative framework and how to use it; • 25% increase in women's and men's awareness of positive intercultural gender and conservation norms among general public 	7	Executing Entities), Project Management Unit (PMU)	budget	
COMPONENT 1: CONSERVING AND PRODUCING FOR LIFE				7,171,189	
<p>Output 1.1.1: Land use/management plans formulated; and restoration/conservation agreements signed/formalized with beneficiaries</p> <p>1.1.1.1 Assist small producers to formulate Land Use-</p>	<p>Percentage of women and men beneficiaries, disaggregated by age, gender and ethnicity</p> <p><i>Baseline: 0%</i></p> <p><i>Target: Minimum 30% of women beneficiaries per community, priority given to include and benefit women-headed households</i></p> <p>Proportion of people hired who are women and from</p>	<p>By end of project year 2</p> <p>By end of</p>	<p>MARENA & MHCP as Executing Entities), Project Management Unit (PMU)</p>	389,840	<ul style="list-style-type: none"> ▪ 50% of technical, professional staff and consultants are women; ▪ Semi-annual meetings; ▪ Mainstreaming of gender and

Activities	Indicators and Targets	Timeline	Responsibilities	Budget (in USD)	Assumption/ Explanation
<p>1.1.1.2 Management Plans (LUMPs) with business plans (BPs). Assist indigenous communities to formulate Territorial Development Plans (TDPs) including business plans (BPs).</p> <p>1.1.1.3 Assist middle sized producers to formulate Land Use-Management Plans (LUMPs) with business plans (BPs).</p>	<p>Caribbean region (CR) among technical positions proposed <i>Baseline: 0%</i> <i>Targets:</i></p> <ul style="list-style-type: none"> • 50% of people hired are women • 30% (M/F) of technicians hired are indigenous or Afro-descendant from the Caribbean Region (CR) who speak Spanish and at least one local language • 100% of personnel and consultants against whom a complaint is lodged (MRyQ) and verified will be fired and not re-hired 	<p>project year 2</p>			<p>intercultural perspective in all trainings and related materials;</p> <ul style="list-style-type: none"> ▪ Participatory development of Gender Equality Components (1.1.1.1 and 1.1.1.3) and Gender Action Plans (1.1.1.2); ▪ Childcare and other arrangements; and ▪ Follow-up to Gender Equality Components and Gender Action Plans
<p>1.1.1.4 Facilitate celebration and formalization of landscape restoration and forest conservation agreements.</p>	<p>Semi-annual meetings to exchange intercultural gender concerns regarding LAND USE/MANAGEMENT, particularly knowledge, practices, rights, interests, needs, priorities and existing potentials <i>Baseline: 0%</i> <i>Targets:</i></p> <ul style="list-style-type: none"> • 30% women and men direct beneficiaries of each territory participate, of which 20% male and female youth, disaggregated by gender, age and ethnicity • 100% of meetings use popular methodology • 100% of meetings have mixed gender and gender-separate reflection time, including discussion of Gender Equality Components and GAPS • 100% of meetings are documented and contents used in corresponding LUMPs, TDPs, BPs and Gender Equality Components and Gender Action Plans 	<p>By end of project year 2</p>			
	<p>Gender and intercultural perspectives mainstreamed into all training in this output, including materials <i>Baseline: 0%</i> <i>Targets:</i></p> <ul style="list-style-type: none"> • 25% of training time devoted to what kind of agricultural production, LUMPs, TDPs, BPs (etc.) could improve women's lives and why • 80% of materials mainstream gender and intercultural perspectives drawing on traditional sustainable environmental knowledge and practices 	<p>By end of project year 2</p>			

Activities	Indicators and Targets	Timeline	Responsibilities	Budget (in USD)	Assumption/Explanation
	<ul style="list-style-type: none"> 80% of training materials take into account women's interests, needs, rights and priorities 100% of training sessions are translated or held in local languages 15% of training time provided by local male and female indigenous or Afro-descendant elders¹²³ to share conservation practices 				
	Percentage of women and men who receive training <i>Baseline: 0%</i> <i>Targets:</i> <ul style="list-style-type: none"> 50% women and men per community, including 20% male and female youth¹²⁴, priority given to include and benefit women-headed households 40% of families have childcare and other necessary arrangements provided by project¹²⁵ 	By end of project year 2			
	Percentage of Territorial Development Plans (TDPs) and business plans (BPs) have intercultural gender perspective and developed with women's participation (activity 1.1.1.2) <i>Baseline: 0%</i> <i>Targets:</i> <ul style="list-style-type: none"> 100% of TDPs and BPs address intercultural gender concerns regarding land use/management, particularly knowledge, practices, rights, interests, needs, priorities and existing potentials 50% of decision makers of TDPs and BPs are women 	By end of project year 2			

¹²³Intercultural practice in the Caribbean Region (CR) consists of including local indigenous and Afro-descendant female and male elders, called *sabias* and *sabios*, to the training sessions to share sustainable traditional practices with indigenous and non-indigenous farmers.

¹²⁴Youth refers to people 15 – 29 years old.

¹²⁵ Baseline will collect data on how many families, especially women-headed households, need childcare and other provisions (see Gender Assessment section 9.2.1, e.g., childcare), which will be used to calculate a figure. Then the indicator will be updated throughout the GAP to reflect that calculation.

Activities	Indicators and Targets	Timeline	Responsibilities	Budget (in USD)	Assumption/ Explanation
	<p>Evidence of LUMPs and BPs with Gender Equality Components that conforms with the overall project GAP, and developed with women's and men's participation (activities 1.1.1.1 and 1.1.1.3)</p> <p><i>Baseline: 0%</i></p> <p><i>Targets:</i></p> <ul style="list-style-type: none"> • 100% of LUMPs and BPs have Gender Equality components approved • 100% of gender equality components are designed using participatory process • 100% of gender equality components • 100% include at least 3 indicators to redress gender inequalities • 50% of decision makers on LUMPs and BPs, including gender equality components, are women (unless women-only producers) 	By end of project year 2			
	<p>Evidence of TDPs and BPs with gender action plans (GAP) that conform with the overall project GAP, and developed with women's and men's participation (activities 1.1.1.2)</p> <p><i>Baseline: 0%</i></p> <p><i>Targets:</i></p> <ul style="list-style-type: none"> • 100% of TDPs and BPs have GAPs approved • 100% include at least 5 indicators to redress gender inequalities • 50% of decision makers on TDPs and BPs, including gender equality components, are women 	By end of project year 2			
	<p>Gender Equality Components and GAPs are implemented</p> <p><i>Baseline: 0%</i></p> <p><i>Targets:</i></p> <ul style="list-style-type: none"> • 25% increase of young and adult men who have positive attitudes towards gender equality at the household and community levels • 25% increase of young and adult men and women who report improved intercultural gender equality 	By end of project year 7			

Activities	Indicators and Targets	Timeline	Responsibilities	Budget (in USD)	Assumption/ Explanation
	<p>at household and/or community level in at least three indicators¹²⁶, disaggregated by age, gender and ethnicity</p> <ul style="list-style-type: none"> 100% of gender equality components and GAPs are monitored using participatory methods and reported on annually 				
<p>Output 1.2.1 Degraded pasture- and rangeland restored</p> <p>1.2.1.1 Small producers (farm size < 35 ha) restore degraded pastures into climate resilient, biodiverse sustainable silvo-pastoral systems</p> <p>1.2.1.2 Middle sized producers (farm size > 35 ha) restore degraded pastures into biodiverse silvo-pastoral systems</p> <p>1.2.1.3 Producers restore degraded pastures into biodiverse cocoa agroforest systems</p> <p>1.2.1.4 Reforest degraded land on slopes (> 50%) into biodiverse, Close to Nature Planted Forests (CTNPFs)</p>	<p>Percentage of women and men beneficiaries, disaggregated by age, gender and ethnicity</p> <p><i>Baseline: 0%</i></p> <p><i>Target: 50% women and 50% men, including 20% male and female youth, priority given to include and benefit women-headed households</i></p>	By end of project year 7	MARENA & MHCP as Executing Entities), Project Management Unit (PMU)	1,170,693	<ul style="list-style-type: none"> 50% of technical, professional staff and consultants are women; Semi-annual meetings; Mainstreaming of gender and intercultural perspective in all trainings and related materials; Childcare and other arrangements provided; and Follow-up to Gender Equality Components and Gender Action Plans
	<p>Proportion of technicians who are women and from Caribbean region (CR) among technical positions proposed</p> <p><i>Baseline: 0%</i></p> <p><i>Targets:</i></p> <ul style="list-style-type: none"> 50% of technicians are women 30% (M/F) of technicians hired are indigenous or Afro-descendant from the Caribbean Region (CR) who speak Spanish and at least one local language 100% of personnel and consultants against whom a complaint is lodged (MRyQ) and verified will be fired and not re-hired 	By end of project year 7			
	<p>Semi-annual meetings to exchange intercultural gender concerns regarding biodiverse silvo-pastoral systems, cocoa agroforest systems and CTNPFs, particularly knowledge, practices, rights, interests, needs, priorities and existing potentials</p> <p><i>Baseline: 0%</i></p> <p><i>Targets:</i></p> <ul style="list-style-type: none"> 30% women and men beneficiaries by territory, of which 20% male and female youth, disaggregated by gender, age and ethnicity; priority on including and benefitting women-headed households 100% of meetings use popular methodology 100% of meetings have mixed gender and gender- 	By end of project year 7			

¹²⁶ These indicators are specified in output statement 2 above.

Activities	Indicators and Targets	Timeline	Responsibilities	Budget (in USD)	Assumption/ Explanation
	<p><i>separate reflection time, including discussion of Gender Equality Components and GAPs</i></p> <ul style="list-style-type: none"> • <i>100% of meetings are documented and contents used in corresponding business plans</i> 				
	<p>Gender and intercultural perspectives mainstreamed into all training in this output, including materials</p> <p><i>Baseline: 0%</i></p> <p><i>Targets:</i></p> <ul style="list-style-type: none"> • <i>25% of training time devoted to what kind of biodiverse silvo-pastoral systems, cocoa agroforest systems and CTNPFs could improve women's lives and why</i> • <i>80% of materials mainstream gender and intercultural perspectives drawing on traditional sustainable environmental knowledge and practices</i> • <i>80% of training materials take into account women's interests, needs, rights and priorities</i> • <i>100% of training sessions are translated or held in local languages</i> 	By end of project year 7			
	<p>Percentage of women and men who receive training</p> <p><i>Baseline: 0%</i></p> <p><i>Targets:</i></p> <ul style="list-style-type: none"> • <i>50% women and 50% men per community, including 20% male and female youth</i> • <i>40% of families receive childcare and other necessary arrangements</i> 	By end of project year 7			
	<p>Gender Equality Components and GAPs from 1.1.1 continue to be implemented, monitored and reported on</p> <p><i>Baseline: 0%</i></p> <p><i>Targets:</i></p> <ul style="list-style-type: none"> • <i>25% increase of young and adult men who have positive attitudes towards gender equality at the household and community levels</i> • <i>25% increase of young and adult men and women who report improved intercultural gender equality</i> 	By end of project year 7			

Activities	Indicators and Targets	Timeline	Responsibilities	Budget (in USD)	Assumption/Explanation
	<p>at household and/or community level in at least three indicators¹²⁷, disaggregated by age, gender and ethnicity</p> <ul style="list-style-type: none"> 100% of gender equality components and GAPS are monitored using participatory methods and reported on annually 				
<p>Output 1.2.2 Natural forest ecosystems and forest land conserved, restored and sustainably used</p> <p>1.2.2.1 Finance Sustainable Community Enterprises (SCE) in indigenous territories within protected areas for natural forest ecosystems conservation and use</p> <p>1.2.2.2 Finance commercial Community Forest Management (CFM) sub-projects with business plans prepared by indigenous communities outside protected areas</p> <p>1.2.2.3 Finance commercial Community Forest Restoration (CFR) sub-projects with business plans prepared by indigenous communities outside protected areas</p>	<p>SCEs, CFMs and CFRs promote women's economic empowerment</p> <p>Baseline: 0%</p> <p>Target:</p> <ul style="list-style-type: none"> 25% are women-only SCEs, CFMs and CFRs receive finance and related training, priority given to include and benefit women-headed households At least 75% are mixed gender SCEs, CFMs and CFRs receive finance and related training with women in key decision-making posts¹²⁸, priority given to include and benefit women-headed households 	By end of project year 7	MARENA & MHCP as Executing Entities), Project Management Unit (PMU)	4,983,810	<ul style="list-style-type: none"> 50% of technical, professional staff and consultants are women; Semi-annual meetings; Mainstreaming of gender and intercultural perspective in all trainings and related materials; Childcare and other arrangements provided; and Follow-up to Gender Equality Components and Gender Action Plans
	<p>Semi-annual meetings to exchange intercultural gender concerns regarding natural forest ecosystems and forest land conservation, restoration and sustainable use, particularly knowledge, practices, rights, interests, needs, priorities and existing potentials</p> <p>Baseline: 0%</p> <p>Targets:</p> <ul style="list-style-type: none"> 30% women and men beneficiaries by territory, of which 20% male and female youth, disaggregated by gender, age and ethnicity 100% of meetings use popular methodology 100% of meetings have mixed gender and gender-separate reflection time 100% of meetings are documented and contents used in corresponding BPs 	By end of project year 7			
	<p>Gender and intercultural perspectives mainstreamed into all training in this output, including materials</p> <p>Baseline: 0%</p>	By end of project year 7			

¹²⁷ These indicators are specified in output statement 2 above.

¹²⁸ 50% women in the posts of: President and Vice-President.

Activities	Indicators and Targets	Timeline	Responsibilities	Budget (in USD)	Assumption/ Explanation
	<p><i>Targets:</i></p> <ul style="list-style-type: none"> • 25% of training time devoted to what kind of natural forest ecosystems and forest land conservation, restoration and sustainable use (etc.) could improve women's lives and why • 80% of materials mainstream gender and intercultural perspectives drawing on traditional sustainable environmental knowledge and practices • 80% of training materials take into account women's interests, needs, rights and priorities • 100% of training sessions are translated or held in local languages • 15% of training time provided by local male and female indigenous or Afro-descendant elders to share conservation practices 				
	<p>Proportion of technicians who are women and from Caribbean region (CR) among technical positions proposed <i>Baseline: 0%</i></p> <p><i>Targets:</i></p> <ul style="list-style-type: none"> • 50% of technicians hired are women • 30% (M/F) of technicians hired are indigenous or Afro-descendant from the Caribbean Region (CR) who speak Spanish and at least one local language • 100% of personnel and consultants against whom a complaint is lodged (MRyQ) and verified will be fired and not re-hired 	By end of project year 7			
	<p>Percentage of women and men who receive training <i>Baseline: 0%</i></p> <p><i>Targets:</i></p> <ul style="list-style-type: none"> • 50% women and 50% men per community, including 20% male and female youth • 40% of families have childcare and other arrangements 	By end of project year 7			
	<p>Visibilize women's work by paying men and women equally for their work <i>Baseline: 0%</i></p> <p><i>Target: 100% of young and adult men and women from</i></p>	By end of project year 7			

Activities	Indicators and Targets	Timeline	Responsibilities	Budget (in USD)	Assumption/Explanation
	<p><i>all communities are paid equally for work of equal value</i></p> <p>Gender Equality Components and GAPS are implemented, monitored and reported on <i>Baseline: 0%</i> <i>Targets:</i></p> <ul style="list-style-type: none"> • 25% increase of young and adult men who have positive attitudes towards gender equality at the household and community levels • 25% increase of young and adult men and women who report improved intercultural gender equality at household and/or community level in at least three indicators¹²⁹, disaggregated by age, gender and ethnicity • 100% of gender equality components and GAPS are monitored using participatory methods and reported on annually 	By end of project year 7			
<p>Output 1.2.3 Farmer cooperatives, producer organizations and community enterprises access high-value markets</p> <p>1.2.3.1 Support cooperatives, producer organizations and indigenous community (SCEs and CRMR) to reach high-value markets</p> <p>1.2.3.2 Facilitate targeted business contacts between producer organizations and indigenous communities' enterprises with high value markets.</p> <p>1.2.3.3 Support producer organizations and community enterprises in voluntary certification processes</p>	<p>Proportion of technicians who are women and from Caribbean region (CR) among technical positions proposed <i>Baseline: 0%</i> <i>Targets:</i></p> <ul style="list-style-type: none"> • 50% of technicians are women • 30% (M/F) of technicians hired are indigenous or Afro-descendant from the Caribbean Region (CR) who speak Spanish and at least one local language • 100% of personnel and consultants against whom a complaint is lodged (MRyQ) and verified will be fired and not re-hired 	By project year 7	MARENA & MHCP as Executing Entities), Project Management Unit (PMU)	626,846	<ul style="list-style-type: none"> ▪ 50% of technical, professional staff and consultants are women; ▪ Semi-annual meetings; ▪ Women who benefit from high-value markets; ▪ Mainstreaming of gender and intercultural perspective in all trainings and related materials; ▪ Childcare and other arrangements provided; and ▪ Follow-up to Gender Equality Components and Gender Action
	<p>Number and percentage of people who participated in fairs or business events, disaggregated by gender, age and ethnicity of individual participants/ organization <i>Baseline: 0%</i> <i>Target: 50% women and 50% men per community, including 20% male and female youth, priority given to include and benefit women-headed households</i></p>				
	<p>Number of organizations/cooperatives/enterprises to</p>	By project			

¹²⁹ These indicators are specified in output statement 2 above.

Activities	Indicators and Targets	Timeline	Responsibilities	Budget (in USD)	Assumption/ Explanation
	<p>certify their products/services, disaggregated by gender, age and ethnicity of individual participants/ organization <i>Baseline: 0%</i> <i>Target: 50% women and 50% men per community, including 20% male and female youth, priority given to include and benefit women-headed households</i></p> <p>Number of people who participated in commercial visits/exchanges facilitated, disaggregated by gender, age and ethnicity of individual participants/ organization <i>Baseline: 0%</i> <i>Target: 50% women and 50% men per community, including 20% male and female youth, priority given to include and benefit women-headed households</i></p> <p>Proportion of technicians who are women and from Caribbean region (CR) among technical positions proposed <i>Baseline: 0%</i> <i>Targets:</i></p> <ul style="list-style-type: none"> • 50% of technicians are women • 30% (M/F) of technicians hired are indigenous or Afro-descendant from the Caribbean Region (CR) who speak Spanish and at least one local language • 100% of personnel and consultants against whom a complaint is lodged (MRyQ) and verified will be fired and not re-hired 	<p>year 7</p> <p>By project year 7</p> <p>By project year 7</p>			Plans
	<p>Semi-annual meetings to exchange intercultural gender concerns regarding accessing high-value markets, particularly knowledge, practices, rights, interests, needs, priorities and existing potentials <i>Baseline: 0%</i> <i>Targets:</i></p> <ul style="list-style-type: none"> • 30% women and men beneficiaries by territory, of which 20% male and female youth, disaggregated by gender, age and ethnicity • 100% of meetings use popular methodology • 100% of meetings have mixed gender and gender-separate reflection time 	<p>By project year 7</p>			

Activities	Indicators and Targets	Timeline	Responsibilities	Budget (in USD)	Assumption/ Explanation
	<ul style="list-style-type: none"> 100% of meetings are documented and contents used in corresponding BPs 				
	<p>Gender and intercultural perspectives mainstreamed into all training in this output, including materials</p> <p>Baseline: 0%</p> <p>Targets:</p> <ul style="list-style-type: none"> 25% of training time devoted to what kind of access to high-value markets (etc.) could improve women's lives and why 80% of materials mainstream gender and intercultural perspectives drawing on traditional sustainable environmental knowledge and practices 80% of training materials take into account women's interests, needs, rights and priorities 100% of training sessions are translated or held in local languages 15% of training time provided by local male and female indigenous or Afro-descendant elders to share conservation practices 	By project year 7			
COMPONENT 2: GOOD GOVERNANCE				3,847,428	
<p>Output 2.1.1 Environmental authorities present at the regional and the local level, including municipalities and Indigenous Territorial Governments (GTIs) strengthened</p> <p>2.1.1.1 Hire new technical, extension and control personnel to work in the project area and indigenous territories</p> <p>2.1.1.2 Procure material, equipment and vehicles for regional and local institutions</p> <p>2.1.1.3 Grant public budget for operational expenses to regional/local environmental authorities, including Indigenous Territorial Governments</p>	<p>Number of new annual contracts to hire technicians at local level, disaggregated by gender and ethnicity</p> <p>Baseline: 0%</p> <p>Targets:</p> <ul style="list-style-type: none"> 50% women and men hired 30% (M/F) of technicians hired are indigenous or Afro-descendant from the Caribbean Region (CR) who speak Spanish and at least one local language 	By project year 7	MARENA & MHCP as Executing Entities), Project Management Unit (PMU)	3,559,307	<ul style="list-style-type: none"> 50% of technical, professional staff and consultants are women
	<p>Visibilize women's work by paying men and women equally for their work</p> <p>Baseline: 0%</p> <p>Target: 100% of young and adult men and women from all communities are paid equally for work of equal value</p>				
	<p>Personnel responsible for implementing project's intercultural gender equality provisions</p> <p>Baseline: 0%</p> <p>Targets:</p> <ul style="list-style-type: none"> 100% of personnel and others contracted have 	By project year 7			

Activities	Indicators and Targets	Timeline	Responsibilities	Budget (in USD)	Assumption/ Explanation
	<p><i>responsibilities for implementing beneficiaries' gender equality components and gender action plans in their job descriptions as appropriate and their performance is measured accordingly</i></p> <ul style="list-style-type: none"> • <i>100% of personnel and consultants against whom a complaint is lodged (MRyQ) and verified will be fired and not re-hired</i> 				
<p>Output 2.1.2 Legal and normative framework updated</p> <p>2.1.2.1 Analyze and update forestry, environmental and land-use normative framework at national level</p> <p>2.1.2.2 Support regional / local environmental authorities to actualize the normative framework</p> <p>2.1.2.3 Update the management plans of the two protected areas: BOSAWAS and Indio Maíz.</p>	<p>Evidence that reforms are consulted widely, as appropriate</p> <p><i>Baseline: 0%</i></p> <p><i>Targets:</i></p> <ul style="list-style-type: none"> • <i>100% of updates to legal and normative frameworks consulted with relevant TGIs, community members, regional governments and academics/experts</i> • <i>100% of products consulted with male and female indigenous and Afro-descendant elders</i> • <i>50% of those consulted are women, 20% are male and female youth</i> • <i>100% of consultations held in local languages or translation provided</i> • <i>100% of meetings use popular methodology</i> • <i>80% of meetings have mixed gender and gender-separate reflection time</i> • <i>100% of meetings are documented and intercultural gender concerns reflected in revised legal and normative frameworks</i> • <i>24 sets of quarterly meetings held</i> <p>Analysis, updates and reforms to legal and normative framework will mainstream intercultural and women's perspectives</p> <p><i>Baseline: 0%</i></p> <p><i>Target:</i></p> <ul style="list-style-type: none"> • <i>80% of products mainstream intercultural perspectives, including knowledge, needs, rights and priorities</i> • <i>80% of analyses, updates and reforms will address how indigenous and non-indigenous women's lives will be improved, and why</i> 	<p>By project year 7</p>	<p>MARENA & MHCP as Executing Entities), Project Management Unit (PMU)</p>	<p>116,900</p>	<ul style="list-style-type: none"> ▪ 50% of technical, professional staff and consultants are women; ▪ Consultations; ▪ Mainstreaming of gender and intercultural perspective in all trainings and related materials; ▪ Childcare and other arrangements provided;

Activities	Indicators and Targets	Timeline	Responsibilities	Budget (in USD)	Assumption/Explanation
	<ul style="list-style-type: none"> 70% of women consider that their concerns were adequately addressed in reforms and updates, disaggregated by gender, age and ethnicity 				
Output 2.1.3 Public-private dialogue and cooperation strengthened 2.1.3.1 Facilitate sectoral public-private dialogue at regional and local level 2.1.3.2 Strengthen the Production, Consumption and Marketing System (SPCC) at regional level	% of participants, decision-makers and oversight mechanisms are women from indigenous, Afro-descendant and non-indigenous communities <i>Baseline: 0%</i> <i>Targets:</i> <ul style="list-style-type: none"> 50% women and 50% men per ethnicity/community, including 20% male and female youth 100% of sessions held in local languages or translation provided 100% of sessions use popular methodology 	By project year 7	MARENA & MHCP as Executing Entities), Project Management Unit (PMU)	54,455	<ul style="list-style-type: none"> Evidence of provisions for intercultural gender equality in products and sessions % of technical, professional staff and consultants are women; Consultations; Mainstreaming of gender and intercultural perspective in activities and related materials; Childcare and other arrangements provided; and
	Evidence of provisions for intercultural gender equality in products and sessions <i>Baseline: 0%</i> <i>Targets:</i> <ul style="list-style-type: none"> 100% of products (print, audio-visual, digital, etc.) mainstream intercultural gender equality concerns and contribute to breakdown relevant barriers 100% of products produced in local languages 80% of materials take into account women's interests, needs, rights and priorities 80% of sessions and products address how strengthening the SPCC will improve indigenous, Afro-descendant and non-indigenous women's lives and why 	By project year 7			
Output 2.2.1 Territorial governments and local organizations strengthened 2.2.1.1 Provide institutional strengthening to Indigenous Territorial Governments (GTIs) 2.2.1.2 Provide organizational support to local producer organizations (indigenous and non-indigenous) 2.2.1.3 Provide legal support to legalize producer organizations, cooperatives and community	% of experts, consultants and other services provided by women from indigenous, Afro-descendant and non-indigenous communities <i>Baseline: 0%</i> <i>Targets:</i> <ul style="list-style-type: none"> 50% are women 30% (M/F) of technicians hired are indigenous or Afro-descendant from the Caribbean Region (CR) who speak Spanish and at least one local language 100% of personnel and consultants against whom a complaint is lodged (MRyQ) and verified will be 	By project year 7	MARENA & MHCP as Executing Entities), Project Management Unit (PMU)	108,655	<ul style="list-style-type: none"> 50% of technical, professional staff and consultants are women; Mainstreaming of gender and intercultural perspective in all sessions and related materials; Childcare and other

Activities	Indicators and Targets	Timeline	Responsibilities	Budget (in USD)	Assumption/ Explanation
enterprises	<p><i>fired and not re-hired</i></p> <p>% of strengthening measures consulted with community members <i>Baseline: 0%</i> <i>Targets:</i></p> <ul style="list-style-type: none"> • 50% women and 50% men per community, including 20% male and female youth • 100% of sessions held in local languages or translation provided • 1 session held with adult and young women leaders and members per community prior to general consultation to develop proposals • 100% of meetings use popular methodology • 100% of meetings have mixed gender and gender-separate reflection time • 100% of meetings are documented and contents used in corresponding legal reforms and other instruments/ documents • 40% of families have childcare and other arrangements 	By project year 7			arrangements provided;
	<p>Evidence of provisions for intercultural gender equality in processes and products <i>Baseline: 0%</i> <i>Targets:</i></p> <ul style="list-style-type: none"> • 100% of strengthening measures mainstream intercultural gender equality concerns and contribute to breakdown relevant barriers • 100% of products produced in local languages • 100% of sessions are translated or held in local languages • 80% of materials take into account women's interests, needs, rights and priorities • 80% of sessions and products address how reforms will improve indigenous, Afro-descendant and non-indigenous women's lives and why 	By project year 7			
Output 2.2.2 Forest, land-use and land use change administration, control and environmental law enforcement strengthened	<p>Number of brigade and other members hired and trained, gender and ethnicity disaggregated <i>Baseline: 0%</i> <i>Targets:</i></p>	By project year 7	MARENA & MHCP as Executing Entities),	8,112	<ul style="list-style-type: none"> ▪ 5% of technical, professional staff and consultants are women;

Activities	Indicators and Targets	Timeline	Responsibilities	Budget (in USD)	Assumption/ Explanation
2.2.2.1 Operate mobile units and fixed control posts to control timber transport 2.2.2.2 Operate deforestation control and forest fire prevention brigades 2.2.2.3 Operate indigenous people territorial defense and resources control brigades	<ul style="list-style-type: none"> 5% of brigade members trained are women 30% (M/F) of technicians trained are indigenous or Afro-descendant from the Caribbean Region (CR) who speak Spanish and at least one local language 100% of personnel and consultants against whom a complaint is lodged (MRyQ) and verified will be fired and not re-hired 		Project Management Unit (PMU)		<ul style="list-style-type: none"> Mainstreaming of gender and intercultural perspective in all sessions and related materials; Responsive to safety concerns by gender and ethnicity
	<p>% of training and operations guidelines consulted with community members Baseline: 0% Targets: Responsive to safety concerns by gender and ethnicity technicians</p> <ul style="list-style-type: none"> 1 session held with adult and young women leaders and members per community prior to general consultation to develop proposals 100% of meetings use popular methodology 100% of meetings have mixed gender and gender-separate reflection time 80% of operations guidelines and training are responsive to gender and ethnic safety concerns 	By project year 7			
COMPONENT 3: CAPACITY DEVELOPMENT FOR PRODUCTIVE LANDSCAPE RESTORATION AND FOREST CONSERVATION				2,164,831	
Output 3.1.1 Technical personnel, extension workers and promoters trained 3.1.1.1 Train technicians and extensionists in participatory land use planning (LUMP-b, TDPs-b)	<p>Number of technical personnel, extension workers and promoters trained, gender and ethnicity disaggregated Baseline: 0% Targets:</p> <ul style="list-style-type: none"> 50% of technicians trained are women 30% (M/F) of technicians trained are indigenous or Afro-descendant from the Caribbean Region (CR) who speak Spanish and at least one local language 100% of personnel and consultants against whom a complaint is lodged (MRyQ) and verified will be fired and not re-hired 	By project year 7	MARENA & MHCP as Executing Entities), Project Management Unit (PMU)	47,686	<ul style="list-style-type: none"> 50% of technical, professional staff and consultants are women; Mainstreaming of gender and intercultural perspective in all training and other sessions and related materials;
	<p>Number of staff of government partners at all levels trained in intercultural gender approach and GAP, disaggregated by gender, age and ethnicity Baseline: 0% Targets:</p> <ul style="list-style-type: none"> 50% of technicians trained are women 100% of staff and supervisors in CR are trained 	By project year 7			

Activities	Indicators and Targets	Timeline	Responsibilities	Budget (in USD)	Assumption/ Explanation
	<p><i>from all government partners</i></p> <ul style="list-style-type: none"> • <i>80% of project staff and supervisors at HQ (Managua) are trained</i> • <i>15% of training time in CR provided by male and female indigenous or Afro-descendant elders to share conservation practices</i> • <i>100% of sessions and materials take into account women's interests, needs, rights, priorities and existing potentials</i> • <i>100% of sessions and products address how the Bio-CLIMA Gender Action Plan will improve indigenous, Afro-descendant and non-indigenous women's lives and why</i> 				
	<p>Proportion of women experts among trainers <i>Baseline: 0%</i> <i>Targets:</i></p> <ul style="list-style-type: none"> • <i>50% of trainers hired are women</i> • <i>30% (M/F) of technicians hired are indigenous or Afro-descendant from the Caribbean Region (CR) who speak Spanish and at least one local language</i> 	By project year 7			
	<p>Gender and intercultural perspectives mainstreamed into all training in this output, including materials <i>Baseline: 0%</i> <i>Targets:</i></p> <ul style="list-style-type: none"> • <i>25% of training time devoted to what kind of access to high-value markets (etc.) could improve women's lives and why</i> • <i>80% of materials mainstream gender and intercultural perspectives drawing on traditional sustainable environmental knowledge and practices</i> • <i>80% of training materials take into account women's interests, needs, rights and priorities</i> • <i>100% of training sessions are translated or held in local languages</i> • <i>15% of training time provided by local male and female indigenous or Afro-descendant elders to</i> 	By project year 7			

Activities	Indicators and Targets	Timeline	Responsibilities	Budget (in USD)	Assumption/ Explanation
	<p><i>share conservation practices</i></p> <p>Training on how to support design, implementation, monitoring and reporting of Gender Equality Components and Gender Action Plans of Project Component 1 <i>Baseline: 0%</i> <i>Targets:</i></p> <ul style="list-style-type: none"> • 100% of staff receive training on Gender Equality Components and GAPS as pertinent to their position • 100% of staff receive training on conducting intercultural gender analysis using quantitative and qualitative data related to production and conservation 	By project year 7			
	<p>Training of all project personnel on intercultural gender equality capacity building stream¹³⁰ <i>Baseline: 0%</i> <i>Targets:</i></p> <ul style="list-style-type: none"> • 100% attendance of invited trainees • 50% male participants show improvement in gender perceptions, measured through before and after questionnaire. 	By project year 7			
3.1.1.2 Train stakeholders to use the up-dated sectoral legal and normative framework.	<p>Number of persons trained (gender and ethnicity disaggregated). <i>Baseline: 0%</i> <i>Targets:</i></p> <ul style="list-style-type: none"> • 50% women and 50% men per community, including 20% male and female youth, priority given to include and benefit women-headed households • 40% of families have childcare and other arrangements • 100% of training held in local languages or translated/ interpreted 	By project year 7	MARENA & MHCP as Executing Entities), Project Management Unit (PMU)		
	<p>Training addresses intercultural and women's perspectives mainstreamed into analysis, updates and reforms <i>Baseline: 0%</i> <i>Target:</i></p>	By project year 7			

¹³⁰ See GA section 9.2.2.

Activities	Indicators and Targets	Timeline	Responsibilities	Budget (in USD)	Assumption/ Explanation
	<ul style="list-style-type: none"> 30% of training time addresses intercultural perspectives, including knowledge, needs, rights and priorities 50% of training time addresses women's perspectives, including knowledge, needs, rights and priorities 40% of analyses, updates and reforms will address how indigenous and non-indigenous women's lives will be improved, and why 				
<p>Output 3.1.2 Producers and members of organizations/communities trained</p> <p>3.1.2.1 Provide organizational, management, financial and marketing training to producers and members of organizations/communities</p> <p>3.1.2.2 Train producers in LUMP, TDP and Productive Landscape Restoration / Forest Conservation Models</p>	<p>Number of persons trained (gender and ethnicity disaggregated). Baseline: 0%</p> <p>Targets:</p> <ul style="list-style-type: none"> 50% are women, of which 10% are youth per community, priority given to include and benefit women-headed households 40% of families have childcare and other arrangements <p>Proportion of female experts among trainers Baseline: 0%</p> <p>Targets:</p> <ul style="list-style-type: none"> 50% of trainers are women 30% (M/F) of technicians hired are indigenous or Afro-descendant from the Caribbean Region (CR) who speak Spanish and at least one local language 100% of personnel and consultants against whom a complaint is lodged (MRyQ) and verified will be fired and not re-hired <p>Gender and intercultural perspectives mainstreamed into all training in this output, including materials Baseline: 0%</p> <p>Targets:</p> <ul style="list-style-type: none"> 25% of training time devoted to what kind of access to high-value markets (etc.) could improve women's lives and why 80% of materials mainstream gender and intercultural perspectives drawing on traditional sustainable environmental knowledge and practices 	<p>By project year 7</p> <p>By project year 7</p> <p>By project year 7</p>	<p>MARENA & MHCP as Executing Entities), Project Management Unit (PMU)</p>	<p>267,505</p>	<ul style="list-style-type: none"> 50% of technical, professional staff and consultants are women; Mainstreaming of gender and intercultural perspective in all sessions and related materials; Awareness increased on gender equality issues to be redressed Childcare and other arrangements provided;

Activities	Indicators and Targets	Timeline	Responsibilities	Budget (in USD)	Assumption/ Explanation
	<ul style="list-style-type: none"> • 80% of training materials take into account women's interests, needs, rights and priorities • 100% of training sessions are translated or held in local languages • 15% of training time provided by local male and female indigenous or Afro-descendant elders to share conservation practices <p>Exchange sessions and forums held of women producers, leaders and members of organizations/TGIs/ communities to contribute to development of training materials Baseline: 0% Targets:</p> <ul style="list-style-type: none"> • 100% of invitees attend • 7 sets of annual sessions held at community/ organization, local, regional and cross-regional levels • 25% of time devoted to what kind of production, conservation (etc.) could improve women's lives and why • 80% of materials mainstream gender and intercultural perspectives drawing on traditional sustainable environmental knowledge and practices • 80% of training materials take into account women's interests, needs, rights and priorities • 100% of sessions held in local languages or translated • 15% of sessions provided by local female indigenous or Afro-descendant elders to share conservation practices <p>Exchange sessions and forums held of women producers, leaders and members of organizations/TGIs/ communities to revise training materials Baseline: 0% Targets:</p> <ul style="list-style-type: none"> • 100% of invitees attend • 80% of materials mainstream gender and intercultural perspectives drawing on traditional 				

Activities	Indicators and Targets	Timeline	Responsibilities	Budget (in USD)	Assumption/ Explanation
	<p><i>sustainable environmental knowledge and practices</i></p> <ul style="list-style-type: none"> 80% of training materials take into account women's interests, needs, rights and priorities 100% of sessions held in local languages or translated 				
	<p>Awareness raising of producers, leaders and members of organizations/ TGIs/ communities on intercultural gender equality capacity building stream</p> <p><i>Baseline: 0%</i></p> <p><i>Targets:</i></p> <ul style="list-style-type: none"> 100% attendance of invited trainees 50% male participants show improvement in gender perception, measured through before and after questionnaire. 	By project year 7			
<p>Output 3.2.1 Information systems for climate resilient sustainable development and risk management are in place</p> <p>3.2.1.1 Set up a deforestation and forest fires early-warning system</p> <p>3.2.1.2 Up-date and roll out the forest products administration and control system</p> <p>3.2.1.3 Monitor LULUC, deforestation and forest degradation</p> <p>3.2.1.4 Install and monitor permanent plots of the National Forest Inventory (NFI) in the CR</p> <p>3.2.1.5 Monitor biodiversity indicator species in 10% of plots of the NFI in the CR</p> <p>3.2.1.6 Monitor adaptation, mitigation and biodiversity impact of implemented productive landscape restoration/forest conservation models</p> <p>3.2.1.7 Monitor climate, hydrometeorological (including tropical storms, hurricanes, droughts)</p>	<p>Proportion of technicians who are women and from Caribbean region (CR) among technical positions proposed</p> <p><i>Baseline: 0%</i></p> <p><i>Targets:</i></p> <ul style="list-style-type: none"> 50% of technicians are women 30% (M/F) of technicians hired are indigenous or Afro-descendant from the Caribbean Region (CR) who speak Spanish and at least one local language 100% of personnel and consultants against whom a complaint is lodged (MRyQ) and verified will be fired and not re-hired 	By project year 7	MARENA & MHCP as Executing Entities), Project Management Unit (PMU)	1,471,640	<ul style="list-style-type: none"> 50% of technical, professional staff and consultants are women; Mainstreaming of gender and intercultural perspective in all sessions and related materials; Sessions with producers and members of organizations/ communities to analyze data and discuss implications Childcare and other arrangements provided;
	<p>Monitoring criteria impact incorporate gender and intercultural concerns into multi-criteria analysis</p> <p><i>Baseline: 0%</i></p> <p><i>Targets:</i></p> <ul style="list-style-type: none"> 6 sessions held with local male and female indigenous and Afro-descendant elders to share monitoring criteria 60% of monitoring criteria mainstream gender and intercultural perspectives drawing on traditional sustainable environmental knowledge and practices 	By project year 7			
	<p>Forums with producers and members of organizations/communities to analyze data and discuss</p>	By project year 7			

Activities	Indicators and Targets	Timeline	Responsibilities	Budget (in USD)	Assumption/ Explanation
and pest risk phenomena in order to inform and emit alerts	implications <i>Baseline: 0%</i> <i>Targets:</i> <ul style="list-style-type: none"> • 7 sets of annual sessions held at community, organization, local, regional and cross-regional levels to discuss monitoring findings • 25% of time devoted to how monitoring findings affect women's lives and why, by age and community/ethnicity 				
Output 3.3.1 The Public is more aware of the need for climate change adaptation, mitigation, landscape restoration and forest conservation 3.3.3.1 Develop and roll-out a public communication strategy	Evidence of intercultural gender equality content mainstreamed into communication strategy <i>Baseline: 0%</i> <i>Targets:</i> <ul style="list-style-type: none"> • 40% of messages/ materials /programs feature women protagonists from different ethnic communities • 25% of time devoted to what kind of production, conservation (etc.) could improve women's lives and why • 30% of messages feature male and female youth from different ethnic communities • 80% of materials address how adaptation, conservation and other strategies will improve indigenous and non-indigenous women's lives and why 	By project year 7	MARENA & MHCP as Executing Entities), Project Management Unit (PMU)	378,000	<ul style="list-style-type: none"> ▪ 50% of technical, professional staff and consultants are women; ▪ Mainstreaming of gender and intercultural perspective into intercultural gender equality communication strategy and public education campaign and related materials
	Awareness raising of the public on intercultural gender equality capacity building stream <i>Baseline: 0%</i> <i>Target:</i> <ul style="list-style-type: none"> • 100% of messages addresses intercultural perspectives, including knowledge, needs, rights and priorities • 50% of materials addresses women's perspectives, including knowledge, needs, rights and priorities • 20% of materials address non-violent masculinities 	By project year 7			
	Popular version of campaign materials for use with community members <i>Baseline: 0%</i> <i>Target:</i>	By project year 7			

Activities	Indicators and Targets	Timeline	Responsibilities	Budget (in USD)	Assumption/ Explanation
3.3.3.2 Undertake environmental education in local schools and communities	<ul style="list-style-type: none"> 100% materials translated into local languages 				
	Number of persons trained (gender, age and ethnicity disaggregated). <i>Baseline: 0%</i> <i>Target:</i> <ul style="list-style-type: none"> 50% women, men trained per community 50% of those trained are children and youth (of which 50% girls) 	By project year 7	MARENA & MHCP as Executing Entities), Project Management Unit (PMU)		
	Proportion of female experts among trainers <i>Baseline: 0%</i> <i>Targets:</i> <ul style="list-style-type: none"> 50% of trainers are women 30% (M/F) of technicians hired are indigenous or Afro-descendant from the Caribbean Region (CR) who speak Spanish and at least one local language 	By project year 7			
Evidence of intercultural gender equality content in public education materials. <i>Baseline: 0%</i> <i>Targets:</i> <ul style="list-style-type: none"> 80% of materials address how adaptation, conservation and other strategies will improve indigenous and non-indigenous women's lives and why 100% training provided in local languages or translated 80% of training materials take into account women's interests, needs, rights and priorities 30% of messages feature male and female youth from different ethnic communities 	By project year 7				
PROJECT MANAGEMENT <ul style="list-style-type: none"> Set-up and operate the Project Management Unit (PMU) Set-up the project monitoring, evaluation and reporting system Systematize findings and lessons learnt and communicate project results 	Percentage of women and people from the Caribbean region hired, gender and ethnicity disaggregated <i>Baseline: 0%</i> <i>Targets:</i> <ul style="list-style-type: none"> 50% of technicians trained are women 30% (M/F) of technicians trained are indigenous or Afro-descendant from the Caribbean Region (CR) who speak Spanish and at least one local language 100% of personnel and consultants against whom a 	By project year 7	MARENA & MHCP as Executing Entities), Project Management Unit (PMU)	367,220	<ul style="list-style-type: none"> 50% of technical, professional staff and consultants are women; All staff and consultants trained in gender assessment, GAP, gender equality results and indicators;

Activities	Indicators and Targets	Timeline	Responsibilities	Budget (in USD)	Assumption/Explanation
<ul style="list-style-type: none"> Supervise and evaluate project implementation 	<i>complaint is lodged (MRyQ) and verified will be fired and not re-hired</i>				<ul style="list-style-type: none"> Supervision of Grievance and Redress Mechanism on violence against women Set up of and training on monitoring system on gender equality concerns Materials to communicate gender and intercultural results
	Project personnel and consultants trained in project's gender equality and intercultural approach <i>Baseline: 0%</i> <i>Targets:</i> <ul style="list-style-type: none"> 100% of invitees attend 100% of staff trained to report on project's gender action plan, results and indicators 	By project year 7			
	Baseline will collect data for all the indicators included in this Gender Action Plan, disaggregated by gender, age and ethnicity <i>Baseline: TBD</i> <i>Targets:</i> <ul style="list-style-type: none"> 100% of GAP indicators measured in baseline survey 100% of GAP output 2 indicators are measured with qualitative methods, including focus groups, with potential beneficiaries from indigenous, Afro-descendant and non-indigenous communities in all project areas 1 comprehensive analysis conducted of findings and included in first annual report 100% of analytical reports consulted with experts in interculturality and gender from local universities and others 	By project year 1			
	Project findings analyzed from a gender and intercultural perspective are publicly available <i>Baseline: 0%</i> <i>Targets:</i> <ul style="list-style-type: none"> 80% of project reports reporting on project results address women's interests, needs, rights and priorities 80% of project reports address how adaptation, conservation and other strategies will improve indigenous and non-indigenous women's lives and why 	By project year 7			

Activities	Indicators and Targets	Timeline	Responsibilities	Budget (in USD)	Assumption/ Explanation
	<ul style="list-style-type: none"> 100% of annual reports are synthesized for public distribution with main gender equality results and analysis 				
	<p>Supervisors trained and implementing grievance and redress mechanism (MRyQ)</p> <p>Baseline: 0%</p> <p>Targets:</p> <ul style="list-style-type: none"> 100% of supervisors trained on grievance and redress mechanism orientation for staff and people contracted on grievance and redress mechanism laws 100% of components of grievance and redress mechanism implemented at local and regional levels 100% of monitoring and evaluation reports present analyze data of grievance and redress mechanism implementation and effects 	By project year 7			
TOTAL				13,550,668	

COMPONENTS, SUB-COMPONENTS, OUTPUTS AND ACTIVITIES	Total Cost (USD)	%	GAP Budget	Assumption / Explanation
COMPONENT 1: CONSERVING AND PRODUCING FOR LIFE	94,455,226		7,171,189	
Subcomponent 1.1 Land use and management planning for landscape restoration, forest conservation and climate-resilient production	3,898,401		389,840	
<i>Output 1.1.1 Land use/management plans formulated; and restoration/conservation agreements signed/formalized with beneficiaries</i>	3,898,401		389,840	Covers hiring 50% women; semi-annual meetings to address women's concerns; mainstreaming of gender and intercultural perspective in materials; participatory development of Gender Equality Components (1.1.1.1 and 1.1.1.3) and Gender Action Plans (1.1.1.2); childcare and other arrangements; and follow-up to Gender Equality Components and Gender Action Plans
1.1.1.1 Assist small producers to formulate Land Use-Management Plans with business plans (LUMP-b)	2,094,246	0.1	209,425	
Staff Cost	-			
Local consultants	-			
International consultant	-			
Materials and Equipments	-			
Constuction cost	-			
Training, workshops, and conference	-			
Travel	-			
Professional/ Contractual Services	2,094,246			
1.1.1.2 Assist indigenous communities to formulate Territorial Development, Land Use and Plans, incl. business plans (TDP-b)	694,633	0.1	69,463	
Staff Cost	-			
Local consultants	-			
International consultant	-			
Materials and Equipments	-			
Constuction cost	-			
Training, workshops, and conference	-			
Travel	-			
Professional/ Contractual Services	694,633			
1.1.1.3 Assist middle sized producers to formulate LUMPs, incl. business plans (LUMP-b)	215,997	0.1	21,600	
Staff Cost	-			
Local consultants	-			
International consultant	-			
Materials and Equipments	-			
Constuction cost	-			
Training, workshops, and conference	-			
Travel	-			
Professional/ Contractual Services	215,997			
1.1.1.4 Facilitate celebration and formalize of landscape restoration and forest conservation agreements	893,524	0.1	89,352	
Staff Cost	-			
Local consultants	-			
International consultant	-			
Materials and Equipments	-			
Constuction cost	-			
Training, workshops, and conference	-			
Travel	-			
Professional/ Contractual Services	893,524			
Sub-component 1.2 Investments in landscape restoration, forest conservation and climate-resilient production	90,556,825		6,781,349	

Output 1.2.1 Degraded pasture- and rangeland restored	26,351,703		1,170,693	
1.2.1.1 Small producers (farm size < 35 ha) restore degraded pastures into climate resilient, biodiverse sustainable silvopastoral systems	3,349,280		218,590	
Staff Cost	-			
Local consultants	-			
International consultant	-			
Materials and Equipments	2,545,452			
Constuction cost	-			
Training, workshops, and conference	97,151	0.3	24,288	Meetings, trainings and materials produced mainstream and redress gender and intercultural concerns; ; childcare and other arrangements
Travel	318,072			
Professional/ Contractual Services	388,604	0.5	194,302	50% of people hired/contracted are women
1.2.1.2 Middle sized producers (farm size > 35 ha) restore degraded pastures into biodiverse silvopastoral systems	5,023,919		320,598	
Staff Cost	-			
Local consultants	-			
International consultant	-			
Materials and Equipments	3,818,179			
Constuction cost	-			
Training, workshops, and conference	145,726	0.2	29,145	Meetings, trainings and materials produced mainstream and redress gender and intercultural concerns; ; childcare and other arrangements
Travel	477,108			
Professional/ Contractual Services	582,906	0.5	291,453	50% of people hired/contracted are women
1.2.1.3 Producers restore degraded pastures into biodiverse cocoa agroforests	15,166,182		389,403	
Staff Cost	-			
Local consultants	-			
International consultant	-			
Materials and Equipments	14,104,174			
Constuction cost	-			
Training, workshops, and conference	177,001	0.2	35,400	Meetings, trainings and materials produced mainstream and redress gender and intercultural concerns; childcare and other arrangements

	Travel	177,001			
	Professional/ Contractual Services	708,006	0.5	354,003	50% of people hired/contracted are women
1.2.1.4 Reforest degraded land on slopes (> 50%) into biodiverse, Close to Nature Planted Forests (CTNPFs)		2,812,321		242,102	
	Staff Cost	-			
	Local consultants	-			
	International consultant	-			
	Materials and Equipments	2,010,812			
	Constuction cost	-			
	Training, workshops, and conference	205,103	0.2	41,021	Meetings, trainings and materials produced mainstream and redress gender and intercultural concerns; ; childcare and other arrangements
	Travel	194,244			
	Professional/ Contractual Services	402,162	0.5	201,081	50% of people hired/contracted are women
Output 1.2.2 Natural forest ecosystems and forest land conserved, restored and sustainably used		62,403,396		4,983,810	
1.2.2.1 Finance Sustainable Community Enterprises (SCE) in indigenous territories within protected areas for natural forest ecosystems conservation and use		5,122,800		502,319	
	Staff Cost	-			
	Local consultants	-			
	International consultant	-			
	Materials and Equipments	2,371,667			
	Constuction cost	1,423,949			
	Training, workshops, and conference	94,867	0.3	28,460	Meetings, trainings and materials produced mainstream and redress gender and intercultural concerns; ; childcare and other arrangements
	Travel	284,600			
	Professional/ Contractual Services	947,718	0.5	473,859	50% of people hired/contracted are women
1.2.2.2 Finance commercial Community Forest Management (CFM) projects with business plans prepared by indigenous communities outside protected areas		23,998,150		1,661,426	
	Staff Cost	-			
	Local consultants	-			
	International consultant	-			
	Materials and Equipments	10,559,190			
	Constuction cost	9,138,798			

				Meetings, trainings and materials produced mainstream and redress gender and intercultural concerns; ; childcare and other arrangements
	Training, workshops, and conference	488,655	0.2	97,731
	Travel	684,117		
	Professional/ Contractual Services	3,127,390	0.5	1,563,695
				50% of people hired/contracted are women
1.2.2.3	Finance commercial Community Forest Restoration (CFR) projects with business plans prepared by indigenous communities outside protected areas	33,282,447		2,820,065
	Staff Cost	-		
	Local consultants	-		
	International consultant	-		
	Materials and Equipments	9,485,501		
	Constuction cost	16,441,535		
				Meetings, trainings and materials produced mainstream and redress gender and intercultural concerns; ; childcare and other arrangements
	Training, workshops, and conference	939,517	0.2	187,903
	Travel	1,151,571		
	Professional/ Contractual Services	5,264,322	0.5	2,632,161
				50% of people hired/contracted are women
	<i>Output 1.2.3 Farmer cooperatives, producer organizations and community enterprises access high-value markets</i>	1,801,726		626,846
1.2.3.1	Support cooperatives, producer organizations and indigenous community (SCEs and CRMR) to reach high-value markets	81,600		15,360
	Staff Cost	-		
	Local consultants	-		
	International consultant	-		
	Materials and Equipments	28,800		
	Constuction cost	-		
				Meetings, trainings and materials produced mainstream and redress gender and intercultural concerns; ; childcare and other arrangements
	Training, workshops, and conference	16,800	0.2	3,360
	Travel	12,000		
	Professional/ Contractual Services	24,000	0.5	12,000
				50% of people hired/contracted are women
1.2.3.2	Facilitate targeted business contacts between producers organizations and indigenous communities enterprises with high value markets	540,000		72,000

	Staff Cost	-			
	Local consultants	-			
	International consultant	-			
	Materials and Equipments	84,000			
	Constuction cost	120,000			
	Training, workshops, and conference	96,000	0.2	19,200	Meetings, trainings and materials produced mainstream and redress gender and intercultural concerns; ; childcare and other arrangements
	Travel	134,400			
	Professional/ Contractual Services	105,600	0.5	52,800	50% of people hired/contracted are women
1.2.3.3 Support producer organizations and community enterprises in voluntary certification processes		1,180,126		539,486	
	Staff Cost	-			
	Local consultants	-			
	International consultant	-			
	Materials and Equipments	-			
	Constuction cost	-			
	Training, workshops, and conference	168,589	0.2	33,718	Meetings, trainings and materials produced mainstream and redress gender and intercultural concerns; ; childcare and other arrangements
	Travel	-			
	Professional/ Contractual Services	1,011,537	0.5	505,768	50% of people hired/contracted are women
COMPONENT 2: GOOD GOVERNANCE		11,905,361		3,847,428	
Subcomponente 2.1 Regional natural resources governance strengthened		10,366,267		3,730,661	
Output 2.1 .1 Environmental authorities present at the regional and the local level, including municipalities and indigenous territory governments (GTIs) strenghtened		9,782,318		3,559,307	
2.1.1 .1 Hire new technical, extension and control personell to work in the project area and indigenous territories		6,804,000	0.5	3,402,000	
	Staff Cost	-			
	Local consultants	6,804,000	0.5	3,402,000	50% of people hired/contracted are women
	International consultant	-			
	Materials and Equipments	-			
	Constuction cost	-			
	Training, workshops, and conference	-			
	Travel	-			
	Professional/ Contractual Services	-			

2.1.1.2 Procure material, equipment and vehicles for regional and local institutions		1,806,362		103,681	
Staff Cost		-			
Local consultants		-			
International consultant		-			
Materials and Equipments		1,234,999			
Constuction cost		260,000			
Training, workshops, and conference		65,000			
Travel		39,000			
Professional/ Contractual Services		207,363	0.5	103,681	50% of people hired/contracted are women
2.1.1. 3 Grant public budget for operationalional expenses to regional/local environ. authorities incl. Indigenous Territorial Governments		1,171,956		53,625	
Staff Cost		-			
Local consultants		-			
International consultant		-			
Materials and Equipments		273,001			
Constuction cost		182,001			
Training, workshops, and conference		63,700			
Travel		546,003			
Professional/ Contractual Services		107,251	0.5	53,625	50% of people hired/contracted are women
<i>Output 2.1.2 Legal and normative framework up-dated</i>		375,700		116,900	
2.1.2.1 Analyse and up-date forestry, environmental and land-use normative framework at national level		187,200		58,500	
Staff Cost		-			
Local consultants		32,500	0.5	16,250	50% of people hired/contracted are women
International consultant		52,000	0.5	26,000	50% of people hired/contracted are women
Materials and Equipments		2,600			
Constuction cost		-			
Training, workshops, and conference		31,200	0.3	7,800	
Travel		52,000			
Professional/ Contractual Services		16,900	0.5	8,450	50% of people hired/contracted are women
2.1.2.2 Support regional / local environmental authorities to actualize the normative framework		78,000		22,750	
Staff Cost		-			
Local consultants		32,500	0.5	16,250	50% of people hired/contracted are women
International consultant		-			
Materials and Equipments		10,400			
Constuction cost		-			

				Meetings, trainings and materials produced mainstream and redress gender and intercultural concerns; ; childcare and other arrangements
	Training, workshops, and conference	19,500	0.2	3,900
	Travel	10,400		
	Professional/ Contractual Services	5,200	0.5	2,600
				50% of people hired/contracted are women
2.1.2.3 Up-date the management plans of the two protected areas: BOSAWAS and Indio Maíz		110,500		35,650
	Staff Cost	-		
	Local consultants	60,000	0.5	30,000
	International consultant	20,000		
	Materials and Equipments	4,000		
	Constuction cost	-		
	Training, workshops, and conference	12,000	0.2	2,400
	Travel	8,000		
	Professional/ Contractual Services	6,500	0.5	3,250
				50% of people hired/contracted are women
Output 2.1.3 Public-private dialogue and cooperation strenghtened		208,249		54,455
2.1.3.1 Facilitate sectoral public-private dialogue at regional and local level		22,750		3,705
	Staff Cost	-		
	Local consultants	-		
	International consultant	-		
	Materials and Equipments	6,500		
	Constuction cost	-		
	Training, workshops, and conference	10,400	0.2	2,080
	Travel	2,600		
	Professional/ Contractual Services	3,250	0.5	1,625
				50% of people hired/contracted are women

2.1.3.2 Strengthen the Production, Consumption and Marketing System (SPCC) at regional level		185,499		50,750	
Staff Cost		-			
Local consultants		15,000	0.5	7,500	50% of people hired/contracted are women
International consultant		18,000			
Materials and Equipments		60,000			
Constuction cost		-			
Training, workshops, and conference		6,000	0.2	1,200	Meetings, trainings and materials produced mainstream and redress gender and intercultural concerns; childcare and other arrangements
Travel		2,400			
Professional/ Contractual Services		84,099	0.5	42,050	50% of people hired/contracted are women
Subcomponente 2.2 Local organization, territorial oversight and law enforcement strengthened		1,539,094		116,767	
Output 2.2.1 Territorial governments and local organizations strenghtened		699,844		108,655	
2.2.1.1 Provide institutional strengthening to Indigenous Territorial Governments (GTIs)		621,000		82,800	
Staff Cost		-			
Local consultants			0.5	57,500	50% of people hired/contracted are women
International consultant		115,000			
Materials and Equipments		-			
Constuction cost		230,000			
Training, workshops, and conference		161,000			
Travel					
Professional/ Contractual Services					
Training, workshops, and conference		46,000	0.2	9,200	Meetings, trainings and materials produced mainstream and redress gender and intercultural concerns; childcare and other arrangements
Travel		36,800			
Professional/ Contractual Services		32,200	0.5	16,100	50% of people hired/contracted are women
2.2.1.2 Provide organizational support to local producer organizations (indigenous and non-indigenous)		32,766		8,192	
Staff Cost		-			
Local consultants		-			
International consultant		-			
Materials and Equipments		5,120			
Constuction cost		-			

	Training, workshops, and conference	10,240	0.2	2,048	Meetings, trainings and materials produced mainstream and redress gender and intercultural concerns; childcare and other arrangements
	Travel	5,120			
	Professional/ Contractual Services	12,287	0.5	6,144	50% of people hired/contracted are women
2.2.1.3 Provide legal support to officialize producer organizations, cooperatives and community enterprises		46,078		17,663	
	Staff Cost	-			
	Local consultants	33,278	0.5	16,639	50% of people hired/contracted are women
	International consultant	-			
	Materials and Equipments	-			
	Constuction cost	-			
	Training, workshops, and conference	5,120	0.2	1,024	Meetings, trainings and materials produced mainstream and redress gender and intercultural concerns; childcare and other arrangements
	Travel	7,680			
	Professional/ Contractual Services	-			
Output 2.2.2 Forest, land-use and land use change administration, control and environmental law enforcement strengthened		839,250		8,112	
2.2.2.1 Operate mobile units and fixed control posts to control timber transport		195,300		2,600	
	Staff Cost	-			
	Local consultants	-			
	International consultant	-			
	Materials and Equipments	65,299			
	Constuction cost	52,000			
	Training, workshops, and conference	13,000	0.2	2,600	Responsive to safety concerns by gender and ethnicity
	Travel	65,000			
	Professional/ Contractual Services	-			
2.2.2.2 Operate deforestation control and forest fire prevention brigades		182,250		2,632	
	Staff Cost	-			
	Local consultants	-			
	International consultant	-			
	Materials and Equipments	86,409			
	Constuction cost	-			

	Training, workshops, and conference	14,401	0.1	1,440	Responsive to safety concerns by gender and ethnicity
	Travel	57,606			
	Professional/ Contractual Services	23,834	0.1	1,192	Minimum 5% women hired
2.2.2.3 Operate indigenous people territorial defense and resources control brigades		461,700		2,880	
	Staff Cost	-			
	Local consultants	-			
	International consultant	-			
	Materials and Equipments	288,022			
	Constuction cost	72,870			
	Training, workshops, and conference	28,802	0.1	2,880	Responsive to safety concerns by gender and ethnicity
	Travel	72,006			
	Professional/ Contractual Services	-			
COMPONENT 3: CAPACITY DEVELOPMENT FOR PRODUCTIVE LANDSCAPE RESTORATION AND FOREST CONSERVATION		8,382,836		2,164,831	
Subcomponent 3.1 Capacity development through training		1,028,556		315,191	
<i>Output 3.1.1 Technical personel, extension workers and promotors trained</i>		145,336		47,686	
3.1.1.1 Train technicians and extensionists in participatory land use planning (LUMP-b, TDPs-b)		66,690		21,513	
	Staff Cost	-			
	Local consultants	-			
	International consultant	-			
	Materials and Equipments	10,756			
	Constuction cost	-			
	Training, workshops, and conference	21,513	0.2	4,303	Meetings, trainings and materials produced mainstream and redress gender and intercultural concerns; childcare and other arrangements
	Travel	-			
	Professional/ Contractual Services	34,421	0.5	17,210	50% of people hired/contracted are women
3.1.1.2 Train stakeholders to use the up-dated sectoral legal and normative framework		21,466		7,144	
	Staff Cost	-			
	Local consultants	-			
	International consultant	-			
	Materials and Equipments	1,717			
	Constuction cost	-			

				Meetings, trainings and materials produced mainstream and redress gender and intercultural concerns; childcare and other arrangements
	Training, workshops, and conference	9,101	0.2	1,820
	Travel	-		
	Professional/ Contractual Services	10,647	0.5	5,323
				50% of people hired/contracted are women
3.1.1.3 Train technicians and extensionworkers to implement Productive Landscape Restoration / Forest Conservation Models		57,181		19,030
	Staff Cost	-		
	Local consultants	-		
	International consultant	-		
	Materials and Equipments	4,574		
	Constuction cost	-		
	Training, workshops, and conference	24,245	0.2	4,849
	Travel	-		
	Professional/ Contractual Services	28,362	0.5	14,181
				50% of people hired/contracted are women
Output 3.1.2 Producers and members of organizations/communities trained		883,220		267,505
3.1.2.1 Provide organizational, management, financial and marketing training to producers and members of organizations/communities		22,435		4,487
	Staff Cost	-		
	Local consultants	-		
	International consultant	-		
	Materials and Equipments	-		
	Constuction cost	-		
	Training, workshops, and conference	22,435	0.2	4,487
	Travel	-		
	Professional/ Contractual Services	-		
3.1.2.2 Train producers in LUMP, TDP and Productive Landscape Restoration / Forest Conservation Models		860,785		263,018
	Staff Cost	-		
	Local consultants	-		

	International consultant	-			
	Materials and Equipments	79,702			
	Constuction cost	-			
		318,809	0.1	31,881	Meetings, trainings and materials produced mainstream and redress gender and intercultural concerns; childcare and other arrangements
	Training, workshops, and conference				
	Travel	-			
			0.5	231,137	50% of people hired/contracted are women
	Professional/ Contractual Services	462,273			
Subcomponent 3.2 Development of tools and instruments		5,410,281		1,471,640	
Output 3.2.1 Information systems for climate resilient sustainable development and risk management are in place		5,410,281		1,471,640	
3.2.1.1 Set up a deforestation and forest fires early-warning system		504,000		51,800	
	Staff Cost	-			
			0.5	10,000	50% of people hired/contracted are women
	Local consultants	20,000			
	International consultant	10,000			
	Materials and Equipments	180,000			
	Constuction cost	70,000			
					Meetings, trainings and materials produced mainstream and redress gender and intercultural concerns; childcare and other arrangements
	Training, workshops, and conference	25,000	0.2	5,000	
	Travel	15,000			
			0.2	36,800	50% of people hired/contracted are women; contractual services provided
	Professional/ Contractual Services	184,000			
3.2.1.2 Up-date and roll out the forest products administration and control system		680,000		55,500	
	Staff Cost	-			
			0.5	12,500	50% of people hired/contracted are women
	Local consultants	25,000			
	International consultant	15,000			
	Materials and Equipments	285,000			
	Constuction cost	120,000			

			0.2	3,000	Meetings, trainings and materials produced mainstream and redress gender and intercultural concerns; childcare and other arrangements
	Training, workshops, and conference	15,000			
	Travel	20,000			
	Professional/ Contractual Services	200,000	0.2	40,000	50% of people hired/contracted are women;contractual services provided
3.2.1.3 Monitor LULUC, deforestation and forest degradation		2,244,000		438,000	
	Staff Cost	-			
	Local consultants	324,000	0.5	162,000	50% of people hired/contracted are women
	International consultant	180,000	0.5	90,000	50% of people hired/contracted are women
	Materials and Equipments	600,000			
	Constuction cost	-			
	Training, workshops, and conference	180,000	0.1	18,000	Meetings, trainings and materials produced mainstream and redress gender and intercultural concerns; childcare and other arrangements
	Travel	120,000			
	Professional/ Contractual Services	840,000	0.2	168,000	50% of people hired/contracted are women;contractual services provided
3.2.1.4 Install and monitor permanent plots of the National Forest Inventory (NFI) in the CR		911,481		455,740	
	Staff Cost	-			
	Local consultants	-			
	International consultant	-			
	Materials and Equipments	-			
	Constuction cost	-			
	Training, workshops, and conference	-			
	Travel	-			
	Professional/ Contractual Services	911,481	0.5	455,740	50% of people hired/contracted are women
3.2.1.5 Monitor biodiversity indicator species in 10% of plots of the NFI in the CR		444,000		222,000	
	Staff Cost	-			

	Local consultants	-			
	International consultant	-			
	Materials and Equipments	-			
	Constuction cost	-			
	Training, workshops, and conference	-			
	Travel	-			
	Professional/ Contractual Services	444,000	0.5	222,000	50% of people hired/contracted are women
3.2.1.6	Monitor adaptation,mitigation and biodiversity impact of implemented productive landscape restoration/forest conservation models	338,800		169,400	
	Staff Cost	-			
	Local consultants	-			
	International consultant	-			
	Materials and Equipments	-			
	Constuction cost	-			
	Training, workshops, and conference	-			
	Travel	-			
	Professional/ Contractual Services	338,800	0.5	169,400	50% of people hired/contracted are women
3.2.1.7	Monitor climate, hydrometeorological (incl tropical storms, hurricanes, droughts),and pest risk phenomena in order to inform and emit alerts	288,000		79,200	
	Staff Cost	-			
	Local consultants	84,000	0.5	42,000	50% of people hired/contracted are women
	International consultant	-			
	Materials and Equipments	60,000			
	Constuction cost	-			
	Training, workshops, and conference	36,000	0.2	7,200	Meetings, trainings and materials produced mainstream and redress gender and intercultural concerns; childcare and other arrangements provided
	Travel	48,000			
	Professional/ Contractual Services	60,000	0.5	30,000	50% of people hired/contracted are women
Subcomponent 3.3 Development of public awareness		1,944,000		378,000	
<i>Output 3.3.1 The Public is more aware of the need for climate change adaptation, mitigation, landscape restoration and forest conservation</i>		1,944,000		378,000	
3.3.1.1	Develop and roll-out a public communication strategy	216,000		108,000	
	Staff Cost	-			
	Local consultants	-			

	International consultant	-			
	Materials and Equipments	-			
	Constuction cost	-			
	Training, workshops, and conference	-			
	Travel	-			
	Professional/ Contractual Services	216,000	0.5	108,000	50% of people hired/contracted are women
3.3.1.2 Undertake environmental education in local schools and communities		1,728,000		270,000	
	Staff Cost	-			
	Local consultants	-			
	International consultant	-			
	Materials and Equipments	648,000			
	Constuction cost	-			
	Training, workshops, and conference	108,000			
	Travel	432,000			
	Professional/ Contractual Services	540,000	0.5	270,000	50% of people hired/contracted are women
PROJECT MANAGEMENT		948,821		367,220	
<i>Project Management Unit (PMU) in operation</i>		566,621		233,920	
Set-up and operate the PMU		485,982		221,600	
	Staff Cost	-			
	Local consultants	430,000	0.5	215,000	50% of people hired/contracted are women
	International consultant	-			
	Materials and Equipments	11,982			
	Constuction cost	4,000			
	Training, workshops, and conference	8,000	0.2	1,600	Staff and consultants trained on Project's Gender Assessment, Gender Action Plan and Gender equality results and indicators
	Travel	22,000			
	Professional/ Contractual Services	10,000	0.5	5,000	50% of people hired/contracted are women
Stenghten MEFCCA/MARENA project oversight and steering capacities		80,639		12,320	
	Staff Cost	-			
	Local consultants	10,000	0.5	5,000	50% of people hired/contracted are women
	International consultant	-			
	Materials and Equipments	25,000			
	Constuction cost	12,000			

		10,000	0.2	2,000	Train in: Project Gender Assessment and GAP; gender equality and intercultural results and indicators; grievance mechanism, gender equality components and gender action plans
	Training, workshops, and conference				
	Travel	13,000			
			0.5	5,320	50% of people hired/contracted are women
	Professional/ Contractual Services	10,639			
Project M&E and reporting system implemented, and Environmental and Social Impact Assessment and Management and Mitigation Plan in place		382,200		133,300	
Set-up the project monitoring, evaluation and reporting system		88,200		27,100	
	Staff Cost	-			
			0.5	5,000	50% of people hired/contracted are women
	Local consultants	10,000			
	International consultant	5,000			
	Materials and Equipments	10,000			
	Constuction cost	-			
				3,000	Training on Gender Assessment and GAP; Gender Equality results and indicators; and qualitative methods and gender and intercultural analysis
	Training, workshops, and conference	15,000	0.2		
	Travel	10,000			
			0.5	19,100	50% of people hired/contracted are women
	Professional/ Contractual Services	38,200			
Systematize findings and lessons learnt and communicate project results		84,000		22,800	
	Staff Cost	-			
			0.5	12,000	50% of people hired/contracted are women
	Local consultants	24,000			
	International consultant	-			
	Materials and Equipments	6,000			
	Constuction cost	-			
				4,800	Training on Gender Assessment and GAP; Gender Equality results and indicators; and qualitative methods and gender and intercultural analysis
	Training, workshops, and conference	24,000	0.2		
	Travel	18,000			

Professional/ Contractual Services	12,000	0.5	6,000	50% of people hired/contracted are women
Supervise and evaluate project implementation	210,000		83,400	
Staff Cost	-			
Local consultants	60,000	0.5	30,000	50% of people hired/contracted are women
International consultant	96,000	0.5	48,000	50% of people hired/contracted are women
Materials and Equipments	12,000			
Constuction cost	-			
Training, workshops, and conference	12,000	0.2	2,400	Training on Gender Assessment and GAP; Gender Equality results and indicators; and qualitative methods and gender and intercultural analysis
Travel	24,000			
Professional/ Contractual Services	6,000	0.5	3,000	50% of people hired/contracted are women
TOTAL	115,692,245		13,550,668	