



ADAPTATION FUND

AFB/PPRC.20/19
4 March 2017

Adaptation Fund Board
Project and Programme Review Committee
Twentieth Meeting
Bonn, Germany, 14-15 March 2017

Agenda Item 8 n)

PROPOSAL FOR HONDURAS

Background

1. The Operational Policies and Guidelines (OPG) for Parties to Access Resources from the Adaptation Fund (the Fund), adopted by the Adaptation Fund Board (the Board), state in paragraph 45 that regular adaptation project and programme proposals, i.e. those that request funding exceeding US\$ 1 million, would undergo either a one-step, or a two-step approval process. In case of the one-step process, the proponent would directly submit a fully-developed project proposal. In the two-step process, the proponent would first submit a brief project concept, which would be reviewed by the Project and Programme Review Committee (PPRC) and would have to receive the endorsement of the Board. In the second step, the fullydeveloped project/programme document would be reviewed by the PPRC, and would ultimately require the Board's approval.
2. The Templates approved by the Board (OPG, Annex 4) do not include a separate template for project and programme concepts but provide that these are to be submitted using the project and programme proposal template. The section on Adaptation Fund Project Review Criteria states:

For regular projects using the two-step approval process, only the first four criteria will be applied when reviewing the 1st step for regular project concept. In addition, the information provided in the 1st step approval process with respect to the review criteria for the regular project concept could be less detailed than the information in the request for approval template submitted at the 2nd step approval process. Furthermore, a final project document is required for regular projects for the 2nd step approval, in addition to the approval template.

3. The first four criteria mentioned above are:
 1. Country Eligibility,
 2. Project Eligibility,
 3. Resource Availability, and
 4. Eligibility of NIE/MIE.
4. The fifth criterion, applied when reviewing a fully-developed project document, is:
 5. Implementation Arrangements.
5. It is worth noting that since the twenty-second Board meeting, the Environmental and Social (E&S) Policy of the Fund was approved and consequently compliance with the Policy has been included in the review criteria both for concept documents and fully-developed project documents. The proposals template was revised as well, to include sections requesting demonstration of compliance of the project/programme with the E&S Policy.
6. In its seventeenth meeting, the Board decided (Decision B.17/7) to approve "Instructions for preparing a request for project or programme funding from the Adaptation Fund", contained in the Annex to document AFB/PPRC.8/4, which further outlines applicable review criteria for both concepts and fully-developed proposals. The latest version of this document was launched in conjunction with the revision of the Operational Policies and Guidelines in November 2013.

7. Based on the Board Decision B.9/2, the first call for project and programme proposals was issued and an invitation letter to eligible Parties to submit project and programme proposals to the Fund was sent out on April 8, 2010.

8. According to the Board Decision B.12/10, a project or programme proposal needs to be received by the secretariat no less than nine weeks before a Board meeting, in order to be considered by the Board in that meeting.

9. The following fully-developed project document titled “Ecosystem-Based Adaptation at Communities of the Central Forest Corridor in Tegucigalpa” was submitted by the United Nations Development Programme (UNDP), which is the Multilateral Implementing Entity for this project.

10. This is the second submission of the project focusing on water management in Honduras. It was first submitted for consideration of the Board at its 28th meeting but was withdrawn following the initial technical review of the secretariat.

11. The present submission was received by the secretariat in time to be considered in the twenty-ninth Board meeting. The secretariat carried out a technical review of the project proposal, assigned it the diary number HND/MIE/Multi/2016/1, and completed a review sheet.

12. In accordance with a request to the secretariat made by the Board in its 10th meeting, the secretariat shared this review sheet with UNDP, and offered it the opportunity of providing responses before the review sheet was sent to the PPRC.

13. The secretariat is submitting to the PPRC the summary and, pursuant to decision B.17/15, the final technical review of the project, both prepared by the secretariat, along with the final submission of the proposal in the following section. In accordance with decision B.25.15, the proposal is submitted with changes between the initial submission and the revised version highlighted.

Project Summary

Honduras – Ecosystem-Based Adaptation at Communities of the Central Forest Corridor in Tegucigalpa

Implementing Entity: UNDP

Project/Programme Execution Cost: USD 381,802

Total Project/Programme Cost: USD 4,036,590

Implementing Fee: USD 343,110

Financing Requested: USD 4,379,700

Project Background and Context:

The main objective of the project is to increase climate resilience of the most vulnerable communities in the Central Forest Corridor and the adaptation capacity of its municipalities with emphasis on securing livelihoods and the continued provision of ecosystem goods and services for Tegucigalpa and surroundings.

Enhancement of biodiversity and ecosystem services represents a key adaptation strategy for communities of CFC, given that there is a very significant dependency between communities in the CFC and the natural resources present, as source of a range of ecosystem services. Climate related challenges identified in the CFC are intrinsically linked to water resources availability such as strong rainfall that decrease water quantity and quality to satisfy the demands from communities that live in the CFC, on the other hand, the loss of forest cover is posing a high risk on these communities. Natural resources vulnerability towards the impacts of extreme events exacerbated by climate change, have a strong negative effect on livelihoods directly related to these natural resources. Therefore, the project aims to enhance how these communities make a better use of their resources and to recover the lost forest coverage, reducing the current threats to biodiversity and ecosystem services. These biodiversity and ecosystem services can help to buffer these forests from perturbation, promoting natural reforestation and conservation, having communities to manage protected areas, that will increase their resilience to climate change.

Component 1: Strengthening of local and community governance for climate resilience (USD 472,513)

The project will focus on facilitating the success and continuity of the CFC Platform as a model of land, forest and water resources management, with a focus on climate change adaptation, to ensure the provision of ecosystem goods and services, operating as a coordination and advocacy mechanism among municipalities, and between municipalities to central government institutions. The project will support the establishment of a CFC Technical Implementation Unit that will be tasked to develop internal procedures and rules for the operational activities of the CFC Platform, and an Action Plan toward formalizing a CFC Authority. The project will also support the application and implementation of the Forestry, Protected Areas and Wildlife Law. In order to promote planning tools that help municipalities increase their resilience and to support compliance with the Law of Climate Change, the project will also support the review and preparation of key municipal level plans. Lastly, under this component the project will support the replication of the municipal level PES scheme introduced through the current AF project in Tatumbia. This involved

the revision of the water tariff system to internalize the costs of protection and maintenance of water source and recharge areas.

Component 2: Increased capacity of communities in CBC to implement ecosystem-based climate change adaptation measures (USD 2,750,500)

The project will promote the restoration of 1,000 ha of mix and pine forest in the CFC, in line with the components of the 2016 – 2026 Restoration Plan in areas affected by the bark beetle. The restoration will involve reforestation of areas completely devastated and complementary planting (completion) of areas with some level of plants survived. Protection measures will be implemented in the framework of the 14 Municipal Forest Protection Plans that will be revised and updated to the post-bark beetle plague situation. Interventions will aim at enhancing the natural resilience of forests against risks of fires, pests, diseases (including the bark beetle) that is exacerbated by increasing drought conditions – supporting forest restoration through assisted natural regeneration. Drought management adaptation measures will be also implemented to optimize the use of water resources for agriculture and domestic use. Further support to enabling environment will include training and coordination support to extension officers and technicians of central institutions such as SAG, SANAA and ICF, to ensure their enhanced field presence and advisory services to producers in CFC.

Component 3: Strengthening knowledge, information management, and monitoring systems on climate change vulnerability and adaptive capacity (USD 431,775)

Under this component, applied research will be carried out to enhance knowledge and information on the links amongst climate change, drought, pests, fires and adaptation measures in the CFC. This output is key considering that the unprecedented disaster caused by the bark beetle requires analysis of trends and identification of enhanced techniques for prevention and response measures, towards an enhanced understanding of related dynamisms. The project will forge alliances with institutions such as the UNAH, Research System (SINFOR in Spanish) of the National School of Forestry Sciences (ESNACIFOR in Spanish). The project will also support the National Climate Change Observatory for Sustainable Development (ONCCDS – Spanish acronym) to obtain a legal status. Lastly, a Community early warning and monitoring system for bark beetle pest outbreak will be developed under CFC Platform.



ADAPTATION FUND

ADAPTATION FUND BOARD SECRETARIAT TECHNICAL REVIEW OF PROJECT/PROGRAMME PROPOSAL

PROJECT/PROGRAMME CATEGORY: Regular-sized Project

Country/Region: **Honduras**
 Project Title: **Ecosystem-Based Adaptation at Communities of the Central Forest Corridor in Tegucigalpa**
 AF Project ID: **HND/MIE/Multi/2016/1**
 IE Project ID:
 Reviewer and contact person: **Andrew Chilombo**
 IE Contact Person: **Gabor Vereczi**
Requested Financing from Adaptation Fund (US Dollars): **4,379,700**
 Co-reviewer(s):

Review Criteria	Questions	Comments on 24 January 2017	Comments on February 14, 2017
Country Eligibility	1. Is the country party to the Kyoto Protocol?	Yes	
	2. Is the country a developing country particularly vulnerable to the adverse effects of climate change?	Yes. Honduras is the second poorest country in Central America, highest poverty, economic and social inequality levels, and is severely affected by climate change and extreme events related to tropical cyclones or the El Niño-Southern Oscillation (ENSO) phenomenon	
Project Eligibility	1. Has the designated government authority for the Adaptation Fund endorsed the project/programme?	Yes, letter dated January 12, 2017.	
	2. Does the project / programme support concrete adaptation actions to assist the country in addressing adaptive capacity to the adverse effects of climate change and	The project has successfully identified both climatic and non-climatic challenges in Central Forest Corridor (CFC). The combined effect of the 3 closely integrated outcomes and its outputs are expected to result in the improvement of biodiversity and ecosystem services. There is a very significant dependency between communities in the CFC and the natural resources present. Climate related challenges identified in the CFC are intrinsically linked to water resources availability and include strong rainfall that decrease water quantity and quality to satisfy the demands from communities that live in the CFC. On the other hand, the loss of forest cover	

	<p>build in climate resilience?</p>	<p>is posing a high risk on these communities. Natural resources vulnerability to the impacts of extreme events is exacerbated by climate change, which has a strong negative effect on livelihoods directly related to these natural resources.</p> <p>Therefore, the project aims to enhance how these communities make a better use of their resources and to recover the lost forest coverage, reducing the current threats to biodiversity and ecosystem services. These biodiversity and ecosystem services can help to buffer these forests from perturbation, promoting natural reforestation and conservation, having communities to manage protected areas, that will increase their resilience to climate change.</p> <p>CR1: Please further demonstrate that the introduction of biological pest controls in CFC will have no impacts on the CFC ecosystem. Biological pest control involves the introduction of other organisms to control the populations and minimize the impacts of the pests to be controlled. Though the results of applying biological pest control measures and agro-ecological practices might be similar in some respects, the two are not the same.</p>	<p>CR1: Addressed.</p>
	<p>3. Does the project / programme provide economic, social and environmental benefits, particularly to vulnerable communities, including gender considerations, while avoiding or mitigating negative impacts, in compliance with the Environmental and Social Policy of the Fund?</p>	<p>Yes. The targeted beneficiaries are 12,000 vulnerable families included in the 3 Municipalities (Ojojona, Santa Ana and Lepaterique) that feature Lenca indigenous communities, having around 2,000 families which are decedents of indigenous groups with certain mix (mestizaje) and spread across the municipalities.</p>	
	<p>4. Is the project / programme cost effective?</p>	<p>Yes.</p>	

	5. Is the project / programme consistent with national or sub-national sustainable development strategies, national or sub-national development plans, poverty reduction strategies, national communications and adaptation programs of action and other relevant instruments?	Yes	
	6. Does the project / programme meet the relevant national technical standards, where applicable, in compliance with the Environmental and Social Policy of the Fund?	Yes.	
	7. Is there duplication of project / programme with other funding sources?	No.	
	8. Does the project / programme have a learning and knowledge management component to capture and feedback lessons?	Yes.	

	9. Has a consultative process taken place, and has it involved all key stakeholders, and vulnerable groups, including gender considerations?	Yes. However, additional information will be required to the table on page 42, by presenting the outcomes of the consultations; and demonstrating how these results were reflected in the design of this project. CR2	CR2: Addressed.
	10. Is the requested financing justified on the basis of full cost of adaptation reasoning?	Yes.	
	11. Is the project / program aligned with AF's results framework?	Yes	
	12. Has the sustainability of the project/programme outcomes been taken into account when designing the project?	Yes.	
	13. Does the project / programme provide an overview of environmental and social impacts / risks identified?	Yes. However, it is recommended to explicitly integrate the ESMP in the project design and implementation arrangements. CR3	CR3: Yes
Resource Availability	1. Is the requested project / programme funding within the cap of the country?	No. The requested budget for this project is \$4,398,932. A project already funded by AF is currently being implemented by UNDP, with a budget of \$5,620,300. The total requested budget for both projects is therefore \$10,019,232, which is above the country cap of \$10 million. CAR: Please	CAR: Addressed. The budget has been revised to \$4,379,700.

		revise the requested budget, taking into account the cap of \$10 million per country established by the Board.	
	2. Is the Implementing Entity Management Fee at or below 8.5 per cent of the total project/programme budget before the fee?	Yes, it is at 8.5%	
	3. Are the Project/Programme Execution Costs at or below 9.5 per cent of the total project/programme budget?	Yes, it is at 9.4%	
Eligibility of IE	4. Is the project/programme submitted through an eligible Implementing Entity that has been accredited by the Board?	Yes, it is submitted through UNDP	
Implementation Arrangements	1. Is there adequate arrangement for project / programme management?	Yes. However, 'size manageability' rather than 'permanent representation' may compromise representation of concerns from Municipalities. The first 3 Municipalities will only appear again in the Board in the final year of the project implementation (dealing with wrapping up rather than actual implementation of activities). Please clarify how their concerns will be represented in the Board during the life of the project. CR4	CR4: Addressed.
	2. Are there measures for financial and project/programme risk management?	Yes.	
	3. Are there measures in place for the management of for	Yes. A social and environmental assessment has been prepared following the UNDP Social and Environmental Screening Procedure (please see	

	<p>environmental and social risks, in line with the Environmental and Social Policy of the Fund? Proponents are encouraged to refer to the draft Guidance document for Implementing Entities on compliance with the Adaptation Fund Environmental and Social Policy, for details.</p>	<p>Annex 13). An Environmental and Social Management Framework has been also prepared and is annexed to the proposal (Annex 14).</p> <p>However, please see CR3 above. Also, please clarify the ‘transparent and clear criteria (paragraph 133)’ that the project will establish and implement to mitigate access and equity issues. CR5</p>	CR5: Addressed.
4.	Is a budget on the Implementing Entity Management Fee use included?	Yes	
5.	Is an explanation and a breakdown of the execution costs included?	Yes	
6.	Is a detailed budget including budget notes included?	Yes	
7.	Are arrangements for monitoring and evaluation clearly defined, including budgeted M&E plans and sex-disaggregated data, targets and indicators?	CR6: Please, clarify if the monitoring of bark beetles by communities will be their in-kind contribution or if the project will financially compensate them.	CR6: Addressed.
8.	Does the M&E Framework include a break-down of how implementing entity IE	Yes	

	fees will be utilized in the supervision of the M&E function?		
	9. Does the project/programme's results framework align with the AF's results framework? Does it include at least one core outcome indicator from the Fund's results framework?	Yes	
	10. Is a disbursement schedule with time-bound milestones included?	Yes	
Technical Summary			
<p>The objective of the proposed project is to increase climate resilience of the most vulnerable communities in the Central Forest Corridor and the adaptation capacity of its municipalities with emphasis on securing livelihoods and the continued provision of ecosystem goods and services for Tegucigalpa and surroundings. It will focus on strengthening of local and community governance for climate resilience; on the ground adaptation measures for forest, land and water resources management; and strengthening knowledge, information management and monitoring systems on climate change vulnerability and adaptive capacity.</p> <p>This is the second submission of the project focusing on water management in Honduras. It was first submitted for consideration of the Board at its 28th meeting but was withdrawn following the initial technical review of the secretariat.</p> <p>The initial review of the current submission found that there had been improvements that had been made to the project. However, it was recommended that the Proponent respond to a few clarification requests (CRs) and corrective action request (CAR) that had been raised, including further demonstration that the introduction of biological pest controls in the forest corridor would have no impacts on the corridor's ecosystem; issues related to compliance with the Environmental and Social Policy of the Fund including complaint handling mechanism, among others.</p> <p>The final review of the revised proposal finds that the issues raised have been adequately addressed.</p>			
Date:	1 March 2017		



ADAPTATION FUND

Letter of Endorsement by Government

Secretary of Energy, Natural Resources, Environment and Mining

January 12, 2017

To: The Adaptation Fund Board
c/o Adaptation Fund Board Secretariat
Email: Secretariat@Adaptation-Fund.org
Fax: 202 522 3240/5

Subject: Letter of Endorsement for the project Ecosystem-based Adaptation at the Central Forest Corridor communities in Tegucigalpa

In my capacity as designated authority for the Adaptation Fund in Honduras, I confirm that the above national project proposal is in accordance with the government's national priorities in implementing adaptation activities to reduce adverse impacts of, and risks, posed by climate change in Honduras.

Accordingly, I am pleased to endorse the above project proposal with support from the Adaptation Fund. If approved, the project will be implemented by the United Nations Development Programme (UNDP) and executed by the Secretary of Energy, Natural Resources, Environment and Mining (MiAmbiente+).

Sincerely,

Jose Antonio Galdámez Fuentes
Secretary of State

A handwritten signature in black ink, appearing to read "Jose Antonio Galdámez Fuentes".An official circular stamp with the text "SECRETARIA DE ENERGIA RECURSOS NATURALES AMBIENTE Y MINAS HONDURAS" around the perimeter, "ESTADO" in the center, and a small emblem.

PROJECT/PROGRAMME PROPOSAL TO THE ADAPTATION FUND

PART I: PROJECT/PROGRAMME INFORMATION

Project/Programme Category:	Regular Project
Country:	Honduras
Title of Project:	Ecosystem-Based Adaptation at Communities of the Central Forest Corridor in Tegucigalpa
Type of Implementing Entity:	MIE
Implementing Entity:	United Nations Development Programme (UNDP)
Executing Entity/ies:	Ministry of Energy, Natural Resources, Environment and Mines (MiAmbiente)
Amount of Financing Requested:	4,379,700 (in U.S Dollars Equivalent)

Project / Programme Background and Context:

National Context

1. Honduras has an area of 112,492 km², the second largest country in Central America. In 2013, a population of 8,721,014 inhabitants¹ (52 % women) was estimated, where more than half (53.3 %) was rural population². Honduras is home to seven indigenous groups, and 2 Afro-Honduran groups, who together represent approximately 7% of the national population³. Honduras is a mid-level human development country, ranking in position number 131, with a Human Development Index (HDI) of 0.606 (gender inequality index of 0.480), which is the penultimate position in Latin America. The country faces the highest poverty, economic and social inequality levels in Latin America. The Gini coefficient is 0.52, and only 3.2 % of income belongs to the poorest quintile⁴. It is estimated that 64.5 % of Honduran households experience poverty, and of these, 42.6% are in extreme poverty. The most affected are rural areas with 68.5 % of the population living in poverty, and 55.6 % in extreme poverty. In rural areas, almost seven out of ten households live in extreme poverty⁵ . Honduras shows uneven fulfillment of Millennium Development Goals (MDGs). Only eight out of 82 indicators undertaken by the country, were reported by the Government as achieved⁶.
2. Moreover, 51.4 % of the economically active population (EAP) is rural population, and from this rural EAP, only 28.2 % are women⁷. 35% of total EAP performs agricultural, forestry, hunting and fishing

¹ INE, 2016

² XLIV Encuesta permanente de hogares Honduras 2013 (Honduran permanent household survey)

³ According to the 2001 Population and Housing Census

⁴ PNUD (2015) Panorama General - Informe de Desarrollo Humano (Human Development Report - General Overview) 2015

⁵ XLIV Encuesta permanente de hogares Honduras (Honduran permanent household survey) 2013

⁶ Gobierno de Honduras (2015) Informe 2015: Objetivos de Desarrollo del Milenio (2015 Millennium Development Goals Report)

⁷ XLIV Encuesta permanente de hogares Honduras (Honduran permanent household survey) 2013

activities⁸, mainly in rural areas; and most are severely affected by climate change and extreme events related to tropical cyclones or the El Niño-Southern Oscillation (ENSO) phenomenon.

3. Honduras has an area of 5.4 million hectares of natural forests. Pine and mixed pine woods coverage is approximate 2.2 million hectares, representing 41% of forest nationwide⁹. Pine forests are ecosystems of great environmental, economic and social importance; which are managed as productive forests, and also for ecosystem services such as water supply and protection of biodiversity.
4. The general situation in the country regarding meeting basic needs related to fresh water provision and sanitation coverage in the urban and rural sector, although having increased, remains proportionally unequal, with more than one million people in 2010 lacking access to improved drinking water services; and around 2.2 million lacking access to improved sanitation services, of which 80 % and 66 % respectively, live in rural areas.

Climate Change and Variability in Honduras

5. Historically, Honduras has been experiencing the effects of *El Niño* and *La Niña*, which produce a significant impact on the rainfall distribution and consequently on the national economy. The adverse effects of the extreme events of *El Niño* 1982-1983 and 1997-1998, are identified as episodes with a strong impact on crops, forest fires, famine and outbreaks of vector-borne diseases, jeopardizing food security and life quality of the population, especially in the south of the country¹⁰.
6. Hurricane Mitch, which occurred suddenly in 1998 out of an episode of *El Niño*, caused the greatest losses, about US\$ 8,000 million Dollars, representing over 20 years of social and economic backwardness, which further increased levels poverty and social exclusion¹¹. Currently, Honduras is emerging from another *El Niño* episode that affected the country during 2014-2015, with severe drought (especially in the area of the *Dry Corridor*), affecting an estimate of 161,403 families; or 817,015 people. Because of the severity of the 2015 drought, the government declared a National Emergency in June 27, 2015 (Decree PCM-036-2015). In addition, and induced by prolonged drought, Honduras has just emerged from one of the most sever incidences of bark beetle plague in the last fifty years, which has affected more than 800,000 ha of pine forest (more than 35% of the total pine forest cover area at national level), alarmingly and directly impacting goods and services they provide, and leading the country into two declarations of National Emergency in 2015 and 2016.
7. Scientific evidence indicates that the intensity, severity and periodicity of *El Niño* y *La Niña* events is changing and increasing over time. According to information from the National Aeronautics and Space Administration (NASA), the current *El Niño* episode, which peaked in January 2016, was longer than the one from 1997 to 1998, and it also affected a larger area. *El Niño* of 2015-2016 (which was a continuation of *El Niño* that first appeared in 2014-2015), had similar pattern to that of 1997-1998, but not an exact repetition. When comparing current conditions with those of 1997-1998, experts estimated a 70% probability that a *La Niña* to develop in 2016¹², representing risks of severe impacts for the country. According to the 5th Report of the Intergovernmental Panel on Climate Change (IPCC), there is a high confidence that ENSO, will remain the dominant mode of natural climate variability in the XXI century, with global influences, and is likely to intensify the variability of regional rainfall under its

⁸ Secretaría de Trabajo y Seguridad Social (Ministry of Labor and Social Security) (2010) Observatorio del mercado laboral de Honduras (Labor Market Observatory - Honduras)

⁹ ICF (2014) Anuario Estadístico Forestal del año 2014 (Forestry Statistical Yearbook 2014)

¹⁰ IHCIT- UNAH (2012) Atlas Climático y de Gestión de Riesgo de Honduras (Climate and Risk Management Honduran Atlas)

¹¹ PNUD (2012) Desastres, Riesgo y Desarrollo en Honduras (Disasters, Risk and Development in Honduras)

¹² <http://sealevel.jpl.nasa.gov/elnino2015/index.html>

influence¹³. Therefore, impacts of climate variability and change will continue to be experienced in Honduras, becoming increasingly imperative to continue taking the necessary adaptation measures.

Climate risks and vulnerability in Honduras

8. The IPCC 5th Report addresses the particular vulnerability of the Central American region, noting that: "Central America has traditionally been characterized as a region with high exposure to geo-climatic threats, due to its location and topography, and also showing high vulnerability of its human settlements (ECLAC, 2010c). It has also been identified as the tropical region most sensitive to climate change ". (Giorgi, 2006).
9. According to the German Watch Global Climate Risk Index published in November 2015, for the 1995-2014 period, at global level, Honduras was the most affected country by hydro-meteorological extreme events; with 73 events impacting the country, causing economic losses worth US\$ 570.35 billion, representing losses of 2.23 % of GDP. Taking into account the limitations of this index, whose data reflect only the direct impacts of extreme weather events (direct losses and deaths), it is also important to note that other impacts, such as heat waves, are often leading to much stronger indirect impacts, such as drought and food shortages¹⁴. Honduras is recurrently at the top of this index on a yearly basis, for the accumulated period.
10. Lack of public safety and insufficient violence prevention are an obstacle to human development in Honduras, while one of the most important problems for citizens and a priority area for the government of Honduras. Although there has been significant progress in reducing levels of homicides, Honduras continues to have excessively high rates: in 2015, the homicide rate reached 59.6 homicides per 100,000 inhabitants, representing one of the highest rates in the world. Those inhabitants living in areas affected by violent conflict are particularly vulnerable to climate change, because resources that facilitate adaptation, as institutional structures and social networks are severely impacted¹⁵. Both the condition of poverty and extreme poverty, as well as lack of public safety and violence, determine the high vulnerability levels of the population.

National Climatic Scenarios

11. In 2010, the Ministry of Energy, Natural Resources, Environment and Mines (now MiAmbiente, by its acronym in Spanish) conducted a study of climate variability and climate change scenarios in Honduras. This study indicated a 5% reduction in annual rainfall by 2020. In addition, an increase of between 0.5 and 0.75 degrees Celsius in annual average temperature is projected. By 2050, a reduction of 20-25% of precipitation is projected for most of the country, from June to August, with deficits that exceed 30% during the months of July and August for most areas. The pessimistic scenario for 2090 shows a reduction of 30-40% of precipitation, and a temperature increase of more than 4 ° C in almost all of Honduras. Under these conditions, in most of the country reduced precipitation will extend, which usually occurs in the middle of the rainy season; temperatures and dryness will rise, endangering crops and access to water for human consumption and productive uses. These scenarios represent a greater threat in terms of sustainability and political stability in Honduras, if current economic, demographic and urbanization trends persist - particularly in relation to poverty levels.

¹³ IPCC (2014) (Physical bases. Summary for Policymakers, technical summary and FAQs.)

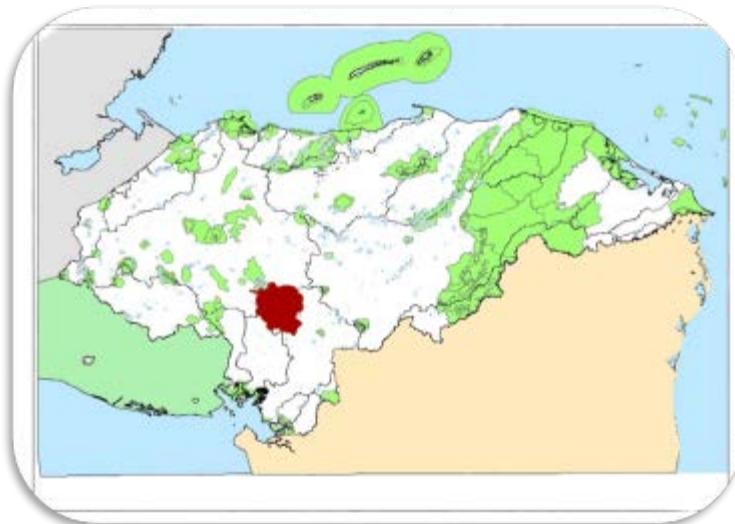
¹⁴ Germanwatch (2016) Global Climate Risk Index

¹⁵ IPCC (2014) Climate Change 2014. Impacts, Adaptation and Vulnerability (chapter 19.2)

Honduras facing Climate Change

12. Honduras is addressing the needs of the country against the impacts of climate change and climate variability through a National Climate Change Strategy, a Law on Climate Change, the preparation and presentation of their National Communication (currently preparing its Third National Communication and first Biennial Update Report - BUR), the presentation of its Determined National Contribution (NDC) (targeting both mitigation and adaptation, highlighting a goal on afforestation / reforestation of a million hectares in the country), as well as a National Adaptation Plan (NAP) currently under development. In all these processes, Honduras prioritizes on-the-ground design and implementation of specific measures that integrate and synergize mitigation and adaptation, and provide co-benefits to the population. Thus, the governmental national policy places people at the heart of development and the impacts of climate change, highlighting human dimensions or 'Rostro Humano (Human Face)' of Climate Change.

CENTRAL FOREST CORRIDOR – Target Area



13. Dominated by mountains with large tracts of forest, the Central Forest Corridor (CFC) surrounds the capital of Honduras, Tegucigalpa, in the Francisco Morazán Province, providing a range of ecosystem services and livelihoods support to the population, with an emphasis on providing water for communities within the corridor, and also to the capital (Central District). The population in the 14 CFC municipalities, is estimated at 1,427,699 inhabitants¹⁶ (more than 16% of the total population). In three CFC municipalities (Ojojona, Santa Ana and Lepaterique) Lenca indigenous people inhabit some parts of the land¹⁷.
14. The 2014 forest map of the Forest Conservation Institute (ICF - acronym in Spanish) shows an area of approximately 186,525 ha for the CFC, with 102,786 ha of forest cover, equivalent to 55 % of the total area of the corridor. Of this extension of forest cover, approximately 56% (57.547 ha) is pine forest, and

¹⁶ Instituto Nacional Estadístico (National Statistical Institute), 2016

¹⁷ PDR-OT 12, 2013

the rest is broadleaved, mixed and deciduous (dry) forest. This forest coverage is constantly subject to natural and anthropogenic pressures that prevent its natural development, and jeopardize the ability to provide ecosystem benefits to the surrounding and endogenous population. Climate change impacts aggravate the situation even further.

15. The creation of the CFC is a recent initiative of late 2014, promoted as a measure for climate change adaptation for the protection of water producing areas and restoration of degraded areas, under sound management of natural resources, in order to increase the quantity and quality of water for different users. Currently, this Platform is acknowledged at municipal level, but a legal instrument is necessary to ensure its sustainability, as well as an action plan for its effective functioning. According to the already established limits, CFC is comprised of:

- ✓ **14 municipalities**¹⁸
- ✓ **5 protected areas**¹⁹ that represent 21.78% of the CFC. All these areas have management plans, except Multi-Purpose Area Carias Bermudez.
- ✓ **5 sub-basins**²⁰ that represent 41.99% of CFC, of which three have management plans²¹. The sub basins that greatest and with most water catchment capacity are Río del Hombre and Guacerique, located at the west, representing 77% of the water supply for the city²².
- ✓ There are approximately 50 **micro-basins** within the CFC, of which 25 have undergone action plans.
- ✓ 66 Forestry Use Areas. Each features Management Plans, which is a requirement for designation as such.
- ✓ Agricultural crop production, urbanized and industrialized areas.

16. Whereas almost half the CFC territory belongs to sub-basins that provide more than two thirds of the total water in the capital, the need to work on Ecosystem-Based Adaptation through integrated water resource management becomes evident, recognizing the watersheds, forests and vegetation roles in regulating water flows and providing water to build resilience to climate change. Hence the importance to implement water resources compensation mechanisms, (e.g. Payments for Ecosystem Services - PES, etc.) to help land users, farmers or ranchers to preserve forests in the city water supplying basins, protect biodiversity, and provide livelihoods for the population.

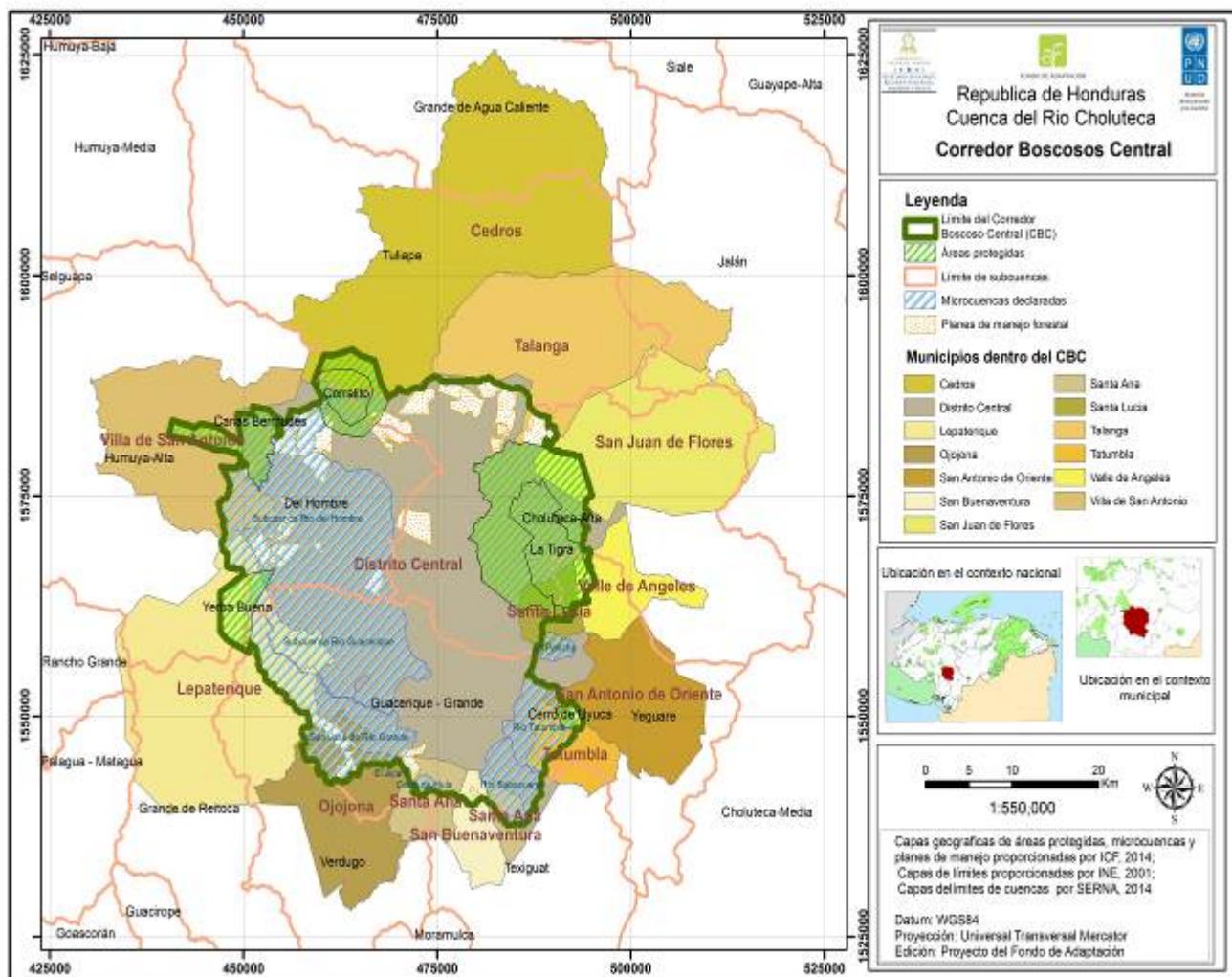
¹⁸ The CFC was initially comprised of 13 municipalities, but the municipality of Villa de San Francisco (bordering San Juan de Flores and Valle de Angeles) has recently been included in various CFC activities, although it was originally not part of the CFC, but given its influence over the La Tigra National Park and the political and active participation of its leaders, the Villa de San Francisco has been recently integrated. Under this consideration, there are 14 CFC established municipalities (including the Central District, ie the capital city Tegucigalpa). See Table 1 in the Annex 6 for more information on these municipalities

¹⁹ See Table 2 in the Annex 6 for more information

²⁰ See Table 3 in the Annex 6 for more information

²¹ The Guacerique Sub Basin, Rio del Hombre, and Concepción (Rio Grande) feature Management Plans

²² Geohydrochemical Study of the Choluteca River Highlands -Instituto Hondureño de Ciencias de la Tierra-UNAH-Adaptation Fund Project.



Map 1. Fuente: Sistematización del CBC, MiAmbiente 2016

17. The main livelihoods of CFC municipalities²³, (except for the Central District) are growing basic grain crops (corn, sorghum, beans). Vegetables are grown in more than half of the municipalities, catering the needs of the capital city. Through community consultations for the preparation of this proposal, it was identified that villagers in some cases are organized under cooperatives²⁴ to engage in such livelihoods. Forestry, especially resin extraction, is an important livelihood for Lepaterique and Ojojona, with four agroforestry cooperatives. Talanga has an industrial cooperative for wood processing for furniture. Small-scale livestock takes place in the CFC to a lesser extent, and also coffee (there is a coffee cooperative in the village of San Francisco). Finally, a few municipalities also perform tourism, crafts, wind energy, beekeeping, banana, sugarcane and non-metallic mining as livelihood activities. The average per capita income in the CFC municipalities (excluding the capital) is approximately \$ 3.300 per year²⁵.

²³ Data not available for Cedros, Villa de San Antonio y Talanga

²⁴ For more detailed information, please refer to community consultation reports in the Annexes

²⁵ For more detailed information on livelihoods and per capita income, please refer to table 4 in Annex 6 .

Climate Change impacts on CFC

18. The CFC is under threat of the impacts of climate change as rising temperatures, changes in rainfall patterns, and in the frequency and intensity of extreme events. These have led to drought, water stress, flooding (especially in Central District), loss of biodiversity, fire and aggravation of the current plague of the bark beetle. These factors directly affect the livelihoods of the population, and also the provision of ecosystem services and goods generated in the CFC.

- ***Pressures over water resources availability***

19. Temperature increase and changes in rainfall patterns are leading to water stress in the CFC, adversely affecting agricultural production and ecosystems, as well as the availability of water for human consumption. According to an evaluation of water resources in their natural regime implemented by the National Autonomous University of Honduras (UNAH in Spanish), in 2012 from January to May, a water deficit was observed in the CFC, as well as during July in the heatwave period²⁶. Furthermore, according to UNAH drought index studies, Francisco Morazán is one of the most affected Districts, with 30.18 % of its territory under water scarcity, expecting an alarming increase in water scarcity areas for 2025 and 2050.

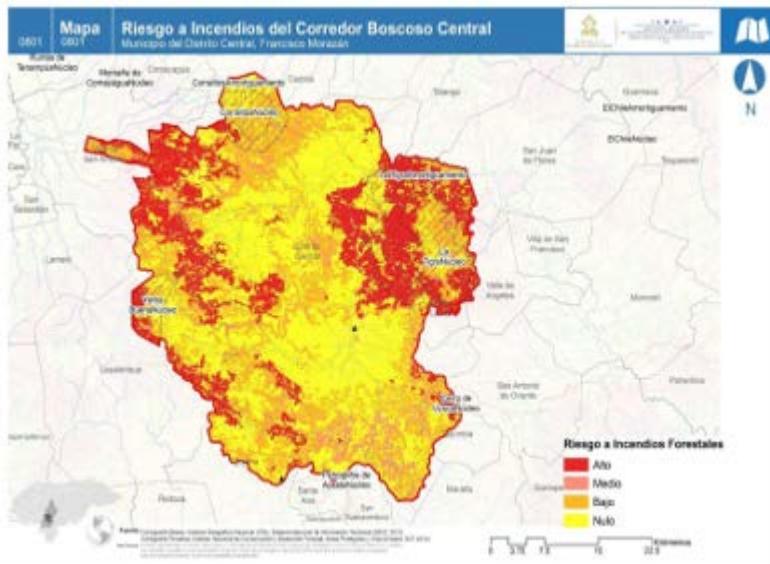
20. In addition, drought monitoring during 2014 and 2015 has shown how drought has worsened in 2015 in the area of Francisco Morazán, further pressuring both Northern and South-west CFC (adjacent to the *Dry Corridor* area). In early 2016 a survey, carried out in 70 households of 9 communities in Lepaterique with agricultural areas mainly for subsistence, resulted in 80 % reporting that water supply was not sufficient to meet needs for home consumption. 100% reported having had problems of drought and water stress in their community. This is the result of the *El Niño* phenomenon that has recently affected the country, but climate change scenarios indicate worse conditions for the future. It is therefore imperative to implement necessary actions to adapt to increased drought situations in the CFC.

- ***Forest Fires in the CFC***

21. An increase in forest fires, as the result of higher temperatures, is observed along with increased water stress. 50 % of the CFC territory is vulnerable to forest fires²⁷, causing every year large losses in health, livelihoods and ecosystem services provided by the area (biodiversity, carbon capture, water resources, wood). Also, impacts of poor forest burning practices are increasing due to conditions brought by higher temperatures, longer droughts and more vulnerable forests.

²⁶ Honduran Water Resources Assessment- Instituto Hondurenio de Ciencias de la Tierra-UNAH-Adaptation Fund Project.

²⁷ PFA (2016) Systematization of support activities for forestry protection in the Central Forest Corridor



22. Forest fires are a major cause of coverage loss in the CFC, also triggering problems such as the incidence of pests against a weakened forest. In the 14 CFC municipalities, as of 2010-2015, there has been a total loss of coverage of approximately 80,000 ha.
23. There is a National Forest Protection Plan where all CFC municipalities are prioritized. In addition, all CFC municipalities also have Municipal Forest Protection Plans, which were produced for implementation during 2015. The challenge now is to continue their implementation and to update them following the impacts of the recent beetle outbreak, prioritizing restoration of the affected areas. This requires further dissemination of the plans, and seeking incentives that show the many benefits brought by forest protection.
- **Bark Beetle Plague in the CFC**
24. Pine forests of Honduras are continued to be affected by the bark beetle (*Dendroctonus frontalis*), which represents the most destructive insect pest since the decade of the 60, and have resulted in nearly 381,400 ha affected at phase III²⁸ level. It is estimated that in April 2016 a total of 800,000 ha had been affected nationwide, in phases I, II, and III²⁹. Faced with this alarming situation, the Honduran Government declared national emergencies during 2015 and 2016, aimed at (a) pest control, (b) extraction of accumulated forest biomass for protection against fire, (c) forestry protection against fires, and ecological restoration of degraded areas.
25. According to information from the ICF, in early 2016, 98% of the total affected area was in the Districts of El Paraíso, Yoro, Comayagua, Francisco Morazán and Olancho. By March 2016, 4,917 pest outbreaks had been identified nationwide, of which 1,581 are located within the CFC, causing a forest loss of 6,316.19 ha (in infestation phase III), so considering an increase parameter of 40% for stage I and II of infestation, it is estimated that there are approximately 8,842 ha affected in the CFC area (phase I, II and III). Considering the above data from a total 2014 conifer forest area within the CFC of

²⁸ ICF (2016) Pest Control Report 2016. Reported área to January 15 2016

²⁹ Phase III visible damage, phase II and I the bark beetle has attacked the tree, but is not yet visible.

57,547.69 ha, losses due to the plague would affect 15.3% of the area of CFC pine forest. Considering the spread of the plague in the total municipal CFC territory, numbers increase to 22,016 ha (considering only phase III) and 30,822 ha (phase I, II, and III).

26. A study by Rivera et al. from Honduras, shows that '*Considering the relations among the bark beetle and environmental conditions on a linear model, it was found that rise in the average temperature, climatic anomalies of warm months and yearly adverse effects caused by forest fires, influence the occurrence and spread of D. frontalis pests*'. This study establishes a direct correlation among areas affected by fires and areas affected by the plague, concluding that '*annually forest areas affected by fires are subject to very high stress levels, weakening the trees and generating a lower resistance to bark beetle attack..., pointing that the occurrence of fires is directly related to drier and warmer climates*'³⁰. However, more research is needed to fully understand the dynamism of this correlation and take further measures.
27. The government recently has set up a 'Restoration Plan for areas affected by pine bark beetle 2016-2026' in order to ensure the restoration of forest areas affected by the plague, through participatory processes and generation of socio-economic and environmental benefits for the population. The implementation of this plan is an imperative to avoid the risk of land use change of affected areas, thus safeguarding the ecosystem services provided by the forest.
28. An overall national level estimation of areas under special regime (areas managed by the Forest Conservation Institute - ICF- in different categories of management), which constitute protected areas, micro basins and community managed forest areas, has been calculated as follows:
- ✓ In 33 protected areas, 13.5% of pine forest has been affected (21, 415.57 ha).
 - ✓ In 176 micro basins, 24 % of pine forest has been affected (23, 051.11 ha).
 - ✓ In 58 national community managed forest areas, 59% of pine forest has been affected (61, 883.73 ha).
29. The plague affecting community-managed forest areas has directly impacted income-generating opportunities of people who used the forest for their livelihoods, for wood, charcoal or resin extraction. There are 51 forest management plans within the limits of the CFC, representing an area of 19,779.87 ha, of which 7,249.01 ha are managed by community groups. These community groups-managed areas are usually national or common-property areas. 1195,34³¹ ha of CFC areas under community management have been affected, representing 16.5% of the total area under community forest management (under infestation phase III). Considering an increased parameter of 40% for infestation phase I and II, a 23%³² of infestation of community managed areas within CFC would be estimated.
30. The CFC municipalities of Lepaterique and Ojojona, perform resin and charcoal extraction for sale to nearby agroforestry cooperatives. However, it was noted during a recent field work day in Lepaterique, that communities are not using environmental and sustainable techniques when extracting the resin (sustainable techniques such as herringbone, retaining the tree). Conversely, they were using more aggressive techniques to obtain resin in less time, causing weakening pine and subsequent death. Such activity is not subject to supervision and monitoring, and also lacks sanctions and compliance to ensure the sustainability of this resource. To date, the plague impact has been more intense in areas

³⁰ Rivera et al. (2010) Climate Change and bark beetle epidemic events on pine forest *Dendroctonus frontalis* in Honduras

³¹ ICF Pests Unit, March, 2016

³² Own elaboration, based on 7,249 CFC ha. under community forestry management

under forest management. National experts indicate that there might be a relation among resin extraction areas (without environmentally-friendly techniques), and increased pests. This correlation is in need of further research in order to further specify level and dynamism of impacts, and establish more effective measures against future outbreaks of the plague.

31. By the start of the rainy season this year, the bark beetle plague began to diminish due to change in natural conditions. However, activities for early identification and response of a possible next plague are necessary, as well as actions for restoration of the affected areas, through the implementation of the National Restoration Plan.

- ***Significant losses of biodiversity due to habitat degradation, species population decline and ecosystem services loss***

32. The CFC species face a risk of population decline, especially because climate change interacts with other stressors such as habitat change, overexploitation, pollution and invasive species. Many species will be unable to adapt to these new weather conditions. Specifically, forest decline implies risks for carbon storage, biodiversity, timber production, water quality, aesthetic value and economic activities³³.

Non-climatic problems

33. The CFC is under pressure due to the climate change aspects mentioned above, that also exacerbate existing pressures resulting from inappropriate use and management of natural resources and anthropogenic pressures. These problems have caused a loss of 10.10% of forest cover in the CFC over the last 10 years, (in addition to the actual 15.3 % pine forest area loss due to bark beetle), eroding goods and services that this area provides. These problems are:

- ***Population growth***

34. The CFC 14 municipalities have an estimated population of 1,427,699 inhabitants. In 2001 it had a population of 1,042,343 inhabitants, demonstrating the considerable population growth pressuring the territory, especially regarding land use change and water supply.

- ***Deficit in water supply due to an increase in demand for various uses and inappropriate techniques that do not consider climate aspects or good adaptation practices***

35. Water supply decline is partly due to the aforementioned population increase in the CFC. However, studies by the Department of Protection and Watershed Management of the Ministry of Water, Sanitation and Sewerage (SANAA³⁴ in Spanish), focused on the effects of climate change, indicate that activities that produce more deterioration in watersheds are those carried out by farmers, due to unsustainable techniques, such as poor water use and expansion of the agricultural frontier. The traditional irrigation system using hose and sprinkler is a common inefficient practice in the CFC, putting pressure on water resources. In contrast, soil and water conservation practices in agriculture areas are only applied in an estimated 0.16% of the total surface. Therefore, the CFC is in need of adaptation techniques to ensure efficient use of water resources (e.g. drip irrigation) and that also provide co-benefits as increased production, reduced soil erosion, and diversification of productive activities³⁵.

³³ IPCC (2014) Climate Change: Impacts, Adaptation and vulnerability

³⁴ Before 2011, through support from CATIE

³⁵ Micro irrigation in Guacerique sub river basin . Systematization of experiences of the Adaptation Fund project : facing climate risks on water resources in Honduras

- ***Illegal logging and inadequate forest management practices (eg. Aggressive resin extraction practices)***
36. One of the major challenges faced by the forestry sector, apart from fires and pests, is the illegal logging and exploitation of forest that exceeds 60% of legal use. Honduras has a National Illegal Logging and Trade Strategy, but it has not been implemented effectively. In addition, forest management areas experience bad practices that lead to forest weakening, for example, through the aforementioned technique of aggressive resin extraction, leading to tree death.
- ***Land use and forest conversion to other uses (agriculture, coffee production)***
37. After the bark beetle outbreak this year, the main risk Honduran forests face is a conversion of affected and degraded forest areas to other land uses. However, traditionally land use change in Honduras has occurred due to migratory agriculture growth caused by poor soil use, (burning, use of fertilizers and pesticides), and due to increased areas of grassland for livestock use. The ICF 2014 forest map shows that the main vegetation cover in the CFC is for conifer forest (dense and sparse) representing 30.85 % of the land, but pastures and crops account for 23.55%. This situation represents an opportunity for the implementation of adaptation measures for agroforestry and silvo-pastoral practices in these crop and pasture areas.

The above climatic and non-climatic drivers affect the capacity of forests to provide ecosystem services, as detailed below:

ECOSYSTEM SERVICES in CFC	
Provisioning Services Products obtained from ecosystems	<p>food and fiber: As a direct food source from the forest, communities practice hunting and gather wild berries. Food supply related ecosystem services are key for agroforestry practices (currently rather limited, e.g. for coffee production in shade), or livestock ranging. There is a pressure on forestry areas and resources, due to the expansion of slash and burn agriculture techniques and moving to new fields, with incursion to forests. The project includes specific activities to support adaptive agroforestry and silvo-pastoral measures that will enhance forest coverage and diversity as a means to help adapting food production to extreme drought and precipitation conditions.</p> <p>In some municipalities flower production is a key livelihood, and the reduced water supply and changes in microclimate due to degraded and reduced forests affect them.</p> <p>There has not been systematic research carried out yet on the plague impact on agriculture production, nevertheless community feedback through the current AF project indicated the following: In the Municipality of Ojojona, the agriculture technician indicated that there has been a decrease in the water flow at the water source that serves for both irrigation and domestic use. This affects agricultural production. On the other hand, changes in rain patterns has resulted in that producers who do not have irrigation technology, can have now only one planting cycle per year, when usually they had two. The producers that benefited from the micro-irrigation system introduced by the current AF project, had up to two or three planting cycles per year.</p> <p>fresh water: CBC forests have a prime role in water security and all year-round water supply, considering functions of water retention, flood reduction, water quality.</p> <p>The community consultations indicated that e.g. the community of Pajarillos, Municipality of Cantarranas, has been affected by climate change because forests in and around recharge areas of water sources fell and got devastated due to bark beetle plague. Previously, this area produced about 40 gallons/minute, nowadays there is only 20 gal/min, the volume of water in the community has been reduced by 50%.</p> <p>In Ojojona, there is also a decrease in volume, creeks carry more mud and have a dark brown color, which means they are carrying more organic matter, as a result of erosion in areas where the forest has been affected or cut down to control the plague. According to technicians from the Water Authority (SANAA), the La Concepción dam, although there has been good amount of raining, is still not full. This is attributed to the reduced rates of infiltration in the cleared land of lost forest.</p> <p>fuelwood and extraction of other prime material: CBC forests are key resources for primary material used by poor rural households, esp. for firewood, charcoal and resin extraction, for subsistence and income generation. Reports from Agroforestry Cooperatives show reductions in resin production up to 50% in the post-plague situation. Longer term resin production capacity of pine forests is also affected by current non-sustainable resin production methods using inappropriate tools and cutting techniques that provide quick yields but cause damage to the trees for longer term production and recovery, and make trees more susceptible to disease infection. As explained in 2.3., therefore the project will promote:</p> <p><i>Enhanced and more sustainable practices will be supported for the use of forest resources, including training of community forest management groups on good practices of charcoal production and resin extraction, (e.g. the use of non-intrusive techniques for trees, like herringbone technique). The installation of efficient eco-stoves will be also supported in order to reduce pressure on firewood consumption by families.</i></p> <p>bio-chemicals: the resin extracted and sold serves to produce pharmaceutical products, chemical derivate (e.g. for paintings, cosmetics).</p> <p>genetic resources: the plague affects overall genetic resources of forests, therefore the reforestation activities will use seeds from selected native seed producing trees with optimal qualities</p>

	and using varieties that are more resilient to climatic impacts, such as drought.
Regulating Services Benefits obtained from regulation of ecosystem process	<p>water regulation, erosion control: increased erosion problem has been evident from sediment accumulation in drainage along linear infrastructure (roads). As also mentioned under freshwater provision part: according to the Water Authority (SANAA), the La Concepción dam, although there has been good amount of raining, is still not full. This is attributed to the reduced rates of infiltration in the cleared land of lost forest.</p> <p>climate regulation: Changes have been observed in defining and regulating local micro-climates and climate variability patterns in affected areas of micro-watersheds, due to reduced forest coverage thus functions of the affected forest for regulating micro-climates. This has been manifesting in increased wind conditions (reduced wind breaker function of forests) and increase in temperature, more erratic rainfall patterns.</p> <p>CFC forests play a major role as carbon sinks, and by carbon sequestration reducing greenhouse gases, so obviously, the reduction of forest mass and areas reduces CO2 sequestration functions, while forest fires induced by drought contributes to emissions.</p> <p>disease regulation: prevention and reduction of the beetle bark plague itself through the forest restoration and protection actions. Using more resilient agricultural crop varieties and applying water adaptation measures, along with biological agro-pesticides will also enhance the plant's resilience to diseases.</p>
Cultural Services Nonmaterial benefits obtained from ecosystems	<p>recreation, ecotourism, aesthetic: CBC forests, including protected areas (like the La Tigra National Park and Uyuoca Biological reserve) are key recreational areas, esp. for city dwellers, including trails, streams, ponds, bathing, picnic and sporting areas. As part of the tourism attraction, the landscape aesthetic value of the area has been greatly affected, given the large scale devastation. Some key tourism use areas have been also affected by the plague.</p> <p>spiritual and religious: Forest are important symbols of cohesion between municipalities and communities. E.g. there is a traditional practice of annual pilgrimage and festivity called "Guancasco" including a walk between Ojojona and Lepaterique crossing forest areas on a traditional forest trail carrying symbols of patron saints and serving as annual gathering to reinforce community unity, including population of Lenca origin. These areas have been also affected, and longer term impacts can affect connectivity and trail use, a part from symbolic and aesthetic values of the connecting forest area.</p> <p>Community consultations revealed an ancestral practice called "Cabañuela" of a seasonal and weather related calendar based on observed trends of seasonal change and climate variability, with the ability to predict weather conditions for particular parts or days of the year, attaching productive and cultural practices. With changes in climate variability and related seasonal patterns becoming more unpredictable this ancestral practice is being discontinued.</p> <p>inspirational: values are linked to the landscape beauty and aesthetic aspects of the area serving inspiration for art work (painters, wood carvers, artisans, photographers).</p> <p>educational: protected areas and their visitor facilities serve for education purposes of general public and school children as well, and there are annual reforestation education activities held.</p>
Supporting Services Services necessary to produce all other ecosystem services	The project will support soil formation, nutrient cycling and primary biomass production principally through the forest restoration and conservation measures, as well as through the adaptive agriculture practices that will enhance soil and water conservation

Barriers

38. There are a number of barriers that prevents CFC municipalities from effectively responding to climate change and variability risks and impacts, and to the above mentioned problems exacerbated by climate change. Overall, weak municipal governance due to the low capacities of CFC municipalities for design, planning, development, management and implementation of financial resources, standards, measures and technologies that promote a resilient development; has made vulnerability reduction and effective climate change adaptation difficult.

Weak municipal governance systems and low adaptive capacity

39. The Regional Development and Land Management Plan (PDR-OT) Region 12, classifies all CFC municipalities, except for Valle de Angeles and Santa Lucia, in the *low management capacity* category, indicating that they do not have sufficient means to promote development in their municipalities³⁶. The main identified cause for such low management capacity is the lack of tax collection and financial management capabilities that allow them to invest in municipal infrastructure, improvement of living conditions and achievement of financial autonomy. Also, government budget transfers are generally delayed, and are not sufficient for low-resource municipalities to manage their development. Also, those municipalities that do not have a high management capacity have less access to the public budget. Therefore, there is a need to strengthen municipal capabilities in improving access and management of financial resources. Municipal Environmental Units (UMA – as in Spanish acronym) are government entities responsible for carrying out management of environmental matters in local municipalities. However, they lack specialized technical staff and capacity to effectively perform their functions. In addition, bureaucratic procedures commanded by central institutions to municipalities, imply delays in resolution of demands and requests from local governments, (i.e. delays in issuing of permits requested for logging plagued forest, which is not decentralized in the municipalities outside the urban Centre).

Low organizational capacity of municipalities and communities, and limited representation of central institutions' technicians on the field

40. A barrier is the low organizational capacity of the communities under decision making platforms, and also the lack of coordination among local and central institutions, aggravated by a scarce presence of central institutions' technicians on relevant natural resources issues, as MiAmbiente, ICF and the Ministry of Agriculture and Livestock (SAG – acronym in Spanish), which have no field offices. Although the ICF has regional field offices, they do not necessarily have available technical staff and / or vehicles and tools to implement field activities. Consultations implemented for the development of this proposal in CFC municipalities showed strong dissatisfaction with ICF management across all municipalities, precisely because of its lack of presence on the ground. Although different laws (e.g. Water law, forest law) mandate the creation of decision making frames and processes as Watershed Councils or Forest Advisory Councils, in many cases these are not operational because there is no empowerment from municipalities and communities, who perceive the initiative as something imposed from the central government, and there is no monitoring of these councils by central government authorities due to lack of human resources. Basin/Watershed Councils experience lack of clarity to legally register these Councils, as manifested as an obstacle by its communities. The strength of Water Boards lies on their presence in all communities under an operational organization structure, providing water services, collecting and fees and undertaking financial management. However, their limitation lies on the lack of an integral vision of water resources, preventing them from making decisions considering climate change and variability.

³⁶ For more information, please refer to table 5 in the annex 6.

Non-operational planning tools that have not been harmonized, and in many cases, lacking climate change and variability considerations

41. Currently, the CFC has several planning tools: Municipal Development Plans with Land Management (PDM-OT); Municipal Forest Protection Plans (in 14 CFC municipalities); Climate Change Municipal Plans (five CFC municipalities); Action Plans for 23 micro basins; four management plans for Protected Areas; and two Sub Basins Management Plans. However, such plans do not exist in all municipalities, and where they exist, in most cases, there is a lack of harmonization and operationalization of these plans. In addition, the Climate Change Act passed in 2014 states that ICF, SAG, MiAmbiente, and the General Coordination Secretary should support municipalities in the revision and adjustments of their Land Management Plans, in order to meet the adaptation and mitigation objectives commanded by the Law. But to date, only five CFC municipalities have started revising and adjusting their PDM-OT through the development of complementary climate change Adaptation Plans, supported by the current Adaptation Fund (AF) project. In some other cases, the lack of implementation of plans is because plan development has been driven by state institutions, but without sufficient involvement and ownership of municipal officers. Also, lack of institutional leadership is another barrier, as well as lack of technical capacities at the municipal level, and lack of financial mechanisms and incentives to implement measures set out in the plans. There is also a need to update these plans to the post-bark beetle situation.

Lack of enforcement, control and compliance mechanisms

42. To ensure a sustainable and adaptive use of the natural resources of the area, and for the implementation of planning tools, there needs to be a strong system of compliance and established mechanisms to collect and respond to complaints and disputes about misuse and exploitation of natural resources conflicts (e.g. illegal logging, poor practices resin extraction, fires, etc.). Regarding the plague, local technicians have said that low or no presence of national institutions, and the lack of sanctions and procedures for compliance with regulations to ensure environmental sustainability of these practices, are the main problems for protection of their overall natural resources and specifically of their forests. The lack of institutional presence in the field, such as the Environmental Prosecutor's Office and the ICF, is one of the main barriers to comply with the legislation on natural resources.

Lack of incentives and financial mechanisms

43. Financial mechanisms and incentives are key to ensure the sustainability of actions aimed at the protection of water and forestry resources, and to ensure their continuity over time. However, over the years, this has been a difficult barrier to address. Regarding Payments for Ecosystem Services (PES) there have been several attempts to establish systems nationwide, but none has managed to materialize due to problems with the establishment and operation of funds and financial mechanisms, and due to a lack of political will. In 2012, in the Francisco Morazán area, the National Park *La Tigra* performed an assessment of ecosystem services within its protected area, with the intention to negotiate a PES with the municipality of the Central District, for goods and services in the water resources area that *La Tigra* provides to the residents of the capital, and to ensure the protection of forests that produce these services. But due to lack of political will, the PES could not be implemented. The same lack of political will hindered in 2014 the review of the water tariff in the capital city. In both cases, political will and negotiation capacity constituted the main barriers. Successful experiences of water tariff reviews at local level are also known, through water service providers that invest in improvements of pipelines, as registered in the Tatumbla initiative supported by the current AF funded project as a pilot. In order to implement this financial mechanism, it is necessary to strengthen the Regulatory Agency Services for Water and Sanitation (ERSAPS in Spanish), a central governing body, who is responsible for training service providers. Regarding CFC small and medium producers, lack of

access to credit and market incentives is one of the main reasons hindering producers from changing their production techniques towards more sustainable systems that consider climate change. Usually, the biggest barriers to access this funding and / or incentives, are the lack of security on land tenure, lack of legal guarantee from organized producers, lack of financial programs tailored to their needs, and lack of processes understanding. Regarding access to programs such as the Agricultural Credit by the National Program for the Reactivation of Agriculture Sector of Honduras (FIRSA in Spanish), there is a lack of integration of climate risks and adaptation in the criteria and application guidelines.

Lack of tools and protocols for responding to pests and for the restoration of affected areas, which integrate climate change and variability

44. Regarding pest control, there is no intervention protocol defined, and each government institution and involved areas attempt to control the pest differently. In some cases, clearcutting is performed, knocking down all the trees affected plus a 50-meter perimeter from healthy trees, to ensure that the bark beetle will not advance. Other practices leave affected trees standing, (because the risk of fire decreases by not being on the soil) and the perimeter of cutting healthy trees can be greater than 50 meters. In any case, the lack of an intervention protocol hinders effective and efficient pest control. To date, some protocol guidelines have been followed from countries as the United States and Canada, although climatic conditions of these countries are unlike tropical conditions in Honduras, and therefore, an adapted protocol must be customized to the country.
45. Regarding restoration, also the lack of a protocol that includes adaptive climate variables and innovative techniques hinders effective areas restoration. Recent experience has shown low survivor rate of seedlings because they were not planted in the right time of the year, and because climate change variables, like changing periods of heat waves in the country, have not been fully considered.

Limited knowledge and access to adaptive agricultural and forest use techniques and technologies

46. In the agriculture sectors the main barriers are the limited awareness and knowledge of producers of efficient irrigation techniques, coupled with limited field presence and advisory capacity of the Secretary of Agriculture and Livestock (SAG in Spanish acronym); lack of design and construction standards of irrigation systems that allow for rational and sustainable water use; lack of financial assistance for the installation of technically advanced agricultural enterprises; lack of legal organization and training of farmers to access micro finance; lack of technical skills of producers. Regarding resin extraction techniques carried out in the CFC, the lack of knowledge of more sustainable techniques such as herringbone cuts, and lack of awareness about long-term management of resources, have resulted in communities to use aggressive resin extraction techniques.

Inadequate management, and little or no knowledge, of information and research generation and on climate change and natural resources use relations

47. The focus group meetings of experts regarding forests and pests, conducted in April 2016 for the development of this proposal³⁷, concluded that one of the largest problem to confront the bark beetle plague was the lack of information (especially micro data) and research. They pointed out that this time, the plague had not followed any known pattern, which had indiscriminately affected young forest, mature forest, different exposures, different altitudes and different shaft diameters. Precisely because this time the pattern had been somewhat different, the need for research on this new behavior in order to have better control of the pest in a future outbreak became evident. Similarly, among this group of experts, it was emphasized that systematization and data collection on the actual affection is a

³⁷ See report in annexes

priority, in order to use the data for future research, and to increase preparedness in case of a next plague. One of the largest barriers identified by these experts to combat this plague has been the lack financial resources.

48. MiAmbiente has been doing concerted efforts to generate new knowledge and analysis in the form of technical studies and policy analysis, particularly notable in the area of climate change (National Communications, BUR, Climate Public Expenditure and Institutional Review, Climate Scenarios, etc.). However, there is a need to enhance the dissemination and uptake of these knowledge products in a tailored way to different audiences and users, especially considering the complexities of the technical content. These efforts are further hindered due to a lack of systematic peer reviews; a lack of a platform structure that systematizes and manages a climate information and data base, processing and disseminating climate data, and supporting coordination among governmental and academic institutions.
49. The National Climate Change Observatory for Sustainable Development (ONCCDS – in Spanish) is a recent initiative from MiAmbiente, linked to the Environment Information Center (–CREDIA in Spanish). Its vision is to manage knowledge and democratize environmental information in Honduras, providing quality services and guiding decision making to improve the capacity of society for adaptation and mitigation through science, innovation and collaboration. The ONCCDS is a good base for managing knowledge on climate change, however, it has great challenges ahead to achieve this objective. An analysis performed by MiAmbiente in February 2016, showed a set of barriers that needed to be overcome for this observatory to position itself as a reference platform at the national and international level, and to fulfill its objectives. The barriers were: CREDIA's institutional structure hosting function may not work properly; limited technical staff; lack of a clear strategy; limited coordination with knowledge management and research institutions; lack of a legal form to support its institutional base; lack of an official line of financing; and low activity of stakeholder's networks linked to ONCCDS.
50. On the other hand, regarding research on climate change, since the creation in 2010 of the Interinstitutional Technical Committee on Climate Change (CTICC), research institutions and academia have expressed the need to build a coordination structure amongst them. However, this has not yet taken place, possibly because of the lack of initiative by central institutions, which have been overwhelmed by an intense climate change agenda in the country.

Land tenure

51. Land tenure is a widespread national problem, also affecting the CFC. Legal uncertainty over land is mainly caused by complex administrative regularization processes; and a differentiated legal framework for legislation depending on rural, urban, community or indigenous and Afro- Honduran communities' ownership status of the land. This legal uncertainty prevents families from having access to credit, and therefore prevents them from improving their crops; bringing land disputes; and preventing infrastructure investments.

Lack of periodic forest fire monitoring and early warning systems

52. Throughout 2014, it became evident that CFC municipalities were not systematically reporting fires, and in many cases the form established by the ICF was not used, due to the lack of ICF presence in the area to follow up on these procedures, and a lack of training for municipal technical staff. This is an example of how decentralization of these functions to municipalities, delivering clear instruments and training to perform their duties has not actually taken place yet. Similarly, the current bark beetle plague has revealed that the lack of an Early Warning System (EWS), and the lack of an early ICF response in many cases, have prevented control of the plague to contain and avoid its wider spread. Regarding

restoration, there is a lack of a procedure for tracking, monitoring and registration of implemented restorations.

Long-term vision and intervention strategy to address the problem

53. In order to safeguard the goods and services that the CFC provides to the population, and to sustain in the long term the process of building more resilient communities and municipalities in the target area, it is necessary to strengthen the governance systems of 14 municipalities in the CFC, supporting these local governments to perform their duties and regulations delegated through decentralized functions. Another cornerstone to good municipal governance will be to address financial problems through design and piloting of schemes of payments for watershed services.
54. For actions that contribute to the resilience of communities, it will be necessary to use municipal plans for adapting to climate change as vehicles for the design and implementation of these actions, which will focus on the protection and optimal use of forest and water resources, including consideration of future climate change scenarios in protocols, manuals and research, which will guide these measures and adaptation techniques. Information generation (especially for monitoring and research), and its adaptation for different audiences that contribute to informed decision making will be a key action area that will support interventions for climate change adaptation in CFC communities. CFC communities will be able to apply more efficient and adaptive water management practices for both human consumption and agriculture use that will be supported through the adjusted municipal plans and revised local water tariff systems allowing municipalities to protect and manage water sources and surrounding catchment and recharge areas.
55. To achieve this long-term vision, a comprehensive intervention strategy has been designed in the frame of this proposed project, combining strengthening local governance processes, implementing measures in the field to increase the resilience of communities, and supporting the adequate generation and management of information on climate change trends, risks and impacts in the country.

Project / Programme Objectives:

- 56. The main objective of the project is to increase climate resilience of the most vulnerable communities in the Central Forest Corridor and the adaptation capacity of its municipalities with emphasis on securing livelihoods and the continued provision of ecosystem goods and services for Tegucigalpa and surroundings.**
57. Enhancement of biodiversity and ecosystem services represents a key adaptation strategy for communities of CFC, given that there is a very significant dependency between communities in the CFC and the natural resources present, as source of a range of ecosystem services. Climate related challenges identified in the CFC are intrinsically linked to water resources availability such as strong rainfall that decrease water quantity and quality to satisfy the demands from communities that live in the CFC, on the other hand, the loss of forest cover is posing a high risk on these communities. Natural resources vulnerability towards the impacts of extreme events exacerbated by climate change, have a strong negative effect on livelihoods directly related to these natural resources. Therefore, the project aims to enhance how these communities make a better use of their resources and to recover the lost forest coverage, reducing the current threats to biodiversity and ecosystem services. These biodiversity and ecosystem services can help to buffer these forests from perturbation, promoting natural reforestation and conservation, having communities to manage protected areas, that will increase their resilience to climate change.

58. To achieve the above objective, the project will focus on three components that are closely related through governance strengthening at the municipal level, enabling them to implement on-the-ground adaptation measures for forest restoration and management of water, land and forest resources, supplemented with activities to strengthen knowledge and information management, and monitoring of climate change vulnerability and adaptive capacity to CC.

- **COMPONENT 1:** Strengthening of local and community governance for climate resilience
- **COMPONENT 2:** On the ground adaptation measures for forest, land and water resources management
- **COMPONENT 3:** Strengthening knowledge, information management and monitoring systems on climate change vulnerability and adaptive capacity.

Project / Programme Components and Financing:

Project/Programme Components	Expected Concrete Outputs	Expected Outcomes	Amount (US\$)
1. Strengthening of local and community governance for climate resilience.	<p>1.1 Strengthened coordination mechanisms for climate-resilient management of CFC natural resources, including measures for the effective participation of women and indigenous people (243,313 US\$)</p> <p>1.2 Municipal level regulatory mechanisms strengthened for adaptive management of natural resources (20,000 US\$)</p> <p>1.3 Municipal level plans are revised and newly established to harmonize adaptation interventions (122,000 US\$)</p> <p>1.4 Payment for Ecosystem (Watershed) Services (PES) schemes developed and operationalized for CC adaptation measures (87,200 US\$)</p>	The CFC platform and related planning and regulatory processes strengthened to implement Ecosystem-Based Adaptation.	472,513

2. On the ground adaptation measures for forest, land and water resources management	2.1 Pine and Mixed Forest areas damaged by drought-induced pest and fire hazards are reforested (892,000 US\$) 2.2 Protection measures are introduced against fires, pests, land use change, and unsustainable forest use, assisting natural regeneration of forests (992,900 US\$) 2.3 Drought management adaptation measures implemented to optimize the use of water resources for agriculture and domestic use (865,600 US\$)	Increased capacity of communities in CFC to implement ecosystem-based CC adaptation measures	2,750,500
3. Strengthening knowledge, information management, and monitoring systems on climate change vulnerability and adaptive capacity	3.1 Applied research carried out to enhance knowledge and information on the links amongst climate change, drought, pests, fires and adaptation measures in the CFC. (124,775 US\$) 3.2 Strengthened National Climate Change Observatory for Sustainable Development (ONCCDS) (132,000 US\$) 3.3 Community early warning and monitoring system for bark beetle pest outbreak under CFC Platform (30,000 US\$) 3.4 Systematized and disseminated project knowledge and experience (145,000 US\$)	National Platforms for Information, Knowledge Management and Monitoring on Climate Change strengthened, having the CFC as a reference area to contribute to research and capacity building	431,775
4. Project/Programme Execution cost			381,802
5. Total Project/Programme Cost			4,036,590
6. Project/Programme Cycle Management Fee charged by the Implementing Entity (if applicable)			343,110
Amount of Financing Requested			4,379,700

Project Calendar:

Milestones	Expected Dates
Start of Project/Programme Implementation	2017
Mid-term Review (if planned)	2019
Project/Programme Closing	2021
Terminal Evaluation	2021

PART II: PROJECT / PROGRAMME JUSTIFICATION

- A. Describe the project / programme components, particularly focusing on the concrete adaptation activities of the project, and how these activities contribute to climate resilience. For the case of a programme, show how the combination of individual projects will contribute to the overall increase in resilience.

Outcome 1: The CFC Platform and related planning and regulatory processes strengthened to implement Ecosystem-Based Adaptation.

Output 1.1 Strengthened coordination mechanisms for the climate-resilient management of CFC natural resources, including measures for the effective participation of women and indigenous peoples.

59. The project will focus on facilitating the success and continuity of the CFC Platform as a model of land, forest and water resources management, with a focus on climate change adaptation, to ensure the provision of ecosystem goods and services, operating as a coordination and advocacy mechanism among municipalities, and between municipalities to central government institutions. The project will support the establishment of a CFC Technical Implementation Unit that will be tasked to develop internal procedures and rules for the operational activities of the CFC Platform, and an Action Plan toward formalizing a CFC Authority. The Platform operational plan and the Action Plan for the envisaged Authority will include a communication and consultation plan, to promote full and effective institutional participation of women, youth and indigenous communities through the review of regulations, guidelines of existing municipal and community level governance and institutional structures (Community-Based Organization - CBOs), including water boards, local environmental committees, women's network. It will aim at establishing an effective ongoing communication and consultation mechanisms towards the Platform and future Authority etc. The CFC Authority will be formalized as a legal entity through an Executive Decree. Activities will also include exchange of experiences among municipalities and technical and administrative training for the Platform and Authority management structure and participating entities. The CFC Platform and Authority will also promote a more direct engagement and enhanced field presence of national institutions and will also liaise with the Association of Honduran Municipalities (AMHON in Spanish) for broader national outreach. This envisaged Authority will be coordinated under the mandates of ICF, AMOHN and MiAmbiente. Given its establishment by Executive Decree, the Authority will be an autonomous body and will be able to programme and access resources from the state budget, which is coordinated through the Ministry of Finance and approved by the Congress.

Output 1.2 Municipal level regulatory mechanisms strengthened for adaptive management of natural resources

60. Actions under this output will principally support the application and implementation of the Forestry, Protected Areas and Wildlife Law, by the following local regulatory mechanisms:

- Develop a Reporting mechanism for communities (on malpractices, illegal logging, fires, and pest outbreaks, etc.) with training
- Develop municipal level norms and ordinances (esp. land use zoning and forestry use by private land owners) with communication, inspection and feedback mechanisms. Support the national Environmental Prosecution Office in delivery of targeted trainings to municipalities (esp. their Environment Management UNITS – UMAS as Spanish acronym) on these processes

- Review ICF permit system to delegate authority to UMAs for small scale and non-commercial community use wood material (e.g. firewood). This will allow more effective locally controlled process

Output 1.3 Municipal level plans are revised and newly established to harmonize adaptation interventions

61. In order to promote planning tools that help municipalities increase their resilience and to support compliance with the Law of Climate Change, the project will support the review and preparation of the following municipal level plans:

- Revision of 5 existing Municipal Climate Change Adaptation Plans (developed through current AF project) and development of new ones in 9 additional Municipalities. These plans act as complement to the Municipal Development Plans and support harmonization with other related plans on CC adaptation matters
- Revision of Forest Protection Plans in all 14 Municipalities
- Development of 25 Micro-Basin Plans (further to exiting 25 plans developed through current AF project, covering the entire CFC and its 50 micro-basins)

62. The plan revision and development processes will update to the situation in the aftermath of the 2015-16 bark beetle plague outbreak in order to better respond to its effects through restoration and prepare for such future risks. The revision will also incorporate advanced planning tools and inputs, such as the vulnerability index piloted through UNAH, and will also consider any recent changes in the Municipal Development Plans as basis. The processes will be based on community consultations and assessments, and will be using the method of CdT4H (means Workbook with 4 tools – Spanish acronym) and the Methodological Guide for the Production of Climate Change Municipal Plans – produced under the current AF project. For these community assessments, it will be important to carry out socio-economic, technical, administrative and regulatory analysis to understand the special and temporal dynamics of the municipalities around their livelihoods, their land tenure, type of resources used, etc. A gender analysis will also be performed so that planning measures can be designed to promote gender-balanced development. These measures will support and facilitate a balanced participation of man and women in local institutional structures participating in planning processes, such as the community water boards, community/neighborhood association, Consultative Forest Councils, as Agricultural Producer Associations, as well as in Municipal Offices (such as the Environment and Risk Management Unit, and the Women's Office). The project will support the Municipal Office of Women in the target municipalities, in their coordinating role for participatory frames and capacity building activities of women's associations and advocacy groups in communities. This gender analysis will inform the municipal planning process to ensure that in the plans revised or newly developed, adaptation needs are specified according to gender considerations. Actions under this output will also deliver training support for these planning processes, including on financial management aspects that will be conducive towards the establishment of Municipal Investment Plans integrating climate change risks and adaptation measures.

Output 1.4 Payment for Ecosystem (Watershed) Services (PES) schemes developed and operationalized for climate change adaptation measures

63. The project will support the replication of the municipal level PES scheme introduced through the current AF project in Tatumbla. This involved the revision of the water tariff system to internalize the costs of protection and maintenance of water source and recharge areas. The process will involve

community- and Municipal Division-level Water Boards, both in the main urban centers and rural areas of the CFC Municipalities.

64. Furthermore, it will support the development of a pilot proposal for an inter-municipal PES scheme, in one of the main sub-basins with CFC area providing water supply to the Central District downstream. The pilot process will support the establishment of a Sub-Basin Committee, dialogue through the CFC Platform, review of past experiences, conduct an exercise on valuation of ecosystem services, define a proposal for an operational mechanism of compensation involving the SANAA and the Water Council (CONAGUA), deliver training and awareness raising actions.
65. The introduction of PES scheme will be carried out considering the following institutional and regulatory frames:
66. Honduras has adopted a compensation mechanism for ecosystem goods and services. This is supported by various national laws such as the Framework Law on Water Sector and Sanitation, which includes in its objectives "to establish the criteria for services valuation, fee schemes and compensation mechanisms and social solidarity to ensure the access to resources by families and community groups who are in conditions of social vulnerability". This law also establishes the National Council for Drinking Water and Sanitation. One of the powers assigned to this council through the law is to "develop a methodology to establish an economic assessment of water" (Art. 8.7, LMSAPS).
67. The General Water Law, in its article 52 states that "the value of water resources should be estimated according to the variables of quality, quantity and use. The valuation of environmental services that allow the conservation of water resources also involves the building of water protection works". Article 57 reaffirms: "The cost of works could be recovered by the State through charges to the various users".
68. In 2016 came into force the Regulations for the Compensation of environmental goods and services, supporting implementation mechanisms. Article 35. of this legislation states: "The management entity of the Mechanism will be responsible for articulating the Users and Providers of ecosystem services, managing the ecosystem services fund, issuing agreements or contracts, performing or coordinating actions in the field, approving reports for the accreditation of progress in the conditions of areas for conservation that provide good and services under compensation, disseminate transparency reports on funds management; determine who will coordinate technical and administrative activities, and, in general ensure the coordination of activities and the effective operation of the mechanism, among other activities".
69. There are success stories about the implementation of this mechanism in Honduras, as is the case of the municipality of Jesus de Otoro, Department of Intibucá where water users pay a monthly service fee of water, and a percentage is redirected towards the protection and care of the Rio Reseva Cumes. This is managed by the Administrative Board of Water and Waste Jesus de Otoro (JAPOE), and has achieved through compensation of ecosystem goods and services the following:
 - a. Enhanced incentives and sustainable management of forest resources.
 - b. Reduced pollution through sustainable and organic agriculture.
 - c. Participatory watershed management in place.
 - d. Reduced conflicts between the users and consumers of water services, that are receiving adequate water quantity and quality to their demands.
 - e. The population of Lenca ethnic origin settled in the basin has been actively participating and contributing to the sustainable management of resources.

Outcome 2: Increased capacity of communities in CBC to implement ecosystem-based climate change adaptation measures

Output 2.1 Mixed and Pine Forest areas damaged by drought-induced pest and fire hazards are reforested

70. The project will promote the restoration of 1,000 ha of mix and pine forest in the CFC, in line with the components of the 2016 – 2026 Restoration Plan in areas affected by the bark beetle. The restoration will involve reforestation of areas completely devastated and complementary planting (completion) of areas with some level of plants survived. Restoration areas will be defined with the municipalities within the CFC Platform, and will focus on priority areas, such as main water supply areas (including protected areas) and community forest management areas, since 23% of these areas has been affected and did not obtain financial resources from the government for actions during 2016.
71. The works will be undertaken following the establishment of a restoration protocol/guide for CFC municipalities integrating climate change and variability. This will also involve enhanced techniques such as the use of more resilient tree varieties. The use of agroforestry systems in line with the Agroforestry Policy and the National Agroforestry Sustainable Productive Landscapes Program will be promoted. Training will be provided to key stakeholders involved in restoration as municipal governments, communities, private landowners, agro-forestry groups, Co-Manager Organizations of Protected Areas, Advisory Councils, Agro-forestry Cooperatives, and other structures already established as part of forestry sector actors.
72. The project will support the setting up of a procedure for tracking, monitoring and registration of restoration actions implemented. During the last year of the project an ecological and land use assessment will be carried out to evaluate the rate of success of the restoration.
73. It is expected that the reforested areas will reduce climate related risks and impacts, including protection against soil erosion and landslides (caused by intense precipitation), and regulation of water flows (enhanced retention of runoff) through enhanced land coverage, as well as reducing drought related vulnerabilities in water supply through the watershed regulation functions.

Output 2.2 Protection measures are introduced against fires, pests, land use change, and unsustainable forest use, assisting natural regeneration of forests

74. Actions under this output will be framed under the 14 Municipal Forest Protection Plans that will be revised and updated to the post-bark beetle plague situation. Interventions will aim at enhancing the natural resilience of forests against risks of fires, pests, diseases (including the bark beetle) that is exacerbated by increasing drought conditions – supporting forest restoration through assisted natural regeneration.
75. The project will support trainings for municipalities and community forest management groups on forest fire and bark beetle outbreak detection and control (including preventive rounds and patrols), and for implementation of local norms and ordinances /developed under output 1.2. Local fire brigades will be trained and equipped with communication and fire control gears, as well as specific transportation to access remote and rugged areas (e.g. quads). A school programme will be introduced for forest protection volunteers and linked with output 2.1. to encourage children planting trees.

76. Enhanced and more sustainable practices will be supported for the use of forest resources, including training of community forest management groups on good practices of charcoal production and resin extraction, (e.g. the use of non-invasive techniques for trees, like herringbone technique). The installation of efficient eco-stoves will be also supported in order to reduce pressure on firewood consumption by families. These measures will contribute to enhancing resilience of forests against drought induced impacts (fires, pests), and in turn will reduce also vulnerabilities of communities of CFC depending on ecosystem services of forests (including for resin extraction and use of wood material addressed in this output).

Output 2.3 Drought management adaptation measures implemented to optimize the use of water resources for agriculture and domestic use

77. Actions within this output are addressing drought-induced impacts and risks to water and food security of CFC communities, through the introduction of a combined set of adaptation measures enhancing efficiency of water supply and agricultural production. These measures will be framed in the Micro-Basin Plans (existing ones and the ones to be developed through output 1.3 of the project), and will be coordinated through watershed/basin councils established, community water boards and municipal authorities.

78. Adaptation measures for water supply for human consumption will include:

- Protection of water source and recharge areas around wells (demarcation, fencing, replanting)
- Improved water intakes and filters
- Community water storage (cisterns, tanks)
- Leakage reduction in water distribution schemes
- Household level rainwater capture and storage (tanks) – based on technical guidelines produced by current AF project

79. Water management adaptation measures in agriculture production will involve:

- Protection of water sources and springs (coordinated with similar actions above)
- Channeling surface water, infiltration galleries
- Water storage (small reservoirs and dams, ponds and iron-cement tanks)
- Drip irrigation
- Soil and water conservation measures: terracing in slopes, intercropping, mulching, enhanced agro-forestry and silvo-pastoral techniques
- Introduction of ~~organic agricultural biological pest control and fertilizer~~ techniques (reduce use of agro-chemicals, and consequent runoff and contamination of streams) – incentivized through drip irrigation support
- Introduction of drought-resilient crop varieties and crop diversification

80. ~~Biological pest control refers to agricultural production and the application of solutions (locally prepared using natural ingredients) that has properties as natural pesticides and fungicides.~~ Measures will promote agro-ecological practices, in accordance with the Organic Agriculture Regulations and the Manuals of Good Agricultural Practices; by the Ministry of Agriculture and Livestock (SAG). Drip irrigation and micro-reservoirs will be supported through technical guides prepared by the current AF project, and based on its pilot experience implemented in the Guacerique Basin, in collaboration with the Pan-American Agricultural School El Zamorano. The project will ensure synergies with FIRSA, and with its recently established small grants programme supporting the building of micro-reservoirs and its micro-credit programme for drip irrigation. Apart from small grants provided by the project, it will also support producers with technical assistance and business plan development (including maintenance and operations) for application to FIRSA, ensuring that climate change risks are fully incorporated in

the design and operation of the interventions. Towards a more systematic application of climate risk criteria in the design of these interventions, the project will also help FIRSA in revising its application procedures and guides to ensure that climate change and variability considerations are fully integrated. The project will also facilitate capacity enhancement of organized producer groups towards formal registration and achieving legal status, so they can access funding through FIRSA.

81. Further support to enabling environment will include training and coordination support to extension officers and technicians of central institutions such as SAG, SANAA and ICF, to ensure their enhanced field presence and advisory services to producers in CFC.

Outcome 3: National Platforms for Information, Knowledge Management and Monitoring on Climate Change strengthened, having the CFC as a reference area to contribute to research and capacity building

Output 3.1 Applied research carried out to enhance knowledge and information on the links amongst climate change, drought, pests, fires and adaptation measures in the CFC.

82. This output is key considering that the unprecedented disaster caused by the bark beetle requires analysis of trends and identification of enhanced techniques for prevention and response measures, towards an enhanced understanding of related dynamisms. The project will forge alliances with institutions such as the UNAH, Research System (SINFOR in Spanish) of the National School of Forestry Sciences (ESNACIFOR in Spanish). Research will be carried out including the following topics:

- the relationship among climate change, forest fires and increased bark beetle pest (e.g. through an updating of the study conducted by Rivera et al, with new data from country climate scenarios)
- new pest control techniques (e.g. application of pheromones, etc.)
- behavior of natural regeneration processes after infestation
- correlation among community forest management areas where resin extraction is performed and plague outbreaks occurrence
- characterization of the bark beetle infestation by altitude, pine species, diameter;
- innovative restoration techniques that are better adapted to future climate conditions in the country (e.g. seed dissemination, hydrogel, waterboxes, etc.);
- Proposals for repatriation of improved genetic planting material (more resilient tree varieties).

83. The results of these investigations will be mainly aimed at government institutions to use the findings for definition of pest control protocols, restoration protocols, pest control techniques, related training and advisory programmes, etc. Results will also be used as a basis for local and community work when designing and implementing measures for adaptation and resilience building. The project will ensure through Output 3.4, that the generated information will be disseminated to different target audiences for informed decision making.

84. Agreements with national academia and research centers will be considered for students to perform monitoring and collection of micro data in target areas, to be used for the planned research.

85. Actions under this output will also support collaboration with UNAH to carry out the studies for the Vulnerability Index to set the baseline and its monitoring, as indicated in objective level indicator in the project Strategic Result Framework.

86. The project will also support the creation and institutionalization (through a regulation or other legal form) of a decision-making structure around information and scientific research on climate change. It

could be, for example, a Scientific Subcommittee on Climate Change (Scientific Working Group on Climate Change) under the Interinstitutional Committee on Climate Change (CICC) linked to ONCCDS. Under this group or committee, country climate change information could be assessed and adapted, agree on relevant research topics on climate change issues, such as the development of future national climate scenarios, develop peer review, define and select country representatives to the IPCC; etc.

Output 3.2 Strengthened National Climate Change Observatory for Sustainable Development (ONCCDS – Spanish acronym).

87. The project will support ONCCDS to obtain a legal status, linked with the following set of actions, towards its consolidation as the main national platform to manage knowledge on climate change, including:

- Strengthening the institutional linkages between ONCCDS and partner institutions, such as the National Environmental Information System (SINIA, by its Spanish acronym), and the National Center for Atmospheric Ocean and Seismology Research, (CENAOS in Spanish), through joint technical expert groups and harmonization of data base and information flow management processes, and provision of trainings
- Sourcing of IT equipment and software necessary for the proper functioning of this platform.
- Technical Assistance and training provided to strengthen ONCCDS staff
- Development of an ONCCDS Communication and Knowledge Management Strategy linked to actions under Output 3.4. and functions of the CFC Platform and Authority
- Establish a specific work line for the management of micro data at community level of the target CFC area, managing and transforming this data into information products, publications and educational materials for community use (linking this activity to output 3.4). This line of community work will also promote broader community awareness on climate change and variability.
- Develop and operationalize a plan, including fund raising capacities through establishing information services with a fee system for cost-recovery, training on financial management skills

Output 3.3 Community early warning and monitoring system for bark beetle pest outbreak under CFC Platform

88. Effective pest monitoring and control is based on the rapid identification of an outbreak. If community members know how to identify and perform an early detection of pest behavior in its first phase, an effective pest control can be enabled, provided that there is also close coordination and action of central government agencies. Therefore, the project will support (linked with Outputs 2.1 and 2.2):

- Development of protocols and capacities for community pest monitoring: inspections, patrols and reporting of outbreaks (with a registry system)
- Community Contingency plans against the bark beetle outbreak. These contingency plans will integrate the lessons learned from the last country outbreak, and research results generated under the project (through Output 3.1).
- Channeling of drought early warning information (seasonal forecasts)
- Awareness raising on the forest ecosystem benefits and the need to preserve these assets

89. The monitoring and early warning system will be implemented in close coordination with key central government bodies as ICF, AMOHN and MiAmbiente, under the CFC Platform. The Forest Protection Plans have been prepared through a participatory process and Consultative Forest Councils, and local/traditional knowledge of the area have been captured. As part of the Early Warning System for the bark beetle, a protocol will be established for the observation and early detection of an infestation and plague, with roles of community groups and members, incorporating and relying on local/traditional knowledge of the area, conditions (including climatic) and changes in forests and plants status. For

reporting of early detection of infestation signs by community members, specific channels and methods will be established, including an appropriate mechanism for reporting and recording, which will immediately notify the Municipal Environment Units, entity that will transfer the information by radio to the ICF Forest Fire Operations Center, so that technical brigades are mobilized towards interest points and can verify the provided information, first hand from local communities.

Output 3.4 Systematized and disseminated project knowledge and experience

90. A Communication and Knowledge Management Plan will be set for the project, to ensure systematic capturing and dissemination of experience on lessons learnt and good practices. This will build on similar plan and actions developed through the current AF project, and will be key to continue given that the project will address a set of recently emerged and unprecedented challenges, especially by the bark beetle plague. Actions under this output will support also key institutional functions, including those of the CFC Platform and ONCCDS. Knowledge and communication products to be developed will include adaptation stories and project briefs, technical guides and manuals, videos, photo essays, lessons/experience notes, press and media materials, TV and radio spots, visibility materials, etc. The communication and dissemination of information will be implemented including through social media (Twitter, Facebook, etc.), the regular updating of a project website which will be hosted on the Project Coordination Office (OCP in Spanish) MiAmbiente web platform and linked to the DNCC website, presentations at national, regional and / or international forums. For the organization of these forums, the project will coordinate with ONCCDS and the CFC Platform. The project will also promote exchange site visits between CFC communities. The project will also support South-South exchange of experiences, particularly about measures on the bark beetle plague, and with neighboring countries in Central America.
- B. Describe how the project / programme provides economic, social and environmental benefits, with particular reference to the most vulnerable communities, and vulnerable groups within communities, including gender considerations. Describe how the project / programme will avoid or mitigate negative impacts, in compliance with the Environmental and Social Policy of the Adaptation Fund.

Benefit type	Benefits
Economic	<p>The project will directly benefit an estimated 12,000 families who are especially vulnerable to the impacts of climate change, through the design and implementation of concrete adaptation measures for more efficient use of water resources. These measures will provide economic benefits to the families in terms of savings of expenditures/costs of water, and through savings and revenues generated by increasing agricultural yields and production (for home consumption and sales).</p> <p>Revenue generation will be also supported through training provided to community forest management groups (10 groups benefitting, 1500 families) on good practices of charcoal production and resin extraction, that will support a more sustainable and environmental friendly production.</p> <p>The project will also provide economic benefits in terms of avoided losses and costs that are referenced under the cost-effectiveness section.</p>
Social	<p>The project will benefit indirectly around 25,000 families through forest protection measures (fire, pest control, land use change) in 25 CFC micro basins.</p> <p>The project will bring benefits to the 14 CFC municipalities (including the Central District of Tegucigalpa), strengthening their local governance.</p> <p>Promotion of full and effective participation of communities and groups</p>

	<p>inhabitants in particular vulnerable conditions, such as youth, women, and Lenca indigenous people, is expected to have a positive impact on their social and economic conditions.</p> <p>Improvements to the access food and water (both quality and quantity) in drought conditions will expectedly improve health conditions in households. The introduction of eco-stoves (benefitting 500 families) using less wood and generating less smoke will also have positive impacts on health in homes.</p> <p>The knowledge management, awareness raising activities under component 3 and the school programme to be introduced for forest protection volunteers under output 2.2 will contribute to general education on environmental and climate change issues.</p> <p>Agricultural adaptation will support application of relevant ancestral/traditional techniques (e.g. cultivating on terraces, using traditional plant varieties more resilient to climate variations) will support cultural preservation.</p>
Environment	<p>These adaptive techniques for crop improvement also provide positive impacts through decreasing soil erosion, and reducing chemical fertilizers and pesticides use that pollute water bodies.</p> <p>The project aims at the restoration of 1000 ha of forests and the protection of a forest area of 8000 ha that will support biodiversity conservation and the continued provision of ecosystem services to both the rural dwellers (such as water, forest materials); and the capital city dwellers (especially in water supply), as well as mitigation of greenhouse gases (through enhanced carbon sequestration and stocks in forests)</p>

C. Describe or provide an analysis of the cost-effectiveness of the proposed project / programme.

91. According to an ICF analysis, 2014 estimated losses in the CFC municipalities were in an estimated value of 91.14 million lempiras³⁸ (about US\$ 4 million dollars), due to the forest cover loss by fire. Losses due to the 2015-2016 bark beetle plague have been quantified in US\$ 262.6 million dollars. The project can be considered cost-effective, considering its potential to avoid such damage and associated costs in the future, due to the implementation of the proposed ecosystem-based adaptation measures to reduce fire risks and future bark beetle outbreaks, while implementing measures to restore damaged areas.

92. The project will also ensure cost-effectiveness by supporting replication of successful pilot measures of the current AF project, using technical guidelines produced, esp. considering techniques of rainwater capture and storage, micro-reservoirs and drip irrigation. The project will ensure that the plans for measures and adaptation technologies at the field level in communities incorporate a maintenance plan from the outset of its implementation, which will ensure long-term and cost -effectiveness functions. The project can also be considered cost-effective from its institutional management perspective, since its intervention strategy is based on existing mechanisms and institutional frames, including Municipal level technical divisions, the AMHON associative structure for municipalities, or aligning with national mechanisms, such as the agriculture support programmes established under FIRSA.

93. The proposed techniques can be considered cost-effective comparing with other alternative solutions:

³⁸ Economic assessment of the environmental damage caused by forest fires

- Forest restauration: this will be pursued through a combination of replanting, completion, natural regeneration assisted (through protection) – that can be considered more cost-effective than complete clearing and replanting.
- Resin extraction: more sustainable techniques (e.g. applying herring-bone cuts) can be considered more cost-effective in the long-term as alternative to the currently applied more aggressive cutting and resin collection methods that give more immediate yields, but in the mid-long term damages the plant, debilitates and provides for a greater risk of drought and bark beetle damage, thus eventually results in reduced production.
- Eco-stoves: an alternative to the traditional stove with open fire space that uses more wood, provides less heat and pollutes more. Therefore, economic and health costs are higher, also considering environmental costs (forest damage). Estimates show that by using eco-stoves a family saves around 15 trees a year.
- Water supply solutions: cost effectiveness largely lies on the integrated nature of the interventions that combines management of water sources (including ground, surface and rainwater), enhanced storage, distribution (water efficiency), and also demand management aspects (saving, water pricing, local PES schemes). In general, the proposed techniques offer locally managed solutions (communal and household), where users are close to the source and directly engaged in management (local water boards), as compared to larger centralized water distribution schemes that are costlier due the remoteness of the communities, and geographical complexities in the CFC mountain range.
- The agricultural measures combine water use-efficient irrigation techniques with soil and water conservation measures for effective adaptation in drought conditions, complemented with the use of climate resilient varieties and organic agricultural practices. The proposed drip irrigation systems (well tested and tried through the current AF project) is proven more efficient than other forms of irrigation (like aspersion) that uses more water and results in less water absorption by plants. Feedback through the current AF project shows that farmers who introduced drip irrigation are able to have up to 2-3 harvests a year as compared to farmers relying on rain-fed crops only able to have one harvest per year, due to the changing climate variability conditions. The organic agricultural practices can be considered more cost-effective in the long term than intensive practices relying on heavy use of chemicals (pesticides and fertilizers) that are costlier, and though might produce high immediate yields but in the mid-longer term would result in soil depletion, plus costs of environmental pollution due to run-off water washing these substances down to the streams or infiltrating to aquifers (potential health costs).

D. Describe how the project / programme is consistent with national or sub-national sustainable development strategies, including, where appropriate, national or sub-national development plans, poverty reduction strategies, national communications, or national adaptation programs of action, or other relevant instruments, where they exist.

94. The project is aligned with the following key national policy and planning frames

National Strategic Framework

95. Through the implementation of the Law for the Establishment of a Country Vision and Adoption of a National Plan (Legislative Decree 286-2009), from 2010, Honduras began efforts to structure a model of public administration based on long-term vision system planning, and sustained by a shared compromise from the various sectors of Honduran society. The Country Vision is set to 2038, and the

National Plan is set from 2010 to 2022, featuring eleven strategic guidelines, including adaptation and mitigation to climate change as the eleventh guideline. The Government 2014-2018 Strategic Plan constitutes the second four-year plan and provides the foundation for the processes of sectoral and institutional planning, as well as government action in the territories. The current Government's 2014-2018 Strategic Plan departs from the objectives of the 'Plan de Todos para una Vida Mejor (Plan for All for a Better Life)'

96. The "**Plan de Todos para una Vida Mejor**" is promoted by the Government, encouraging the improvement of living conditions of the poor population, through initiatives related to health, housing, the economy and the environment; and it is the angular instrument for the development of the 2014-2018 Government Plan. The Plan is divided into several projects nationwide: construction of decent roofs, latrines, eco-stoves installation, installation of rain water harvesting system and water filters, urban gardens, etc. These projects aim to achieve and benefit 800 thousand families in Honduras living today under extreme poverty. The concept of the 'Rostro Humano' (Human Face) of climate change promoted by the government embodies this logic to benefit the poorest and most vulnerable populations.
97. According to a conceptual study from late 2015, the '**Rostro Humano**' of Climate Change can refer to the entire Honduran population that is vulnerable to the adverse effects of climate change, mostly to the population living in extreme poverty, plus traditionally excluded groups as women, the elderly and ethnic population. Also, the human face refers to the young population of children and youth, who in lack of current education, will have to face greater consequences in the near future. In Honduras, the small, medium and large agricultural sectors, including subsistence agriculture, is directly affected by climate change. It is therefore correct to state that although the 'Rostro Humano' refers to 'the dispossessed', climate change in Honduras affects the entire population³⁹. Following the concept of "Rostro Humano" of MiAmbiente, all adaptation and mitigation activities undertaken in the country under the national climate agenda must be addressed to provide co-benefits to the most vulnerable population. Therefore, the project is fully aligned with the eleventh guideline of the 'Plan de Nación', in order to benefit those vulnerable CFC families living in rural areas and poverty, focusing on life quality improvements. This project will have synergies with the 'Plan de Todos para una Vida Mejor' particularly in the installation of rainwater harvesting systems.

MiAmbiente Strategic Framework

98. The Decree PCM-001-2014, stated that the Secretary of State in the Ministry of Energy, Natural Resources and Mines (MiAmbiente), was to be integrated into the Sectoral Office of Economic Development, with the mission to ensure the protection, conservation and use of strategic natural resources of the country, through a transparent, comprehensive and sustainable environmental management and natural resource policy, aimed at consolidating a model of inclusive, fair, equitable and inclusive development, to improve levels of welfare and prosperity of the Honduran people. This proposal is fully in line with the main objectives of the Institutional Strategy MiAmbiente (2016-2026), pursuing a land environmental planning based on the sustainable management of Natural Capital, and capable of preventing and responding to climate risks; contributing to productivity and competitiveness of the country in a direct, inclusive and equitable way, starting from capacity building and community and local governments response to reduction or mitigation of risks, to build robust and sustained resilience over time through processes of good environmental governance.

Climate Change National Institutional Framework

³⁹ Support for development of the "Conceptual Vision of Climate Change, synergies among Adaptation and Mitigation". MiAmbiente. September, 2015.

National Climate Change Directorate (DNCC, by its acronym in Spanish)

99. The DNCC is the agency in charge of climate change policy. In early 2014, the DNCC restructured its strategic government profile, supported by UNDP, to define results to be sought in the next following four years, establishing four strategic work lines (or flagships) and a central work line with several results, for the 2014-2018 Government Plan. The strategic work lines are: 1. Adaptation; 2. Mitigation; 3. Knowledge Management; 4. Climate Finance. This project is fully aligned with three DNCC strategic work lines, as project results contribute to adaptation through measures to reduce the vulnerability of CFC communities; to mitigation through the results of the restoration and conservation of ecosystems; and to knowledge management through the creation of ONCCDS. Similarly, it is aligned with the adaptation to climate change goals stated in its Institutional Strategic Plan, aimed at building capacity and building resilience at community level in the CFC through the integration of climate change into planning.

Inter-institutional Climate Change Committee (CICC, by its acronym in Spanish)

100. The CICC works as an advisory and political platform of the President of the Republic on climate change issues. The CICC is formed by heads of government institutions that are directly linked to the implementation and planning of actions related to climate change. The CICC, given the interdisciplinary and multi-sectoral nature of the issue, consists of more than 15 government institutions, also reaches out to private enterprise representatives, civil society organizations, academia, indigenous and Afro- Honduran communities, professional associations and donors. The Interinstitutional Technical Committee on Climate Change (CTICC, by its acronym in Spanish) was created in support of the CICC. The CTICC comprises technical representatives from the CICC institutions. Some of its functions are promoting and coordinating the implementation of climate change adaptation and mitigation activities; developing projects of national interest on the issue of climate change along the DNCC; dissemination of results of climate change projects and programmes, etc. Within the CTICC, there are technical subcommittees to address specific issues, lead by the representative of the government institution responsible for the topic, with the active participation and advice of the DNCC. The project management mechanism will be framed in the CTICC, within the Adaptation Subcommittee.

Indigenous and Afro Honduran Climate Change Board (MIACC, by its acronym in Spanish)

101. The MIACC is the highest representative body for decision-making, for coordination, for national policy for negotiation, for implementation, monitoring and evaluation of REDD + processes, and other related processes, in indigenous and Afro- Honduran territory. The MIACC was constituted in 2012 under an agreement of the Confederation of Indigenous Peoples of Honduras (CONPAH, by its acronym in Spanish) to serve as guidance on political and technical aspects related to Climate Change, REDD + and other related actions at national and international level. It is currently undergoing regulatory reform. Project consultations regarding the CFC Lenca people will use this mechanism as a reference, but always framing their actions under DINAFROH (Division of Indigenous and Afro-Honduran People, by its acronym in Spanish), as the government department responsible for this subject.

Strategic and Political Climate Change Framework

National Climate Change Strategy

102. To meet its commitments to the UNFCCC, Honduras approved in 2010, by Decree No. PCM- 046-2010, the National Climate Change Strategy (ENCC). The Strategy proposes 17 strategic objectives,

15 in adaptation and two in mitigation. This project is aligned with the objectives of adaptation in water resources, in the forest and agriculture sectors, and also targets food security. It also contributes to mitigation targets through forest protection, and to strengthening synergies between adaptation and mitigation objectives.

Climate Change Law

103. The aim of the law is to "establish the principles and regulations necessary to plan for, prevent and respond in an appropriate, coordinated and sustained way to impacts caused by climate change in the country". The law establishes climate change as an inter-sectoral state issue, politically led by the Presidency, which is responsible for directing and guiding the actions related to climate change adaptation and mitigation through the CICC. The law mandates MiAmbiente and the Ministry of Finance to work together on the development of a Plan for Climate Change Adaptation and National Appropriate Mitigation Actions (NAMAs).

104. The preparation of the National Adaptation Plan process has already begun, however, is still at an early stage. The law also mandates the creation of strategic and operational plans for climate change in priority sectors, among which are: human health, coastal and marine areas, agriculture, forestry, ecosystems and protected areas and infrastructure. It also addresses the adjusting of municipal land use plans to meet the targets for adaptation and mitigation mandated by law. The project will support the latter goal in the 14 CFC municipalities.

Intended National Determined Contributions (INDC)

105. Honduras managed to timely define and present in 2015 its INDC, showcasing its commitment at international level to the problems of climate change. Under the process of definition of the INDC, sectors and sources addressed on mitigation, given their availability of reliable data, were: Energy, Agriculture, Industrial Processes, and Solid Waste. For these sectors, a 15% emissions reduction for the scenario 'Business as Usual' (BAU) for 2030 was defined. In addition, afforestation / reforestation of 1 million hectares of forest by 2030 was proposed, and a 39% reduction in consumption of firewood by families through efficient stoves, supporting actions against deforestation. Given its high levels of vulnerability, Honduras included adaptation and loss and damage initiatives into the INDCs, as many other countries already affected by the impacts of climate change. Both mitigation and adaptation activities focused on the 'Rostro Humano' of climate change, supporting improvements in life quality for Hondurans, ensuring full and effective participation especially of women, indigenous peoples and Afro Hondurans, and guaranteeing human rights. This is an ongoing initiative, where these goals can rise their ambition level towards a National Determined contribution Honduras (NDC). Since INDCs were produced within time and financial resources restraints, there is space and opportunity to continue reviewing the current INDC. The project can contribute inputs for the review of the adaptation section of the future NDC, that could be presented at the time of ratification of the Paris Agreement by Honduras, or during the 'dialogue facilitator' under the UNFCCC agreed in decision 1CP / 21 for 2018. These processes will be important opportunity for Honduras to present more ambitious and informed goals on adaptation. This project, through its work in the restoration of degraded areas and optimum use of firewood, will also contribute to INDC mitigation targets set by the country.

Third National Communication and First Updating of the Biennial Honduras Report

106. The main objective of this project is to allow Honduras to fulfill its commitments to the UNFCCC through the preparation and the presentation to the Convention, and the dissemination, of the Third National Communication and the First BUR. Currently, the country is preparing inventories of greenhouse gases. During 2017, the country will have to develop its Communication for adaptation,

and the project will be able to work closely with such process, to incorporate work undertaken and lessons learned during 2017.

National Adaptation Plan

107. This plan is currently being prepared by MiAmbiente, and is expected to be completed at the time the project enters its implementation phase. The project will contribute the implementation of NAP, particularly in water, agriculture and forest sector related deliverables, and it will also contribute to overall institutional and knowledge management aspects, especially through support to the National Observatory on Climate Change.

Relevant Sectoral Policy Frameworks related to Climate Change

108. The project will be framed in the Municipalities Law as the legal instrument that grants a level of management autonomy to municipalities. For all activities targeting CFC natural resources, the project will use the rules, regulations, and instruments of the Forestry, Protected Areas and Wildlife Law, especially for forest protection and firefighting activities, as well for the creation of incentives for forest protection and community forestry. It will also consider the General Water Law, especially for the preparation of a PES scheme for watershed services proposal; and also the National Risk Management System Law, for all EWS actions, as well as national emergencies like the bark beetle outbreak and / or drought.

2016-2022 Restoration Plan in areas affected by bark beetle, and 2016 Action Plan.

109. This plan aims to ensure the restoration of forest areas affected by the bark beetle plague, through participatory processes, generating socio-economic and environmental benefits to the general population. By 2016, the plan aims to restore 30,000 ha affected areas, prioritizing water supplying areas as micro basins and protected areas. The project will fully align esp. its outputs 2.1 and 2.2 with the guidelines of this plan.

National Reforestation Programme

110. The National Reforestation Program has a designated one (1) % of the country budget. The project will ensure close links with this program to carry out the activities of component 2.

Agroforestry Policy and the Agroforestry National Program of Sustainable Productive Landscapes (under approval)

111. The project will be framed under this policy for the implementation of agroforestry systems that allow innovative ways of integrating production processes of food, water, and soil conservation; biodiversity sustainability, power generation, carbon sequestration, tourism and scenic beauty; as well as restoration of degraded areas, especially those affected by the bark beetle plague.

National Program for the Reactivation of the Honduran Agro-food Sector (FIRSA)

112. The National Program FIRSA was established in October 2014, to run for four years, funded by the General Budget of the Republic for twenty billion lempiras. This program initially started as agricultural loan funds, but in 2015, a non-refundable budget line was assigned for water reservoirs. The construction of water reservoirs will continue during 2016 and 2017, representing an opportunity for synergies. The project will ensure synergies with and support to FIRSA, as described under Output 2.3.

UN Strategic Framework

113. The United Nations Development Assistance Framework (UNDAF) has three strategic areas of intervention, that is aligned with national objectives stated in the 'Visión de País 2010 – 2038' document, which stated five effects, aligned to country Sustainable Development Goals (SDG). This project is perfectly aligned with UNDAF Strategic Area 3, Outcome 5: Poor and food insecure vulnerable population living in target regions has increased their production and productivity, as well as their income and sustainable consumption, also considering climate change. The results of the project contribute to achieve the fulfillment of the following Sustainable Development Goals (SDGs):



114. In addition, the project aligns with the **UNDP Strategic Plan (2014-2017)** in its objectives: O1: *Growth is inclusive and sustainable, integrates productive capacities that create jobs and livelihoods for the poor and excluded; O5: Countries are able to reduce the likelihood of conflict and reduce the risk of natural disasters, including climate change.* It is also aligned to the specific outputs of 'UNDP Country Programme Document (CPD 2017-2021)' *Outcome 1: Sustainable and resilient practices integrated in to the livelihoods of groups in extreme poverty.*

E. Describe how the project / programme meets relevant national technical standards, where applicable, such as standards for environmental assessment, building codes, etc., and complies with the Environmental and Social Policy of the Adaptation Fund.

115. The project will consider relevant technical standards required by the Honduran Government, such as environmental impact assessments procedures by the Division of Environmental Evaluation and Control (DECA) of MiAmbiente, building codes, forestry, water and sanitation regulations. The construction works of micro projects for efficient water and forest resources consumption in the target area that this project aims at, have been classified in the lowest risk category, not being required a formal environmental impact assessment. For this type of micro projects, DECA requires the following information prior to a field assessment by DECA staff: description of objectives, geo-referencing and dimensions of the project. The project will ensure that this procedure is implemented under MiAmbiente standards, as the corresponding governing body. For implementation of construction works for water resources use, the project will use the guides produced by the current AF project on Rain Water Harvesting Systems Design, and also for micro-reservoirs and drip irrigation. The project will consider the Honduran Construction Code to ensure proper performance of the construction works, also ensuring safety for its users. An Environmental and Social Management Framework (ESMF - Annex 14) has been prepared to address potential social and environmental risks and impacts and to ensure compliance with applicable regulations and standards. The ESMF outlines procedures for screening, assessment, and development of measures to manage potential social and environmental risks and impacts during project implementation.

The following further regulations and standards will be considered for project implementation

Regulations	Objective	Authority
Agreement No. 169	About Indigenous Peoples and Tribes in Independent Countries	National Directorate of

		Indigenous Peoples and Afro-descendants (DINAFRO)
Municipality Law	Regulatory Framework for Municipal Management	Municipalities
Forestry Law	Protection, exploitation and conservation of forests and wildlife	ICF
General Law for the Environment	Orientates human activities towards sustainable development.	MiAmbiente
Regulations for Organic Agriculture	Promotion of environmental and sustainable agricultural production	Ministry of Agriculture and Livestock (SAG)
Law of the National System for Risk Management	Legal framework oriented to the development of prevention capacities, and decrease the risk to potential disasters, as well as to preparedness and recovery of damage due to natural disasters or those caused by human activities.	Permanent Contingency Committee (COPECO)
General Water Law	Establish principles and regulations applicable to the adequate management of water resources, for the protection, conservation, valuation and exploitation towards the integrated management of water resources at the national level.	Ministry of Energy, Natural Resources, Environment and Mining (MiAmbiente), through the General Directorate of Water Resources
Framework Legislation for Water and Sanitation	<ol style="list-style-type: none"> 1) Promote the expansion of service coverage for drinking water and sanitation. 2) Ensure water quality and potability, to guarantee water consumption is healthy for the population. 3) Establish the environmental management regulatory framework, for the protection and preservation of water sources, as to for the sanitation and management of wastewater discharges. 4) Establish criteria for service valuation, fee schemes and compensation mechanisms and social solidarity, that guarantee access to these resources by families and communities that are under the condition of social vulnerability. 5) Strengthen the spatial planning and governance in water services and sanitation management through an adequate delegation of functions, competencies and responsibilities, promoting civil participation in the process and conflict resolution. 	CONASA ERSAPS SANAA

Technical Standard for Water Quality (public health safety about delivery of drinking water services)	Protect public health through the establishment of appropriate levels or standards that water quality should meet, and parameters that might represent a health risk to the community or inconvenient for the conservation of water sources systems.	Ministry of Public Health
Municipal Arbitration Plan	Municipal regulation every 5 years, referred to arbitration of municipal taxes, that are valid for activities carried out under the municipal area.	Municipalities
Municipal Development Plans	Planning instruments, prepared under the mandate of the General Coordination Secretary of the Government for municipalities.	General Coordination Secretary, Secretary of the Interior Municipalities
National Forest Restoration Strategy	Forest Restoration	ICF
Forest Protection Plans	Methodology Guide for the planning of municipal forest protection.	ICF
Resin, Charcoal and Forest Exploitation activities	Regulation for resin extraction and utilization activities attached to Forest Protection Plans	ICF
Organic agriculture regulations	Promoting sustainable agriculture Best agriculture practices guide	Ministry of Agriculture and Livestock
Environmental Impact Assessments	Building of Water Systems	MiAmbiente through DECA
Regulation of Compensation for Ecosystem Services	Establishes the criteria for services valuation, fee schemes and compensation mechanisms and social solidarity to ensure the access to resources by families and community groups who are in conditions of social vulnerability	MiAmbiente through the Environmental Management Directorate

F. Describe if there is duplication of project / programme with other funding sources, if any. Complementarities and synergies between existing development initiatives and the proposed AF project are summarized below:

Project title	Donor	Focus (and contribution to Baseline)	Value AF Project Adds	Period
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Project title	Donor	Focus (and contribution to Baseline)	Value AF Project Adds	Period
Addressing climate risks on water resources in Honduras	Donor: Adaptation Fund USD 5,180,000 Implementing Body: UNDP Executing Body: MiAmbiente	The Project aimed at increasing the resilience of the most vulnerable population of Honduras against climate-related impacts by improving water management capacities. Activities supported capacity building and the development of a number of planning tools and instruments such as the CFC Forest Protection Plan, Protected Areas Management Plans, Municipal Adaptation Plans, and Watershed Management Plans based on socioeconomic and biophysical diagnoses prepared by the project.	The new AF Project will complement by contributing to the updating and implementation of the Forest Protection Plan and the Watershed Management Plans. It will also advance the knowledge management based on best practices in water resources management and the institutionalization of the CFC platform. The new AF Project will also strengthen the National Climate Change and Sustainable Development Observatory by consolidating an indicators framework to monitor climate change impacts.	2011-2016
Reducing Emissions from Deforestation and Forest Degradation (REDD+)	Donors: FCPF and UN-REDD FCPF: USD 3,800.000 UN-REDD: USD 3,609,645 Implementing body: UNDP/WFO/UNEP Executing Body: MiAmbiente and ICF	The main objective is to improve the life quality of people through the conservation of biodiversity, sustainable forest management and restoration of degraded forest land areas, through: 1) National Strategy to Reduce Deforestation; 2) Enabling framework to implement the Strategy; 3) Safeguards Information System; 4) Monitoring, Reporting and Verification System.	The AF Project will advance sustainable forest management practices and on activities regarding forest cooperatives in the CFC; it will also support the design of financial mechanisms. The strongest value added will lie on the restoration and forest protection measures to be implemented by the project, which the National REDD + Strategy will be able to integrate into their actions. Another aspect the Project will contribute to relates to the monitoring system, mainly in the framework of Monitoring, Reporting and Verification (MRV) that REDD+ is leading.	FCPF 2014-2017 UN-REDD 2015-2018
Climate Change Program (PRCC- USAID)	Donor: United States Agency for International Development (USAID) Executing Bodies: CATIE/IUCN/TNC/CARE/Terra Global/DAI LAC	The PRCC is a regional initiative that seeks to propose solutions and actions to enable rural areas to address the effects of climate change. The PRCC works to reduce human vulnerability to climate change in Central America and the Dominican	The AF Project will seek synergies with this initiative regarding monitoring and knowledge management of the Component 3, mainly by implementing at the local level a PRCC methodology to promote synergies and co-benefits between climate change adaptation-mitigation in the forest sector. It will also explore opportunities related to the incentives for forest conservation proposed by the	2013-2017

Project title	Donor	Focus (and contribution to Baseline)	Value AF Project Adds	Period
		Republic populations. It also pursues integration of observation and land monitoring-geospatial technologies to decision making for development.	PRCC.	
CLIFOR Programme	Donor: EU / GIZ USD 25 million Implementing Body: German Cooperation Agency GIZ Executing Body: ICF	The CLIFOR Programme seeks to improve the situation of the local population through Community Forestry in order to face climate change impacts. CLIFOR plans to increase the area of public forest under community management by 550,000 hectares, reduce illegal logging and forest fires, improve the economic situation of women in target areas, and mass adoption of climate adaptation measures.	The AF Project will not only consider good practices and lessons learned around community forestry but also integrate coordinated actions to support the work of the forest cooperatives when implementing concrete measures in areas of community forest management.	2014-2018
Honduran Land Management Programme (PATH) Phase II	Donor: World Bank Implementing body: World Bank Executing Body: Honduran Institute of Property	PATH aimed to strengthen property rights in Honduras through the modernization of the policy and institutional framework, capacity building and the development and full integration of the Decentralized National System of Property Administration (SINAP).	The AF Project will directly benefit from this programme as it was very important to the strengthening of the Honduran Institute of Property and this institution will be key to support processes related to land tenure issues. Particularly, it is linked to actions and measures proposed by the Component 2.	2012
MOSEF	Donor: EU USD 23.1 million (loan) Implementing body: ICF	The main objective of MOSEF is to improve forest governance at national level, to improve protected areas and wildlife, also supporting the ICF actions and other forestry related institutions.	The AF Project will promote synergies in forest governance, complementing the initiative particularly with the local focus on municipal and community forestry access of information and geo-data.	2014-2020

Project title	Donor	Focus (and contribution to Baseline)	Value AF Project Adds	Period
Sustainable Forest Management Programme	Donor: BID USD 25 million (loan) Implementing body: ICF	Currently under definition, but will be oriented to sustainable forest management.	The AF Project will complement actions related to sustainable forest management. Activities will be defined when there is more information available on the actions and target areas of the programme.	2017-to be defined
Strengthening of Climate Information and Early Warning Systems to support resilient development in Honduras and Nicaragua	Donor: World Bank USD 425, 000 for Honduras Implementing Body: World Bank Executing Body: COPECO	The Project aims at the preparation of: 1) A diagnosis of the state of art of the institutional aspects, equipment, forecasting, human resources, budget for adequate climate information and EWS requirements for Honduras. It will also prepare a modernization plan, capacity building programme and EWS pilots.	The AF Project will establish regular communication with the project team, ensuring participating in their training events, and integrating the climate information generated by the project into Component 3. Efforts will also be made to implement one of the EWS pilots in the CFC area.	2016-2018
Pilot Programme on Climate Resilience (PPCR)	Donor: World Bank USD 1.5 million Implementing body: INVESTH Executing Body: MiAmbiente	The main objective is to design and prepare a portfolio of adaptation and climate resilience projects. The programme features four main areas: Water security; Food security; Knowledge Management; and Institutional strengthening	The AF Project will seek synergies, so that actions favoring the sustainability of the project can be ensured through linking within the PPCR project portfolio to be defined.	2017-2018
Forest Investment Programme (FIP)	Donor: World Bank (IFC) USD 250,000 Implementing Body: World Bank and IDB Executing Body: MiAmbiente	The objective of the Programme is to support the implementation of the REDD+ project in the country.	The AF Project will complement this initiative by providing inputs to the definition and design of the FIP portfolio of projects focusing on the forest sector.	2017-2018

G. If applicable, describe the learning and knowledge management component to capture and disseminate lessons learned.

116. The project features Component 3, specifically oriented to knowledge management and communications, and systematization of lessons learned. As an added value in this area, the project will strengthen the ONCCDS, as a platform managing information on environmental variables and indicators, to guide and improve decision making and responsiveness of the Honduran population facing climate change vulnerability. In addition, the project will ensure that the necessary tools such as the website, newsletters, newspapers, social networks, and videos to disseminate its activities and

results to different target groups (through output 3.4) are in place. The project will develop a Knowledge Management and Communication Plan as a tool to perform these processes, linked to the MiAmbiente and ONCCDS communication strategy, and also to related functions of CFC Platform and the envisaged Authority. The project will focus on tailoring the information according to the target population (e.g. at community level, informal meetings convened by rural agents, radio and TV spots, etc.). The project will consider the linguistic diversity in the target area, in order to properly reach out to indigenous people. Specific communication actions will be designed to target women and youth. Since the project will be working directly with municipalities and the Municipal Environmental Units (UMA)s, these entities will be the channels to reach out to all the local organization such as water associations, forestry groups, consultative councils and others, in order to generate and disseminate knowledge products and project activities. Other means will be also harnessed, for consultation and socialization of results and activities such as open cabinets, community radio stations, and the National Climate Change Observatory.

117. The Forest Conservation Institute has been consulted about experiences in Central America about the bark beetle plague and conveyed the following:

- In the Central American context, Honduras was actively providing assistance to other countries, and with FAO support, the Regional Forestry Health Strategy was established in 1990, through which national coordinators met periodically within the CCAD framework (Central American Commission for Environment and Development). This regional movement was discontinued. However, some of the lessons learned were used for the design of this project, specially: promoting the participation of communities in the detection and prompt attention of beetle outbreaks, as well as the need of more research about it.
- The large beetle outbreaks in 2013 started in Honduras (and has been continuing to date), and Honduras has been the most affected country in Central America. In effect the ICF of Honduras initiated communications and alerted neighboring countries on the plague risk. It is recognized that there is need for more systematic exchange of experiences with other countries in the region, therefore the project will also support South-South cooperation and exchanges through actions under its Output 3.4.

H. Describe the consultative process, including the list of stakeholders consulted, undertaken during project preparation, with particular reference to vulnerable groups, including gender considerations, in compliance with the Environmental and Social Policy of the Adaptation Fund.

118. The development of this proposal began with consultations with technical experts about restoration, bark beetle pest, watershed management, knowledge management, meteorological information and agriculture; through bi-lateral meetings and/or focus groups with experts from government institutions, including MiAmbiente, SAG, SANAA, ICF, CONADEH, COPECO and Honduran Coffee Institute (IHCAFE); experts from academic institutions as UNAH , U - ESNACIFOR , and UNA -Catacamas ; ONCCDS staff ; cooperation Agencies as the IDB, the World Bank , UNDP, UNEP , GIZ and EU; and the Honduran Federation of Agroforestry Cooperatives (for more information see Annex 7 and 8). In addition, in May 2016, an exercise on the Theory of Change with experts from the same institutions mentioned above (for more information (see Annex 9) was performed. Finally, community consultations were conducted during the first half of July 2016 in CFC municipalities, attended by communities in each municipality, ensuring the participation of women and the participation of the Lenca people. These community consultations aimed to produce a preliminary diagnosis of municipalities (concerning issues of planning, financial mechanisms and current incentives, livelihoods, etc.), and to obtain information on expectations, concerns and interests of key CFC municipal and community stakeholders, as well as information on needs and investment opportunities for climate change adaptation (for more information on these consultations, see Annex 10). From these consultations, validation letters of the proposed project issued by CFC municipalities (see Annex 11) were signed. In addition, the National Climate

Change Directorate also validated this project proposal at a meeting by CTICC (see Annex 12). the project's ESMF outlines a Stakeholder Engagement Plan that outlines how stakeholders will be consulted through project implementation.

119. The following table is a summary of municipal consultations undertaken during the proposal preparation, involving 12 municipalities, 265 persons representing 84 communities. It is estimated that 35% of the participants were women.

Represented Organizations	Roles
Community Patronage	Base organizations for community development
Water Boards	Oversights the construction, maintenance and administration of water system that supply rural communities
Health Centers	Sanitation surveillance and client services
Agriculture Schools	Technical assistance to municipalities
Municipalities and their several Units (Environmental Management Units, Land Registry, Municipal Justice, Women's Office, Transparency commissions)	Local governance
Forest Consultative Councils	By law, these are decision making bodies for the forest management in a Municipality or community.
Education Directorate	Educational projects about the environment
International NGOs and partner organizations (World Vision, Habitat for Humanity)	Technical Assistance
Agroforestry Cooperatives	Management and utilization of forest resources
CONEANFO (National Commission for the Development of Non-formal Education)	Educational projects about the environment
Women's Network	Strengthening of organizational and productive capacities of groups of women
Permanent Contingency Committee (COPECO)	Address emergencies caused by to natural disasters
Churches	Development of social projects
Co-manager NGOs of protected areas	Responsible for protected area management in the Central Forest Corridor
Military Posts	Coordinate environmental activities of the Armed Forces (reforestation, forest protection)
Pro development Committees	Base organizations for community development.
Water Services providers	Water systems management
Fire Department	Participation in fire protection, pests and emergency response

Watershed Councils	Coordination of watershed management and protection activities between municipalities
Citizen Transparency Commission	Social Audit
Forest Conservation Institution (ICF)	Responsible for managing the regulatory framework of forest resources management, and provides technical assistance
Development Associations	Coordination Platform for technical support in municipalities
Honduras Federation of Indigenous Lencas (FHONDIL)	Represents indigenous peoples' interests

The outcomes of the consultation process highlight that communities are aware of the close relationship that exists between forests, water resources and climate change and the need to implement adaptation measures in those sectors. The workshops held in the 12 municipalities were also great opportunities not only to understand local contexts and community dynamics, but also to the discussion of possible interventions. Issues of governance arrangements, community participation, knowledge management and barriers and limits for effective implementation of climate change adaptation have also been raised and considered in the project design.

The following table provides a summary of the outcomes of the consultations and how they are reflected in the project design.

Barriers and limits	Recommended actions
-Lack of community engagement to prevent and firefight wildfires;	-Community capacity building for wildfire prevention and monitoring;
-Difficult access to wildfire prone areas due to its topography that limits wildfire prevention measures;	-Support to the creation/consolidation of forest cooperatives;
-Lack of financial mechanisms for forest management;	-Support to wildfire prevention and monitoring brigades (equipment);
-Lack of adaption technologies to improve water catchment;	Monitoring of forest areas to avoid deforestation and environmental degradation;
-Lack of water reservoirs to water supply and irrigation;	-Capacity building to water boards;
-Forest restoration with species not adapted to local environmental conditions;	-Creation of a municipal committee to coordinate forest restoration actions;
-Lack of community engagement in forest monitoring;	-Engage with other stakeholders such as the churches, community development associations, etc.
-Lack of prompt community and public response in case of wildfires;	-Implementation of Action Plan for Forest Restoration and Recovery;
	-Improve monitoring and response to areas

<ul style="list-style-type: none"> -Lack of implementation of the Municipal Protection Plan; -Lack of community engagement in ecosystem-based adaptation measures; -Lack of women participation in forest management activities; -Lack of capacities from water boards; -Lack of community incentives for forest restoration and afforestation; -Lack of municipal capacities to respond to droughts; -Lack of financial resources at the municipal/community levels; -Landlords restrict access of wildfire prevention brigades due to lack of information; -Lack of local/community knowledge on bark beetle plague control, monitoring and prevention; Lack of financial resources to bark beetle plague control and prevention; -Lack of funding streams to address the need of irrigation systems; -Lack of technical knowledge and information on adaptation techniques; --Lack of environment awareness; -Lack of resources to community/municipal brigades (vehicle, radios, tools, etc); 	<ul style="list-style-type: none"> affected by bark beetle plague; -Improve scientific research and knowledge of affected areas; -Improve fire control in areas close to the urban center (higher likelihood); -Creation of municipal funds to support forest cooperatives; -Improve resources management (human, financial, techniques); -Improve selection of local restoration/afforestation species; -Improve/disseminate drip irrigation techniques; -Improve communication and participation of private landlords; -Improve law enforcement at the municipal level; -Improve stakeholders' involvement and participation; -Improve resources management and coordination; -Improve action planning; -Improve government planning and coordination; -Improve forest management by implementing monitoring tools and activities; -Increase environmental awareness and improve communication; -Provide capacity building and technical assistance; -Implement capacity building programmes; -Implement measures to protect and restore watersheds;
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The municipal consultations reflected gender considerations in the following ways:

120. The discussions promoted reflections about women, youth and children participation, and interventions highlighted the need for more active participation of women and the youth. In some municipalities participants stated e.g. that "there is high interest involving young people and children, since currently there is a lack of new leadership that integrate organizations". Likewise, the facilitators

also provided their assessment as follows: “assistance to the consultations were balanced between men and women, however, there were very few interventions by women during the consultation”, “the people consulted insisted that the participation of young people is vital when carrying out any process”.

121. Doña Odilia (Water Board member) from a municipality participated saying that “citizen participation (more involvement) will help to create and maintain links with the environmental prosecutors, Forest Area Surveillance, achieve that the SANAA train the beneficiaries, get help from institutions, educate children and young people through education centers about good management and forest protection as well as to preserve the micro watershed”.

122. The detailed gender assessment and plan to be carried out in the inception stage of the project implementation will take these into consideration and will promote methods for a balanced gender participation in consultations and participatory processes attached to project implementation.

I. Provide justification for funding requested, focusing on the full cost of adaptation reasoning.

Components/Outputs	Baseline (without AF Resources)	Alternative (with AF Resources)
Component 1: Strengthening of local and community governance for climate resilience		
<i>Output 1.1 Strengthened coordination mechanisms for climate-resilient management of CFC natural resources, including measures for the effective participation of women and indigenous people</i>	<p>The strengthening and consolidation of the CFC Platform is the departing point of this Output and builds on a one-year effort of the previous AF Project where municipal-level authorities have recognized the importance of the Platform. However, without further support to its consolidation, formalization and strengthening it will continue to function in a poor and loose <i>ad-hoc</i> manner, risking of being totally ineffective, and municipalities of CFC lacking a coordinating mechanism to address issues related to integrated management of watershed and forest areas that lies within.</p>	<p>The AF Project will strengthen the CFC Platform as a model of land, forest and water resources management, with a focus on climate change adaptation, to ensure the provision of ecosystem goods and services, operating as a coordination and advocacy mechanism among municipalities, and between municipalities to central government institutions. The project will support the establishment of a CFC Technical Implementation Unit that will be tasked to develop internal procedures and rules for the operational activities of the CFC Platform, and an Action Plan toward formalizing a CFC Authority. The Platform Operational and Action Plans will include a communication and consultation plan to promote full and effective institutional participation of women, youth and indigenous communities. The CFC Authority will be formalized as a legal entity through an Executive Decree. Activities will also include exchange of experiences and technical and administrative training.</p>
<i>Output 1.2 Municipal level regulatory mechanisms strengthened for adaptive management of</i>	<p>The sanction and complaint mechanisms in place in the country are generally ineffective; in addition, local regulations are non-existent or equally ineffective due to the lack of municipal</p>	<p>The AF Project will support the application and implementation of the Forestry, Protected Areas and Wildlife Law, developing local regulatory instruments and tools</p>

<i>natural resources</i>	governance capacity, and lack of delegation of functions (e.g. forest use permits) from central authorities to municipalities.	such as a reporting mechanism for communities (on malpractices, illegal logging, wildfires, and pest outbreaks, etc.) with training, municipal norms and ordinances (e.g. land use zoning and forestry use by private land owners). The project will also support the National Environmental Prosecution Office in delivering trainings and capacity building activities to municipalities. It will also review ICF permit system to delegate authority to municipal governments for small scale and non-commercial community use of wood material (e.g. firewood).
<i>Output 1.3: Municipal level plans are revised and newly established to harmonize adaptation interventions</i>	The CFC is an integral part of Region 12, which has its Land Use Regional Plan. The planning situation in the municipalities is diverse, featuring different approaches: some municipalities have Municipal Development Plans (PDM), others focus on Land Management (PDM-OT), others already have Community Development Plans (promoted by the 'Plan de Vida Mejor' though the FOCAL methodology from the Japanese cooperation), and some do not have any instruments at the municipal level. Regarding thematic levels, there are Municipal Forest Protection Plans (in 14 CFC municipalities supported by the current FA Project); 23 Micro Basins Action Plans (also supported by the current FA Project); 4 management plans of protected areas; and 2 sub-basins management plans. The current FA Project also supported the integration of climate change considerations in 5 PDM-OT within the CFC. For that purpose, a "Methodological Guide for the elaboration of Municipal Plans for Climate Change Adaptation" was produced. Without the project existing climate change adaptation plans and forestry protection plans remain outdated given that they were developed in a pre-bark beetle plague situation and does not respond to emerging post-plague needs, while in other municipalities planning processes will continue without proper integration of climate change risk, and harmonization of the various planning	The AF Project will promote planning tools that increase the capacities of municipal government to comply with the Climate Change Law. It will also support the review and preparation of the following municipal-level plans such as the Municipal Climate Change Adaptation Plans (including those developed by the previous AF Project). These plans are important components of the Municipal Development Plans. The Forest Protection Plans and the Micro-Basins Plans will also be reviewed, covering the entire CFC and its 50 micro-basins. These processes will provide an opportunity to update 2015-2016 bark beetle plague outbreak in order to better respond to its effects through restoration and prevention/preparation. These processes will also rely on community consultations and assessment, including socio-economic, technical, administrative and regulatory analysis to understand the special and temporal dynamics of the municipalities around their livelihoods, their land tenure, type of resources used, etc. A gender analysis will also be performed so that planning measures can be designed to promote gender-balanced development.

	instruments in this aspect.	
<i>Output 1.4: Payment for Ecosystem (Watershed) Services (PES) schemes developed and operationalized for climate change adaptation measures</i>	At CFC inter - municipal level, a payment mechanism for ecosystem services (esp. for water provision) does not exist, past attempts have stalled due to lack of political will and coordination between municipalities. A municipal level PES scheme has been piloted through the current AF project in Tatumbla that needs to be replicated.	The AF Project will support the replication of the municipal level PES scheme introduced through the previous AF project in Tatumbla. This involved the revision of the water tariff system to internalize the costs of protection and maintenance of water source and recharge areas. The process will involve community and municipal-level bodies such as Water Boards, both in the main urban centers and rural areas of the CFC municipalities. Furthermore, it will support the development of a pilot proposal for an inter-municipal PES scheme in one of the main sub-basins within the CFC area that provides water supply to the Central District downstream. The pilot process will support the establishment of a Sub-Basin Committee, dialogue with the CFC Platform, review of past experiences, ecosystem services valuation assessment and definition of an operational mechanism for compensation involving SANAA and the Water Council (CONAGUA).
Component 2: On the ground adaptation measures for forest, land and water resources management		
<i>Output 2.1: Pine and Mixed Forest areas damaged by drought-induced pest and fire hazards are reforested</i>	The 2016 Operational Plan for Restoration of Areas Affected by the Bark Beetle, which aims to ensure the restoration of 30,000 affected hectares; due to limiting funding, prioritized as target areas only micro basins and declared protected areas in five departments (Francisco Morazán, Olancho, El Paraíso, Yoro, Comayagua), but it does not have resources to address community-managed forest areas. To date, there are no restoration protocols, and in many cases, changing temperature and rainfall patterns are resulting in little survival and succession rate of seedlings planted through reforestation.	The AF Project will promote the restoration of 1,000 ha of mix and pine forest in the CFC, in line with the components of the 2016–2026 Restoration Plan in areas affected by the bark beetle. The areas for restoration will be defined with the municipalities within the CFC Platform, and will focus on priority areas. It is expected that the reforested areas will reduce climate-related risks and impacts, including protection against soil erosion and landslides (caused by intense precipitation), and regulation of water flows (enhanced retention of runoff) through enhanced land coverage, as well as reducing drought related vulnerabilities in water supply through the watershed regulation functions.
<i>Output 2.2: Protection measures are introduced against wildfires, pests, land use change, and</i>	The current AF Project supported the preparation of 14 Forest Municipal Plans during before the bark beetle plague, thus without further revision	The AF Project will support trainings for municipalities and community forest management groups on forest fire and bark beetle outbreak

<i>unsustainable forest use, assisting natural regeneration of forests</i>	and capacity support for protection measures its implementation will be ineffective to respond to the recently emerged devastating impact.	detection and control and for implementation of local norms and ordinances /developed under Output 1.2. Local fire brigades will be trained and equipped with communication and fire control gears, as well as specific transportation to access remote and rugged areas (e.g. quads). A school programme will be introduced for forest protection volunteers to encourage children planting trees. The installation of efficient eco-stoves will be also supported in order to reduce pressure on firewood consumption by families. These measures will contribute to enhancing resilience of forests against drought induced impacts (forest fires, pests), and in turn will reduce also vulnerabilities of communities of CFC depending on ecosystem services of forests.
<i>Output 2.3: Drought management adaptation measures implemented to optimize the use of water resources for agriculture and domestic use</i>	The current AF Project has developed drip irrigation pilot project, infiltration galleries, and improvements on water service (improving the water intake, conduction line and storage tank) through micro projects in five CFC municipalities. The FIRSA government programme has recently initiated grant and credit support programme for producers to build micro-reservoirs and install drip irrigation, but producers lack technical capacities to prepare sound plans for applications, and the FIRSA system does not fully integrate climate risk considerations and lacks adequate advisory services.	The AF Project will replicate the experience of micro projects in other CFC municipalities, using available technical guides on rainwater capture and storage, drip irrigation projects and water reservoirs integrating climate risk measures. These initiatives will provide opportunities for a set of co-benefits such as increased agriculture production and reduced soil erosion. These measures seek to increase the resilience of communities in these municipalities. The Project will also facilitate the integration of other actions under implementation such as the FIRSA programme.
Component 3: Strengthening knowledge, information management and monitoring systems on climate change vulnerability and adaptive capacity		
<i>Output 3.1: Applied research carried out to enhance knowledge and information on the links amongst climate change, drought, pests, wildfires and adaptation measures in the CFC.</i>	In Honduras, there is only one research study so far that relates the infestation of the bark beetle to rainfall and temperature variations, as direct consequences of climate change and variability. There are no studies or research to show what the best intervention strategy for restoration and pest control depending on climatic variables, how the plague behaves under different environmental conditions (e.g. altitudes), thus without further research on such unprecedented level and severity of	The AF Project will forge alliances with institutions such as the UNAH, Research System (SINFOR in Spanish) of the National School of Forestry Sciences (ESNACIFOR in Spanish) to advance research in topics such as the relationship between climate change, forest fires and increased bark beetle pest (e.g. through an updating of the study conducted by Rivera et al, with new data from country climate scenarios), new pest control techniques (e.g. application of

	plague outbreak, future preparedness and response measure will continue to be ineffective.	pheromones, etc.), correlation among community forest management areas where resin extraction is performed and plague outbreaks occurrence. The project will also support the creation and institutionalization of a decision-making structure around information and scientific research on climate change like a Scientific Subcommittee on Climate Change (Scientific Working Group on Climate Change) under the Interinstitutional Committee on Climate Change (CICC) linked to ONCCDS.
<i>Output 3.2: Strengthened National Climate Change Observatory for Sustainable Development (ONCCDS)</i>	An ONCCDS has been established, but is not consolidated as a solid reference in national and international fields for knowledge management, and has no legal status, and there is only one national institution (MiAmbiente) that have signed a collaboration agreement. There is already a link among the SINIA and the ONCCDS, through the Water Geoportal, but data management processes are not fully harmonized. Work has been initiated to develop a system of climate change indicators but has not been concluded or operationalized.	The AF Project will support the ONCCDS to obtain a legal status to consolidate it as the main national body to manage climate change knowledge, including strengthening its institutional linkages with other partner institutions, such as the National Environmental Information System (SINIA, by its Spanish acronym), and the National Center for Atmospheric Ocean and Seismology Research, (CENAOS in Spanish).
<i>Output 3.3: Community early warning and monitoring system for bark beetle pest outbreak under CFC Platform</i>	Community-organized monitoring for the bark beetle outbreak does not exist, and fire monitoring is weak. There are no procedures for intervention against the bark beetle plague, and fire response procedures are weak. There is no community level early action warning systems set for the bark beetle outbreak.	The AF Project will support (linked with Outputs 2.1 and 2.2) the development of protocols and capacities for community pest monitoring (inspections, patrols and reporting of outbreaks (with a registry system); community contingency plans against the bark beetle outbreak. These contingency plans will integrate the lessons learned from the last country outbreak, and research results generated under the project's Output 3.1; raising awareness on the forest ecosystem benefits and the need to preserve these assets and implement EWS in close coordination with key central government bodies as ICF, AMOHN and MiAmbiente, under the CFC Platform. The EWS will establish a protocol for the observation and early detection of an infestation and plague, with roles of community groups and members well-defined,

		incorporating and relying on local/traditional knowledge of the area, conditions (including climatic) and changes in forests and plants status.
<i>Output 3.4: Systematized and disseminated project knowledge and experience</i>	Knowledge management and communication actions have been effectively implemented by the current AF project, and these types of functions need to be continued under the new project to allow capturing and dissemination of new experiences and lessons learnt.	The AF Project will develop a communication and knowledge management plan that will ensure a systematic capturing and dissemination of experience on lessons learnt and good practices. This will build on similar plan and actions developed through the previous AF project, and will be key to continue these actions given that the project will address a set of recently emerged and unprecedented challenges, especially those posed by the bark beetle outbreak. Actions under this output will support also key institutional functions, including those of the CFC Platform and ONCCDS. The project will also support South-South exchange of experiences, particularly about measures on the bark beetle plague, with neighboring countries in Central America.

J. Describe how the sustainability of the project/programme outcomes has been taken into account when designing the project / programme.

Institutional sustainability:

123. The sustainability of project results and capacities developed will be principally pursued through institutional strengthening interventions at various levels, including national (ONCDDDS), regional (CFC Platform and Authority) and municipal (Municipal Authorities involving their different units and division), supported through regulatory and planning frames. The institutional support frames will be strengthened also through establishing longer term operational and business plans (e.g. a revenue generating mechanisms for ONCCDS through fees system for information services). The Results Platform of the government will be another way in which the sustainability of actions and results will be ensured. The project will support the 2018-2022 DNCC planning exercise, to ensure that future actions to sustain the gains already achieved by the project will be established in the government Results Platform. Furthermore, the Government has proposed the consolidation of the Climate Action Plan with its Water, Forest and Soil conservation approach, seeking the sustainable development of Honduras and the fulfilment of acquired commitments reported in the NDCs, through which it is planned to reforest 1 million hectares of forest and reduce fuelwood consumption by 39% and GHG emissions by 15% by 2030.

124. As mentioned in the proposal, the CFC Authority will be formalized as a legal entity through and Executive Decree. This envisaged Authority will be coordinated under the mandates of ICF, AMOHN and MiAmbiente. Given its establishment by Executive Decree, the Authority will be an autonomous body and will be able to programme and access resources from the state budget, which is coordinated

through the Ministry of Finance and approved by the Congress – this also contributes to financial sustainability

125. The sustainability of the forest conservation, and beetle prevention and monitoring programme measures will be ensured through an institutional frame and coordination mechanism set up by the Central Government, given the severity of the impacts. Following the plague outbreak an emergency situation has been declared through Executive Power, making it a national priority, determined by mandate of the President. This led to the formulation of a National Strategy for Forest Restoration, directed to the recovery and restoration of degraded forest areas. Response, recovery measures, including monitoring are led by the Forest Conservation Institute (ICF) in collaboration with the Ministry of Environment. The monitoring programme will be sustained through community involvement coordinated by the Forest Fires Operations Center, addressing the main problem associated with water and forest stress, causing the weakening of species and making them vulnerable to attack by plagues such as the bark beetle.

126. ICF will provide continuous technical assistance, ensuring adherence to regulations. Agroforestry groups will sustain their functions in their designated areas based on management plans, which are approved by ICF. The longer-term operational costs of fire brigades will be covered by ICF and the municipalities, and will be also supported through volunteer groups formed by the community water associations. The school tree planting programme will be sustained through an agreement between the Ministry of Environment and Ministry of Education through the Green Schools Programme. The revision and operationalization of the Forest Protection Plans, supported through the project will also provide a frame for the longer-term sustainability of these functions.

Financial Sustainability:

127. Some financial mechanisms are already mentioned above, such as CFC Platform accessing state budget, or ICF supporting operational costs of fire brigades. The project will support various financial mechanisms, such as municipal and inter-municipal PES schemes, and access by producers to FIRSA programmes, that will be key vehicles for longer term sustainability and replication of results achieved. The technical assistance provided to municipalities and producers for the establishment of ground measures in water resources management for human use and agriculture will also involve sound maintenance and operational plans to ensure longer term functions. Importantly, various planning, regulatory and capacity building support to be provided to Municipal Governments is expected to result in Municipalities integrating CC adaptation measures in their budgetary planning and investment planning processes, thus ensuring longer term sustainability and maintenance of the installations and capacities put in place by this proposed project.

Social sustainability:

128. Social sustainability will be achieved through the active participation of rural and indigenous communities in the implementation of adaptation measures proposed by the communities. Community groups, community members and women participation will be fostered and strengthened through the implementation of concrete adaptation measures that will promote social organization and provide alternatives for income generation and food production to enable individuals to better cope with the impacts of climate variability. The proposed adaptation measures will be implemented as part of a collaborative effort between community members, CBOs, municipal and national authorities. This approach, which includes capacity-building and awareness-raising related to climate change adaptation, will empower the participating social groups and will promote social organization for the development and implementation of strategies to reduce risk related to climate change. The CFC platform to be strengthened and formalized under the proposed project will be a key coordination,

consultation and communication mechanism towards longer term social sustainability of the adaptation interventions in CFC municipalities and communities.

Technical sustainability:

129. The introduction of adaptation techniques and technologies (e.g. irrigation, water capture and storage facilities) will be ensured through the development of business plans, and as well as the operational and maintenance (O&M) plans to ensure the provision of any spare parts, repairs and maintenance needed as part of the site specific design of the interventions. The O&M of communal measures for water supply (e.g. water source protection, communal water tanks, pipes, etc.) will be ensured through the functions of local water boards who will take care of the maintenance and will raise funds from small fees collected for this purpose. The incentives provided through the enhanced agricultural production and consequent expected earnings will be key for the maintenance of the adaptation techniques introduced. These will be supported through ongoing advisory services by ICF, MiAmbiente or the Ministry of Agriculture and Livestock.

Environmental Sustainability:

130. The interventions are designed in an integrated way that aims at protecting and improving ecosystem functions and services in the longer term (as detailed in the table under Section I.A, Backgrounds information). The long-term maintenance of the enhanced environmental conditions will be achieved through the compound effect of the planning, regulatory, restoration, protection, water and land use management measures that will be sustained through the above mentioned institutional, financial, social and technical functions and mechanisms.

Processes and actions described in the ESMF (Annex 14) will also contribute to the above mentioned social and environmental sustainability aspects

K. Provide an overview of the environmental and social impacts and risks identified as being relevant to the project / programme.

131. The project is assessed for Environmental and Social Risks as Category B (moderate). A social and environmental assessment has been prepared following the UNDP Social and Environmental Screening Procedure and the results are in Annex 13. An Environmental and Social Management Framework has been also prepared and can be found in Annex 14. Indications and descriptions of potential risks and mitigation measures in the project context are provided below along 15 environmental and social principles defined by the Adaptation Fund:

Checklist of environmental and social principles	No further assessment required for compliance	Potential impacts and risks – further assessment and management required for compliance
<i>Compliance with the Law</i>	X	
<i>Access and Equity</i>		X
<i>Marginalized and Vulnerable Groups</i>		X
<i>Human Rights</i>	X	
<i>Gender Equity and Women's Empowerment</i>		X
<i>Core Labour Rights</i>	X	
<i>Indigenous Peoples</i>		X

<i>Involuntary Resettlement</i>	X	
<i>Protection of Natural Habitats</i>	X	
<i>Conservation of Biological Diversity</i>		X
<i>Climate Change</i>		X
<i>Pollution Prevention and Resource Efficiency</i>		X
<i>Public Health</i>	X	
<i>Physical and Cultural Heritage</i>	X	
<i>Lands and Soil Conservation</i>	X	

Compliance with Legislation

132. The project is framed within the current legislation of the National Plan and Vision ('Plan de Nación y Visión de País'), strengthening governance structures with a focus on land use planning. In addition, the Project is working with communities vulnerable to the impacts of climate change, and prioritizing actions that provide co - benefits to communities. The project is responding to the National Development Plan ('Plan de Todos para una Vida Mejor'), and to the government initiative of the Human Dimension of Climate Change ('Rostro Humano de Cambio Climático). As for sectoral legislation, the project is framed in and complies with the Municipalities Law as the legal instrument that gives municipalities their management autonomy level. For the efforts related to CFC natural resources, the project will comply with the rules , regulations, and instruments of the Forestry, Protected Areas and Wildlife Law , especially regarding forest protection, firefighting, generation of incentives for forest protection and community forestry; the General Water Law, especially in the design of a proposal for a Compensation Payment for water resources; and the National Risk Management System Law - for all actions related to EWS and national emergencies like the bark beetle outbreak and / or drought. Further information is included under section II.E on how the project meets relevant national technical standards and related regulations. Therefore, no risks or negative impacts are identified regarding compliance with legislation.

Access and Equity

133. A potential negative impact has been identified in the access and equity for beneficiaries to adaptation measures and technologies proposed by the project. To mitigate this impact, the project will establish and implement transparent and clear criteria, which will be socialized into the coordination mechanism of local and community organizations, as well in the CFC Platform and partner institutions, on how the selection of interventions sites and direct beneficiaries will be done, and who and how will have access to ground measures, and related capacity build support and information services to be provided by the project, particularly under component 2.

Transparent and clear criteria will be applied along the following principles:

- Open to all persons in project areas on non-discriminatory basis
- Benefits to be provided on basis of fair treatment of all eligible beneficiaries
- Targeted outreach to marginalized, vulnerable groups and individuals
- Clear, accessible, culturally appropriate communications that inform potential beneficiaries of available services, entitlements and how to obtain them
- Sensitive to diverse cultural and socio-economic backgrounds of potential beneficiaries and be responsive as far as practical to individual circumstances
- Clear beneficiary feedback and complaint processes will be outlined

134. A further risk factor has been identified considering that potential changes to water tariffs and access restrictions to forest resources may limit availability/accessibility to some basic services. To mitigate this risk, the following measures are proposed:

The AF Project will support the replication of the municipal level Payment for Ecosystem Services (PES) scheme from Tatumbla introduced through the previous AF project. Its implementation involved the revision of the water tariff system to internalize the costs of protection and maintenance of water source and recharge areas. Building on this successful experience, the proposed project will engage with communities, local and national stakeholders and the municipalities of the CFC to implement PES schemes. It is expected that these actions will help CFC communities to have better access to water resources whilst they apply more efficient and better adaptive water management practices for both human consumption and agriculture use. Affordability and access of water and forest resources by poor and marginalized groups will rely on ample participative processes and improvements in the municipal plans and revised local water tariff systems allowing municipalities to protect and manage water sources and surrounding catchment and recharge areas.

Vulnerable and marginalized groups

135. A risk has been identified considering that affected stakeholders, in particular marginalized groups, could potentially be excluded from fully participating in decisions that may affect them. This is due to limitations that may exist in the capacities of local stakeholders, in particular poor and vulnerable groups, to participate effectively in decision making that can affect them. Marginalized groups in the project area of CFC can be considered poor and vulnerable population, facing food security issues (municipalities with chronic malnutrition), and water security problems (difficult access to year round and safe water supply).

136. Mitigation measures to this risk will be as follows:

These groups will be analyzed in the project inception phase and prioritized for adaptation interventions. The stakeholder engagement process will be conducted in similar inclusive fashion as it was for the proposal preparation phase consultations, assuring broad representation of existing relevant community-based organizations/groups. These involve Community Development Associations that area represented in municipalities, women's committees, water associations, community producer associations, forestry cooperatives, communal health promoters. These organizations will be principally involved through local governments-coordinated consultation and decision making processes, which is the local current practice. The CFC Platform will also facilitate broad stakeholder consultation processes in participatory ways.

137. Overall, the Project is expected to have a positive impact on vulnerable and marginalized groups, that can be considered poor and vulnerable population living in the CFC, facing food security issues (municipalities with chronic malnutrition), and water security problems (difficult access to year round and clean water supply). The Project is expected to benefit these communities and groups by implementing measures that are proposed to build resilience and support their livelihoods. Therefore, the project will support improving the availability, accessibility and quality of benefits and services (e.g. water) for individuals and potentially marginalized groups, increasing their inclusion on decision making processes that may affect them (in accordance with the principle of human rights and non-discrimination and equality).

Human Rights

Project preparation and planned implementation process follows a human-rights based approach: In the face of climate change impacts and unsustainable forest management and agricultural practices, the project supports the Honduran government's efforts to ensure continued provision of clean water resources (right to water) to communities in the Central Forest Corridor through integrated water resources management and restoration and conservation of critical ecosystem services. The project will directly benefit an estimated 12,000 families who are especially vulnerable to the impacts of climate change, through the design and implementation of concrete adaptation measures for more efficient agricultural practices and use of water resources. These measures will also provide economic benefits to the families in terms of savings of expenditures/costs of water, and through savings and revenues generated by increasing agricultural yields and production (for household consumption and sales). In addition, the introduction of eco-stoves (benefiting 500 families) will have positive health impacts (right to health) by generating less smoke. The project seeks to ensure that benefits of the project are shared broadly in a nondiscriminatory, equitable manner through participatory processes and transparent selection criteria. Extensive stakeholder consultations were held during project preparation (see Annex 10) and will be continued throughout project implementation. The consultations involved the 3 municipalities where Lenca indigenous communities are present (and the project notes that Free and Informed Prior Consent (FPIC) processes will be instituted if needed). Potential project-related concerns and/or grievances of local communities will be addressed through a complaint's register along with a Grievance Redress Mechanism consistent with the UNDP's Stakeholder Response Mechanism: Overview and Guidance (2014). The Grievance Redress Mechanism will be designed in consideration of the specific local context and draws on existing processes and procedures for the resolution of complaints and grievances in Honduras.

Equity and empowerment of women

138. Honduras has a relatively high Gender Inequality Index rating (0.480) and women are underrepresented in rural economically active persons (only 28%). There is a risk of potentially reproducing discrimination against women based on gender, especially regarding participation in design and implementation or access to opportunities and benefits as women may be excluded from decision-making or not adequately participate in the design/implementation of the Project. As a result, they might have unequal access to resources and/ or access to opportunities and benefits. To ensure that the project does not exclude women, or increases the inequality gap, a gender analysis will be undertaken in the first phase of the project to assess divisions of labor and women's role and access to resources and to develop recommendations on how project will promote women's equality and empowerment, including participation in project decision-making. Measures will ensure that women receive an equitable share of benefits and that their status and interests are not marginalized. Women representation in project decision-making bodies (e.g. Project Board, CFC Platform, community water boards) will be ensured. Participatory processes will include specially designed methodologies that enhance the participation of women and therefore enhance the inclusion of their views into the activities of the project, using existing mechanisms for representing women's views, such as the Municipal Office of Women and women's associations. For monitoring, disaggregated and measurable data related to gender equality and empowerment of women will be incorporated. Furthermore, when possible, measures and techniques that can have a positive impact by closing the gap of inequality between men and women will be promoted.

Labor Rights

139. The Project is not specifically designed to promote employment, although some of its actions can have positive impact on job creation and/or livelihood improvement (increasing the time that farmers dedicate to their crop fields). The Project will monitor carefully and enforce necessary measures so that there is no child labor involved in its activities.

Indigenous Population

140. The area of the CFC involves 3 Municipalities (Ojojona, Santa Ana and Lepaterique) that feature Lenca indigenous communities. These communities have been directly engaged during the proposal preparation consultations (see Annex 10). The Project does not foresee any change or negative impact on the current livelihood of these communities or their natural resource base, in fact it will promote the use of ancestral knowledge and will support the implementation of adaptive techniques to their current livelihood activities. In case any project activities would require formal processes of Free and Informed Prior Consultation (FPIC), then the Project will recur existing national mechanisms. These mechanisms involve the preliminary draft Law on FPIC that is currently undergoing national consultation and socialization, and is expected to be already into force during the proposed Project implementation period. For any instance that this Law would not be formally approved and operationalized by the time of the Project start the existing legal framework, which is based on current international standards, will be taken as reference, such as the 169 ILO Convention, the Declaration by United Nations on the Rights of Indigenous Peoples, and Jurisprudence produced by the Inter-American Human Rights system.

Involuntary resettlement.

141. Involuntary resettlements are not foreseen within the project.

Protection of natural habitats

142. Restoration activities in degraded forest areas will occur in some protected areas. Targeted productive sectors (e.g. agriculture) are expanding in some environmentally sensitive areas. State institutions have poor capacities and weak law enforcement. The Project will support the application and implementation of the Forestry, Protected Areas and Wildlife Law, by developing a reporting mechanism for communities (on malpractices, illegal logging, wildfires, and pest outbreaks, etc.); municipal level norms and ordinances (especially land use zoning and forestry use by private land owners) with communication, inspection and feedback mechanisms. It also expects to support the National Environmental Prosecution Office in delivery of targeted trainings to municipalities and review ICF's permit system to delegate authority to UMA's for small scale and non-commercial community use wood material (e.g. firewood). This will allow not only more effective locally controlled process, but also the opportunity to work with the productive sectors support them in order to adopt inclusion of ecosystem-based adaptation measures and techniques in the productive sector and watershed and natural resources management activities in these sensitive areas, thereby reducing negative impacts. The project will support zoning in order to reduce productive expansion into particularly critical sensitive areas

Conservation of biological diversity

143. With reforestation activities, there is an identified risk of potential use of alien and invasive alien species, although forest restoration will only involve planting of more resilient native tree species. To mitigate this risk, the work will be undertaken following the establishment of a restoration protocol/guide for CFC municipalities integrating climate change and variability. This will also involve enhanced techniques such as the use of more resilient native tree varieties, ensuring that the plants used for reforestation and completion in areas affected by the bark beetle plague and wildfires are native and appropriate. Therefore, the Project will generate a positive impact on the conservation of biological biodiversity through forest protection and restoration. The Project will also support the setting up of a procedure for tracking, monitoring and registration of restoration actions implemented. During the last year of the project an ecological and land use assessment will be carried out to evaluate the rate of success of the restoration.

144. The Project will also promote reforestation of degraded forests, where community managed forest areas where use of forestry resources is being practiced (wood, charcoal, resin extraction). In this sense, reforestation activities will be designed to enhance biodiversity and ecosystem services of degraded areas. Reforestation activities will be guided by existing forest management plans as well as a Project “restoration protocol.” In addition, the Project will provide training for more sustainable use of forest resources, e.g. more efficient resin extraction techniques and introduction of eco-stoves to families to reduce the use of wood material. The Project also incorporates ecosystem-based adaptation measures and technologies into the forestry sector and into integrated watershed planning and management.

Climate Change

145. The project is directly addressing climate change vulnerabilities and adaptation capacities in the Central Forest Corridor, and while it directly promotes adaptation measures, adverse impacts of extreme climatic events (particularly drought) can affect forest and agricultural areas and related livelihoods. To mitigate these risks, the project will be directly supporting the implementation of adaptation measures at the ecosystems and community level as well, including the reforestation of areas affected by the drought-induced bark beetle plague, protection of a broader forest area through introducing pest and fire control and monitoring mechanisms, and through introducing on-the-ground adaptation measures on water resource management for human consumption and agricultural use, as well as more sustainable forestry resource use practices in communities. Other risk management measures include expanded research and monitoring of climate impacts, adoption of Early Warning Systems, and strengthened regulations and enforcement to combat illegal/unsustainable practices.

Resource efficiency and prevention of pollution

146. The Project will promote measures and technologies for the optimal use of water and wood resources, which will have a positive impact. Through the project, producers could also adopt improved farming techniques (e.g. organic agriculture, soil and water conservation) that would reduce the use of fertilizers and pesticides, thus reducing the contamination of soil and water bodies. There may be a risk of application of pesticides that may have a negative effect on the environment or human health, although the Project will promote biological pest control that refers to agricultural production and the application of solutions (locally prepared using natural ingredients) that has properties as natural pesticides and fungicides. These measures will promote agro-ecological practices, in accordance with the Organic Agriculture Regulations and the Manuals of Good Agricultural Practices by the Ministry of Agriculture and Livestock (SAG). Though not foreseen, but if potentially harmful pesticides are needed and/or will be used, they will be properly managed, stored, used, in an adequate manner, following national and international standard regulation and procedures.

Public Health

147. Implementation of measures for the efficient use of firewood (e.g. Eco stoves) are expected to improve the health of household members. In communities where adaptation measures aimed at optimal use of water resources, through improvements in the pipeline, improved water storage, filters, etc.; a positive impact on the health of household members is expected, who will have access to improved water quality.

Physical and cultural heritage

148. In the absence of physical and cultural heritage sites in the target area, there are no expected negative impacts.

Soil Conservation

149. Through the application of adaptive and organic agricultural practices (including soil and water conservation techniques) and forest restoration measures, it is expected that the project will support soil conservation.

150. The adaptive water management activities may involve construction of community water storage tanks, cisterns; micro-reservoirs and dams; terracing, drip irrigation systems, that will imply some earth work. To avoid any adverse effects on soil conditions, the project will ensure compliance with environmental impact assessment procedures of MiAmbiente, in addition to Honduran building codes and forestry, water, and sanitation regulations (for low risk projects, MiAmbiente requires project description and geo-referencing prior to conducting a field assessment). In addition, the project will follow technical guidance developed by previous AF project on rain water harvesting systems, micro-reservoirs and drip irrigation techniques.

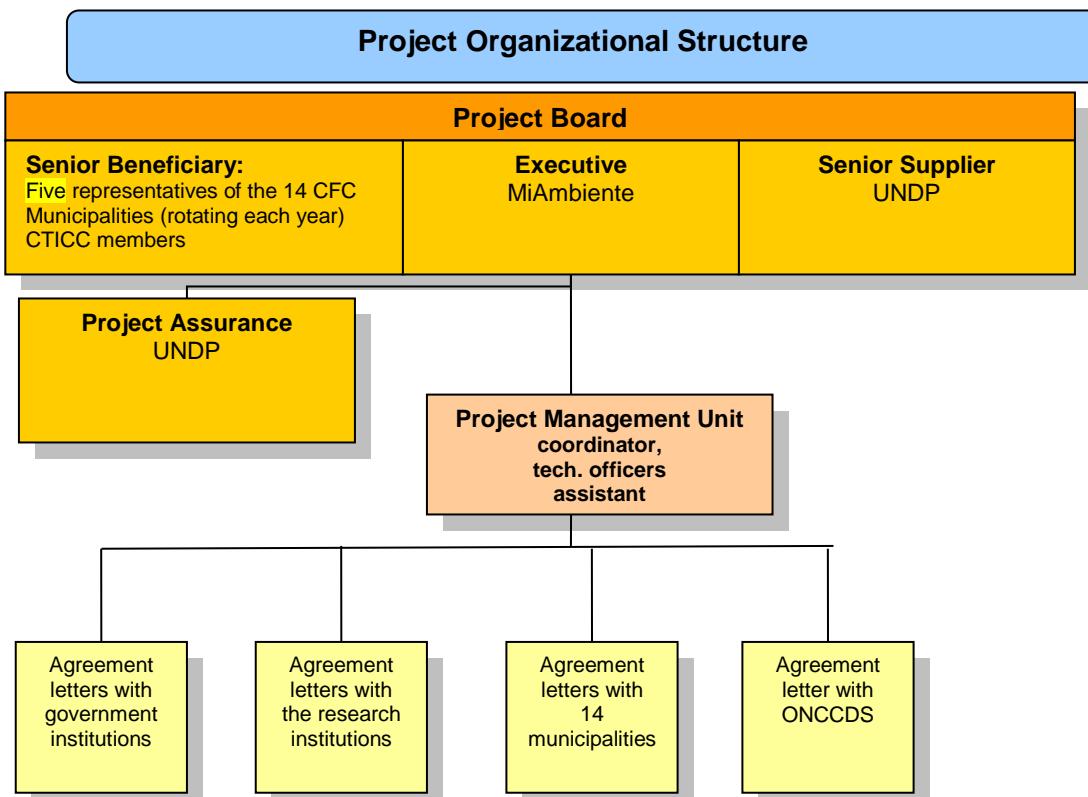
PART III: IMPLEMENTATION ARRANGEMENTS

A. Describe the arrangements for project / programme implementation.

1. The Government of Honduras will implement this five-year project with the support of UNDP under the National Implementation Modality (NIM). MiAmbiente will be the national implementing partner (executing entity) responsible for ensuring that the project results are achieved, and that resources are allocated and disbursed efficiently and effectively as is detailed in the Project Document. MiAmbiente will operate through its OCP. MiAmbiente will sign agreements with relevant partners to support the implementation of specific project components, including government institutions such as AMHON, ICF, and SANAA; academic institutions such as SINFOR, and UNAH; the ONCCDS; and 14 municipal governments.
2. The Project Manager or Coordinator will prepare a Work Plan to incorporate the activities and results of the project to be delivered. The Plan will define the timeframe for implementation of each activity and the parties responsible for their implementation. The First Work Plan will be finalized and incorporated into the Project Document within 30 days of its signature. The involvement of partners will be essential to the success of the planning phase, during which, the Annual Work Plan will be prepared.
3. The implementation of the project will be conducted under the overall guidance of a Project Board / Steering Committee Project (SCP), assembled specifically for this purpose. According to UNDP policies, each project must install a Project Board as the upper body responsible for taking management decisions, including approval of budget revisions, and if required, advising the Project Manager or Coordinator. Project Control Reviews conducted by the Project Board are made in accordance with Decision Points defined during the development of the project, or, if necessary, when the Project Manager or Coordinator considers it necessary.
4. The above mentioned SCP/Project board will be constituted as follows:
 - MiAmbiente assumes the executive role.
 - UNDP assume the role of senior provider.
 - The 14 municipal governments assume the role of principal beneficiary. Will be represented by **five** municipalities in the Project Board, and will rotate each year, achieving the participation of each

municipality in the Project Board throughout project implementation. This representative rotation arrangement has been suggested for simple reasons of group manageability. A part from the Project Board, the CFC platform and Authority will be a key venue for discussing and coordinating project implementation processes in a wider audience and with all Municipalities, and will feed to project planning and monitoring process, as well as to functions of the Project Board through the PMU.

- Representatives of CTICC Member institutions
5. The responsibilities of the Project Board are:
- Approve the Project Work Plan.
 - Take decisions about the defined milestones in the Annual Operational Plan.
 - Monitoring project development activities, ensuring that they are contextualized in the strategies and objectives of the project.
 - Approve the budget and substantial budget reviews, and resolve issues related to the report of the Project Manager or Coordinator
 - Approve the plans, technical reports and financial progress of the project.
6. Project assurance: UNDP Honduras will support project implementation by assisting in monitoring project budgets and expenditures, recruiting and contracting project personnel and consultant services, subcontracting and procuring equipment. UNDP Honduras will also monitor the project implementation and achievement of the project outcomes/outputs and ensure the efficient use of donor funds through an assigned UNDP Programme Officer to support the Project Board to objectively and independently oversee and monitor the project.



7. The high level Committees CICC (political) and the CTICC (technical), represent a platform that links to Organized Civil Society and government, promoting coordination and communication among all

members on both levels on the issue of climate change. All climate change projects that are managed in different national institutions are presented to the Committee, as the appropriate body for discussion, approval, execution and monitoring of projects, both at political and technical level. Agreement letters with 14 municipalities will be signed in order to receive funds for goods and activities that are approved as part of this Prodoc, the agreement will indicate the disbursement calendar and the conditions for each disbursement. These grants will be granted under the guidelines of UNDP for Micro Capital grants.

8. The Project Board will meet regularly at the end of each semester and during special sessions when convened by the Executive. UNDP will be responsible for accountability for the effective implementation of this project to the Adaptation Fund. As a multilateral implementing body, UNDP is responsible for providing a number of key services for general management and technical expertise. These services are provided through the global network of offices and Units in the country, at regional level and from UNDP headquarters, and include assistance in:
 - a) the formulation and evaluation of the project.
 - b) determining the mode of implementation and evaluation of local capacities.
 - c) briefings with staff and project consultants.
 - d) general surveillance and monitoring, including participation in project reviews.
 - e) receiving, allocating and informing the financial resources Donor.
 - f) thematic and technical support
 - g) provision of systems, information technology infrastructure, brands and knowledge transfer
 - h) research and development
 - i) participation in policy negotiations
 - j) policy advisory services.
 - k) identification and program development.
 - l) identification, access, combination and financing sequences.
 - m) problem solving.
 - n) identification and consolidation of learning.
 - o) and training and capacity building.
9. Upon request from the Implementing Partners, UNDP can provide Direct Project Services (DPS) according to its specific policies and convenience. In this case, the Implementing Partner will sign a Letter of Agreement specifying the services to be provided and their costs. The costs of these services will be part of the project management costs of the executing entity identified in the project budget. UNDP and the government of Honduras recognize that these services are not mandatory and will only be provided in full compliance with the UNDP recovery of direct costs policies. The DPS will be charged annually using the UNDP Universal Price List.

Key national stakeholders to be involved and their roles:

Stakeholders	Roles
Ministry of Energy, Natural Resources, Environment, and Mining (MiAmbiente)	National Executing Agency. Through the Project Coordination Office, will ensure that necessary synergies are created with other national partners. These collaborations will be formalized through letters of agreement with different institutions. MiAmbiente will assume the role of Executive in the Project Board and will also promote, the creation of the CFC Platform, including its Authority, and the Technical Unit for Implementation. According to its technical competencies, through the DECA, will also support the Environmental Impact Assessments, if required by any adaptation measure.

Forest Conservation Institute (ICF)	<p>At the political and technical level, along with MiAmbiente and AMHON, ICF will play an important role in strengthening the CFC platform, especially given that the institution has experience setting up these kind of coordination mechanisms in other areas of the country.</p> <p>The ICF will be an integral part of the Project Board, and will also sign a letter of agreement with MiAmbiente for the implementation of certain activities.</p> <p>According to its competences, the ICF will play a major role in strengthening Municipalities and their local actors, in order to apply the appropriate regulations and good practices in forest protection and restoration via natural regeneration or planting.</p> <p>It will also be the counterpart through which the project will directly support the agroforestry groups to improve sustainable charcoal production and resin extraction practices.</p>
14 Municipalities	<p>Municipalities will be a fundamental part of the CFC Platform and will be represented in a rotating way in the Project Board. Municipalities will also be subject to signing letters of agreements to execute actions agreed towards the project objectives.</p> <p>They will be responsible for conducting planning processes (development plans, adaptation plans, and others) in a participatory manner, ensuring the inclusion of the most vulnerable. Also, will conduct regulatory processes such as the complaints mechanisms, ordinances and permits that the ICF can delegate through the UMAS (Environment Unit of the Municipality).</p> <p>In the operational area, will coordinate forest protection and restoration activities, Early Warning Systems, the pilot scheme of Payment for Ecosystem Services, allocation of financial resources for the co-execution and longer term maintenance of activities through municipal budget.</p> <p>The UMAS will be an important link to the Knowledge Management Plan, to generate and disseminate information.</p>
Association of Municipalities of Honduras (AMHON)	<p>Political coordination and support platform for Municipalities, AMHON will be part of the CFC Platform, and will also accompany municipalities in high level efforts to consolidate actions. Will also continue to serve as adviser on planning processes.</p>
Agroforest Groups	<p>These are local interest groups and community based organizations which are direct beneficiaries of the project, and participants in municipal platforms exist according to regulations (like Open Cabinets - Cabildos Abiertos, Transparency Commissions). These groups will be involved in planning and ground level implementation through participatory and consultative processes. The watershed councils have a role to coordinate between municipalities and local water boards within watersheds.</p>
Watershed Councils	
Forest Consultative Board	
Water Boards	
Women's Networks	
Indigenous Organizations	

Producers associations	
Environment Prosecutor's Office	Advice and training on legal aspects to municipalities and local interest groups.
General Coordination Secretary of the Government	Support to municipalities to update land use plans.
Ministry of Agriculture and Livestock (SAG)	Technical assistance for productive activities and support to coordinate with the Fund for the Revival of Agriculture Sector (FIRSA).
Regulatory Agency for Water and Sanitation Services (ERSAPS)	Technical assistance for activities related to water and sanitation.
National Autonomous Service for Water and Sewage (SANAA)	Technical assistance for watershed management, support to Water Boards.
National Climate Change Observatory (ONCC)	Direct beneficiary to be strengthened in its role (e.g. through the CC Observatory functions), coordinates with SINIA and CENAOS.
Pan-American Agriculture School (EAP)	Project partners to develop research related to the bark beetle. These institutions will collaborate through the PMU, and will sign letters of agreement to carry out designated project activities.
National Autonomous University of Honduras (UNAH)	
National Research System for Forests, Protected Areas and Wildlife (SINFOR)	
National School for Forest Sciences (UNACIFOR, before ESNACIFOR)	
NGOs as Co-managers of protected areas	Participants in Project activities that will be carried out in protected areas.
Interinstitutional Technical Committee for Climate Change (CTICC)	This committee is composed by technical representatives from different institutions that oversee the interdisciplinary and multi-sectoral processes promoting and coordinating adaptation and mitigation actions. Will have a representative in the Project Board.
National Directorate for Climate Change (DNCC)	As the CTICC Secretariat, responsible for convening its meetings and selecting Project Board representatives.

B. Describe the measures for financial and project / programme risk management.

Risk	Level	Mitigation Strategy
Government change in 2018 (national elections) results in changing priorities that are not fully aligned with the expected results of the project	Medium	The project has strong work components at Community level. Regardless of government change and the priorities set at national level, the Community focus will be maintained as main project beneficiaries. Component 1 of the project will also support 2018-2022 DNCC planning, to ensure that project results are integrated in the government planning and policy frames for longer term implementation and monitoring, and therefore project actions to remain a priority for the incoming government in 2018.
Governance tensions or potential conflicts at community level	Medium	The project will use methodologies for conflict resolution, to ensure that there are mechanisms and that government institutions in charge of response have the skills and tools to use. The project will

Risk	Level	Mitigation Strategy
		also use and further enhance regulatory measures at the municipal level (e.g. local ordinances), or at the national level (e.g. the new Water Act in case tensions are related to water use and rights)
Political will diminishes for coordination among different CFC municipalities	Medium	The Project will work to strengthen ties among the different CFC municipalities. The formalization of the CFC platform will be the basis to ensure that the political will that exists today to promote this initiative is sustained, and that through training and strengthening activities, coordination among bodies of different municipalities increases.
Unexpectedly strong extreme climatic events threaten forest restoration efforts	High	The project will have three main measures to avoid this risk. Research and monitoring will facilitate a greater understanding of the causes of the impacts of these threats, facilitating an improvement in the action plans to adapt to them. Additionally, Community Early Action Warning Systems will allow prompt effective and active response. Also, the project will work on strengthening the enforcement of sanctions and regulations at community level, that enables people to report illegal activity in the target area (e.g. Illegal logging, burning, resin extraction techniques, change of land use, etc.)
Lack of political will and coordination for designing and installing payments for ecosystem services	High	The project will use as principal mechanism for dialogues and coordination the CFC Platform and Authority to pursue PES schemes, and will provide incentives to replicate the existing pilot in Tatumbla on a municipal scheme, will analyze lessons learnt from previous efforts on bigger inter-municipal schemes to avoid their lack of success. The project will also ensure synergies with other processes of financial mechanisms such as REDD +.
Problems of legal security of land ownership in the CFC	High	The project will support a preliminary diagnosis of each municipality on land tenure. In cases where conflicts over the legal security of the land falls beyond the scope and capability of the project, the necessary synergies will be established with the corresponding government institutions, as the Institute of Property (IP) and the National Agrarian Institute (INA). Links to national programmes, such as Land Management Program of Honduras (PATH), which address this problem at national level, will also be ensured.
Changes and turn over in government staff	Low	The project, through its Component 3, will work on knowledge management and ensuring the establishment of systematic institutional memory of the Project at the short and long term, so that the new government staff can continue building on this information. Although it is true that there are changes in government staff, usually these changes are rotational, and skilled human resources continue to work on related areas, therefore, an overall high loss of skilled human resources is not foreseen.
Corruption and lack of transparency by municipalities and communities in management of small-grants	Low	The project will be implemented through the Project Management Office of MiAmbiente, which at the end of 2015, favorably passed audit for fund management. Municipalities and communities will be provided training for the management and transparency of funds regarding the small grants. Accountability required measures will be ensured, so there is no place for misuse of resources, through formal grant agreements and their close monitoring process

- C. Describe the measures for environmental and social risk management, in line with the Environmental and Social Policy of the Adaptation Fund.
10. As noted in previous sections (Section II.K) in this document, the project falls under the B category as assessed by 15 criteria and principles established by the Adaptation Fund. Risk mitigation and management measures are described under Section K, and in the UNDP Social and Environment Screening Document and in the Social and Environmental Management Framework attached to this proposal. The ESMF outlines monitoring arrangements for implementation of environmental and social risk management, as well as procedures for addressing stakeholder concerns regarding the project's social and environmental performance

- D. Describe the monitoring and evaluation arrangements and provide a budgeted M&E plan.

Project monitoring and evaluation:

Start of the project:

11. The inception workshop will be conducted in the first two months of project, convening stakeholders with roles assigned in the structure of the project organization, the UNDP Country Office, and, where appropriate and feasible, technical advisers from regional programs and policies, and other stakeholders. The inception workshop is crucial to contribute to ownership of the project results and to plan the first Annual Work Plan.
12. The inception workshop should address a number of key issues including:
- a) To assist all parties to understand and take ownership of the project. Detail the roles, support services and shared responsibilities among the UNDP Country Office and Regional Coordination Unit (RCU) staff. Discuss the roles, functions, and responsibilities within the decision-making structure of the Project, including reporting and communication lines, and conflict resolution mechanisms. The terms of reference for project staff will again be reviewed if necessary.
 - b) To finalize the first Annual Work Plan based on the Project Results Framework. Review and establishment of mutual agreement on indicators, targets and means of verification, and review of the assumptions and risks.
 - c) Provide a detailed summary of reports, monitoring and evaluation (M & E). The Work Plan and M & E budget shall be agreed budget and scheduled.
 - d) Discuss financial procedures, obligations and arrangements for annual audits.
 - e) Plan and schedule Board meetings. The roles and responsibilities of all organizations that are part of the structure should be clarified, and meetings shall be agreed on. The first meeting of the Board shall be held within the first 12 months after the inception workshop.
13. The inception workshop report is a key reference document and must be prepared and shared among the participants to formalize the decisions and plans agreed during the meeting.

On a quarterly basis:

14. Registered progress should be monitored based on the Management Platform Based on UNDP results:

- a) Based on the initially submitted risk analysis, the risk framework should be regularly updated in ATLAS. The risk becomes critical when the impact and probability are high. It is noted that for UNDP AF projects, all financial risks associated with financial instruments as revolving funds, Micro financial schemes, or ESCOs capitalization are automatically classified as critical, based on their innovative nature (high impact and uncertainty due to the lack of experience, justifying their classification as critical).
- b) Based on the information entered in Atlas, a Project Progress Report can be generated in the Executive Snapshot.
- c) Other ATLAS inputs can be used to monitor lessons learned, etc. The use of these functions is a key indicator in the Executive Balanced Scorecard.

Annually:

15. The project is required to submit a Project Performance Report (PPR) to the donor on an annual basis, one year after the start of project implementation (date of inception workshop) and the last such report should be submitted six months after project completion.

16. The PPR completed template should be submitted to the secretariat in English and that all financial figures provided in the template should be in US dollars (USD). There are 8 sections in the template, as follows:

1. Overview
2. Financial information
3. Procurement data
4. Risk assessment
5. Ratings
6. Project indicators
7. Lessons learned
8. Adaptation Fund results tracker

Periodic monitoring through field visits:

17. The UNDP Country Office and the UNDP RCU will conduct field visits to the project based on the program agreed in the inception report / Annual Work Plan, to attend first hand project progress. Other members of the Board can join these visits. A report from the field visit will be prepared by the country office and by the UNDP RCU, and will be circulated no later than one month after the team's visit.

Average project cycle:

- 18. The project will be subject to an independent mid- term evaluation, when the project has reached its halfway implementation, which will determine the progress achieved on the results, and will identify rectifications where necessary. It will focus on the effectiveness, efficiency and timing of project implementation; it will highlight issues requiring decisions and actions; and will present initial lessons learned about project design, implementation and management.
- 19. Findings of this review will be incorporated as recommendations for enhanced implementation during the second half of the project. The organization, terms of reference and precise timing of the mid-term evaluation will be decided after consultation among the parties to the project document. The terms of reference for this mid-term evaluation will be prepared by the Country Office based on advice from the

RCU and UNDP EEG. The Response management and evaluation will be uploaded to the UNDP system, in particular to the UNDP Evaluation Office Evaluation Resource Center (ERC).

Project end:

20. A final independent evaluation will take place three months before the final meeting of the Board, and shall be conducted in accordance with the UNDP and the AF guidelines. The final evaluation will focus on delivering the results of the project as planned initially (as it was rectified after the mid-term evaluation, if any rectification took place). The final evaluation will look at impact and sustainability of results, including the contribution of capacity building and the achievement of global environmental benefits. The terms of reference for this evaluation will be prepared by the Country Office based on advice from the UNDP Regional Hub. The final evaluation should also provide recommendations for monitoring activities, and will require a management response that should be uploaded to PIMS and the UNDP ERC.
21. During the final three months, the project team will prepare the final report of the project. This comprehensive report will summarize the results achieved (objectives, outcomes, outputs), lessons learned, problems encountered and areas where results may not have been achieved. It will also present recommendations for future steps that may need to be taken to ensure sustainability and replicability of the project results.

Audit

22. The audit would be performed under the UNDP financial regulations and rules applicable to audit policies on UNDP projects.

Learning and shared knowledge:

23. Project results will be internally disseminated and beyond the project target area, through existing information sharing networks and forums.
24. The project will identify and participate, where relevant and appropriate, in scientific networks, policies and / or any other network that may be of benefit to project implementation through lessons learned.
25. Finally, there will be a two-way flow of information between the project and other projects with a similar approach.

Publications:

26. The AF logo should appear on all relevant publications of the Project, included within other logos, project equipment and other acquisitions with AF funds. Any citation in publications regarding projects funded by the AF should give recognition to the AF. The logos of the implementing agencies and enforcement agencies will also appear on all publications. When other agencies or project partners have provided support (through co - financing), logos should also appear in publications.

Work Plan and M&E budget

M&E Type of activity	Responsible Parties	Budget (US\$*)	Timeframe
Inception workshop	<ul style="list-style-type: none"> ▪ Project Manager ▪ UNDP Country Office 	\$500	Within the first two months of Project start
Inception report	<ul style="list-style-type: none"> ▪ Project team ▪ UNDP Country Office 	None	Immediately after the inception workshop
Measurement of Means of Verification for Project Purpose Indicators	<ul style="list-style-type: none"> ▪ Project Manager 	None	Beginning, half-way and completion of the project
Measurement of Means of Verification for Project Progress and Performance (annually measured)	<ul style="list-style-type: none"> ▪ Project Manager 	None	Annually, previous to the annual report and in accordance with the definition of annual work plans
Quarterly reports	<ul style="list-style-type: none"> ▪ Project team 	None	By the end of each month
Annual reports (PPR)	<ul style="list-style-type: none"> ▪ Project team ▪ MiAmbiente ▪ UNDP Country Office 	\$1000	Annually, after inception workshop.
Project Coordination Committee meetings	<ul style="list-style-type: none"> ▪ Project Manager ▪ UNDP Country Office 	None	After the inception workshop, and from there, at least yearly
Technical Reports	<ul style="list-style-type: none"> ▪ Project team ▪ External Consultants 	None	To be determined by the Project Team and the UNDP Country Office
Half – term external evaluation	<ul style="list-style-type: none"> ▪ Project team ▪ UNDP Country Office ▪ External Consultants 	\$ 20,000	Project halfway implementation
Final external evaluation	<ul style="list-style-type: none"> ▪ Project team ▪ UNDP Country Office ▪ External Consultants 	\$ 30,000	At project completion
Final Report	<ul style="list-style-type: none"> ▪ Project team ▪ UNDP Country Office 	None	At least a month before Project completion
Auditing	<ul style="list-style-type: none"> ▪ UNDP Country Office ▪ Project team 	\$10,000	In accordance to UNDP financial regulations and rules and to applicable auditing policies
TOTAL INDICATIVE COST		\$ 61,500	

E. Include a results framework for the project proposal, including milestones, targets and indicators.

Objective: To increase climate resilience of the most vulnerable communities in the Central Forest Corridor and the adaptation capacity of its municipalities with emphasis on securing livelihoods and the continued provision of ecosystem goods and services for Tegucigalpa and surroundings.					
	Indicators	Baseline	Goals Project completion	Means of verification	Risks and assumptions
Objective of the Project To increase climate resilience of the most vulnerable communities in the Central Forest Corridor and the adaptation capacity of its municipalities with emphasis on securing livelihoods and the continued provision of ecosystem goods and services for Tegucigalpa and surroundings.	Number of CFC communities that reduce their vulnerability and increase adaptive capacity in CFC	A Vulnerability Index has been piloted in 23 communities in 3 municipalities during the current AF project, with the support of The National University of Honduras. In 1-5 scale of vulnerability (very low-low-medium-high-very high) municipalities showed medium-high level vulnerability. ⁴⁰	By the end of the project the Vulnerability Index improves to medium-low level for men and women	<ul style="list-style-type: none"> Vulnerability Index baseline and progress measurement established in representative communities across the 14 participating municipalities (at least 3 communities by municipalities) Project reports and evaluations 	Elections in 2018 does not result in government changes that would pose impediments for continued project implementation Willingness of central and municipal government institutions to coordinate and dialogue Climate change and/or variability does not impact adversely affect project schedule beyond adaptive capacities introduced
	Number of CFC municipalities that integrate climate change adaptation measures into their municipal development planning budgetary processes and investment plans, including revenues from payments for ecosystem service schemes.	3 municipalities have started to include CC adaptation related budget items in their recurrent investment plans since 2013 (Tatumbla, Ojona, Cedros), supported through the various capacity building, planning and ground measures of the current AF project. Tatumbla has implemented a local PES scheme through revising water tariff system to internalize costs of	By year 4 At least 10 municipalities (7 additional) in CFC incorporate in their recurrent budgetary plans (annual) CC adaptation activities.	<ul style="list-style-type: none"> CFC Municipalities Investment Plans 	

⁴⁰ The index formulation involved available environmental and socio-economic data plus community consultations and interviews and involved analysis of exposure, sensibility and adaptive capacity. The establishment of the index has been accompanied by capacity building and planning support actions

		protection and maintenance of water catchment and source areas			
Outcome 1 The CFC platform and related planning and regulatory processes strengthened to implement Ecosystem-Based Adaptation	CFC Authority and Platform formalized, operational and capacitated on managing climate risks	Currently CFC Platform acts as a rather informal mechanism through ad hoc meetings, and without supportive legislation for formalized functions and an authority set for its management	By end of year 1 procedures and rules for the Platform and Action plan for the CFC Authority prepared By end of year 2: CFC Authority is fully established (through Executive Decree), with coordination mechanism and institutional functions formalized (to support the functions of the Platform) through supportive legislation and staff trained	<ul style="list-style-type: none"> • Minutes of meetings under the CFC Platform • Project reports and evaluations • PCM and Legislative decrees on institutional arrangements 	There is political will for institutionalization of the CFC Platform There is willingness and openness by municipalities to dialogue and find solutions towards PES for watershed services. Willingness of central institutions to designate sufficient field and extension stuff and coordinate with CFC Platform and Authority about ground level activities

		ICF (without clear mandate by municipalities)	Management and Justice Units	
Number of Municipal level plans revised and or newly established integrating CC risks and considerations with a gender approach (based on gender analysis and sex- disaggregated data)	<u>CC adaptation plans</u> have been prepared so far in 5 municipalities and <u>Forest Protection Plans</u> in all municipalities with the support of the current AF project, but they need to be revised and updated following the 2016 bark beetle plague outbreak in order to better respond to its effects and prepare for such future risks. In the remaining 9 municipalities CC is not integrated into development plans. <u>Plans for Micro basins</u> have been established in 25 of the 50 in CFC in total, but still lacking in the other 25	By year 1 of the project the existing 5 Municipal CC Adaptation Plans and existing Forest Protection Plans in 14 Municipalities are revised. By year 2 CC Adaptation Plans are completed in the remaining 9 Municipalities, and Micro-Basin Plans are prepared in an additional 25 watersheds	Documentation of the municipal plans Reports of Municipal and community meetings on plan review and formulation	
Number of PES schemes developed	1 so far. Municipal level water tariff scheme has been developed in Tatumbla, internalizing costs of protection and maintenance of water source and recharge areas. There have been efforts to establish inter-municipal PES scheme to compensate CFC municipalities for the	Municipal level PES schemes (revised water tariffs) are replicated in at least 5 additional municipalities by year 4 Proposal for a pilot inter-municipal PES scheme (sub-basin level) is developed by	Documentation of Municipal water tariff arrangements, Reports of CFC meetings and dialogues on inter-municipal PES scheme, PES proposal document	

		provision of watershed services to Tegucigalpa Central district but were not successful due to coordination issues and lack of political will	year 4 of the project		
<p>Outcome 2</p> <p>Increased capacity of communities in CBC to implement ecosystem-based CC adaptation measures</p>	Number of hectares of affected pine and mixed forests restored through reforestation and natural regeneration assisted by protection measures	0 Ha restored so far. The National Restoration Plan has been approved only in May 2016, and currently preparations are underway (e.g. establishment of nurseries), so restoration will be in initial phases when the project is expected to start in 2017.	By year 3, 1000 Ha reforested, and by the end of the project 8000 Ha assisted for natural regeneration via protection measures (covering the entire area affected in CFC, also providing protection for the 1000 Ha reforested)	<ul style="list-style-type: none"> • Project reports and evaluations • ICF periodic monitoring reports • Municipal reports on Forest Protection Plan implementation 	<p>Conflicts over land tenure issues and related legal security do not arise</p> <p>Future outbreaks of the bark beetle plague, and fires will not arise at such extreme devastating level that would outwear the capacities and measures introduced by the project</p>
	Level (%) of implementation of the measures set out in 14 CFC municipal Forest Protection Plans (<i>levels: 0% null; <20% low; 20<50% medium; 50<80% high; >80 very high</i>)	Null and/or low (depending in the municipality)	By the end of the project at least high level in all CFC municipalities	<ul style="list-style-type: none"> • Project reports and evaluations • Municipal reports on Forest Protection Plan implementation 	Effective disbursement and management of small grants to Municipalities are does not affected by lack of transparency or corruption issues
	Number of families (including female-headed households) with enhanced water supply services	8,000 families in CFC have improved their water supply system through the pilot initiatives of the current AF project	By the end of the project and additional 12,000 families receive enhanced water supply services (at least a 20% of these families are female-headed households)	<ul style="list-style-type: none"> • Municipal CC Adaptation Plans (water sector interventions) • Project reports, grant agreements with Municipalities • Proof of purchase of materials and 	

				equipment	
<p>Result 3</p> <p>National Platform for Knowledge and Information Management strengthened, having the CFC as a reference to contribute to research, monitoring and capacity building</p>	Number of studies carried out on the relation among climate change-bark beetle pest, and restoration processes, which are used for designing planning tools (protocols, guidelines, manuals, etc.)	None	At least 5 comprehensive studies by year 2 of the project	<ul style="list-style-type: none"> • Scientific research • Protocols Documents, guidelines, manuals, etc. 	Institutions are willing to share their information and open to adjust and harmonize their data management systems and share expertise
	Number of key national and municipal technical staff (disaggregated by sex) that effectively apply training-acquired knowledge on climate change in planning activities	2,000 technicians (round 20% women) (mostly at national level, as a result of current AF project)	By the end of the project at least 2,500 additional technicians (at least 30% women) (national and municipal level) are trained	<ul style="list-style-type: none"> • Evaluation reports of capacity development • Surveys • Project reports and evaluations 	
	Number of institutions that officially share their climate-related information with ONCCDS (through formal collaboration agreements)	Currently only one institution (<i>MiAmbiente</i>) has signed collaboration agreement with ONCCDS	By the end of the project at least 10 institutions share information based on collaboration agreements signed	<ul style="list-style-type: none"> • Agreement letters among these institutions and the ONCCDS 	
	Number of functioning municipal EWS against the bark beetle outbreak	Non-existent	By year 3 of the project 14 EWS (in each municipality) are operational	<ul style="list-style-type: none"> • EAWS Protocols • Project reports and evaluations • Municipal 	

				ordinances related to EWS implementation	
	Lessons learned and best practices (including on gender aspects) generated by the project are captured and disseminated	Not applicable	At least 20 (at least 2 of them on gender issues), using different multi-media forms and dissemination channels (e.g. technical reports, videos, photo essays, virtual platforms and exchange events, media and press materials)	<ul style="list-style-type: none"> • Learned lessons • Project reports and evaluations • Project knowledge management and communication plan 	

F. Demonstrate how the project / programme aligns with the Results Framework of the Adaptation Fund

Project Objective(s) ⁴¹	Project Objective Indicator(s)	Fund Outcome	Fund Outcome Indicator	Grant Amount (USD)
Increasing climate resilience of the most vulnerable communities in the Central Forest Corridor and the adaptive capacity of its municipalities, focusing on securing livelihoods and on the continued provision of ecosystem services for Tegucigalpa and surroundings	<p>Number of CFC communities that reduce their vulnerability and increase their capacity to response / recovery from climatic events</p> <p>Number of institutions that access and use information and knowledge for adaptation to climate change with a focus on ecosystems</p> <p>Number of CFC municipalities that incorporate measures and technologies for adaptation to climate change in their investment plans, including revenues from the provision of ecosystem goods and services</p>	<p>Outcome 2: Strengthened institutional capacity to reduce risks associated with climate-induced socioeconomic and environmental losses</p> <p>Outcome 3: Strengthened awareness and ownership of adaptation and climate risk reduction processes at local level</p> <p>Outcome 5: Increased ecosystem resilience in response to climate change and variability-induced stress</p> <p>Outcome 6: Diversified and strengthened livelihoods and sources of income for vulnerable people in target areas</p>	<p>2.1. Capacity of staff to respond to, and mitigate impacts of, climate-related events from target institutions increased</p> <p>3.1. Percentage of targeted population aware of predicted adverse impacts of climate change, and of appropriate responses</p> <p>5. Ecosystem services and natural resource assets maintained or improved under climate change and variability-induced stress</p> <p>6.1 Percentage of households and communities having more secure access to livelihood assets</p>	
Project Outcome(s)	Project Outcome Indicator(s)	Fund Output	Fund Output Indicator	Grant Amount (USD)

⁴¹ The AF utilized OECD/DAC terminology for its results framework. Project proponents may use different terminology but the overall principle should still apply

The CFC platform and related planning and regulatory processes strengthened to implement Ecosystem-Based Adaptation.	Number of proposals that arise within the CFC platform to increase resilience in communities and to secure CFC ecosystem goods and services	Output 2: Strengthened capacity of national and sub-national centres and networks to respond rapidly to extreme weather events	2.1.1. No. of staff trained to respond to, and mitigate impacts of, climate-related events (by gender)	472,513
Designed and implemented Ecosystems Based measures and technologies for CC adaptation, that enhance community resilience and livelihoods in the CFC, promoting gender equality and the active participation of youth	Number of hectares of mixed forest restored in areas affected by the bark beetle in CFC municipalities Number of vulnerable families to climate change and variability impacts benefiting from measures and technologies for adaptation to climate change	Output 5: Vulnerable ecosystem services and natural resource assets strengthened in response to climate change impacts, including variability Output 6: Target individual and community livelihood strategies strengthened in relation to climate change impacts, including variability	5.1. No. of natural resource assets created, maintained or improved to withstand conditions resulting from climate variability and change (by type and scale) 6.1.1.No. and type of adaptation assets (tangible and intangible) created or strengthened in support of individual or community livelihood strategies	2,750,500
National Platforms for Information, Knowledge Management and Monitoring on Climate Change strengthened, having the CFC as a reference area to contribute to research and capacity building	Number of lessons learned and best practices included in the project outreach strategy	Output 3: Target population groups participating in adaptation and risk reduction awareness activities	3.1 No. of news outlets in the local press and media that have covered the topic	431,775

- G.** Include a detailed budget with budget notes, a budget on the Implementing Entity management fee use, and an explanation and a breakdown of the execution costs.

Award ID			Project D									
Project Title	Ecosystem Based Adaptation at Communities of the Central Forest Corridor in Tegucigalpa											
Business Unit	HND10											
Project Title	Ecosystem Based Adaptation at Communities of the Central Forest Corridor in Tegucigalpa											
PIMS No.	5839											
Implementing Partner	Ministry of Environment of Honduras											
Outcome/ Atlas Activity	Responsible Party/ Implementing Agent	Fund ID	Donor Name	Atlas Budgetary Account Code	ATLAS Budget Description	Amount Year 1 (USD)	Amount Year 2 (USD)	Amount Year 3 (USD)	Amount Year 4 (USD)	Amount Year 5 (USD)	Total (USD)	Budget Notes
Outcome 1: The CFC platform has been strengthened to implement Ecosystem-Based Adaptation Processes through land planning	MiAmbiente	62040	AF	71200	International consultant	30,000					30,000	1
				71300	Local consultant		10,000				10,000	2
				71600	Travel	15,000	15,000	15,000	15,000	75,000		3
				72100	Contractual services (companies)	43,200	43,200	43,200	42,800	201,200		4
				74500	Miscellaneous Expenses	5,813	5,000	5,000	5,000	5,000	25,813	5
				75700	Training	30,000	36,000	31,500	16,500	16,500	130,500	6
					Total Outcome 1	124,013	109,200	94,700	79,300	65,300	472,513	
Outcome 2: Designed and implemented Ecosystems	MiAmbiente	62040	AF	72100	Contractual Services	52,800	79,200	79,200	79,200	52,800	343,200	7
				72200	Equipment and furniture	-	50,000	50,000	50,000	42,300	192,300	8

Based measures and technologies for CC adaptation, that enhance community resilience and livelihoods in the CFC, promoting gender equality and the active participation of youth				72600	Grants	400,000	400,000	400,000	400,000	400,000	2,000,000	9
				75700	Training	12,500	68,000	67,500	67,000	-	215,000	10
					Totaal Outcome 2	465,300	597,200	596,700	596,200	495,100	2,750,500	
Outcome 3: Strengthened national platform for information and knowledge management, with the CFC as a reference area, to contribute to research, monitoring and capacity building.	MiAmbiente	62040	AF	71300	Local consultant	36,000	36,000	36,000	36,000	36,000	180,000	11
				71600	Travel	5,000	5,000	5,000	5,000	5,000	25,000	12
				72200	Equipment and furniture	-	17,000	-	-	-	17,000	13
				72600	Grants	44,275	34,000	34,000	-	-	112,275	14
				74200	Audiovisual & Print Prod Costs	-	-	15,000	-	15,000	30,000	15
				75700	Training	7,500	22,500	22,500	7,500	7,500	67,500	16
					Total Outcome 3	92,775	114,500	112,500	48,500	63,500	431,775	
Project management	UNDP	62040	AF	71400	Contractual services (individual)	60,000	60,000	60,000	60,000	60,000	300,000	17
				72500	Supplies	5,000	2,500	2,500	2,500	2,500	15,000	18
				72800	Information Techonology Equipmt	5,000	2,200	2,200	2,200	2,200	13,800	19
				74100	Profesional services	2,500	2,500	2,500	2,500	2,500	12,500	20
				74958	DPC	7,915	8,969	8,799	7,910	6,909	40,502	21

					Total management	80,415	76,169	75,999	75,110	74,109	381,802
					Project TOTAL	762,503	897,069	879,899	799,110	698,009	4,036,590

Total components	682,088	820,900	803,900	724,000	623,900	3,654,788
Project management	80,415	76,169	75,999	75,110	74,109	381,802
Total project cost	762,503	897,069	879,899	799,110	698,009	4,036,590

Note	Atlas Code	Category	Total 5 years	Expenses Description (to be further completed at inception stage)
Outcome 1: The CFC platform and related planning and regulatory processes strengthened to implement Ecosystem-Based Adaptation. (US\$ 472,513)				
1	71200	International Consultant	30,000.00	Recruitment of an international consultant for the valuation of the CFC ecosystem services
2	71300	Local Consultant	10,000.00	Local Consultant to support the development of local norms, permuts and ordinances
3	71600	Travels	75,000.00	Mobilization of the project team to the 14 CFC municipalities, for strengthening the Platform
4	72100	Contractual Services	201,200.00	Recruitment of staff (2) for the project team, who implement activities related to strengthening the CFC platform, and support municipalities for the development of their Adaptation to Climate Change Municipal Plans
5	74500	Miscellaneous	25,813.00	Component 1 Unforeseen Costs
6	75700	Training	130,500.00	Training of CFC staff and central institutions as SAG, ICF, <i>MiAmbiente</i> , etc.; for strengthening the CFC Platform
Outcome 2: Increased capacity of communities in CBC to implement ecosystem-based CC adaptation measures . (US\$ 2,750,500)				
7	72100	Contractual Services	343,200.00	Recruitment of support technical staff for the municipalities and the project team, to implement restoration measures, forest protection, and adaptation measures defined in the Adaptation to Climate Change Municipal Plans.
8	72200	Equipment	192,300.00	Purchase of equipment for the restoration of the areas affected by the bark beetle outbreak, and for forest protection by CFC municipalities
9	72600	Grants	2,000,000.00	Implementation of forest restoration, drought management/water resources use adaptation measures managed by CFC Municipalities through grant agreements signed
10	75700	Training	215,000.00	Training to municipalities' staff and communities, to undertake restoration and fire protection measures; and measures for adaptation to climate change (including training on access to financing, good management practices of natural resources, etc.)
Outcome 3: National Platforms for Information, Knowledge Management and Monitoring on Climate Change strengthened, having the CFC as a reference area to contribute to research and capacity building (US\$ 449,500)				
11	71300	Local Consultants	180,000.00	Recruitment of technical support personnel for the ONCCDS, and technical personnel for production of the Project's and ONCCDS' Communication and Knowledge Management Strategies.

12	71600	Travel	25,000.00	Mobilization for the exchange of experiences and presentation of the project results in national and international congresses
13	72200	Equipment	17,000.00	Purchase of equipment for data management by the Project and by the ONCCDS
14	72600	Grants	112,272.00	Applied research carried out on forestry- bark beetle pest-climate change relations, based on grant agreements signed with academic and information and research generation institutions,
15	74200	Videos and printouts	30,000.00	Materials and videos for communication of project results
16	75700	Training	67,500.00	Community training for community monitoring in the 14 CFC municipalities
Project Management (US\$ 381,802)				
17	71400	Contractual Services	300,000.00	Recruitment of project technical staff (management and administrative staff)
18	72500	Materials	15,000.00	Purchase of office supplies for project operation
19	72800	Info-technology	13,800.00	Info-technological equipment for the project team
20	74100	Professional Services	12,500.00	Audits
21	74958	DPC	40,502.00	UNDP Direct Project Support Services

H. Include a disbursement schedule with time-bound milestones.

	Upon Agreement Signature	Upon start of project implementation for Year 1 activities	One Year after Project Start ^{a/}	Year 2 ^{b/}	Year 3	Year 4 ^{c/}	Total
Scheduled Date	April 2017	June 2018	June 2019	June 2020	June 2021	June 2022	
Project Funds		764,869	899,121	882,026	795,616	694,957	4,036,590
Implementing Entity Fee	137,244	39,009	45,856	44,983	40,576	35,442	343,110
Total	137,244	803,878	944,976	927,009	836,192	730,400	4,379,700

PART IV: ENDORSEMENT BY GOVERNMENT AND CERTIFICATION BY THE IMPLEMENTING ENTITY

A. Record of endorsement on behalf of the government⁴² Provide the name and position of the government official and indicate date of endorsement. If this is a regional project/programme, list the endorsing officials all the participating countries. The endorsement letter(s) should be attached as an annex to the project/programme proposal. Please attach the endorsement letter(s) with this template; add as many participating governments if a regional project/programme:

Mr. Jose Antonio Galdames Secretary of State Secretaria de Energia, Recursos Naturales, Environment and Mines	Date: 19 July 2016
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B. Implementing Entity Certification Provide the name and signature of the Implementing Entity Coordinator and the date of signature. Provide also the project/programme contact person's name, telephone number and email address

I certify that this proposal has been prepared in accordance with guidelines provided by the Adaptation Fund Board, and prevailing National Development and Adaptation Plans (including the Country Vision, National Plan, National Climate Change Strategy and National Adaptation Plan) and subject to the approval by the Adaptation Fund Board, commit to implementing the project/programme in compliance with the Environmental and Social Policy of the Adaptation Fund and on the understanding that the Implementing Entity will be fully (legally and financially) responsible for the implementation of this project/programme.

Adriana Dinu Executive Coordinator UNDP - Global Environmental Finance	
Date: Dec 2016	Tel. and email:+1 (212) 906 5143
Project Contact Person: Gabor Vereczi	
Tel. And Email:+507 302 4628 / Gabor.vereczi@undp.org	

⁴². Each Party shall designate and communicate to the secretariat the authority that will endorse on behalf of the national government the projects and programmes proposed by the implementing entities.

ANNEX I. Letter of Endorsement



Letter of Endorsement by Government

Secretary of Energy, Natural Resources, Environment and Mining

July 19, 2016

To: The Adaptation Fund Board
c/o Adaptation Fund Board Secretariat
Email: Secretariat@Adaptation-Fund.org
Fax: 202 522 3240/5

Subject: Letter of Endorsement for project Ecosystem-Based Adaptation at the Central Forest Corridor communities in Tegucigalpa.

In my capacity as designated authority for the Adaptation Fund in Honduras, I confirm that the above national project proposal is in accordance with the government's national priorities in implementing adaptation activities to reduce adverse impacts of, and risks, posed by climate change in Honduras.

Accordingly, I am pleased to endorse the above project/programme proposal with support from the Adaptation Fund. If approved, the project/programme will be implemented by the United Nations Development Programme and executed by the Ministry of Environment of Honduras.

Sincerely,

Jose Antonio Galdames Fuentes
Secretary of State

ANNEX II. UNDP Fees for Support to Adaptation Fund Project
“Ecosystem-Based Adaptation at Communities of the Central Forest Corridor in Tegucigalpa”

Category	Services Provided by UNDP	UNDP Fee (8.5%)
Identification, Sourcing and Screening of Ideas	Provide information on substantive issues in adaptation associated with the purpose of the Adaptation Fund (AF). Engage in upstream policy dialogue related to a potential application to the AF. Verify soundness & potential eligibility of identified idea for AF.	\$17,156
Feasibility Assessment / Due Diligence Review	Provide up-front guidance on converting general idea into a feasible project/programme. Source technical expertise in line with the scope of the project/programme. Verify technical reports and project conceptualization. Provide detailed screening against technical, financial, social and risk criteria and provide statement of likely eligibility against AF requirements. Determination of execution modality and local capacity assessment of the national executing entity. Assist in identifying technical partners. Validate partner technical abilities. Obtain clearances from AF.	\$51,466
Development & Preparation	Provide technical support, backstopping and troubleshooting to convert the idea into a technically feasible and operationally viable project/programme. Source technical expertise in line with the scope of the project/programme needs. Verify technical reports and project conceptualization. Verify technical soundness, quality of preparation, and match with AF expectations. Negotiate and obtain clearances by AF. Respond to information requests, arrange revisions etc.	\$68,622
Implementation	Technical support in preparing TORs and verifying expertise for technical positions. Provide technical and operational guidance project teams. Verification of technical validity / match with AF expectations of inception report. Provide technical information as needed to facilitate implementation of the project activities. Provide advisory services as required. Provide technical support, participation as necessary during project activities. Provide troubleshooting support if needed. Provide support and oversight missions as necessary. Provide technical monitoring, progress monitoring, validation and quality assurance throughout. Allocate and monitor Annual Spending Limits based on agreed work plans. Receipt, allocation and reporting to the AFB of financial resources. Oversight and monitoring of AF funds. Return unspent funds to AF.	\$154,399
Evaluation and Reporting	Provide technical support in preparing TOR and verify expertise for technical positions involving evaluation and reporting. Participate in briefing / debriefing. Verify technical validity / match with AF expectations of all evaluation and other reports Undertake technical analysis, validate results, and compile lessons. Disseminate technical findings	\$51,467
Total		\$343,110

Annex III

	Yr-1				Yr-2				Yr-3				Yr-4				yr -5				TOTAL BUDGET (USD)
	QR-1	QR-2	QR-3	QR-4	QR-1	QR-2	QR-3	QR-4	QR-1	QR-2	QR-3	QR-4	QR-1	QR-2	QR-3	QR-4	QR-1	QR-2	QR-3	QR-4	
OUTCOME 1: The CFC platform and related planning and regulatory processes strengthened to implement Ecosystem-Based Adaptation																					
Output 1.1: 1.1 Strengthened coordination mechanisms for climate-resilient management of CFC natural resources, including measures for the effective participation of women and indigenous people		45,213.00			45,400.00				50,900.00				50,900.00				50,900.00				243,313.00
Output 1.2: Municipal level regulatory mechanisms strengthened for adaptive management of natural resources					15,000.00				5,000.00												20,000.00
Output 1.3: Municipal level plans are revised and newly established to harmonize adaptation interventions		34,400.00			34,400.00				24,400.00				14,400.00				14,400.00				122,000.00
Output 1.4: Payment for Ecosystem (Watershed) Services (PES) schemes developed and operationalized for CC adaptation measures		44,400.00			14,400.00				14,400.00				14,000.00								87,200.00
SUB TOTAL		124,013.00			109,200.00				94,700.00				79,300.00				65,300.00				472,513.00
OUTCOME 2: Increased capacity of communities in CBC to implement ecosystem-based CC adaptation measures																					
Output 2.1: Pine and Mixed Forest areas damaged by drought-induced pest and fire hazards are reforested		166,400.00			186,400.00				186,400.00				186,400.00				166,400.00				892,000.00
Output 2.2: Protection measures are introduced against fires, pests, land use change, and unsustainable forest use, assisting natural regeneration of forests		132,500.00			224,400.00				223,900.00				223,400.00				188,700.00				992,900.00
Output 2.3: Drought management adaptation measures implemented to optimize the use of water resources for agriculture and domestic use		166,400.00			186,400.00				186,400.00				186,400.00				140,000.00				865,600.00
SUB TOTAL		465,300.00			597,200.00				596,700.00				596,200.00				495,100.00				2,750,500
OUTCOME 3: National Platforms for Information, Knowledge Management and Monitoring on Climate Change strengthened, having the CFC as a reference area to contribute to research and capacity building																					
Output 3.1: Applied research carried out to enhance knowledge and information on the links amongst climate change, drought, pests, fires and adaptation measures in the CFC		46,775.00			36,500.00				36,500.00				2,500.00				2,500.00				124,775.00
Output 3.2: Strengthened National Climate Change Observatory for Sustainable Development (ONCCDS)		23,000.00			40,000.00				23,000.00				23,000.00				23,000.00				132,000.00
Output 3.3: Community early warning and monitoring system for bark beetle pest outbreak under CFC Platform					15,000.00				15,000.00												30,000.00
Output 3.4: Systematized and disseminated project knowledge and experience		23,000.00			23,000.00				38,000.00				23,000.00				38,000.00				145,000.00
SUB TOTAL		92,775.00			114,500.00				112,500.00				48,500.00				63,500.00				431,775.00
EXECUTION COSTS																					
GRAND TOTAL		762,503.00			897,069.00				879,899.00				799,110.00				698,009.00				4,036,590.00

Annex IV UNDP Direct Project Support Services

UNDP Country Office in Honduras may provide implementation support services without affecting the strengthening of the capacities of the counterpart and the direct execution of the activities described in the Project Document. The cost incurred by the UNDP country office shall be recovered in accordance with the relevant policy.

Ecosystem-Based Adaptation at Communities of the Central Forest Corridor in Tegucigalpa

Support services*	Support services program	Quantity and type of reimbursement of UNDP LPL/UPL	UNPD costs for providing such support services
1. Payments, disbursements and other financial transactions.	Approximately 10 monthly transactions. Project duration of 60 months.	\$36.10/transaction	\$ 21,660.00
2. Project personnel and consultants recruitment	5 appointments for the executing unit	\$586.14/each	\$ 5,213.60
	Estimated of 10 consultants	\$228.29/consultants	
3. Goods and services procurement and sale/disposal of equipment.	Goods purchases <10,000 - 20 goods approximately>	\$206.76/item	\$ 6,757.65
	Goods purchases >10,000 - 5 goods approximately>	\$524.49/item	
4. Shipment, customs clearance, vehicle registration and accreditation.	approximately 3 goods	\$267.18	\$ 801.54
5. Delegation of US\$1,830,000 - 72600 account, for the implementation of grants for climate change resilient practices such as terraces, erosion barriers, forestry, reforestation, remaining forests conservation, agriculture and others.	20 grants	\$303.46/grant	\$ 6,069.22
			\$ 40,502.01

* UNDP direct support services are defined annually and these are charged at the end of each year according to the de Universal Price List [UPL] or the actual cost of the service.

Due to the local conditions regarding personnel recruitment and procurement [including goods importations] a specific cost recovery has been established for the country [LPL].

Annex V ACRONYMS

AF:	Adaptation Fund
AMOHN:	Association of Municipalities of Honduras
BUR:	Biennial Update Report
CBO:	Community-Based Organization
CFC:	Central Forest Corridor
CENAOS:	National Center for Atmospheric Research, Ocean and Seismology
CICC:	Interinstitutional Committee on Climate Change
CONAGUA:	Water Council
CONASA:	National Council of Water and Sanitation Honduras
CONPAH:	Confederation of Indigenous Peoples of Honduras
CREDIA:	Centre for Documentation and Environmental Interpretation
CTICC:	Interinstitutional Technical Committee on Climate Change
DECA:	Office of Evaluation and Environmental Control
DINAFROH:	National Directorate of Indigenous Peoples and Afro Hondurans
DNCC:	National Climate Change Office
DPS:	Direct Project Services
EAP:	Economically Active Population
ENCC:	National Climate Change Strategy
ENSO:	El Niño-Southern Oscillation
ERC:	Evaluation Office Evaluation Resource Center
ERSAPS:	Regulatory Agency Services for Water and Sanitation
ESNACIFOR:	National School of Forestry Sciences
EWS:	Early Warning System
FIRSA:	National Program for the Reactivation of Agriculture Sector of Honduras
ICF:	Forest Conservation Institute
IHCAFE:	Honduran Coffee Institute
INDC:	Intended Nationally Determined Contribution
INA	National Agrarian Institute
IP:	Property Institute
IPCC:	Intergovernmental Panel on Climate Change
MiAmbiente:	Ministry of Energy, Natural Resources, Environment and Mining
NAMA:	National Appropriate Mitigation Actions
NDC:	National Contribution Determined
OCP:	Project Coordination Office
ONDSCC:	National Observatory for Sustainable Development and Climate Change
PCM:	President of the Council of Ministers (Executive Order in Council of Ministers)
PDM-OT:	Municipal Development Plans Land Management
PDR-OT:	Regional Development Plans Land Management
PES:	Payment for Ecosystem Services
RCU:	Regional Coordination Unit
REDD:	Reducing Emissions from Deforestation and Forest Degradation
SAG:	Ministry of Agriculture

SANAA:	Ministry of Water, Sanitation and Sewerage
SCP:	Steering Committee Project
SDG:	Sustainable Development Goals
SINFOR:	Research System of the National School of Forestry Sciences
SINIA:	National Environmental Information System
UMA:	Municipal Environmental Unit
UNAH:	National Autonomous University of Honduras
UNDP:	United Nations Development Programme
UNFCCC:	United Nations Framework Convention on Climate Change



ADAPTATION FUND



SECRETARÍA DE ENERGÍA,
RECURSOS NATURALES,
AMBIENTE Y MINAS

Mi Ambiente+

ANNEX DOCUMENT:

ECOSYSTEM-BASED ADAPTATION AT COMMUNITIES OF THE CENTRAL FOREST CORRIDOR IN TEGUCIGALPA

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ANNEX 6: TABLES

Table 1: Municipalities with data on the percentage of territory within the CFC

No.	Nombre	Población total (hab) ¹	Área Total Municipio (KM ²)	% de área del municipio dentro del CBC
1	San Antonio de Oriente	15,446	211.23	2.85
2	Cedros	25,539	780.37	3.96
3	Ojojona	10,872	240.87	22.81
4	Santa Lucia	13,463	57.86	70.88
5	Tatumbla	7,799	78.78	39.94
6	Villa de San Antonio	24,824	342.18	15.98
7	Distrito Central	1,207,635	1,501.62	94.39
8	Lepaterique	21,245	566.54	22.46
9	San Buenaventura	2,963	62.27	15.55
10	San Juan de Flores	16,457	380.16	7.42
11	Santa Ana	16,661	95.50	40.92
12	Talanga	36,285	429.43	3.37
13	Valle de Ángeles	17,922	105.95	9.14
TOTAL		1,427,699	1864.84	100

Table 2: Data on Protected Areas CFC

Nombre del AP	Categoría de Manejo	Área en Km ²	Área en ha	% del CBC
Yerba Buena	Reserva Biológica	35.224	3,522.40	1.888
Cerro de Uyuca	Reserva Biológica	7.720	772.00	0.414
Carias Bermudes	Área de Uso Múltiple	50.728	5,072.80	2.720
La Tigra	Parque Nacional	243.409	24,340.90	13.050
Corralito	Refugio de Vida Silvestre	69.22	6,921.80	3.711
TOTAL		406.30	40,629.90	21.782

¹ INE, 2016

Table 3: Details of the five sub-basins of the CFC

Nombre de Subcuenca	Área en Km2	Área en ha	% del CBC
Río Sabacuante	48.04	4,804.00	2.58
Río Tatumbla	63.76	6,376.00	3.42
San José de Río Grande	140.50	14,050.00	7.53
Subcuenca Río Guacerique	189.49	18,949.00	10.16
Subcuenca Río del Hombre	341.38	34,138.00	18.30
TOTAL		78,317.00	41.99

Table 4: Livelihoods and per capita income of the population of the municipalities in the CFC

No.	Nombre	Población total (hab)	Principales medios de vida	Ingreso estimado per cápita anual (US\$ ppa)
1	San Antonio de Oriente	15,446	Agro-transformación, Café, silvicultura, granos básicos (maíz, maicillo, frijol y sorgo), hortalizas (cebolla y papa), ganadería en pequeña escala	3,342.12
2	Cedros	25,539	---	---
3	Ojojona	10,872	Turismo, artesanías, generación de energía eólica, café, silvicultura (incluye resina), hortalizas, granos básicos (maíz y frijol), ganadería en pequeña escala	2,561.64
4	Santa Lucia	13,463	Turismo y servicios asociados, café, granos básicos (maíz y frijol), ganadería en pequeña escala	5,650.74
5	Tatumbla	7,799	Café, granos básicos (maíz y frijol), hortalizas (papa, repollo, zanahorias, ajo), ganadería en pequeña escala	2,848.03
6	Villa de San Antonio	24,824	---	---
7	Distrito Central	1,207,635	Industria manufacturera, agroindustria, turismo, comercio y servicios	6,876.07
8	Lepaterique	21,245	Hortalizas, café, silvicultura (incluye extracción de resina), granos básicos (maíz y frijol)	1,805.79
9	San Buenaventura	2,963	Granos básicos (maíz, maicillo, sorgo y frijol), generación de energía eólica, apicultura, ganadería en pequeña escala	2,972.37
10	San Juan de Flores	16,457	Café, plátano, hortalizas (chile, tomate) caña de azúcar y su agro-transformación, granos básicos (maíz, maicillo y frijol), ganadería en pequeña escala, minería no metálica	---

11	Santa Ana	16,661	Turismo, artesanías y alfarería, generación de energía eólica, café, granos básicos (maíz y frijol), ganadería en pequeña escala, hortalizas (en las Cuevecitas)	4,177.14
12	Talanga	36,285	---	---
13	Valle de Ángeles	17,922	Turismo y servicios asociados, artesanías, café, hortalizas (incluye papa), apicultura, granos básicos (maíz y frijol), ganadería en pequeña escala	4,306.51
14	Villa de San Francisco	10,589	Granos básicos (maíz, maicillo y frijol), ganadería en pequeña escala	2,676.15

Table 5: Global Response Capacity Index (according PDR-OT Región 12)

Municipio	Índice de capacidad de respuesta global	Clasificación en priorización para desastres y aspectos organizativos	Clasificación en nivel de conocimiento	Clasificación en nivel de recursos y herramientas	Clasificación en nivel de infraestructura y servicios para emergencia
Cantarranas	Bajo	Medio	Bajo	Bajo	Medio
Distrito Central	Medio	Alto	Medio	Bajo	Medio
Lepaterique	Bajo	Medio	Bajo	Bajo	Medio
Ojojona	Bajo	Bajo	Bajo	Bajo	Bajo
Sabanagrande	Medio	Medio	Medio	Bajo	Medio
San Antonio de Oriente	Medio	Alto	Bajo	Bajo	Medio
San Buenaventura	Medio	Alto	Bajo	Bajo	Medio
Santa Ana	Medio	Medio	Bajo	Bajo	Alto
Santa Lucía	Medio	Medio	Medio	Medio	Medio
Tatumbla	Bajo	Medio	Bajo	Bajo	Medio
Valle de Ángeles	Medio	Alto	Medio	Medio	Medio
Villa de San Francisco	Medio	Bajo	Medio	Medio	Alto

ANNEX 7: KEY PERSONS INTERVIEWED

Nombre actor clave	Institución	Datos	Cargo
Daisy Samayoa	MiAmbiente	dsamayoa@miambiente.gob.hn	Coordinar un grupo de trabajo sobre el gorgojo.
Ing. Luis Felipe García	Asesor despacho SEFIN	luisfelipeggm@yahoo.com	Fondos FIRSA desde SEFIN. Correo enviado
Walter Sanchez	Consultor para MiAmbiente	wal.jim.san@gmail.com	Consultor encargado de la elaboración de la Estrategia de MiAmbiente
Carlos Izagurre	UPEG	cizaguirre@miambiente.gob.hn	Punto focal para la Estrategia de MiAmbiente
Oscar Ruedas	ICF	orueda@icf.gob.hn	Programa Nacional de Reforestación
Emerson Gomez	COPECO	gomez.emerson@gmail.com	Sistema Meteorológico Nacional
Jacqueline Molina y Lourdes Gonzalez	SEFIN	jmolina@sefin.gob.hn lgonzalez@sefin.gob.hn	Equipo de pre-inversión de SEFIN
Jorge Quiñones	MiAmbiente	jquinones@miambiente.gob.hn	Técnico adaptación en equipo Tercera Comunicación Nacional de CC
Carles Rodríguez	PNUD	carles.rodriguez@undp.org	Monitoreo y Evaluación
Nabil Kawas	IHCIT	nkawask@gmail.com	UNAH
José Benítez	SAG FIRSA	sagfirsa@yahoo.com 32523638	SAG FIRSA
Orlando Sierra	Secretaría de Desarrollo Sostenible	Osierra1954@hotmail.com 99428056	FIRSA
Rafael Martins	PNUD	Rafael.martins@undp.org	Oficial PNUD
Waleska Pineda	MiAmbiente	wpineda@miambiente.gob.hn	Monitoreo y Evaluación
Arturo Santos	PNUD Centro Regional	Jose.arturo.santos@undp.org	ONUREDD+
Gina Hernandez	Banco Mundial (Honduras Nicaragua)	ginahernandez177@gmail.com	Contacto para el proyecto de fortalecimiento de la información climática y los sistemas de alerta temprana

Hugo Galeano	PNUD	Hugo.galeano@undp.org	Programa de Pequeñas Donaciones
Luis Rivas	MiAmbiente		Apoyo técnico para el FIP y PPCR
Luis Guardiola	Consultor MiAmbiente	lguardiolak@gmail.com	Técnico para TNA adaptación
Lily Caballero	Banco Mundial	zeitunlily@yahoo.com	Enlace PPCR en Honduras

ANNEX 8: INITIAL FIELDWORK

LEPATERIQUE / TATUMBLA

Fecha: 26.04.2016

Participantes:

- Milton Domínguez (técnico del FA)
- Eduardo Sanchez (técnico del FA)
- Jorge Ramos (SANAA departamento de cuencas) solo en primera parada
- Leonardo Irías (SANAA departamento de cuencas) solo en primera parada
- Mario Ochoa (SAG FIRSA)
- Karen Enriquez (SAG FIRSA)
- Waleska Pineda (monitoreo MiAmbiente)
- Noelia Jover
- Técnicos de la municipalidad de Lepaterique (solo durante segunda parada)

ZONA AFECTADA POR GORGOJO

Primera parada a una zona afectada por gorgojo camino a la municipalidad de Lepaterique. Nos comentan los técnicos de SANAA que la técnica para controlar el gorgojo en estas zonas debería ser:

1. Cortar solo 50 metros de perímetro de árbol sano alrededor y dejar la zona afectada en pie. Menor problemática con incendios porque la madera de esta manera no está en el piso.
2. Dejar restauración natural
3. Si no se da la restauración natural entonces reforestación

Planes de aprovechamiento: extracción de madera y extracción de resina. Lo hace ICF, no la alcaldía. Aunque hay coordinación.

CLIFOR trata de tener un enfoque integral.

Hay cooperativas forestales y cooperativas de resina (una sola). Aprovechamiento de extracción de resina.

En la parte del corredor boscoso los planes de manejo los hace SANAA (en microcuencas) y lo aprueba el ICF. Y en áreas protegidas los hace y aprueba el ICF.

Anteriormente, en los 60s, se practicó tala rasa y químicos para matar la plaga. Supuestamente en los 60s solo caminaba el gorgojo. Ahora vuela.

En Olancho han hecho tala rasa. La zona que visitamos no ha hecho tala rasa, solo tala de perímetro de 50 metros. Vemos que no hay un protocolo de intervención común.

Hay un problema enorme con la extracción de la madera.

Hay un problema con la resinación. Mala práctica.

En zonas privadas el ICF también hace el trabajo de control de plaga.

En Guacerique hay un total de 21.000 hectáreas y un 30% del bosque ha sido afectado. Son 2269 hectáreas afectadas entre zona de brote mas zona talada (803 hectáreas son en la zona de control talada).

Cada quince días un técnico de ICF hace recorrido de monitoreo y pasa sus datos a SANAA que hace sus estadísticas. Sería importante ver una que haya una homologación entre los datos finales de ICF y el SANAA.

Parece que en el pasado el gorgojo afectaba un diámetro a partir de 30 cm, pero ahora se ha visto que afecta a menos diámetro también.

La resina es el alimento del gorgojo y donde se reproduce. Al talarlo en la fase 1 el árbol deja de segregar resina y el gorgojo queda atrapado dentro solidificado. Esta es otra idea de práctica diferente de control.

Necesidad de HOMOLOGAR protocolo y sistematizar MEJORES PRÁCTICAS.



SEGUNDA PARADA A TANQUE DE AGUA Y ZONA DE RIEGO POR GOTEO

El proyecto ha beneficiado a 3 comunidades de base con un total de 90 familias.

Media manzana de sistema de riego por goteo. Se construye presa de agua o tanque. El foco del proyecto de esta comunidad con el FA es seguridad alimentaria. El total de fondos es de 48.000\$

Todas las parcelas de producción están en el mismo lugar. Esto hace que haya un trabajo conjunto comunitario.



Hay familias en Lepaterique que solo tiene ingresos por la extracción de la resina. Después de la afectación se han quedado sin su medio de vida. Toda la resina que se extrae de Lepaterique se vende a dos cooperativas. Familias enteras que han quedado sin parcelas de resinación. Con la técnica de la espina de pescado sacan menos producción, pero el árbol se conserva (consiguen 5 pulgadas cada 15 días). Actualmente están usando una técnica muy agresiva que mata el árbol en cuestión de 10 años (consiguen 12 pulgadas cada 15 días).

Una pulgada de resina 64 lempiras (20 recipientes).



En la zona húmeda de hierbabuena (1400 metros sobre el nivel del mar) no ha llegado el gorgojo y ahí no hacen extracción de madera ni de resina. Pero es una zona de producción de hortalizas fuerte y se da cambio de uso del suelo. Hierbabuena es una reserva biológica.

Necesidad urgente de darle una alternativa a la resina. Por el momento no se ha encontrado alternativa.

Las dos cooperativas agro forestales (810 familias en una y 1300 familias en otra) no han tenido el trabajo de la parte agro, solo de la parte de bosque. Importante impulsar la política agro forestal.

En la actualidad hay un plan de aprovechamiento y manejo que está caducado y tiene prorrogas. En este pasado plan se contemplaba el aprovechamiento de madera, resina de pino y carbón de pino. El nuevo plan está pronto de ser aprobado y en él se incluye el aprovechamiento de liquidámbar y de carbón del carboncillo, de roble y de encino.

Se está aprovechando en hacer arreglos de casa a nivel individual. La alcaldía esté facilitando los permisos. El transporte de la madera está muy caro por eso no se mueve. La madera está muy barata y la pueden comprar a un precio bajo. Secretaría de Desarrollo e Inclusión Social de Vida Mejor quizás ya están aprovechando la madera para el Plan de Vida Mejor. Consultar.

Riesgo sobre las repercusiones de no aprovechar la madera y de cambio de uso de suelo. Importancia de vincular a la comunidad con su recurso natural.

El sistema de riego por goteo, asistencia técnica y capacitación en el proyecto ha salido por unos 548 dólares por media manzana por familia. Ya había producción en esta zona, pero gracias a este sistema se espera que aumente la producción. Aún no tenemos el dato ya que hace un mes que iniciaron con la primera siembra.

Existen fichas de cada familia beneficiada. Se tiene que monitorear el incremento de producción. Se podrán tener datos en unos tres meses.

Ojojona se estima que con semilla mejorada puede pasar de 10 quintales a 50 quintales. El siguiente paso sería un banco de grano y garantizar la comercialización.



En la zona alta donde se ha construido el tanque de agua también ha habido afectación por el gorgojo. Necesidad de restauración esa zona ya que es la zona de recarga hídrica.



TATUMBLA VISITA DE PROYECTO FIRSA

Iniciativa de la SAG (Dirección de riego) con fondos FIRSA. Creación de reservorios.

Las lagunas están en terrenos privados.

En esta zona se depende de lo que llueve y no tanto de una fuente superficial permanente de agua. Dudas sobre construir esquemas de lagunas encima de una población, pero nos dicen que está bien asegurada y que no hay problemas de derrumbe.



Diez beneficiarios y 8 regando con sistema de mariposa. Iniciado en noviembre. Ya han sacado una cosecha, pero están plantando una segunda cosecha porque aún hay agua en el reservorio. No están trabajando con goteo porque ven que hay suficiente agua. Aunque según su contrato deben tener riego por goteo.



Primeras cosechas (nov-feb) eran de zanahoria, de repollo (150.000 libras). Anteriormente se había perdido cosecha y la producción era menor. El problema es que todos los productores han plantado repollo y bajó el mercado. Antes tenía una persona contratada y ahora tiene 5 o 6.

Antes sacaban 5 quintales de maíz y ahora sacan 45 quintales. Tiene un mercado (la colonia y hortifrut).

Se está continuando con la capacitación de otras variedades (posibilidad aguacate).



Aún no está escrito cuanto es el incremento de producción ni hay estudios de cuanto se pierde por evapotranspiración.

En total en 6 lagunas hay más de 100 beneficiarios directos con empleados que se han contratado ahora. Están organizados en cajas rurales. La idea es integrar más beneficiarios.

Fondos FIRSA a través de Banadesa para optar a crédito. El último paso sería un centro de acopio.

El proyecto tiene en Tatumbla 6 lagunas. En total 17 en Tatumbla y Azacualpa. Se inició en el 2014. Actualmente el Olancho, Francisco Marzan, Porvenir, con fondos de casa presidencial.

ANNEX 9: EXERCISE OF THEORY OF CHANGE

Introducción

El presente documento resume los principales hallazgos de la aplicación de la teoría de cambio para el diseño y elaboración de la propuesta de Honduras al Fondo de Adaptación (FA). La metodología se basó en la técnica de construcción de un árbol de problemas y soluciones delimitado al contexto de las comunidades y ecosistemas vulnerables ubicados en el Corredor Boscoso Central (CBC) de Honduras. Asimismo, se analizaron los actores clave a través de un análisis de poder e interés en el diseño y elaboración de la propuesta de Honduras al FA.

El resultado de la aplicación de la metodología del árbol de problemas genera la definición de la meta a largo plazo, impacto, objetivos principales, un set preliminar de indicadores y un análisis que aterriza recomendaciones, conclusiones y prospectivas para el diseño y elaboración de la propuesta de estrategia de Honduras al FA. El análisis del enfoque se basa en la gestión por resultados orientados a definir y construir una lógica de soluciones en las comunidades y ecosistemas del CBC que procure erradicar o aliviar los principales desafíos de forma sustancial desde un enfoque de adaptación basada en ecosistemas y adaptación basada en la gestión comunitaria. Esta propuesta se centra en la construcción de un modelo de gobernanza local que construya resiliencia, y oriente la planificación y ordenamiento territorial basado en la gestión del conocimiento, y el empoderamiento de comunidades y gobiernos locales para implementar medidas y tecnologías de adaptación al riesgo (climático).

Las recomendaciones y conclusiones procuran poner en perspectiva el encadenamiento de causales de problemas troncales ligados a la vulnerabilidad de las comunidades y ecosistemas del CBC, con el afán de poner sobre la mesa el objetivo central de la construcción de la resiliencia en comunidades y gobiernos locales del CBC, e integrar capacidades adaptativas en base a un modelo de gobernanza local y comunitario, que articule la gestión integral del conocimiento a nivel regional y local, con la implementación y cumplimiento de objetivos que generen evidencia de cambios positivos en los hombres y mujeres de las comunidades del CBC, construcción de resiliencia desde la óptica de ordenamiento/planificación territorial y el fomento y desarrollo de capacidades adaptativas de las comunidades para reducir las vulnerabilidades de sus medios de vida y de los ecosistemas inherentes y circundantes del CBC.

Consideraciones metodológicas

El presente documento se elaboró bajo la metodología del árbol de problemas, el cual es una herramienta para identificar rutas de cambio para el diseño y elaboración de propuestas de proyectos. El método permite de forma analítica ordenar el análisis de las causas y efectos de un problema central, identificando de esta forma los objetivos, soluciones ordenadas de forma coherente con un orden de causales y efectos, y de esta forma clasificar factores clave para definir los objetivos clave para una intervención orientada a generar cambios en los hombres y mujeres viviendo en un contexto físico, socio-cultural, ecosistémico, financiero, geográfico.

¿Cómo se elaboró la teoría de cambio para la propuesta de Honduras al FA?

Se identificó un "núcleo", un problema "central" o "focal". En este caso, las ideas centrales trastocaron la débil capacidad de adaptación de las comunidades y los gobiernos locales para fomentar y promover el fortalecimiento de la adaptación basada en ecosistemas y los procesos de

adaptación basados en la gestión comunitaria en el CBC. El problema central fue identificado como la falta de capacidades a nivel comunitario y de gobiernos locales para la reducción de vulnerabilidades, y la poca o nula generación y utilización de conocimiento e información focalizada y diferenciada para construir y medir la resiliencia de los municipios del CBC y sus ecosistemas.

Se generó una lluvia de ideas para producir una lista de causas y efectos del problema central. En el taller, la discusión se centró en el por qué las capacidades de adaptación de las comunidades y ecosistemas del CBC eran tan bajas, y cómo las causales y efectos de esta poca/nula resiliencia presente en la gestión comunitaria y la gestión de los gobiernos locales, agudizaba la vulnerabilidad del ecosistema del CBC, y como consecuencia, los medios de vida de los hogares de las comunidades localizadas en los municipios del CBC.

Clasificar cada aporte según su importancia. El facilitador discutió cada tema como se sucitó, y cómo este se relaciona con el problema central.

Escribir el 'problema central' en el centro de una hoja de papel y organizar la causa de los siguientes factores y los efectos anteriores. Luego discutir los vínculos entre los factores y dibujar flechas cuando se relacionan siendo necesario. Algunos enlaces causales eran claros, y pueden ir en una dirección solamente, mientras que otros eran más complejos, vinculándose con otros factores, haciendo una compleja red de relaciones causales.

El árbol de problemas se voltea convirtiéndose en un árbol de objetivos cambiando cada factor de causas en las cuestiones a abordar como objetivos o sub-objetivos. Por ejemplo, si la "degradación de los ecosistemas y medios de vida" se da como una causa, entonces este encaja en una caja de objetivo siendo el siguiente "reducción de la degradación de ecosistemas" o "proporcionar medios de vida resilientes". Se hizo lo mismo con las consecuencias, por lo que un efecto que dice "alta tasa de población en estado de vulnerabilidad, el indicador de ese efecto es "número reducido de hogares en estado vulnerabilidad". Esto ayuda a identificar el problema central, objetivos e indicadores. Sin embargo no todos los objetivos pueden ser relevantes al proyecto, y no todos los indicadores pueden ser considerados relevantes en el diseño de la propuesta, pero si deben discutirse y analizarse los por qués de cuando un objetivo o un indicador es descartado del diseño y propuesta del proyecto.

¿Para qué se utilizó el árbol de problemas/soluciones?

En la etapa de planificación. Para analizar los problemas conectados en términos de causa y efectos. El árbol de problemas se puede construir por separado por problemáticas/temáticas específicas con diferentes actores, por ejemplo, a nivel institucional o a nivel comunitario, para determinar varianzas en los elementos de un problema específico que se quiera tener un mayor nivel de detalle. De esta forma las actividades del proyecto pueden reconocer y responder a las diferentes necesidades. Si se utilizan muchos árboles de problemas con diferentes grupos en torno a un problema central, la añadidura en los resultados puede dar una idea general de cómo grupos específicos (jóvenes, mujeres, niños, técnicos, alcaldes, etc.) ven un problema central desde diferentes ópticas. El presente árbol de problemas se construyó desde la óptica de técnicos, gobiernos locales y representantes institucionales.

Para desarrollar objetivos e indicadores para el diseño y formulación de un programa/proyecto. Los objetivos de los árboles de problemas a menudo se utilizan para iniciar la construcción de un marco lógico. El objetivo central se convierte en el propósito del proyecto (Meta), así como los objetivos que se alinean en ella siendo la (as) salidas para las diferentes actividades. Los efectos se pueden usar como indicadores. Por ejemplo, un número de hogares reducido con medios de vida mermados o amenazados indicaría un impacto de éxito del proyecto. Se puede mostrar cómo

diferentes causas pueden lograr este objetivo, pero tomando en cuenta que es UN objetivo entre varios, y todos ellos deben tratarse como una cadena interrelacionado con el fin de hacer una diferencia en el problema central. Por ejemplo, no sirve de nada que se proporcione más medios de vida a hogares vulnerables con pocos o nulos medios de vida, si las causas institucionales o de actitudes culturales de las comunidades siguen siendo limitantes para una solución integral de la construcción de la resiliencia y las capacidades adaptativas de las comunidades, gobiernos locales y ecosistemas del CBC.

Construcción del árbol de objetivos

El método del árbol de problemas demuestra el proceso de construcción de un problema núcleo y los problemas adyacentes que aclara como un set de objetivos debe ordenarse. A este nivel se describe en detalle aquí la clarificación de los objetivos que es importante particularmente para el diseño, formulación, aplicación, evaluación, seguimiento, y monitoreo del proyecto a futuro. El análisis del árbol puede ser un ejercicio exhaustivo, pero para el presente documento se limita al análisis de la construcción preliminar de objetivos tomando en cuenta al menos cuatro criterios:

Debería permitir que los objetivos se establezcan de tal manera que sean comprensibles para todas las partes interesadas. En este caso, también deberían incluirse las comunidades a cierto punto del diseño y elaboración de la propuesta de Honduras al FA.

No debe ser diseñado para ser utilizado por una planificación de "élite" que esperan que otros pongan los resultados en práctica sin que se trate a nivel de actores locales.

Se debe ayudar a las personas/actores clave a fijar los objetivos de tal manera que puedan ser fácilmente vinculado a la acción de su quehacer individual o específico.

Debe formar parte de un proceso continuo en el que los objetivos son regularmente revisados y restablecidos cuando sea necesario.

Discrepancias en la definición del objetivo central

El ejercicio del árbol de problemas puede ayudar al personal del programa, técnicos, comunidades y los administradores de enfocar sus energías más constructivamente si todos están de acuerdo con los objetivos. Sin embargo, es poco probable que todos estarán de acuerdo por completo y casi con certeza alguna no será conciliado las diferencias dentro del proceso. Esto significa que la declaración final del problema central probablemente sea un acuerdo negociado en lugar de un consenso. Como una condición previa para que este enfoque tenga éxito, todos los participantes deben tener el mismo empoderamiento, de lo contrario el que más tenga poder tendrá más influencia. El método está diseñado para garantizar ayudar a que todos los participantes contribuyan por igual, y este aspecto es sumamente relevante y crítico que las comunidades se apoderen del problema central como suyo, que lo entiendan, y lo puedan asociar a sus necesidades y peticiones, dentro un contexto institucional y de gobernanza, que pueda traducir estas realidades comunitarias a criterios técnicos en la construcción del problema central.

Elementos centrales de la teoría de cambio para las comunidades vulnerables del CBC

Problema Principal/Estructural: La alta vulnerabilidad de las comunidades en los municipios del CBC, se agudiza por una baja capacidad, a nivel comunitario e institucional, para el diseño, elaboración, gestión y aplicación de financiamiento, normas, medidas y tecnologías que promuevan

un desarrollo resiliente, que reduzca vulnerabilidades y fomente la capacidad adaptativa de los medios de vida y los ecosistemas del CBC.

Visión conjunta: La alta vulnerabilidad de los hombres y mujeres de las comunidades del Corredor Boscoso Central, se reduce por la alta capacidad, a nivel comunitario e institucional, para promover de forma integral la adaptación al riesgo (climático), promoviendo el desarrollo de: 1) el manejo comunitario sostenible y resiliente de los recursos naturales y sus medios de vida, 2) el fortalecimiento de los gobiernos locales para implementar a través de la planificación territorial procesos de adaptación basada en ecosistemas y modelos de buena gobernanza comunitaria que construyan resiliencia, y, 3) la generación, sistematización y uso de conocimiento e información climática y ambiental de poblaciones y ecosistemas diferenciados y focalizados dentro del CBC para toma de decisiones concienzudas y priorizadas de acuerdo a bases técnico-científicas.

Estrategia de cambio: Construir capacidades en hombres y mujeres, a nivel comunitario y a nivel de los gobiernos locales, para promover la construcción de la adaptación basada en ecosistemas y la adaptación basada en la gestión comunitaria, promoviendo la buena gobernanza local y el ordenamiento y planificación de los territorios sobre los pilares de la resiliencia comunitaria e institucional, y la reducción de vulnerabilidades de los medios de vida de las comunidades y los servicios ecosistémicos del CBC.

Esta estrategia incluye tres rutas de cambio identificadas a través del árbol de problemas y soluciones, las cuales son:

- la construcción de un modelo de gobernanza que priorice el manejo comunitario sostenible y resiliente de los recursos naturales y medios de vida localizados el CBC,
- el fortalecimiento de los gobiernos locales para implementar a través de la planificación territorial procesos de adaptación basada en ecosistemas y y adaptación basada en la gestión comunitaria, donde ambos procesos complementarios puedan construir resiliencia a nivel de hogares, comunidades y de pequeñas y medianas empresas directamente ligadas a los servicios ecosistémicos en el CBC, y,
- la generación, sistematización y uso de conocimiento e información climática y ambiental para promover una gestión por resultados que evidencie cambios en la población y ecosistemas más vulnerables en el CBC, y que contribuya a la toma de decisiones priorizadas para desarrollar y promover la gestión de comunitaria y de buena gobernanza local para la construcción de la adaptación basada en ecosistemas y la construcción de la resiliencia en los municipios del CBC.

Análisis del problema estructural

La presente sección analiza a detalle el problema central identificado por los actores participantes del Taller de TdC para las comunidades y gobiernos locales del CBC. Asimismo, se detallan las razones de la visión conjunta como respuesta a las causas y subcausas primarias identificadas, y que construyen una propuesta de respuesta al problema central que confronta las comunidades y gobiernos locales del CBC.

Causa Primaria del Problema estructural financiero

Carencia y/o mala distribución del financiamiento de fondos propios, préstamos y donaciones dirigidos a las comunidades y gobiernos locales, para la construcción de la resiliencia desde la base comunitaria y el fortalecimiento de las capacidades de los gobiernos locales para reducir vulnerabilidades en el CBC.

Análisis de subcausas:

- corrupción y/o mal manejo de los fondos propios del Estado, donaciones y préstamos por parte del Estado, gobiernos (locales) y a nivel comunitario
- falta de planificación e implementación de un presupuesto por resultados a nivel de alcaldías y comunidades
- falta de creación de mecanismos financieros diferenciados y focalizados al contexto territorial del CBC, y anuente a las necesidades para el fomento del capital financiero, humano, físico, natural y social de los municipios en el CBC
- falta de modelos de financiamiento que construyan sobre las bases comunitarias resiliencia de los medios de vida de las comunidades en el CBC
- falta de modelos financieros que se ajusten a la reducción de la vulnerabilidad financiera de los hogares de los municipios del CBC

Análisis de resultados: Mapa de principales causales convertido a objetivos/resultados (factores claves de cambio)

- Aumentar los niveles y mecanismos de rendición de cuentas, transparencia y anticorrupción a nivel comunitario y de gobierno local antes, durante y luego de la implementación de medidas y tecnologías que promuevan la adaptación y construcción de resiliencia en los municipios de la CBC
- Capacitar a los actores locales, tanto gobiernos locales como las comunidades, en la gestión de presupuesto por resultados
- Diseño, elaboración e implementación de mecanismos financieros alternativos coherentes con las capacidades y utilización de los capitales identificados en las comunidades y gobiernos locales de los municipios del CBC
- Construir desde la base comunitaria modelos de financiamiento administrados e implementados por las comunidades y/o sus bases productivas, desde la óptica de construcción de resiliencia (por ejemplo: microseguros agroforestales, blindaje de inversión en agroforestería, financiamiento a medios de vida alternativos, financiamiento diferenciado y focalizado a mujeres, etc.).
- Construcción de análisis socioeconómicos, técnicos, administrativos y normativos para entender la dinámica de los medios de vida, su temporalidad, tipo de recursos utilizados, calidad de los medios de vida, aplicabilidad del marco regulatorio y su cumplimiento (e.g. mecanismos de multa, sanción e incentivos para mermar malas prácticas agropecuarias, forestales, o de agricultura migratoria, etc. donde se incurra a la presencia de los Gobiernos Locales/Centrales y otras entidades como la Fiscalía Ambiental)
- Diseño, elaboración y construcción de un pago por servicio ambiental/climático, el cual es fundamental hacer rentable para que el mercado de madera proveniente de plantaciones y de bosques naturales en el CBC puedan promover la restauración y a la adaptación de los ecosistemas como una actividad económica resiliente y anuente a la gestión comunitaria sostenible y resiliente de los medios de vida.

Causa Primaria del Problema estructural de baja capacidad adaptativa de comunidades y gobiernos locales

La alta vulnerabilidad y baja capacidad adaptativa de las comunidades y cooperativas del CBC es en buena parte construida por la baja capacidad de respuesta institucional, comunitaria y del sector privado pequeño y mediano en el CBC, ante los efectos de los desastres, la variabilidad climática, la

escasez y degradación de los recursos naturales/ecosistemas y escasez o pérdida total de medios de vida.

Causa Secundaria del Problema estructural de baja capacidad adaptativa: Capitales mermados o inexistentes para la construcción de la resiliencia desde el enfoque de ordenamiento y planificación territorial

Bajas capacidades del capital físico, humano, financiero, social y político de los gobiernos locales genera obstáculos para implementar desde la óptica del ordenamiento y planificación territorial la construcción de la resiliencia (e.g. capacidades técnicas, operativas, de personal, acceso a recursos, etc.)

Análisis de sub-causas principales

- carencia de un modelo de gobernanza de los recursos naturales a nivel territorial en armonía con las necesidades de las comunidades y los planes de desarrollo territorial municipales
- falta de fomento de modelos de desarrollo que promuevan el nexus agua-energía y el nexus agroforestería y dendroenergía
- falta de construcción de adaptación basada en ecosistemas y gestión comunitaria fomentando la agricultura inteligente y la construcción resiliente de la seguridad alimentaria
- falta de un plan de acción focalizado y diferenciado para la generación de capacidades adaptativas en las comunidades y las cooperativas del CBC
- falta de fomento de generación y pagos por servicios ecosistémicos en el CBC
- poca o nula implementación de políticas sectoriales que propicien el desarrollo de actividades alternativas que promuevan la diversificación de los medios de vida de las comunidades en los municipios del CBC (agroforestería, café bajo sombra, industria extractiva maderera y dendroenergética i.e. carbón)
- malas prácticas que inciden negativamente en el sector forestal, esto sumado a la **i**) debilidad institucional del sector forestal a quien se le orienta una baja asignación presupuestaria y **ii)** la baja participación efectiva y eficiente de los actores relevantes involucrados en la gestión forestal.
- falta de implementación de medidas y tecnologías de forma conjunta para la restauración de ecosistemas del CBC entre las comunidades, las alcaldías, la academia, el sector privado local/regional y la cooperación internacional
- la implementación de la estrategia de combate a la tala ilegal, provocada en buena parte por los grandes consumidores de madera/leña, es parcial o nula; y en los casos en que se implementa hay espacio para mejorar, por ejemplo: i) en el aspecto técnico-operativo para la construcción de mejoras en los procesos de controles de trazabilidad de la madera mediante uso de tecnologías modernas; ii) facilitar el acceso, manejo y productividad de la madera legal (incluida la leña) a través del fortalecimiento de capacidades a nivel institucional y comunitario; iii) facilitar el acceso a los pequeños consumidores mediante el otorgamiento de permiso y el fortalecimiento de las Unidades Municipales Ambientales (UMA) de cada municipio para el control de permisos de aprovechamiento a menor escala previendo la presencia institucional adecuada y suficiente para dicho proceso;
- falta de generación de incentivos a las no quemas agrícolas o la quema controlada, y poco o nulo fortalecimiento de mecanismos locales y comunitarios para la prevención de incendios e incentivos para el uso de sistemas silvopastoriles y agroforestales, con el objetivo de intensificar la producción, conservación de la biodiversidad y evitar la degradación del suelo;

- carencia de medidas y ordenamiento/planificación territorial que impulse la zonificación de las áreas agrícolas y forestales y fomenten incentivos financieros y en especies para la producción de diversos cultivos en el CBC;
- limitantes para reducir la expansión de café a expensas del bosque mediante acciones de incidencia que desincentiven económicamente la producción de café bajo sol, y promueva el cultivo de café bajo sombra y la promoción de los paisajes productivos;
- limitantes para reducir la expansión de la frontera agrícola (en especial agroindustrial), mediante los incentivos de mercado, la certificación del producto, simplificar los procesos administrativos y dar garantía jurídica para el acceso a mercados locales y comunitarios
- crecimiento de la agricultura migratoria debido a la pérdida o merma de los medios de vida en el CBC
- malas prácticas agrícolas e.g. la quema, uso de fertilizantes/plaguicidas;
- hay un aumento de las áreas de pastizales para uso ganadero en el CBC
- la expansión agroindustrial afecta la equidad en el consumo y distribución del recurso natural en el CBC, e especial el recurso hídrico
- debilidad de una buena gobernanza comunitaria para la gestión de los recursos naturales,
- una alta vulnerabilidad de la forestería comunitaria,
- débil o insuficiente conciencia ambiental en las comunidades y gobiernos locales del CBC
- los conflictos de índole socioambiental por acceso a los recursos aumentan y generan impases para la buena gobernanza inter- e intra-comunitaria y el accionar de los gobiernos e instituciones locales en el CBC.

Análisis de resultados: Mapa de principales causales convertido a objetivos/resultados (factores claves de cambio)

- revisión de los planes de desarrollo territorial y sectoriales (nivel técnico) para asegurar una planificación alineada con las necesidades de las comunidades;
- Restauración de los bosque - adaptación basada en ecosistemas y basada en la gestión comunitaria – para el desarrollo de capacidades diferenciadas (Técnicos forestales, productores, pueblos indígenas, campesinos y campesinas forestales, etc.) para generar una participación efectiva y eficiente de medidas y tecnologías de adaptación/mitigación;
- fortalecimiento a las capacidades de las instituciones locales para impulsar una estrategia de comunicación de concientización ambiental y de cambio climático
- aumentar la presencia institucional y lograr establecer mecanismos de respuesta temprana y prevención
- trabajo con las Regionales de MiAmbiente/ICF para fomentar una mayor respuesta y visibilidad institucional en los municipios del CBC.
- fomentar espacios de trabajo en conjunto entre las comunidades ladinias y los pueblos indígenas en el CBC.
- la generación de capacidades para el manejo y administración de recursos por parte de las comunidades
- se fortalecerán las plataformas de participación existentes, por ejemplo, Patronatos, Consejos de Cuencas; plataformas de diálogo para el Consentimiento Libre, Previo e Informado a nivel comunitario.
- desarrollo de capacidades locales, el mantenimiento de la autonomía de las comunidades, el fomento de la participación y empoderamiento de las mujeres.

- establecimiento de convenios con el propietario de la tierra para la implementación de la forestería comunitaria, el fortalecimiento de los mecanismos para la generación y distribución equitativa de ingresos tratando de ser más atractivos los negocios forestales.
- desarrollo de capacidades nacionales y locales para que se manejen técnicas de conservación del bosque, creación de información donde se plantea el beneficio que tiene la comunidad al tener un bosque productivo, la elaboración y fomento de estudios para determinar el aporte del bosque a las comunidades, la divulgación de los beneficios que se obtienen al lograr mayor valor agregado de los bienes y servicios provenientes del bosque y la preparación de estrategias de comunicación en pro de la conservación de los bosques.
- creación de mecanismos que permitan captar las quejas y encontrar donde se enfocan las principales dificultades de resolución de conflictos, mapeo de los lugares donde se ocasionan los conflictos para elaborar estrategias de prevención y verificación de los casos que son manejados por la sociedad civil.

Causa Primaria del Problema estructural de poca o nula gestión de información y conocimiento climático y ambiental a nivel del CBC

Gestión inadecuada, y poca o nula generación y uso, de conocimiento e información (e.g. climática, ambiental, socioeconómica) a nivel local obstaculiza la respuesta a las vulnerabilidades de las poblaciones y ecosistemas del CBC

Análisis de sub-causas principales

- Carencia de una plataforma que sistematice y gestione un banco de información climática y ambiental.
- carencia de recolección, sistematización y generación de conocimiento e información referente al recurso de agua, bosque y suelo en alianza con el sector académico en los territorios del CBC.
- Dispersión y/o inexistencia de conocimiento, datos y micro-datos ambientales y climáticos para la el diseño y toma de decisiones para la construcción de la resiliencia y fomento de capacidades adaptativas de las comunidades del CBC y los servicios ecosistémicos colindantes.
- Tráfico o venta de datos e información ambiental, climática y poblacional referente a cambio climático o ambiental.

Análisis de resultados: Mapa de principales causales convertido a objetivos/resultados (factores claves de cambio)

- Construcción y fortalecimiento de plataformas para la sistematización y generación de información y conocimiento focalizado y diferenciado para el CBC en términos de adaptación basada en ecosistemas y adaptación basada en la gestión comunitario
- Sistematización de datos, información, y conocimiento a nivel local y regional del CBC para calibrar de forma técnico-científica la toma de decisiones, y la construcción e implementación de planes de desarrollo territorial
- Generar y procurar que la información y conocimiento de referente al cambio climático y la gestión ambiental, sea utilizada y almacenada para la libre utilización de la misma, y procurando mecanismos de que promuevan la utilización y divulgación de información bajo un plan de comunicación y divulgación de conocimiento científico y técnico

Propuesta de set de indicadores

Un punto importante a tomar en cuenta en el proceso de selección de indicadores para la propuesta de Honduras al FA es tener consensuado, a nivel institucional y comunitario, el objetivo central, ya que de este parte el indicador compuesto y consecuentemente los indicadores de resultados específicos y/o intermedios.

La selección de indicadores deberá ser enfocada de manera particular dependiendo de si el objetivo es de diagnóstico, generación de insumos, resultados, cambios, evaluación de desempeño o de pronóstico sobre escenarios futuros.

También es importante destacar una gran limitación que se presenta al momento de realizar el ejercicio de diseño de indicadores y que consiste en la muy probable ausencia de información estadística básica con la que alimentar el indicador a proponer. Si bien existen métodos para imputar datos perdidos/inexistentes, es muy factible que en el caso de algunas variables ni siquiera se disponga de la información básica mínima necesaria.

Como se mencionó en el taller de TdC, la tradición de recabar, armonizar y agregar información estadística de los distintos sistemas ambientales se encuentra en su primera infancia y por ello, aún no se han estandarizado procedimientos sistemáticos que den lugar a conjuntos de información más o menos comparables, y con mucha mayor dificultad a nivel local o regional en un territorio dado.

En la actualidad, convenios con el sector académico y el uso de estudiantes para la generación levantamiento y sistematización de información debe ser una apuesta necesaria, en especial para el levantamiento de micro-datos a nivel local y regional en el CBC Igualmente, las tecnologías de información y comunicación pueden contribuir a subsanar el inconveniente del tráfico de información, y permite la posibilidad de crear una plataforma de gestión del conocimiento relacionada con indicadores de calidad y sostenidos en el tiempo en un banco de datos estable.

Los indicadores, si bien son para medir los avances, logros y evidenciar cambios de la gestión por resultados, también sirven para promover la gestión climática y ambiental a nivel nacional, regional y local en base a la gestión comunitaria y la gestión de los gobiernos locales, en tanto los datos, información y conocimiento promueva la toma de decisiones concienzuda y permita evaluar y dar seguimiento a las medidas implementadas en comunidades, sectores productivo o ecosistemas específicos de forma técnico-científica.

La propuesta de indicadores preliminares identificados en la elaboración del árbol de problemas y soluciones para la propuesta de Honduras al FA fue la siguiente:

- Número de hectáreas degradadas que han sido recuperadas y restauradas en el CBC
- Número y tipo de recursos naturales y medios de vida restaurados y mejorados
- Aumente de la recaudación fiscal por el aprovechamiento de los recursos naturales (incluyendo madera plagada)
- Número de mecanismos de pagos por servicios ambientales, u otros mecanismos de incentivos, implementados para la promoción de la restauración ambiental y la construcción resiliente de paisajes productivos
- Número de planes de desarrollo territorial implementados
- Número de medidas de adaptación basada en ecosistemas y desde el enfoque de ordenamiento y planificación territorial

- Número de indicadores climáticos y ambientales creados para el CBC, y/o a nivel nacional
- Número de casos de enfermedades causadas por la inadecuada gestión del recurso hídrico reducidos (zica, dengue, enfermedades gastrointestinales etc.)
- Cantidad de recursos económicos generados/levantados, gestados y articulados con los actores clave de la región del CBC
- Reducción de los gastos de los hogares por la compra de agua debido a la implementación de una buena gobernanza del recurso hídrico y la implementación de medidas/tecnologías (e.g. cosechas de agua)
- Pérdida económicas del sector agroindustrial dependiente del capital natural de CBC reducidas
- Generación de empleo y medios de vida resilientes
- Número de medidas implementadas y verificadas para la promoción de la diversificación de medios de vida, incluyendo sistemas agroforestales y/o paisajes productivos (e.g. café)

Este set de indicadores para la propuesta de Honduras al FA debe considerarse como una primera aproximación, y ocupará un mayor detalle y calibración de acuerdo al enfoque en que se construyan y prioricen los objetivos, así como el consenso entre la visión y estrategia de respuesta al problema central por parte de las entidades institucionales y de gobiernos locales por un lado, y las organizaciones de base y comunitarios en el otro.

Análisis para el abordaje de la propuesta de Honduras al FA

El **problema principal/estructural** definido como resultado es: La reducción de la vulnerabilidad de las comunidades en los municipios del CBC, se fomenta a través de la construcción de capacidades, a nivel comunitario e institucional, para el diseño, elaboración, gestión y aplicación de financiamiento, normas, medidas y tecnologías que promuevan un desarrollo resiliente, que reduzca vulnerabilidades y fomente la capacidad adaptativa de los medios de vida y los ecosistemas del CBC.

La meta a largo plazo es: Construcción y funcionamiento sostenible y sostenido en el tiempo, de un modelo de gobernanza local complementario entre las comunidades y los gobiernos locales, que promueva una constante construcción gradual y escalonada de la resiliencia de los ecosistemas y medios de vida de los hombres y mujeres que residen en los territorios de los municipios del CBC.

En el análisis de causalidad desde el ángulo de las causas subyacentes explicativas del problema principal estas se asociaron en tres factores explicativos:

- ✓ La carencia o débil construcción de un modelo de gobernanza que priorice el manejo comunitario sostenible y resiliente de los recursos naturales y medios de vida localizados el CBC,
- ✓ El poco o nulo fortalecimiento de los gobiernos locales para implementar a través de la planificación territorial procesos de adaptación basada en ecosistemas y adaptación basada en la gestión comunitaria, donde ambos procesos sean complementarios y puedan construir resiliencia a nivel de hogares, comunidades y de pequeñas y medianas empresas directamente ligadas a los servicios ecosistémicos en el CBC, y,
- ✓ La poca o nula generación, sistematización y uso de conocimiento e información climática y ambiental para promover una gestión por resultados que evidencie cambios en la población y ecosistemas más vulnerables en el CBC, y que contribuya a la toma de decisiones priorizadas para desarrollar y promover la gestión de comunitaria y de buena gobernanza

local para la construcción de la adaptación basada en ecosistemas y la construcción de la resiliencia en los municipios del CBC.

Análisis de poder e interés de socios/actores clave

En la fase final del Taller de TdC se logró hacer una primera aproximación de los actores clave para ser incluidos en el diseño y elaboración de la propuesta de Honduras al FA. La lista preliminar de actores clave identificados en el taller de TdC: Fiscalía del Ambiente, Cooperativas, Alcaldías Municipales del CBC, Patronatos, Consejos de Cuencas, AMHON, Cooperantes (EU, PNUD, GIZ, COSUDE, etc.), SAG/FIRSA, Copeco, MIAMBIENTE/ICF, ONCO-DS, Academia (Zamorano, Esnacifor, UNAH, etc.), Proyecto Nacaome, Sector Privado (agroindustrias, intermediarios, etc.), Colegio de Ingenieros Forestales, SANAA, medios de comunicación, Secretaría de Derechos Humanos, Justicia, Gobernación y Descentralización (SDHJGD), iglesia y SEFIN.

La clasificación de los actores clave se hizo en base al Poder-Interés de cada actor para el diseño y elaboración de la propuesta de Honduras al FA. De acuerdo a la Tabla Dinámica de poder e interés se clasifican los actores como:

Los actores con amplio poder de influencia y un alto interés para el cumplimiento de los objetivos de la propuesta de Honduras al FA, son vitales para el proceso. Entre estos actores se encuentran: Alcaldías Municipales, AMHON, Cooperantes (EU, PNUD, GIZ, COSUDE, etc.), SAG/FIRSA, MiAmbiente/ICF y SANAA.

Los actores con un alto poder de influencia para el cumplimiento de la propuesta, pero con poco interés para el cumplimiento de los objetivos de la propuesta de Honduras al FA, son vitales pero ocupan ser abordados en procesos de sensibilización sobre la importancia del cumplimiento de los resultados del proyecto. Entre estos actores están: Patronatos, COPECO, Sector Privado (agroindustrias, intermediarios, etc.), medios de comunicación, Secretaría de Derechos Humanos, Justicia, Gobernación y Descentralización (SDHJGD), Iglesias y SEFIN.

Los actores con un bajo poder para el cumplimiento de los objetivos de la propuesta del FA, pero con un alto interés hacia el proceso y los cuales deben ser promovidos a través de incentivos financieros y/o procesos de participación activa para el cumplimiento de los resultados. Entre estos actores están: Fiscalía del Ambiente, Cooperativas Forestales, Consejos de Cuencas, ONCC-DS y la Academia (Zamorano, U-Esnacifor, UNAH, y similares).

Los actores con un bajo poder y bajo interés en el alcance y cumplimiento de los objetivos de la propuesta de Honduras al FA, no mantienen buena actitud hacia el proceso, no se reconocen como prioridad para el proceso a corto y mediano plazo, pero no deben ser desconocidos, hay que mantener abiertas las opciones de su participación e involucramiento. Entre estos actores están: Proyecto Nacaome y Colegio de Ingenieros Forestales.

Propuesta de resultados en base a causales y resultados/objetivos

Como punto de partida se realizó el análisis de causalidad teniendo como marco de referencia el contexto de problemas y soluciones, y se realizó una priorización estratégica en función de las necesidades reales en el Corredor Boscoso Central de Honduras en torno a la degradación y pérdida de los recursos agua, bosque y suelo, y la consecuente merma, degradación y/o escasez de los medios de vida de las comunidades aledañas al CBC.

La visión conjunta definida es: La alta vulnerabilidad de los hombres y mujeres de las comunidades del Corredor Boscoso Central, se puede reducir a través de la construcción de una la alta capacidad de gestión, a nivel comunitario e institucional, para promover de forma integral la adaptación al riesgo (climático), fomentando el desarrollo de: 1) el manejo comunitario sostenible y resiliente de los recursos naturales y sus medios de vida, 2) el fortalecimiento de los gobiernos locales para implementar a través de la planificación territorial procesos de adaptación basada en ecosistemas y modelos de buena gobernanza comunitaria que construyan resiliencia, y, 3) la generación, sistematización y uso de conocimiento e información climática y ambiental de poblaciones y ecosistemas diferenciados y focalizados dentro del CBC para toma de decisiones concienzudas y priorizadas de acuerdo a bases técnico-científicas.

En la visión conjunta resalta la importancia de la participación efectiva de las mujeres y hombres en temas de acceso y distribución de los beneficios y bienes de los ecosistemas del CBC y los medios de vida que proporciona el mismo, y donde el rol de la mujer en actividades productivas podría, según la opinión de algunos de los participantes, hacer que el manejo y distribución de los servicios y bienes ecosistémicos sean más equitativos, sostenible y resilientes

Asimismo, la articulación interinstitucional para la aplicación del enfoque de género en el manejo de los recursos forestales/hídricos y medios de vida tradicionales y alternativos, debe garantizar una mayor efectividad en la integración del enfoque de género, y por lo cual es fundamental tener una perspectiva de género desde el diseño del proyecto enfocado en el rol de los hombres y las mujeres en la adaptación basada en ecosistemas y la adaptación basada en la gestión comunitaria.

Para lograr cambios transformacionales se determinan que los principales factores desencadenantes que propiciarían de forma integral contribuir a alcanzar la visión conjunta se encuentra en la pericia para fortalecer la gobernanza comunitaria mediante el desarrollo de capacidades locales, la construcción de la resiliencia de las comunidades, el fomento de la participación y empoderamiento de las mujeres, reducción de la vulnerabilidad de la forestería comunitaria y la agricultura a través del establecimiento de mecanismos financieros y capacidades técnico-operativas, el anclaje de la adaptación basada en ecosistemas y la gestión comunitaria que promueva los co-beneficios del nexus bosque, agua, suelo y recurso energético; el fortalecimiento de los mecanismos para la generación y distribución equitativa de ingresos para el fomento de los negocios sostenibles, verdes y resilientes.

Para fomentar la conciencia ambiental a través del proyecto debe contribuir en el desarrollo de capacidades nacionales y locales para que se manejen técnicas de conservación del recurso bosque, agua y suelo, y la creación de información donde se plantea el co-beneficio que tiene la comunidad al tener un bosque productivo, y su interrelación con la elaboración y fomento de la gestión del recurso hídrico bajo la construcción de capacidades adaptativas y la reducción de las vulnerabilidades.

Se recomienda que si bien el trinomio: agua, bosque y suelo esta ecosistémicamente interrelacionado, el enfoque de la buena gobernanza en las comunidades y los gobiernos locales del CBC se centre bajo en el recurso agua, para catalizar la fuerza de cohesión social y productiva de la zona bajo un mismo común denominador que pueda integrar a todos los actores claves dentro y fuera del CBC.

Para disminuir y prevenir los conflictos socioambientales por el acceso a los recursos naturales en el CBC se debe procurar colaborar en la creación de mecanismos que permitan captar las quejas y dar respuesta, así como encontrar donde se enfocan las principales dificultades de resolución de conflictos, contando con una mayor presencia de las instituciones del Estado pertinentes para el caso como, por ejemplo, la Fiscalía Ambiental, ICF y MiAmbiente. Como parte del esfuerzo se debería mapear los lugares en los territorios donde se ocasionan con mas vehemencia los conflictos para

elaborar estrategias de prevención y verificación de los casos que son manejados por la sociedad civil, e implementar medidas de prevención y resolución de conflictos ambientales.

Para la solución del problema forestal relacionada con la plaga del gorgojo, que ocasiona deforestación y degradación de los bosques, y consecuentemente del recurso agua y suelo, se debe enfocar en el fortalecimiento de las comunidades para gestar y hacer el manejo y aprovechamiento de la madera plagada, incluyendo una mayor presencia de las instituciones centrales de MiAmbiente/ICF, e incluir medidas de buenas prácticas para continuar trabajando el tema de la tala y comercio ilegal de madera y leña, al calor de la implementación de la estrategia de combate a la tala ilegal provocada por los grandes consumidores del recurso, incluyendo así una mejoría de los controles de trazabilidad de la madera mediante uso de tecnologías modernas y mejoras institucionales y técnico-operativas para facilitar el acceso a madera legal (incluido la leña). Se debe procurar facilitar el acceso a los pequeños productores agroforestales mediante el otorgamiento de permisos y el fortalecimiento de las Unidades Municipales Ambientales (UMA) de cada municipio para el control de permisos de aprovechamiento a menor escala, fomentando mejorías no solo para el aprovechamiento y adecuada aplicación de los planes de manejo, así como una mejor utilización de la madera plagada de gorgojo y el control y detención del avance de la plaga.

Para eliminar o disminuir las malas prácticas agrícolas, y la agricultura migratoria, como la quema, se debería impulsar la generación de incentivos a las no quemas agrícolas o la quema controlada, el fortalecimiento de los mecanismos locales de prevención de incendios e incentivos para el uso de sistemas silvopastoriles y agroforestales, con el objetivo de intensificar la producción, conservación de la biodiversidad y evitar la degradación del suelo.

Para detener el avance de la frontera agrícola es fundamental impulsar la zonificación de las áreas agrícolas y forestales e impulsar incentivos en la producción de diversos cultivos. En el caso de la expansión del cultivo del café en detrimento de la conservación de los bosques es fundamental limitar la expansión de café a expensas del bosque mediante acciones de incidencia que desincentiven económicamente a la producción de café bajo sol y promover la construcción de paisajes productivos con café bajo sombra, bajo el concepto de adaptación basada en ecosistemas y la gestión comunitaria para la construcción de resiliencia y capacidades adaptativas de los medios de vida de las comunidades del CBC.

Recomendaciones

Es importante en el diseño de la propuesta de Honduras al Fondo de Adaptación de precisar el problema principal en función de las poblaciones/comunidades/municipios en condiciones de vulnerabilidad que se consideraran los beneficiarios directos del proyecto en el CBC, y donde la teoría de cambio centra su atención.

En el análisis de causalidad resulta evidente que es fundamental ahondar en el estudio de los factores que afectan desde el ángulo social y cultural la degradación de los ecosistemas y los medios de vida, ya que si la propuesta central de la presente TdC es basar las acciones de cambio a través del binomio: adaptación basada en ecosistemas y la gestión comunitaria de procesos de adaptación en el CBC, esto implica también que se debe realizar un análisis exhaustivo de los procesos necesarios que deben construirse de forma diferenciada y focalizada para cada comunidad/municipio de forma individual y también de forma inter- e intra-comunitaria en el CBC en congruencia con los planes de desarrollo territorial de los municipios. Para tal efecto, se recomienda centrarse en un recurso catalizador como

es el recurso hídrico, el cual puede aunar los intereses y poderes de los actores clave en el CBC, y priorizar una agenda común.

En el análisis de causalidad para los desafíos agroforestales se debe garantizar coherencia y consistencia con la teoría de cambio dando prioridad estratégica al rol de los hombres y mujeres de las comunidades, y los el cumplimiento de la planificación territorial constructora de resiliencia por parte de los gobiernos locales del CBC.

Es fundamental tomar en consideración las conclusiones preliminares y ahondar aún mas en el análisis del enfoque de género en la propuesta de Honduras al FA, para que el enfoque de género sea efectivamente incluido en la estrategia de cambio del proyecto como un eje transversal en los objetivos troncales y generar cambios evidenciables en implementaciones que construyan de acuerdo a la experiencia y evidencia demostrada en el CBC, para que la estrategia de cambio sea efectiva en la inclusión de estrategias de género desde la base comunitaria, en congruencia con la construcción de capacidades adaptativas de las actividades productivas, y con el apoyo de los gobiernos locales.

Es importante en el análisis de resultados ahondar en el resultado social y cultural con estrategias de desarrollo orientadas a las poblaciones beneficiarias directas (i.e. comunidades). Esto es vital porque se considera que es este objetivo central es el que catalizará y permitirá la convergencia de los otros dos resultados previstos en el proyecto (institucional-territorial para la construcción de la resiliencia y gestión de conocimiento climático y ambiental a nivel local/regional del CBC).

Como parte de la teoría de cambio es fundamental realizar el ejercicio pormenorizado de los supuestos y riesgos más importantes del proyecto. Este ejercicio debe garantizar si el camino trazado de la estrategia bajo el enfoque basado en la gestión comunitaria, adaptación basada en ecosistemas y fortalecimiento de las capacidades de los gobiernos locales es el adecuado, o si ocupa ser calibrado, dependiendo del alcance del proyecto en términos financieros y tiempos previstos.

Para que el diseño de la propuesta tenga bases de coherencia y consistencia con el enfoque de la gestión comunitaria, gestión de adaptación basada en ecosistemas y la gestión de los gobiernos locales para la construcción de la resiliencia, el proceso de TdC no puede solamente quedar en la participación institucional y es fundamental que propicien los espacios de coordinación para que durante el diseño y elaboración de la propuesta, así como en su implementación, monitoreo y evaluación, se incluyan a las comunidades bajo un modelo de gestión basado en resultados, con un enfoque de género, con metodologías definidas de participación comunitaria y gestión local, focalizadas y diferenciadas al contexto de los municipios del CBC y de acuerdo a las capacidades de los gobiernos locales.

El trabajo y responsabilidad de la gestión de las comunidades locales y los gobiernos locales es de crear un entorno institucional y comunitario propicio que pueda abordar las funciones del ecosistema a través de los consejos de cuencas (incluyendo la remoción de las barreras jurídicas que éstos consejos tienen actualmente), y centrar el recurso agua como el pivote central de las estrategias de cambio.

Mantener los servicios de los ecosistemas en múltiples escalas, por ejemplo, replantación de laderas deforestadas, la gestión de los recursos hídricos a escala de toda la cuenca con la participación de múltiples partes interesadas (sector privado, academia, comunidades, gobiernos locales, etc.) como una campaña sostenida y vigorosa, la restauración y la replantación de árboles tradicionales o nuevas especies bajo el enfoque de adaptación basada en ecosistemas, entre otras.

Aumentar la resiliencia de los ecosistemas mediante la eliminación de tensiones no climáticas y la promoción de la gestión y restauración de ecosistemas. Esto es importante para mantener el funcionamiento del ecosistema y la prestación de servicios: Conservar y restaurar los bosques mediante la prevención de la fragmentación del bosque, la restauración de corredores, evitando el exceso de uso de los recursos y la reducción de los incendios y la plaga del gorgojo en recursos forestales con riesgo de aumentar los efectos de las plagas, y el mal/inadecuado o nulo manejo forestal en el CBC.

La adopción de un enfoque preventivo ante las vulnerabilidades es importante es importante para reducir incertidumbre sobre cómo afectará el cambio climático (y otros factores de estrés) a los ecosistemas y las comunidades del CBC.

Facilitar los procesos de construcción de capacidades en las comunidades y los gobiernos locales para la adaptación de los ecosistemas (reconociendo que los ecosistemas y los recursos naturales no permanecen inmóviles). Por ejemplo, la provisión de corredores forestales a lo largo de gradientes para ayudar a las especies clave, como polinizadores, dispersores de semillas y plantas medicinales, migran al subir las temperaturas.

Integrar el conocimiento local y tradicional con los conocimientos científicos sobre los recursos naturales / gestión de los ecosistemas de los medios de vida / bienestar humano.

Fomentar las asociaciones que agrupan a las comunidades locales y los tomadores de decisiones con las comunidades de reducción de desarrollo, de conservación y de riesgo de desastres de la práctica.

Asegurar la extensión completa de servicios y valores de los ecosistemas está incluido en ninguna evaluación de los costes y beneficios para la planificación de la adaptación.

Controlar y gestionar el cambio del ecosistema en curso para apoyar la resiliencia del ecosistema humano y la adaptación.

Crear una plataforma de gestión de información y conocimiento que promueva la integración del conocimiento local, con el conocimiento técnico-científico, para crear un banco de datos estadísticos cualitativos y cuantitativos relevantes para medir los cambios y evidencias generadas conforme se avance con el cumplimiento de los objetivos de la propuesta de Honduras al FA.

Conclusiones y prospectiva

Hay una tendencia global cada vez más marcada de que las actividades de adaptación locales tienden a combinar enfoques de adaptación basada en ecosistemas (AbE) y adaptación basada en la gestión comunitaria (AbGC). Las organizaciones orientadas al desarrollo están adoptando cada vez más hacia los enfoques integrados, lo cual rompe la división artificial entre la AbE y la AbGC, y se basa en las fortalezas de ambos enfoque para abordar las deficiencias de la corriente principal de arriba hacia abajo, y crear un enfoque de abajo hacia arriba para la construcción de capacidades adaptativas y reducción de vulnerabilidades den comunidades y ecosistemas.

Una mejor integración también se está produciendo a nivel internacional y nacional. Los procesos de la CMNUCC, como el Marco de Adaptación de Cancún, el Plan de Trabajo de Nairobi, el Fondo de Adaptación, REDD +, planes nacionales de adaptación, y los programas nacionales de adaptación y mitigación (NAPAs y NAMAs), cada vez más reconocen y apoyan el papel de la gestión de los recursos naturales como estrategia de adaptación, con un enfoque diferenciado y focalizado hacia el rol de las comunidades y gobiernos locales en dichos procesos. Algunas políticas nacionales sobre el

cambio climático y las estrategias y políticas sectoriales en Honduras (por ejemplo, el agua, los bosques, suelo y las zonas costeras) también reconocen el papel que los ecosistemas juegan en la adaptación, en complementariedad con las comunidades adyacentes a los mismos.

Asimismo, muchas comunidades que son vulnerables a los impactos del cambio climático han hecho frente a la variabilidad del clima durante décadas de forma innata y bajo procesos de aprendiendo-haciendo, y tienen una riqueza de conocimientos y prácticas sobre cómo adaptarse. La adaptación comunitaria al cambio climático se centra en la capacitación de las comunidades para usar sus propios procesos de conocimiento y toma de decisiones para accionar y tomar medidas, con el apoyo financiero y técnico-operativo de los gobiernos locales.

La investigación sobre los vínculos entre la adaptación basada en ecosistemas y la adaptación basada en la comunidad es una disciplina de investigación y práctica relativamente emergente, que ha ido evolucionando por separado, pero que durante la última década se están uniendo en la teoría y la práctica.

Los enfoques basados en la adaptación de los ecosistemas (AbE) implican el uso de biodiversidad y servicios ecosistémicos para ayudar a las personas a adaptarse al cambio climático y sus efectos. Los que son más vulnerables al cambio climático a menudo son altamente dependientes del entorno natural y sus medios de vida están intrínsecamente ligados a los servicios y bienes de los ecosistemas, y por ende, el resguardo de los mismos yace en el centro de muchas estrategias de adaptación.

La adaptación basada en los ecosistemas (AbE) y la adaptación basada en la gestión comunitaria (AbGC) han ganado fuerza en los últimos años, y los practicantes de desarrollo y los planificadores están promoviendo cada vez más un enfoque integrado de la AbE y la AbGC. Estos enfoques integrados tienen el potencial de beneficiar a las personas más pobres que están más afectados por el cambio climático y también de manera desproporcionada dependen de los ecosistemas y sus servicios.

El manejo comunitario de recursos naturales fue visto inicialmente en parte como respuesta a un problema ambiental. Sin embargo, se considera actualmente como un programa de desarrollo institucional u organizacional mediante el cual se utilizan los recursos naturales para potenciar a las personas locales económicamente. Este es el resultado de los procesos e instituciones donde el enfoque se centra en la creación de espacios para la participación directa y práctica de los hombres y mujeres de las comunidades, que incumben derechos y la autoridad de gestión del gobierno central y local, y su relación directa hacia mejoras en las comunidades, en especial en áreas de gestión basada en derechos, tal y como , la tenencia de tierra, la "propiedad" colectiva de los recursos naturales, distribución equitativa en las comunidades locales de los beneficios de los bienes y servicios ecosistémicos, y el establecimiento de mecanismos para asegurar la provisión de beneficios tangibles para las comunidades para el acceso de recursos vitales como, por ejemplo, el agua.

La AbGC no solo hace hincapié en la importancia de las herramientas de participación, sino que también debe desarrollar la capacidad de los profesionales locales para forjar fuertes vínculos con las estructuras políticas más altas para lograr esto. La AbGC no puede operar exclusivamente en el ámbito de la comunidad, debido a factores externos, como la política regional, nacional e internacional, los compromisos locales ocupan de herramientas de abogacía y fortalecimiento de capacidades para movilizar recursos financieros, técnicos, operativos, normativos y administrativos para programas de escala en áreas, tal y como: irrigación, silvicultura o la cría de ganado sostenible, agroforestería o la construcción de resiliencia de los medios de vida por medio de sistemas de agricultura inteligente.

Aquellos que promueven soluciones integradas de AbGC y AbE hacen hincapié en la importancia de participar en las instituciones que operan en los niveles centrales y locales de gobernanza, para construir en base a la vocación de los ecosistemas y de las comunidades, estructuras sociales y administrativas, con capital humano, social y físico, que sostengan un modelo de gobernanza apropiado y resiliente. Ante esta propuesta se requiere la consideración de la gobernabilidad y la política en el contexto institucional de Honduras y del CBC.

La ampliación de un modelo de gobernanza local para la construcción de capacidades adaptativas es esencial para asegurar que los beneficios de la adaptación pueda llegar a la mayor cantidad de personas pobres y vulnerables posibles y asegurar que los pilotajes propuestos en la propuesta de Honduras al FA tenga congruencia que las políticas y programas de Estado y de Gobierno (e.g. la política de paisajes productivos). Por ende, el proceso también debe centrarse en las cuestiones institucionales y de gobierno más amplias necesarias para asegurar que el impacto que se logre a escala local, tenga la posibilidad de una mayor escala. Incluso aquellas iniciativas que trabajan en estrecha colaboración con los gobiernos locales, muchas veces carecen de la participación multisectorial en los niveles superiores necesarios para maximizar el impacto, y por ende el modelo de abordaje tiene que ser coherente con el contexto y cautelos con su línea de ambición. A esto se suma que más allá de la escala del proyecto, se requiere la incorporación de actividades específicas para armonizar, calibrar, actualizr o tamizar el un marco institucional y normativo propicio que facilite la replicación en diferentes contextos del modelo de abordaje de AbCG y AbE para el CBC. El diálogo y la colaboración entre los diferentes sectores y ministerios es también esencial.

Un tema vital en este acercamiento es tomar en cuenta que la propiedad de la tierra es a menudo un desafío fundamental, y que si bien se pueden centrar esfuerzos para hacer del recurso hídrico el núcleo de las acciones, habrán temas como la tenencia de la tierra que imposibiliten o limiten hacer esto el caso. Por eso es necesario que la integración de la adaptación desde la óptica local se acerque a las estructuras locales, regionales y nacionales de gobierno, políticas, leyes y procesos de planificación desde un enfoque de ordenamiento y planificación territorial. La mejor manera de apoyar esto es acercando los procesos exitosos de las bases comunitarias y gobiernos locales a las estructuras de toma de decisiones a nivel macro, para construir un puente de diálogo entre ambas arenas de trabajo.

ANNEX 10: COMMUNITY CONSULTATIONS

SUMMARY OF THE COMMUNITY CONSULTATIONS

1. INTRODUCCION

Mi Ambiente y PNUD están preparando una propuesta para el Fondo de Adaptación denominada Adaptación Basada en Ecosistemas y Comunidades en el Corredor Boscoso Central, que tiene por objetivo de incrementar la resiliencia climática de las comunidades más vulnerables del Corredor Boscoso Central y la capacidad de adaptación de sus municipios con énfasis en asegurar medios de vida y la continuidad de la prestación de bienes y servicios ecosistémicos para la ciudad de Tegucigalpa y alrededores.

La propuesta ha sido puesta en consulta en varios espacios tanto técnicos como comunitarios, siendo uno de los principales, los espacios locales en los municipios involucrados en el Corredor Boscoso central.

En el presente documento se resume los resultados de estas consultas, realizadas en 12 municipios en el periodo del 6 al 15 de julio del 2016, cuyas memorias individuales se presentan en el Anexo 1.

2. METODOLOGIA

2.1 Organización de la Consulta

La consulta fue organizada con el apoyo, principalmente, de los Alcaldes y encargados de la Unidad Municipal Ambiental de los Municipios del Corredor Boscoso Central.

2.2 Guion Metodológico

La metodología consistió en hacer un espacio introductorio de reflexión sobre cambio climático; seguidamente fueron presentados los componentes de la propuesta; sobre la misma, se rescató la percepción de los pobladores a través de: a) preguntas generadoras (línea base, que se puede hacer, donde, con quienes, barreras y dificultades); y b) discusión abierta

3. RESULTADOS DE LAS CONSULTAS

Se realizó la consulta en 12 Municipios, con una participación de 265 personas que representaron a 84 comunidades. El 35% de los participantes en la consulta fueron mujeres.

Cabe mencionar que la literatura reporta la existencia de poblaciones de ascendencia lenca solamente en tres municipios (Lepaterique, Santa Ana y Ojojona); en el caso de Lepaterique todos los participantes en la consulta se consideran de ascendencia lencas, a pesar de que no se encontraban representantes de organizaciones indígenas; en Santa Ana asistieron dos representantes de organización lenca y en Ojojona participaron 8 representantes indígenas.



Es importantes mencionar que se contó con representación de 90 instituciones/organizaciones, entre los que se pueden citar: Patronatos, Juntas de Agua, Centros de Salud, Escuelas Agrícola, Municipalidades y sus diferentes Unidades (UMAs, Catastro, Justicia Municipal, Oficina de la Mujer), Comisiones de Transparencia, Centro de salud Cuesta Grande, Consejo Consultivo Forestal, Dirección de Educación, ONGs Internacionales y Cooperantes (World Vision, Habitat para la Humanidad, FAO), Cooperativas agroforestales, CONEANFO (Comisión Nacional para el Desarrollo de la Educación No Formal), Red de Mujeres, CODEL, Iglesias, ONGs comanejadoras, Destacamento Militar, Fundaciones sociales, Comité pro desarrollo, Prestadores de Servicio de Agua, Bomberos, Consejo de Cuencas, Comités de Ambiente, Proyectos Forestales, Auxiliares , Comisión ciudadana de transparencia, Instituciones de Gobierno (ICF), Asociaciones de Desarrollo, Proyectos comunitarios (Guías Familias, Mejores Familias), Representante de Organizaciones Indígenas: Federación Hondureña de Indígenas Lencas (FHONDIL)

4. CONCLUSIONES

Las personas que asistieron al taller de consultas, conocen muy bien de la estrecha relación que existe entre el agua y el bosque y el cambio climático por lo que mostraron igual importancia para ambos sectores.

Las comunidades tienen claridad en lo que hay que hacer, pero se ven limitadas en cuanto a aspectos de gobernanza, recursos financieros, apoyo de gobiernos municipales y centrales, entre otros; por lo que la propuesta presentada resulta altamente pertinente.

Doña Brenda: Don Ramiro: Declarar y registrar cada microcuerna del municipio para tener buen manejo del agua

Doña Odilia: Participación ciudadana (Involucrar más) Crear y seguir manteniendo los enlaces con la fiscalía del ambiente, Vigilancia zonas del bosque, lograr que el SANAA capacite a los beneficiarios, obtener ayuda por parte de instituciones , Capacitar a los niños y jóvenes de los diferentes centros educativos en el buen manejo y protección del bosque y cuidado de las micro cuencas

Don Víctor: Realizar más trabajos de campo, por parte de la fiscalía del ambiente, hacer cumplir las leyes, lograr que COPECO apoye en cosas técnicas, capacitar a los ciudadanos

Doña Bessy: Mantener mejor coordinación con las instituciones

Los ejercicios realizados, además de la consulta, representaron valiosos espacios para la reflexión y el conocimiento de la dinámica local, lo que sin duda representa un plus, al momento de la implementación de un Proyecto.

Los participantes validaron una serie de barreras y limitantes en los aspectos de gobernanza y participación, que precisamente son abordados en la propuesta al Fondo de Adaptación , como ser: falta de conocimiento y cumplimiento dela legislación, falta de supervisión de las autoridades, falta de instructivos a seguir, falta de apoyo del Gobierno Central, falta de liderazgo, gobierno local muy pasivos, burocracia para probación de permisos, falta de involucramiento de dueños de propiedades privadas, poco o ninguna asistencia a productores sobre el no uso del fuego, falta de vigilancia y monitoreo; poco involucramiento comunitario (se considera que el pago de cuadrillas que desmotivan el voluntariado), falta de involucramiento de la juventud y de los niños y de las iglesias, poco involucramiento e incidencia de las mujeres, resentimientos de la población ante restricciones de uso no comercial del bosque

Se identificaron barreras respecto a los mecanismos financieros, incentivos, y recursos económicos para las inversiones, temas que también son abordado en la propuesta: falta de mecanismo de compensación ambiental. Al respecto, algunas citas muy representativas : “-Ojojona abastece tres represas que son la Concepción, Nacaome y Petacón, sin embargo no se reciben retribuciones, esto se puede deber a una débil gestión local y de la misma autoridad” . “Existe urgencia de generar arreglos interinstitucionales de cara al aprovechamiento del agua-por ejemplo el SANAA, extrae agua para el Distrito Central y no se facilitan volúmenes para las comunidades con escases). “Un alto descontento hacia la capital, ya que no consideran justo que la capital no retribuya por la cantidad de agua que recibe del municipio”. En este ámbito también fueron abordados el tema de las tarifa de agua baja en algunas comunidades y falta de involucramiento de los abonados.

Asimismo fueron planteadas amenazas generales hacia el recurso bosque, así como necesidades muy puntuales, especialmente para el tema de activos para hogares así como para parcelas, lo que también es objeto de la propuesta presentada:

Se están perdiendo las fuentes de agua en el municipio por tanta degradación que está sufriendo el bosque en la actualidad; existencia de enormes cantidades de biomasa, que representan un riesgo para la ocurrencia de incendios forestales; amenaza de restauración con especies que no se adaptan por ejemplo el Eucalipto; avance de plaga, se están reactivando brotes; periodos largos de sequías; cambio de uso del área afectada para expansión urbanística; no se respetan las zonas delimitadas; ausencia de plan de acción de la microcuenca

Falta potabilización de agua en aproximadamente un 5- 30% de la población; falta de reservorios para abastecimiento en zonas agrícolas; sistemas de agua potable obsoletos y que están muy por debajo de las demandas; no existen cosechas de agua que ayuden en épocas de sequía; se carece de pilas para captación de agua

Por otro lado, recurrentemente el tema de financiamiento es planteado a través de : falta de créditos y financiamiento para establecer sistemas de riego; falta de recursos para las actividades de limpieza, falta de fondos directos a cooperativas; falta de mercado con precios justos; no hay

acceso a la banca (préstamos blandos); no hay estímulos, incentivos. Evidenciando potencialidades como ser el hecho de que la comunidad puede aportar contraparte pero no lo suficiente para ejecutarlo

Otro elemento validado fue el tema Gestión de Conocimiento, que fue planteado en términos de: Poca investigación, falta de conocimiento sobre el método de control, falta de conocimiento sobre tecnologías, “No se cree en la regeneración, se confía más en los viveros”, se carece de tecnologías para mejorar la captación de agua para consumo, entre otros.

Es importante destacar que también los participantes identificaron importantes potencialidades y consideraciones que representan un entorno favorable para el Proyecto propuesto:

Crear conciencia en los agricultores para el buen manejo de riego. El uso de tecnologías, lograr buen tratamiento de agua y buen uso, la municipalidad organizar y apoyar técnicamente a la sociedad civil, crear conciencia por parte de la corporación municipal

- Los participantes están conscientes de la problemática y priorizan la necesidad de practicar el voluntariado, tanto para los temas de restauración como protección.
- Existen espacios de coordinación avanzados, lo que puede facilitar el desarrollo de las actividades; los espacios mayormente identificados son las Juntas de agua, patronatos, existiendo también espacios específicos como red de Mujeres, Cajas rurales, Cooperativas forestales.
- La participación de organizaciones indígenas, representa una oportunidad para considerar la potenciación de “las tecnologías ancestrales para la agricultura”
- Existe una explícita recomendación de considerar el trabajo con mujeres y jóvenes.

5. ANEXOS

1. Carpeta con Informes de las Consultas
2. Carpeta con Constancias de las Consultas

COMMUNITY CONSULTATION OF EACH MUNICIPALITY OF THE CFC

Cantarranas

I. GENERALIDADES

Participantes

Total: 16	Hombres: 12	Mujeres: 4	Indigenas: Hombres: Mujeres:
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Instituciones participantes:

- Alcaldía Municipal (UMA, Alcalde y Dirección de Justicia Municipal)
- Patronato Promoveramiento de Chandala
- Junta de Agua, El Porvenir-Guapinol
- Junta de Agua de Pajarillos
- Junta de Agua de Yamaguare
- Junta de Agua de El Naranjal
- Junta de Agua de El Carbón
- Junta de Agua de El Zarzal
- Centro de Salud Municipal

Espacios de coordinación existentes: Cajas rurales, asociación de juntas de agua y red de mujeres.

Grupos organizados existentes: (Productivos y no Productivos)

- 30 Juntas de Agua
- 27 Patronatos comunales
- Red de mujeres
- Cajas rurales
- Cajas Rurales (apoyadas por FUNDER), pajarillos, Tomatín, Guaricayan, Zarzal, Joyas del Carballo, Cofradía, El Ocote, Yamaguare, Sursular, San Luis; algunas se han logrado agrupar
- **Cafetaleros** en Joyas del Carballo, Sursular, Delicias y el Chaguite
- Azucarera 3 Valles: provee de empleo en tiempo de zafra
- CODELES
- Cuerpo de Bomberos
- Brigada global
- Fundación Amigos de La Tigría

Medios de Vida de la Población:

- Producción de azúcar (de la caña): emplea a la población
- Agricultura (de subsistencia y exportación), aproximadamente el 60%
- Ganadería (venden a empresas como la sula)
- Fábricas de dulces (Economía informal de dulces y rosquillas)
- Fábricas de rosquillas
- Turismo (balnearios)
- Aprovechamiento forestal mediante planes de manejo

II. REVISION DE PRODUCTOS DEL CONCEPTO DE PROYECTO

Matriz completada

MATRIZ N° 1 REVISIÓN DE PRODUCTOS

<i>Producto del Componente 2</i>	<i>¿Qué hay en el municipio?</i>	<i>¿Cómo podemos hacerlo?</i>	<i>¿Donde?</i>	<i>¿Con quiénes?*</i>	<i>Barreras y dificultades</i>
<p>1.- Restauración del bosque de pino en el CBC de 1,000 hectáreas para fortalecer y proteger servicios ecosistémicos y medios de vida.</p> <p>(Preguntas generadoras:</p> <p>¿Cómo les ha afectado la plaga (económicamente, salud, clima, etc.)?, ¿Hay Cooperativas Forestales?, ¿De qué viven?, ¿Tienen acceso al crédito?)</p>	<ul style="list-style-type: none"> -Se ha iniciado a reforestar. -Alta presencia de plaga. -Agricultura Ganadería. -Restauración por azucarera 3 valles. -Un vivero en plan entre la alcaldía y la azucarera 3 Valles. 	<ul style="list-style-type: none"> -Empoderar a la población. -Capacitación. -Formar e involucrar más liderar. -Trabajar con aldeas mancomunadas (promover la unión de esfuerzos entre comunidades). -Conformar cooperativas forestales para que aprovechen y a la vez protejan su bosque. -Viveros con escuelas, colegios, productores y comunidades. 	<ul style="list-style-type: none"> -Las zonas de recarga de las tomas de agua -Zonas deforestadas en zonas de ladera 	<ul style="list-style-type: none"> -Gobierno local -Gobierno central -Sector de educación -Todas las comunidades y fuerzas vivas -Empresas privadas -Sector salud -Agricultores y ganaderos -Iglesias, patronatos, cajas rurales. 	<ul style="list-style-type: none"> -Falta de financiamiento. -Falta de voluntad de las comunidades. -Apatía de la población a integrar y trabajar en las organizaciones. -Poco liderazgo, falta de integración de nuevos líderes. -Gobiernos locales más reactivos que proactivos. -Acciones muy pasivas del gobierno local, se requiere que ellos estén al frente y organizar a las comunidades. -Falta de involucramiento de la juventud y de los niños y de las iglesias. -Poco involucramiento e incidencia de las mujeres.

<i>Producto del Componente 2</i>	<i>¿Qué hay en el municipio?</i>	<i>¿Cómo podemos hacerlo?</i>	<i>¿Dónde?</i>	<i>¿Con quiénes?*</i>	<i>Barreras y dificultades</i>
2.- Protección y prevención contra incendios, plagas, enfermedades y tala ilegal.	-Cuadrillas de control de pagas -Cuadrillas de vigilancia -Recurrencia de incendios y afectaciones de plagas en zonas de recarga hídrica Tala ilegal en zonas altas (por cambio de uso-siembra de café).	-Rondas preventivas en zonas de recurrencia -Control de tala y cacería	-Zonas de recarga hídrica- -Reserva Biológica El Chile y Parque Nacional La Tigra. -La mayor parte del bosque es privado. La mayor parte de las áreas que se queman son en los terrenos privados.	-CODELES -Cuerpo de bomberos -Cuadrillas de AMITIGRA, de la municipalidad y de la Azucarera -Destacamento (se ha observado una presencia efectiva de los destacamentos militares para los temas de tala ilegal).	-La gran barrera, falta de voluntariado. -Se considera que el pago de cuadrillas que desmotivan el voluntariado. -Alta acumulación de biomasa que pone de manifiesto el riesgo a incendios forestales. -Reacción negativa de la población, sino pueden sacar la madera por lo cual deciden quemar el bosque. -Bajo nivel de participación de la población en combate de incendios. -Reacción negativa de la población a participar en el combate, ante las restricciones de aprovechamiento no comercial por las comunidades -Burocracia para aprobar permisos de extracción de la madera.

<i>Producto del Componente 2</i>	<i>¿Qué hay en el municipio?</i>	<i>¿Cómo podemos hacerlo?</i>	<i>¿Dónde?</i>	<i>¿Con quiénes?*</i>	<i>Barreras y dificultades</i>
					<ul style="list-style-type: none"> -Falta de Aplicación de leyes -Irregularidades en planes de manejo forestal -Difícil acceso a zonas por la topografía, lo que limita la prevención y combate de incendios. -Se ha perdido la figura de guardas forestales.
3.- Diseño e implementación de medidas y tecnologías de adaptación al cambio climático para el consumo responsable de agua y bosque. (Preguntas generadoras: ¿Qué tipo de sistemas de riego utilizan?)	<ul style="list-style-type: none"> -Los pequeños productores tienen riego por goteo empírico. -Sistemas de agua por gravedad. -Existe sistemas por bombeo en dos comunidades (cerro Bonito y Chandala, solo para el tiempo de verano). -La municipalidad posee un banco de cloro para potabilizar el agua. 	<ul style="list-style-type: none"> -Promover la gestión local. -Capacitando a las Juntas de Agua. -Empoderar a los actores. -Buscar fuentes alternas de agua potable y para riego. 	<ul style="list-style-type: none"> -Zonas agrícolas. -Zonas de recarga hídrica y tomas de agua. 	<ul style="list-style-type: none"> -Juntas de agua. -Agricultores. -Gobierno central. -Cooperantes -Gobierno central. 	<ul style="list-style-type: none"> -Falta de mecanismos financieros. -Se carece de tecnologías para mejorar la captación de agua para consumo. Un 5% de la población carecen de sistemas de agua potable. Hay contadores en el Naranjal, pero no los utilizan. Vida útil de los ecofogones muy corta que demanda inversión para cambio de piezas, lo cual para algunas familias de bajos recursos se vuelve difícil. Falta de reservorios para abastecimiento en zonas agrícolas.

<i>Producto del Componente 2</i>	<i>¿Qué hay en el municipio?</i>	<i>¿Cómo podemos hacerlo?</i>	<i>¿Donde?</i>	<i>¿Con quiénes?*</i>	<i>Barreras y dificultades</i>
	<ul style="list-style-type: none"> -En el Naranjal existe un sistema de agua que posee una planta de filtración (marca FIME) -Existen racionamientos por efectos de la crisis de agua en época de verano -Existe una cobertura total de los ecofogones en el municipio (la alcaldía ha invertido con 4,500 ecofogones- modelo Mirador 2x3) 				<p>Sistemas de agua potable obsoletos y que están muy por debajo de las demandas.</p> <p>No existen cosechas de agua que ayuden en épocas de sequía.</p>

III. Información varia

Comentarios por parte de los participantes sobre cambio climático y sus afectaciones:

- Manifestaron que cambio climático era una modificación en el clima , debido a la variabilidad , que en el año solo se presentaban dos estaciones como ser invierno y verano el cual todo esto lo provocaba el ser humano.
- Antes nuestros ancestros se dirigían por las cabañuelas, hoy en día no sabemos cuándo lloverá.
- El cambio climático es una modificación al clima.
- Quienes provocan los cambios en el clima son las intervenciones humanas sobre el medio ambiente.
- Los incendios han afectado el cambio climático.
- Una vez que se detecta la plaga se debe quemar para evitar la propagación de la plaga.
- Se debe cambiar la metodología de prevenir en vez de combatir, para lo cual es importante capacitar a las comunidades en la detección de la plaga, la población no sabe que es lo que está pasando en su comunidad
- Los municipios sufrirán enfermedades ante los cambios climáticos
- Es deber del gobierno capacitar a las comunidades.
- Los fenómenos que provoca el cambio Climático son inundaciones, sequias, fenómeno del niño y la niña.
- En cuanto a que sabían sobre cambio climático manifestaron que la temperatura ha aumentado, que había variación de la canícula y presencia de muchas plagas, enfatizaron que los más afectados por el cambio climático son los niños, ancianos, comunidades más pobres debido a la falta de oportunidades, otro sector afectado en de la agricultura debido a la sequía los cultivos no se aprovechan, afecta también al sector ganadero , así como también a toda la población que vive en zonas en riesgo (zonas altas deslizamientos por lluvias y zonas bajas por inundaciones y concluyeron que la población en general esa muy afectada, directamente como personas nos afecta el cambio climático en la economía, en la salud en general por tanta enfermedad, plagas así como también la infraestructura de nuestra comunidad es afectada.
- Enfermedades como leishmaniasis, se incrementan con la deforestación
- La deforestación en zonas de riesgo afectará con deslizamiento.
- Participante recuerda que hace años se combatió el gorgojo haciendo uso de un avión y que arrojaban humo...???
- Existe un alto potencial de mujeres muy dinámicas, sin embargo, se debe promover un mayor involucramiento.

Que afecta el cambio climático y a quienes:

- Afecta la salud y la economía del país (infraestructura, producción-agricultura-ganadería).
- Los sectores más afectados por el cambio climático son las comunidades de bajos recursos, niños, ancianos, personas que viven en zonas de alto riesgo.
- Nuestra comunidad (pajarillos) ha sido afectada por el cambio climático ya que en las zonas de recarga de nuestras tomas de agua se ha talado por la plaga del gorgojo, antes se

obtenían 40 galones/minuto, hoy en día únicamente 20 gl/min; se ha reducido en un 50% la cantidad de agua en los caudales de nuestras comunidades.

- En lo que respecta a que fenómenos provoca el cambio climático manifestaron que, el fenómeno del niño y niña, las inundaciones, había sequía, reducción del agua y que todo esto afectaba su comunidad

Consideraciones sobre la plaga del gorgojo del pino

- No se ha contado con un buen nivel de capacitación de los miembros de las cuadrillas que participan en el control.
- Participantes no comparten el método de control, ya que no han funcionado los anillos o franjas de protección.
- El control no ha sido efectivo ya que se han incluido en las cuadrillas personales sin experiencia.
- Hay graves afectaciones en las áreas protegidas de La Tigra y El Chile.
- Las plagas se adaptan al clima, como ejemplo el zancudo del Dengue se está adaptando a climas templados

IV. Conclusiones

- Existe una buena estructura organizativa que debe potenciarse y fortalecerse.
- La asistencia e intervenciones en la consulta es equilibrada entre hombres y mujeres.
- Existe un desinterés de la población, se está perdiendo el voluntariado, ya que no hay un nivel de conciencia sobre la problemática.
- Existe poco liderazgo y ausencia de nuevos líderes.
- Existe un alto interés en involucrar a los jóvenes y niños, ya que en la actualidad se carece de involucramiento y carencia de líderes nuevos que integren las organizaciones.

V. Recomendaciones

- Controlar la cantidad de agua que se extrae para el Distrito Central, ya que las comunidades únicamente hacen uso del rebalse.
- El gobierno debe capacitar a las comunidades en el manejo de la plaga forestal, a fin de lograr una detección y atención proactiva.
- Existe urgencia de generar arreglos interinstitucionales de cara al aprovechamiento del agua (por ejemplo, el SANAA, extrae agua para el Distrito Central y no se facilitan volúmenes para las comunidades con escases).
- Potenciar las organizaciones que ya existen dentro de las iglesias.
- Existe un instrumento legal que es el de pagos por servicios ecosistémicos que las juntas de agua deben utilizar para conservar sus zonas de recarga.
- Solicitar los planes de salvamento por grupo, con toda la legalidad y los derechos de los propietarios.
- Se requiere motivar e incentivar ampliamente a la población.

Anexo1: Lista de asistencia (adjunta)

Estado de Asistencia / Evento: Taller de Consulta de propuesta de Adaptación Basada en Ecosistemas y Comunidades en el Corredor Boscoso Central							
	Nombre del Participante	Mujer	Hombre	Municipio/Institución	Cargo	Teléfono	Firma
1	Fuentes Eleuterio Yeguado	/		Soc Sociedad Flores	Presidente local	9724-83-04	Fuentes Eleuterio Yeguado
2	José Amílcar Castell	/		Ayuntamiento de Flores	Gobernador	32172-08036	José Amílcar Castell
3	Dora Aracely Sandoval			Junta de agua Zarzal Cantarranas	Fiscal	8897 7785	Dora Aracely
4	Wendy Patricia Benítez	/		Zarzal Cantarranas	Secretaria	3223 92-07	Wendy Patricia Benítez
5	Juan Carlos Monzo G.	/		Chamula Cantarranas	Secretario	31-69-03-53	Juan Carlos Monzo G.
6	Reinaldo Costillanos	/		Bomberos	Auxiliar de Bomberos	9833-9449	Reinaldo Costillanos
7	Alvaro Nahin G.	/		Pajonío	Fuentenera	95 3660832	Alvaro Nahin G.
8	Gabriel Pineda	/		Palmarinas	Tesorero	98-03-7760	Gabriel Pineda
9	Luisenia Rosa	/		Tampiquán		99-59-75-56	Luisenia Rosa
10	Santos Salgado	/		Carbon	Presidente		-Santos Salgado
11	Patricia Velasquez	/		Cesoma Cantarranas	TSA	33891222	Patricia Velasquez
12	Oriace Alicia Godoy	/		Salud	Médico Municipal	32 97 9516	Oriace Alicia Godoy
13	Oscar R Regos	/		U.M.A. Capitales	U.M.A	99415044	Oscar R Regos
14	Claudia Regino Alvarado			Zarzal Cantarranas	Tesorera	33-32-02-45	Claudia Regino Alvarado
15	Sandra Gómez	/		Vale de Angeles	Consejo Cuenca	-	Sandra Gómez
16	Hector Antonio G.	/		Cantarranas	Dirección de Justicia	880071755	Hector Antonio G.
17	Claudia Mendoza	/		Mi Ambiente	Facilitadora	9585-4955	Claudia Mendoza
18	Marwin Jose Figueroa	/		Mi Ambiente IPNCC	Secretario	9939-6405	Marwin Jose Figueroa

Fotografías del evento

	
Participantes brindando comentarios en taller de consulta comunitaria en municipio de Cantarranas	Desarrollo del ejercicio de consulta comunitaria en Cantarranas
	
Desarrollo del ejercicio de consulta comunitaria en municipio de Cantarranas	Material generado con la consulta comunitaria en municipio de Cantarranas

Ojojona

I. GENERALIDADES

Comunidades representadas: El Tunel, Santa Elena, Zarabanda, Loma Alta Norte, Montaña Alta, La Pancha, El Chimbo, La Sabaneta, Agua Dormida, Montañita El Eden y Casco Urbano.

Participantes

Total: 27	Hombres: 22	Mujeres: 5	Indigenas: Hombres: 8 Mujeres:
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Instituciones participantes:

- Alcaldía Municipal (UMA, Oficina de la Mujer, Regidores, Alcalde Municipal, Unidad técnica Municipal)
- Patronato del casco urbano de Ojojona
- Dirección de Educación
- World Vision
- Patronato de Yucanteca
- CONEANFO (Comisión Nacional para el Desarrollo de la Educación No Formal)
- Pastoral Ecológica
- Cooperativa de Ojojona
- Cooperativa Indios
- Cooperativa Saracaran

Espacios de coordinación existentes: Juntas de agua, patronatos y cooperativas forestales

Grupos organizados existentes: (Productivos y no Productivos)

Juntas de agua (27 en total), Patronatos, Red de Mujeres organizada, 5 cooperativas forestales constituidas legalmente (benefician 450 familias aproximadamente),

Medios de Vida de la Población:

- Extracción de resina
- Aprovechamiento de leña y carbón
- Fabricación de muebles rústicos y acabados
- Artesanías de arcilla, acícula de pino y planta de tule
- Hortalizas
- Caficultura
- Turismo (está en surgimiento mediante los servicios gastronómicos y venta de artesanía)

II. REVISION DE PRODUCTOS DEL CONCEPTO DE PROYECTO

Matriz completada

MATRIZ N° 1 REVISIÓN DE PRODUCTOS

Producto del Componente 2	¿Qué hay en el municipio?	¿Cómo podemos hacerlo?	¿Dónde?	¿Con quiénes?*	Barreras y dificultades
<p>1.- Restauración del bosque de pino en el CBC de 1,000 hectáreas para fortalecer y proteger servicios ecosistémicos y medios de vida.</p> <p>(Preguntas generadoras: ¿Cómo les ha afectado la plaga (económicamente, salud, clima, etc.)?, ¿Hay Cooperativas Forestales?, ¿De qué viven?, ¿Tienen acceso al crédito?)</p>	<ul style="list-style-type: none"> -Plan de Reforestación Municipal. -Hay un vivero Municipal -Se cuenta con un plan de acción para reforestar a nivel municipal -Existe coordinación entre educación y la iniciativa PLANTATON, para lo cual con las escuela cada mes realizan -Limpieza y mantenimiento de áreas con regeneración natural. -Jornadas de plantación con voluntarios de la universidad 	<ul style="list-style-type: none"> -Formando comitiva para la restauración de las áreas -Inspeccionando todas las áreas afectadas. -Reforestación, con seguimiento y protección de las áreas plantadas. -Incorporando a las iglesias (Iglesia pastoral), ya que son grupos organizados -Implementando un plan de acción 	<ul style="list-style-type: none"> Zona de recarga Payaguare, Agua Blanca, Quiscamote, Chagüite Grande; ya que son las más afectadas 	<ul style="list-style-type: none"> ICF quien dona plantas, A través de la UMA se ha coordinado con alumnos de la universidad y escuelas -Proyecto Clifor , GIZ, -Plantaton –ICF. Municipalidad. Educación Estudiantes locales y universitarios Pastoral ecología, Iglesias. -Acenhsao -Cliflor -ICF -Juntas de agua 	<ul style="list-style-type: none"> -Extracción de biomasa -Restauración con especies que no se adaptan por ejemplo el Eucalipto -No ha existido una motivación adecuada. -Poco involucramiento comunitario. -Falta de mecanismo adecuados para concientizar la población. (auxiliarse de la psicología) -Falta de aplicación de la ley que presione el involucramiento de la población ante un plan de emergencia como es la afectación de plaga del gorgojo.

Producto del Componente 2	¿Qué hay en el municipio?	¿Cómo podemos hacerlo?	¿Dónde?	¿Con quiénes?*	Barreras y dificultades
2.- Protección y prevención contra incendios, plagas, enfermedades y tala ilegal.	<p>-Gestiones para el aprovechamiento y extracción de madera a partir de esta fecha la UMA podrá extender licencias no comerciales en todo el municipio.</p> <p>-Capacitaciones para el manejo de plaga.</p> <p>-Se cuenta con 6 cuadrillas contratadas por el ICF para el control de plagas.</p> <p>-Se cuenta con planes de protección en las áreas asignadas a las cooperativas, estos planes se encuentran incluidos en el plan de manejo que se ejecute en un buen nivel</p> <p>Existe reactivación de brotes</p>	<p>-Negociar con el estado para mejorar el tema de extracción de Madera.</p> <p>-Atención de incendios con una rápida reacción.</p> <p>-Promover el voluntariado, /vocación de servicio.</p> <p>-Implementando el plan de protección que tiene el municipio</p> <p>-Para el aprovechamiento de la madera se recomienda cura la madera con métodos locales (ejemplo aplicar gas con Sal)</p> <p>-Involucrando a la población con los beneficios del bosque (En un bosque comunitario se involucran los pobladores ya que dependen del bosque,</p>	<p>-Todo el municipio, pero principalmente en zonas rurales.</p> <p>-Áreas asignadas a las cooperativas</p> <p>-Zonas afectadas en áreas de cooperativas (en comparación con otras áreas del país la afectación ha sido menor- existen diferentes opiniones respecto a este punto)</p>	<p>-Gobierno municipal -ICF -Miembros de cooperativas forestales con un buen involucramiento .</p> <p>-Las cooperativas como mecanismos de convocar a los comunitarios</p>	<p>-Extracción de la Biomasa.</p> <p>-Protocolo complicado para la extracción de Biomasa, urge agilizar los trámites</p> <p>-Enormes cantidades de Biomasa, que representan un riesgo para la ocurrencia de incendios forestales</p> <p>-Grandes Pérdidas económicas producto de la no extracción de madera.</p> <p>-Altos costos económicos para la extracción, a los cuales muchas familias no tienen acceso.</p> <p>-Solo se está atendiendo las Microcuencas; sin embargo existen otras áreas afectadas.</p> <p>-Negligencia para atender la plaga. Falta de capacidad para atender las plagas.</p> <p>-Poca investigación</p> <p>-Aumento de biomasa puede generar más plagas (ejemplo cucarachas)</p> <p>-Falta de control de incendios en zonas urbanas (alrededores); ya que es donde mayor incidencia se tiene</p> <p>-Avance de plaga, se están reactivando brotes</p> <p>-Cada vez hay menos productores ante más consumidores, demandando mayores recursos</p> <p>-Las leyes han afectado, ya que hay una idea de violación a los derechos</p>

Producto del Componente 2	¿Qué hay en el municipio?	¿Cómo podemos hacerlo?	¿Dónde?	¿Con quiénes?*	Barreras y dificultades
		en tanto que en áreas que se protegen por cuadrillas el número y áreas afectadas por incendios es mayor).			humanos cuando se intenta forzar a la población a que participe en el control de incendios. -Fondos directos a cooperativas.
3.- Diseño e implementación de medidas y tecnologías de adaptación al cambio climático para el consumo responsable de agua y bosque. (Preguntas generadoras: ¿Qué tipo de sistemas de riego utilizan?)	- Se cuenta con un sistema de riego de en 30 Mz. y 45 productores/familias beneficiadas en zonas rurales, a ello se suman familia indirectas. -El 80% de las comunidades poseen sistemas de agua potable. -Existen mecanismos para asignación de ecofogones. -En la Represa concepción se cuenta con ayuda a una comunidad con riego por goteo para hortalizas y reforestación al caserío Jinigual. -El gobierno municipal realiza incidencia para la protección del patrimonio de agua antes amenazas externas (desvío de agua hacia Tegucigalpa)	-Avances en la participación de la mujer. -Espacios de socialización con juntas de agua. -Incentivos (plantar a cambio de recibir ecofogones). -Crear un granero municipal, que mitigue los problemas de sequía. -Compromiso ambiental en los productores.	Ecofogones a nivel rural, únicamente se cuenta con una cobertura aproximada del % Fortalecer sistemas de riego e identificar otros productores	Juntas de agua -Salud. -Educación. -Patronatos -Cooperativas (pueden colaborar en manejo de microcuencas /valoración de ecosistemas y mecanismo de asignación de ecofogones) -Actores locales en general	-Falta potabilización de agua en aproximadamente un 30% de la población. -La población vende los ecofogones y no ha existido una buena coordinación entre FUNDEIH y la municipalidad. -Alta dependencia /débil de gestión a nivel de las JA. -No existen mecanismo de compensación ambiental -Ojojona abastece tres represas que son la Concepción, Nacaome y Petacón, sin embargo no se reciben retribuciones, esto se puede deber a una débil gestión local y de la misma autoridad. -Extracción y limpieza de áreas afectadas lo cual asegurará la regeneración natural y con ello la restauración de zonas de recarga hídrica -Restricciones del ICF para la extracción de la familia. -Falta de financiamiento a nivel local.

III. Información varia

- Existe un nivel de machismo que se debe superar, ya que hay limitación de participación de la mujer
- Falta de empoderamiento de los propietarios privados, se las ha involucrado, pero existe una gran apatía y desinterés
- Se carece de una efectiva capacitación que genere un buen manejo de la plaga
- La falta de investigación ha limitado el buen manejo de la plaga, ya que este es un problema por el que ya ha pasado Honduras
- Las acciones municipales se ven limitadas ante las restricciones legales que existen para el aprovechamiento de madera afectada por el gorgojo del pino
- Opiniones particulares asegurando que el mayor beneficiado de los proyectos son las ciudades como Tegucigalpa.
- El Estado, ha asignado recursos financieros a las Fuerzas Armadas, para actividades de protección forestal, sin embargo, estas instancias no son eficientes.
- Consideran los Cambios climáticos, como las transformaciones que sufre la tierra como productos de las malas prácticas que nos lleva a experimentos catástrofes (concepto desarrollado por el grupo)
- Algunos efectos del cambio climático enunciados fueron:
 - La emigración de las grandes ciudades a nuestros pueblos
 - Plagas
 - Enfermedades e incendios
 - Cambios en periodos de producción
 - Alteraciones precipitación

IV. Conclusiones

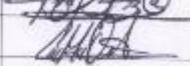
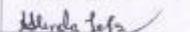
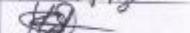
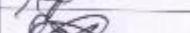
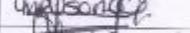
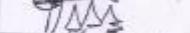
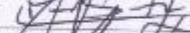
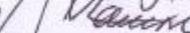
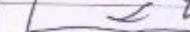
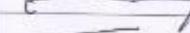
- La asistencia en la consulta no fue equilibrada entre hombres y mujeres; sin embargo, las pocas mujeres que asistieron realizaron varias las intervenciones durante la consulta.
- Los participantes están conscientes de la problemática y priorizan la necesidad de practicar el voluntariado, tanto para los temas de restauración como protección; un elemento reiterativo fue la necesidad de trabajar psicológicamente con la población ya que se considera que lo que más necesitan es apreciar sus recursos
- Los participantes poseen un alto descontento hacia la capital, ya que no consideran justo que la capital no retribuya por la cantidad de agua que recibe del municipio.
- Consideran la gran barrera como la falta de extracción de madera afectada por la plaga del gorgojo, limitando la restauración mediante la regeneración natural, restringiendo las oportunidades de desarrollo e ingresos a las comunidades y propiciando mayores riesgos de contaminación e incendios forestales.

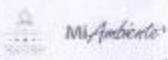
V. Recomendaciones

- Se debe realizar una selección adecuada de las especies.
- Incorporar sistemas productivos de manera sostenible.
- Establecer un balance entre la restauración con especies nativas y producción sostenible.

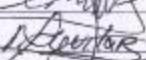
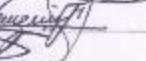
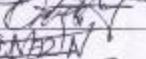
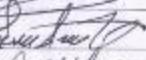
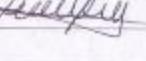
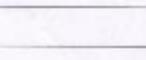
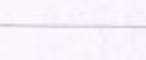
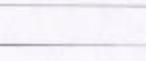
- Buscar el balance entre la participación escolar y la comunitaria en las actividades de restauración, ya que la mayor parte es asumida por los alumnos.
- Contar con una red de abastecimiento de agua, donde todas las Juntas de Agua coordinen.
- Capacitar a las organizaciones con el objetivo de mejorar su capacidad de gestión.
- Generar negociaciones orientadas a pagos por servicios ambientales
- Aumentar el nivel de conciencia de la población mediante ayudas psicológicas
- Incentivar a la población generando beneficios del bosque, tal como se ha realizado con las cooperativas forestales.

Anexo1 Lista de asistencia (adjunta)

No.	Nombre del Participante	Mujer	Hombre	Comunidad	Organización	Cargo	Teléfono	Firma
1	Jatimón Flores	✓		Ojocona F.M. Oficina de las mujeres		Coordinadora	32944624.	
2	Claudia H. Osorio A.	✓		Ojocona F.M. Ofic. de las Mujeres		Colaboradora	9947-4611	
3	Gleno Rosario Lopez	✓		Ojocona F.M.	partidista	Tesorera	31-65-16-98	
4	Mario Enrique Rivero	✓		Ojocona F.M.	Direc. Educac.	Asistente	9754-7618	
5	Lemberto Ruiz	✓		Ojocona F.M.	UMA	coordinador	98026523	
6	Maria René Osorio	✓		Ojocona F.M.	World Vision Facilitator	Integración	320082391	
7	Johan Alonso	✓		Ojocona F.M.	Agricultor	Agricultor	9817-6303	
8	Edin Rene Perea	✓		Ojocona F.M.	pol. de partidista	presidente postulante	77538506	
9	Reinaldo Valencia	✓		Ojocanteca	"	"	31918452	
10	Francisco Benito	✓		Ojocona	CONEANFO	Instructor	98249965	
11	Zamouna Mita	✓		Ojocona	pastoral	coordinador	99966727	
12	Bernardo Finch	✓		Ojocanteca	Directiva	Vocal II		
13	Cristino Espinoza	✓		Ojocona	cooperativa	Vicepresidente		
14	José Gonzalo	✓		Ojocano	"	Vocal I	-	
15	Hector Alfonso			Saracan	P.O.2 Saracan fil			
16	Ricardo Plaza	✓		Santacruz	Coop. Indio	Vocal	95705652	
17	Eduardo Ormeño	✓		Santo Cruz	Coop. Indio	vocal 1	99690523	
18	Justino M. Intriago			Pica	Coop. Indio	secretario		

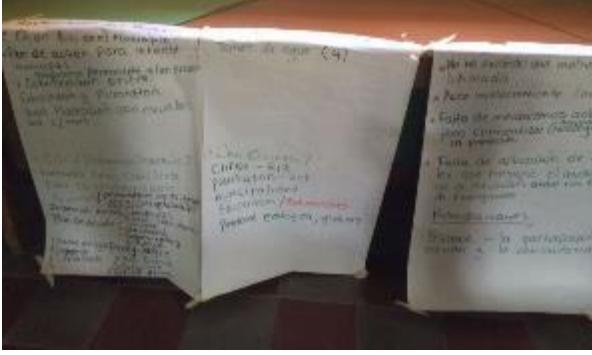


Lista de Asistencia / Evento: Taller de Consulta de Propuesta de Adopción basada en ecosistemas y comunidades en el CBC
Lugar y Fecha: 13 de Julio del 2016

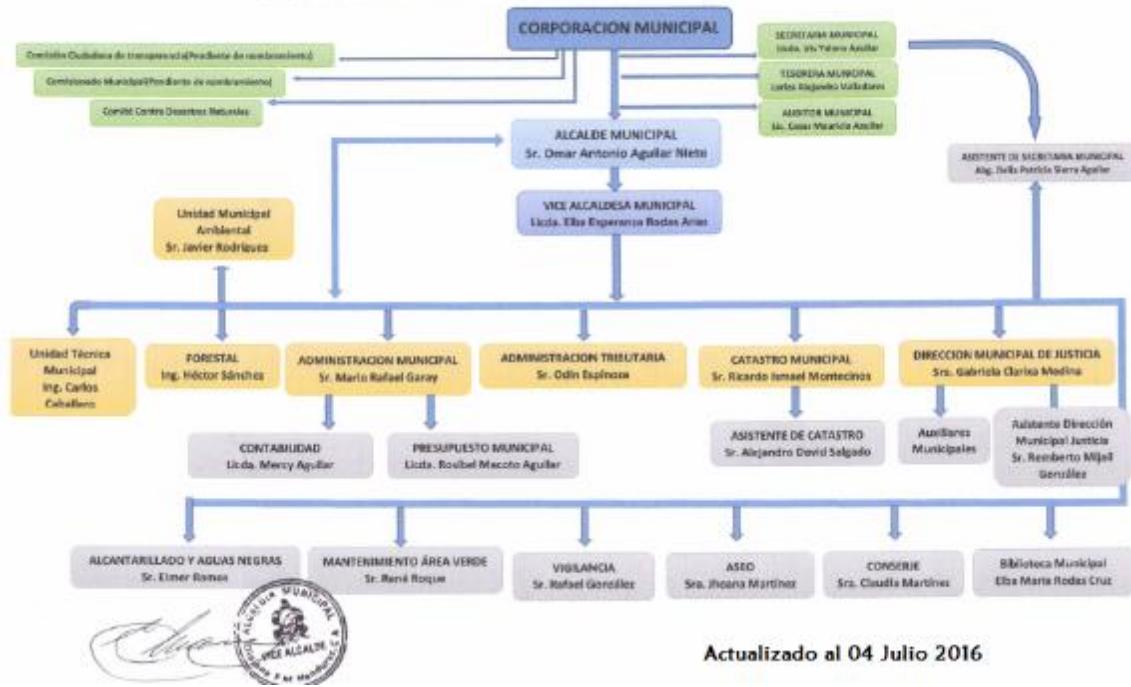
No.	Nombre del Participante	Mujer	Hombre	Comunidad	Organización	Cargo	Teléfono	Firma
19	Aurelio Martínez	X		El Tucaro	Coop. Indios	p.t.c.	84778730	
20	Carlos Caballero	X		Oropeza	VTM	Concejador	96131313	
21	Mery Aguirre	X		Ojojona	Municipalidad	Centra	97268133	
22	Nelson Flores	/		Ojojona	Municipalidad	Regidor	99284696	
23	Sandra Gómez	X		Teguagapa				
24	Mario Sosa	X		Osozana	Municipalidad	Regidor	97-8387-72	
25	Ororo Aguirre	/		Ojojona	Alcalde	Alcalde	9988-1121	
26	José Matías González	X		Ojojona F.M	Juntas de agua	Presidente	97073894	
27	Douglas Juan Andrade	/		Servicio comunitario	cooperativas L	suplente comunitaria	99112595	
28	Claudio Milagros	✓			Mi Ambiente	Facilitador	95854955	

Fotografías del evento

Organigrama del gobierno municipal

	
Alcalde municipal presenciando la reunión	Desarrollo del ejercicio de consulta comunitaria
	
Participantes brindando comentarios	Material generado con la consulta comunitaria

ORGANIGRAMA DE LA ALCALDIA MUNICIPAL DE SAN JUAN DE OJOJONA F.M.



Disponible en: <http://portalunico.iap.gob.hn/portal/index.php?portal=151>

Santa Lucia

I. GENERALIDADES

Comunidades representadas: El Tunel, Santa Elena, Zarabanda, Loma Alta Norte, Montaña Alta, La Pancha, El Chimbo, La Sabaneta, Agua Dormida, Montañita El Eden y Casco Urbano.

Participantes

Total: 24	Hombres: 16	Mujeres: 8	Indigenas: Hombres: Mujeres:
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Instituciones participantes:

- Alcaldía Municipal (UMA, guardabosques y fontanero)
- Patronato del El Tunel
- Junta de Agua de Loma Alta Norte
- Patronado de Santa Elena
- Junta de Agua de Montaña Grande
- Junta de Agua de La Pancha
- Junta de Agua de Agua Dormida
- Patronato de Montañita El Eden
- Red de Mujeres
- Junta de Agua de la Sabaneta
- Comité de Emergencia Local de La Sabaneta
- Junta de Agua de El Chimbo
- Junta de Agua del Casco Urbano

Espacios de coordinación existentes: reuniones con Juntas de agua, comanejadores, cabildos abiertos, patronados CODELES y Comités Locales de Ambiente

Grupos organizados existentes: (Productivos y no Productivos)

Juntas de agua, Patronatos, Comité Ambiental Local, Red de Mujeres, Caja Rural, Comités de Emergencia Municipal (CODEL)

Medios de Vida de la Población:

- Agricultura: hortalizas (repollo, remolacha, zanahoria)
- Siembra y cosecha de granos básicos (maíz y frijoles)
- Floricultura: Flores, viveros a orillas de la carretera
- Huertos familiares (mujeres)
- Consumo y venta de leña (Mayor aprovechamiento para consumo de leña)
- Comercio informal mediante puestos de verduras y comidas típicas
- Construcción de viviendas (una debilidad es que la mayoría de los empleados de proyectos habitacionales es de fuera del municipio)
- No existen planes de manejo forestal y tampoco cooperativas
- Turismo local, únicamente gastronomía

II. REVISION DE PRODUCTOS DEL CONCEPTO DE PROYECTO

Matriz completada

MATRIZ N° 1 REVISIÓN DE PRODUCTOS

Producto del Componente 2	¿Qué hay en el municipio?	¿Cómo podemos hacerlo?	¿Donde?	¿Con quiénes?*	Barreras y dificultades
1.- Restauración del bosque de pino en el CBC de 1,000 hectáreas para fortalecer y proteger servicios ecosistémicos y medios de vida. (Preguntas generadoras: ¿Cómo les ha afectado la plaga (económicamente, salud, clima, etc.)?, ¿Hay Cooperativas Forestales?, ¿De qué viven?, ¿Tienen acceso al crédito?)	<ul style="list-style-type: none"> -Reforestación con plantas donadas (únicamente en áreas ejidales) -Local para un vivero -Limpieza y mantenimiento de áreas con regeneración natural 	<ul style="list-style-type: none"> -Agenciándose de fondos, personal, riego -Fomentando el voluntariado -Seleccionando otras especies que se adapten (Ceiba, Guanacaste) -Obteniendo herramientas para manejo de biomasa -Con riego con goteo artesanal -Con una mayor organización comunitaria, donde las juntas de agua convocan e involucran a otros actores como las escuelas. -Contratando personal que realice la limpieza 	Se debe restaurar principalmente en áreas dentro del Parque Nacional La Tigra	<ul style="list-style-type: none"> -ICF (dona plantas) -Con la UMA -Voluntariado con alumnos de la universidad y escuelas -Con las comunidades y personal del gobierno local 	<ul style="list-style-type: none"> -Falta de financiamiento -Acumulación de biomasa, material del bosque cortado, que dificulta las plantaciones -Restricciones legales para la limpieza de combustible en zonas protegidas/ restricciones legales por tratarse de un AP -Falta de recursos para que personal realice la limpieza -

Producto del Componente 2	¿Qué hay en el municipio?	¿Cómo podemos hacerlo?	¿Dónde?	¿Con quiénes?*	Barreras y dificultades
		-Asignando áreas comunitarias, considerando el acceso.			
2.- Protección y prevención contra incendios, plagas, enfermedades y tala ilegal.	<ul style="list-style-type: none"> -Rondas preventivas (15 Km de rondas año 2015, año 2016, 35 km) -Control de brotes de plagas -Existe monitoreo, vigilancia y reporte de brotes, ya sea a la alcaldía o cuadrillas -Se ha capacitado sobre las fases de ataque de la plaga, pero solo al personal, muy poco a las comunidades -Existen ordenanzas municipales para la construcción de rondas -Cuota para rondas en algunas tarifas de agua 	<ul style="list-style-type: none"> -Con voluntarios y personal local -Con aporte en tarifas de agua de Junta de agua, como ejemplo Zarabanda Junta de agua el Piliguin y la pancha convoca a los abonados para rondar, los que no asisten deben pagar más por la tarifa de agua. -Mediante ordenanzas municipales -Dirigiendo notas a los propietarios privados, quienes deben construir rondas -Establecer multas por hectárea quemada -Con la asignación de cuadrillas por parte del ICF -Mediante reporte comunitarios para mejorar el control 	<ul style="list-style-type: none"> -A orillas de carreteras, caminos secundarios y veredas -En todo el municipio, ya que el problema de incendios y plaga ha afectado, pero principalmente la zona del Parque Nacional La Tigra y a orillas de la carretera 	<ul style="list-style-type: none"> -Con juntas de agua -Con propietarios privados -Con las comunidades -Con Cuadrillas municipales y del ICF 	<ul style="list-style-type: none"> -Se ha perdido el interés en la prevención y combate -Propietarios privados desacatan orden de construir rondas preventivas -Resentimientos de la población ante restricciones de uso no comercial del bosque -Falta de financiamiento propio para atender los daños -Alta demanda y pocas cuadrillas -Falta de conocimiento sobre el método de control

Producto del Componente 2	¿Qué hay en el municipio?	¿Cómo podemos hacerlo?	¿Dónde?	¿Con quiénes?*	Barreras y dificultades
3.- Diseño e implementación de medidas y tecnologías de adaptación al cambio climático para el consumo responsable de agua y bosque. (Preguntas generadoras: ¿Qué tipo de sistemas de riego utilizan?)	Únicamente cuentan con tanques de almacenamiento de agua, que se distribuye a las comunidades Riego por aspersión (mariposas) Aprovechamiento de leña/instalación de estufas eficientes	Gestionando con las comunidades	Para esta actividad no hay nada en ejecución, se manifiesta que debido a la dificultad de acceso a crédito	Proyectos de la Unión Europea (anteriormente con apoyo de FORCUENCAS se construyeron pilas en varias viviendas) Programa de vida mejor para abastecer de ecofogones	-Falta de gestión y la falta de financiamiento -Carecen de pilas para captación de agua -La selección de beneficiarios de ecofogones se ha realizado con variables socioeconómicas que discriminan varias viviendas (ejemplo, viviendas de material), aun cuando requieren de este beneficio -Falta de créditos y financiamiento para establecer sistemas de riego

III. Información varia

- No cuentan con mecanismos financieros para desarrollar sistemas agrícolas eficientes.
- Es urgente promover el ecoturismo potenciando paisajes, ya que existe un alto número de visitantes todos los fines de semana.
- Es importante retomar el tema de las cajas rurales, anteriormente funcionó una caja rural en Montaña Grande, que debe reactivarse.
- No poseen acceso a crédito.
- Existe un problema magnificado de degradación por un avance acelerado de la plaga.
- No se ha realizado un procedimiento correcto en el manejo de la plaga: corte, aprovechamiento, limpieza y quema.
- Se realizó práctica de campo, el gorgojo no muere ni quemándolo (se refiere a que las poblaciones no se disminuyen significativamente).
- Poseen necesidades logística (transporte), herramientas y equipo de combate de incendios (bombas mochilas) y motosierras para limpieza.
- Uno de los mayores problemas en el municipio es el cambio de uso, expansión urbanística, se carece de planificación urbanística, las construcciones están afectando las fuentes de agua, los desechos contaminan las fuentes de agua afectando toda la comunidad.
- Es necesario que las comunidades se involucren en las plantaciones para que adquieran mayor compromiso y seguimiento por la restauración.
- Falta promocionar e incentivar mayormente el voluntariado.
- La comunidad manifiesta la necesidad de plantar árboles frutales.
- Se muestra una disminución significativa de incendios forestales en el año 2016 en relación al año 2015 (reporte de incendios Año 2015: 470 ha, 2016: 235 ha; 50% de reducción de área quemada).
- Existen propietarios privados que han aprovechado la existencia de la plaga para lotificar sus predios con fines de construir urbanizaciones, por lo que esas zonas no se restauraran
- Los gobiernos municipales únicamente pueden brindar autorizaciones de aprovechamiento de la madera en zonas urbanas, en las zonas rurales debe ser el ICF, y en la zona del Parque se requiere visto bueno de AMITIGRA.
- El gobierno municipal, tiene la pretensión de construir un vivero municipal, se cuenta con un local sin embargo no cuentan con personal ni acceso a riego.

IV. Conclusiones

- La asistencia en la consulta es equilibrada entre hombres y mujeres; sin embargo fueron muy pocas las intervenciones de las mujeres durante la consulta.
- Los participantes están concientes de la problemática y priorizan las necesidades de un manejo efectivo de la plaga y la extracción urgente de la biomasa; asimismo demandan cambios en los protocolos de aprobación para la extracción, ya que las restricciones únicamente generan resentimientos con consecuencias como incendios forestales y poco interés en practicar el voluntariado.
- Las mujeres ocupan puestos dentro de las organizaciones, en su mayoría son las secretarias.

- Uno de los principales temores de las autoridades locales y las organizaciones es el cambio de uso, ya que Santa Lucía es un municipio donde se realizan proyectos habitacionales por su cercanía a la capital.
- Los impactos del cambio climático, han alterado los sistemas productivos, ocasionando pérdidas que obligan a la familia a desintegrarse, ya que el esposo migra a otras regiones del país para obtener empleos.
- Existen fuertes inconformidades hacia las instituciones principalmente hacia el ICF.
- Es evidente la falta de conocimiento del desarrollo de la plaga del gorgojo, dado varios comentarios que confunden la plaga con otras plagas, no se comprende el control, ni las fases del ataque.
- Existen fuertes preocupaciones orientadas a la falta de un voluntariado de las comunidades y se concluye que entre las causas principales están los resentimientos por restricciones al uso de la madera y por el pago de cuadrillas que genera un interés de pago para cualquier actividad (contratar gente ha empeorado que la gente sea voluntaria).
- Existen experiencias de pagos por servicios ambientales, ya que en la junta de agua de Zarabanda, se ha establecido una cuota dentro de la tarifa de agua que se utiliza para construcción de rondas, en caso que la población no pague se le corta el servicio.

V. Recomendaciones

- Existe una buena estructura organizativa que debe potenciarse y fortalecerse.
- Se deben tomar medidas para el cambio de uso del suelo.
- Se debe fomentar e incentivar el voluntariado, la vez se deben analizar las causas de apatía de las comunidades y definir los mecanismos adecuados para incentivar el voluntariado.
- Se deben realizar cambios en los protocolos de aprovechamiento de la madera, para que faciliten la extracción por parte de las comunidades.
- La prioridad de la distribución de agua debe ser el consumo humano y en segundo plano el riego, ya que existe riego por aspersión, lo cual demanda mucha agua.
- Quien debe tomar el liderazgo en este tipo de reuniones debe ser el gobierno local (queja particular).
- Se deben construir lagunas para cosechas de agua (intervención de una mujer).
- Se debe conformar una cooperativa forestal en el municipio, para que se extraiga y venda toda la madera caída como producto del control de la plaga del gorgojo del pino, principalmente se puede aprovechar para leña.
- Las autoridades no deben cobrar por el aprovechamiento de madera plagada.
- Se deben asignar áreas para la limpieza de biomasa a las comunidades, para ello se deben realizar arreglos entre la UMA y las comunidades.
- Se debe involucrar a las escuelas en la plantación.
- Se deben investigar otras variedades de pino resistentes u otras especies que resistan los ataques de la plaga.

Anexos

Lista de asistencia (adjunta)



Listado de Asistencia / Evento:

Lugar y Fecha: Marqueses de Santa Lucia 8-julio-2016

No.	Nombre del Participante	Mujer	Nombre	Municipio/Institución	Cargo	Teléfono	Correo ele
1.	Héctor Rodríguez			El Tunel	Presidente	33275764	
2.	Pausto Cordero	✓		Surabanda	Presidente Codet	92463065	
3.	Gloria Suárez	✓		Laguna Alta Norte	Presidente P.F. Danta Al Agua Vol.	88796104	
4.	DORGE FERNANDEZ	✓		STA. ELENA ARRIBA	P.D.E PATRONATO	33279895	frdorge@fm
5.	Xosé Cernio			Zarabanda	Gerente bosques	77842682	
6.	Hector M. Llindón			Aguas de Tumaco	Festanero	90262987	
7.	Hommel David Cárdena			Montería Corredor	Presidente Juzgado 20-3-4-43		
8.	Patricia Gabriel Colindres			Montería Cárdena	PPAL. C. Santa Fe	88306614	
9.	Ana Julia Edgardo			Montería Grindulius	Presidente de la P.M. del maguey	90013212	
10.	Favían Arboz	✓		La Penacho	PPRC Vicente JU	18041761	
11.	Hilda Acituno			Aguas Tumida S.L.	Secretaria J.A	97159926	
12.	Ramla Rovella			Municipio	bocat J A	95014054	Santa Eler
13.	Yosquies Saavedra	✓		Vengo del Pasadita norte	vocal gerencia del		
14.	Edmundo Achacucho			Chumbes	Presidente J.A	87981077	
15.	Susana Esteban Colindres			El Tunel	Secretaría J.A	32256108	
16.	Clementina Colindres	✓		El Tunel	Vocal	32901297	
17.	José Edmundo Ortega Pavón	✓		La Sabanita	Presidente	97960775	
18.	Luis Ximena Fernández	✓		La Sabanita	Presidente	98237499	



Lista de Asistencia / Evento:

Lugar y Fecha: Municipio Santa Lucía 8 de julio 2016

No.	Nombre del Participante	Mujer	Hombre	Municipio/Institución	Cargo	Teléfono	Correo electrónico
9.	Enrique Coloma		✓	Centro Chimalpa	Sacerdote	9980-10-00	
10.	Orián Tica Colindres		✓	Centro de el Eden	Presidente Político	99454547	
11.	Mónica Yessica Bustillo	✓		Sta Lucia	Presidente	99-01-42-44	
12.	José Zetegui		✓	Santa Lucía	MOTORISTA	33969752	
13.	Yessica Bustillo	✓		M. Ambiente PMA	Asist. Adm	8789-14-27	y bustillo10
14.	Jesús María Colina	✓		Sarabanda	Secretariajuntada		
15.	Nidia Javer	✓		M. Ambiente	Consultora	99715607	nidiajaver@gmail.com
16.	José Tórres		✓	Santa lucía	Coordinador UMA	9920-6673	santolberto2002@gmail.com
21.							
22.							
23.							
24.							
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27.							
28.							
29.							
30.							
31.							

Fotografías del evento

	
Reflexionando sobre la problemática del CBC	
	
Participantes brindando comentarios	
	
Intervenciones del jefe de la Unidad Municipal Ambiental	

San Buenaventura

I. GENERALIDADES

Comunidades representadas:

- ✓ El Calvario
- ✓ El Terrero

Participantes

Total: 25	Hombres: 10	Mujeres: 15	Indígenas: 0 Hombres: Mujeres:
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Instituciones participantes

- ✓ Escuela Pedro Nufio
- ✓ Iglesia Evangélica
- ✓ Junta de agua de El Calvario
- ✓ Junta de agua de El Terrero
- ✓ Patronato de El Calvario
- ✓ Patronato de El Terrero
- ✓ Centro de Salud

Espacios de coordinación existentes:

- ✓ UMA
- ✓ Juntas de agua

Grupos organizados existentes: (Productivos y no Productivos)

- ✓ Grupos de cajas rurales
- ✓ Grupo de producción de hortalizas

Medios de Vida de la Población:

- ✓ Extracción de madera
- ✓ Cultivo de maíz, frijol y hortalizas.
- ✓ Cría de ganado vacuno
- ✓ Cría de cerdos
- ✓ Cría de aves
- ✓ Oficinistas

II. REVISION DE PRODUCTOS DEL CONCEPTO DE PROYECTO

Matriz completada

MATRIZ N° 1 REVISIÓN DE PRODUCTOS

<i>Producto del Componente 2</i>	<i>¿Qué hay en el municipio?</i>	<i>¿Cómo podemos hacerlo?</i>	<i>¿Donde?</i>	<i>¿Con quiénes?*</i>	<i>Barreras y dificultades</i>
1.- Restauración del bosque de pino en el CBC de 1,000 hectáreas para fortalecer y proteger servicios ecosistémicos y medios de vida. (Preguntas generadoras: ¿Cómo les ha afectado la plaga (económicamente, salud, clima, etc.)?, ¿Hay Cooperativas Forestales?, ¿De qué viven?, ¿Tienen acceso al crédito?)	Se están estableciendo planes municipales	Reforestando	Todas las fuentes de agua del municipio	Todas la fuerzas vivas, UMA	Comité formado de vigilancia No se da seguimiento a la reforestación Gestión de las plantas
	Hubo un comité forestal pero fracaso	Declaración de microcuencas Exploración de nuevas fuentes de agua	Todas las fuentes de agua del municipio	ICF, Alcaldía, patronatos, juntas de agua	Organización, son fuentes privadas
	La muni solo tiene una fuente de agua protegida que es la que abastece al casco urbano	Legalización de las juntas de agua, crear asociación de juntas de agua	JA del Horno, La Montaña, Crucitas, El Calvario, Terrero.	ERSAPS, juntas de agua	Falta de información de los organizadores
	Apoyo de los de chamba comunitaria	Apoyo técnico para la exploración de suelos	En las microcuencas: La Montaña, El Calvario y El Terrero	Patronato, juntas de agua	Falta de conocimiento
	Grupos de cajas rurales, pero fracasaron	Llevar más viveros a las comunidades	El Terrero, El Achote, La Majada, Los Perruchos, El Peñón	Un comité encargado por zona, ICF, eólica, Fuerza Aérea, Amitigra, Larach	Apoyo institucional, recurso económico
	Aportes de energía eólica (dotación de árboles)	Hacer conciencia ambiental en las personas	La Montaña, El Horno, Sauce, El Caso Urbano, Crucitas y El Terrero.	Juntas de Agua, patronatos y organizaciones que trabajen con el medio ambiente	Organización, tecnología

	Los dueños de terreno son los que permiten el uso del agua de sus propiedades	Considerar las especies de la zona (mango, cítricos, marañón y aguacate) para los viveros	El Terrero, El Achote, La Majada, Los Perruchos, El Peñón	Un comité encargado por zona, ICF, eólica, Fuerza Aérea, Amitigra, Larach	Apoyo institucional, recurso económico
	Un pozo en El Sauce	Un comité de vigilancia por parte de la comunidad	El Terrero, El Achote, La Majada, Los Perruchos, El Peñón e involucrar a cada barrio	Fuerzas vivas, juntas de agua, UMA	Conocimiento, desinterés, comunicación, responsabilidad
	Comunidades del Horno, Milpa Grande y Ocumupe hay 1 pozo	Crear un comité de seguimiento a proyectos	A nivel de municipio integrado por una persona de cada comunidad	Patronatos	Conocimiento, desinterés, comunicación, responsabilidad
	En la montaña del Izopo hay una fuente de agua pero no está declarada				
	La Crucita tiene una fuente que abastece por gravedad.				
	Hay un vivero por parte del FA				
2.- Protección y prevención contra incendios, plagas, enfermedades y tala ilegal.	La tala es un medio de vida	Concientizar, buscar otros medios de vida, tala controlada	Nivel municipal	Propietarios de terrenos	Miedo, temor de represalias
	No hay conocimiento de planes municipales y planes forestales	Vigilar, apoyo comunitario, apoyo de las autoridades	A nivel municipal	ICF, gobierno municipal.	Indiferencia de las autoridades
		Aplicación de las leyes	A nivel municipal	Autoridades correspondientes	Amenazas contra la vida de los que denuncian

3.- Diseño e implementación de medidas y tecnologías de adaptación al cambio climático para el consumo responsable de agua y bosque. (Preguntas generadoras: ¿Qué tipo de sistemas de riego utilizan?)	Estudios de exploración de agua subterránea	Hacer estudios de factibilidad para abastecimiento de agua	El Terrero, El Horno, Las Crucitas, El Calvario, La Montaña, Casco de San Buenaventura	Energía eólica, UMA, juntas de agua, patronatos, SANAA, ERSAPS, la municipalidad, UNAH.	Interés, falta de conocimiento de las instituciones.
	Plan Estratégico Municipal (Luz, centros de salud)	Perforación de acuíferos	El Calvario	SANAA, la alcaldía, eólica, juntas de agua.	Recurso económico, interés de los pobladores.
	Producción de pastes(pasteras)	Reparación de tubería de distribución	El Terrero, El Achote.	Juntas de agua, patronatos.	Recurso económico.
	Perforación empírica de pozos.	Sembrar nuevas variedades (maracuyá, patate, nance, papaya, yuca)	El Terrero, El Calvario, El Achote	Alcaldía, eólica, SAG	Interés
	Disponibilidad de poner contraparte	Reservorios, sistemas de riego por goteo(por gravedad)	El Calvario y alrededores	Juntas de agua, patronatos, alcaldía, eólica	Iniciativa, recurso económico
		Crear conciencia en el uso responsable del agua			
		Formar grupos de control de agua			

III. Información varia

- ✓ El municipio cuenta con un plan de manejo.
- ✓ De acuerdo a las personas consultadas, todas las microcuencas identificadas se encuentran en propiedades privadas.
- ✓ La gran mayoría de los terrenos del municipio son privados, por lo que la reforestación se vuelve una actividad un tanto complicada.
- ✓ En San Buenaventura existe una oficina de la mujer y se desea crear la red de mujeres del municipio.
- ✓ Los pagos por el servicio de agua son muy pobres, dado que en El Terrero y El Calvario solo se pagan L. 10 y L. 20 mensuales respectivamente.

IV. Conclusiones y recomendaciones

- ✓ Las personas consultadas, insistieron que la participación de los jóvenes es vital al momento de llevar a cabo cualquier proceso.
- ✓ Las autoridades municipales no muestran interés en este tipo de procesos, ya que no tuvo representantes durante el desarrollo del taller.
- ✓ La participación de la mujer durante el evento de consultas, fue muy influyente para la recopilación de la información obtenida durante la jornada.

V. Anexos


 Listado de Asistencia / Encuentro: Jornada de consultas para el Proyecto Fondo de Adaptación
 Lugar y Fecha: Municipio de San Juan Bautista, Pijimelash

No.	Nombre del Participante	Mater. Número	Municipio/Institución	Cargo	Teléfono	Corr
1	Diego Hidalgo Jiménez	11		Secretario Jefe de Agua	782252-18	
2	Alejandra Fernández Gómez	11		Secretaria	995602-72	
3	Proyecto Montaña			Fiscal		
4	Oscar Castillo			Secretaria Jefe de Agua	73361190	
5	Ricardo Fo Alvarado					
6	Laura Mirella Sánchez			VISIÓN DE AGUA	89541-6798	
7	Ariadna López González			Secretaria jefe de Agua	991166-22	
8	Josefa E. Amador			Secretaria Jefe de Agua	32222250	
9	Eduardo Andrade			Oficina de Casas	3333-2235	
10	José Alberto Montejano			Secretaria	3333-2335	
11	Maria del Socorro Díaz			Oficina de Casas	9949-6264	
12	Sorothem Cruz Andrade					
13	Hacini Yamileth Cárdenas		Eco Pedro Nolasco	Directora	32220-5155	
14	Wilda Correa de Herrera		Eco Pedro Nolasco	Sub-directora	3160-9122	
15	Maria Felipa Orellana		Iglesia Evangélica	Pastora	7809-7983-00333	
16	Juan Francisco Martínez		Iglesia Evangélica	Pastorado de Agua	0813-1950-0095	
17	Sofía Marcela Gordillo					
18	Ruth María Gómez	20012	VISIÓN DE AGUA	0888-1235-0090		
			Vocal	0818-1916-0090		



Estado de Asistencia / Evento: Jornada de CONSULTAS para el Proyecto Fondo de Adaptación
Lugar y Fecha: MUNICIPAL DE San Patricio, 10 de Octubre





Cedros

I. GENERALIDADES

Comunidades representadas: El Higuerito, Quebrada Grande, Pueblo Nuevo, El Guante, Siria, Caridad, Usagua, El Suyatal, Mata Plátano Cedros casco urbano.

Participantes

Total: 23	Hombres: 16	Mujeres: 7	Indígenas: 0 Hombres: Mujeres:
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Instituciones participantes: Junta de Agua, AJARCO, Fundación Caridad, Salud, Patronatos, Unidad Municipal Ambiental, APRODEC, Destacamento Militar.

Espacios de coordinación existentes:

Grupos organizados existentes: (Productivos y no Productivos): Juntas de Agua, Patronatos, Asociación de Juntas de Agua del Refugio Coralito, (AJARCO), Asociación Pro Desarrollo de Cedros, (APRODEC), Fundación Caridad,

Medios de Vida de la Población: Agricultura (de subsistencia Granos Básicos) y Caficultura

II. REVISION DE PRODUCTOS DEL CONCEPTO DE PROYECTO

Matriz completada

MATRIZ N° 1 REVISIÓN DE PRODUCTOS

<i>Producto del Componente 2</i>	<i>¿Qué hay en el municipio?</i>	<i>¿Cómo podemos hacerlo?</i>	<i>¿Donde?</i>	<i>¿Con quiénes?*</i>	<i>Barreras y dificultades</i>
1.- Restauración del bosque de pino en el CBC de 1,000 hectáreas para fortalecer y proteger servicios ecosistémicos y medios de vida. <u>(Preguntas generadoras:</u> ¿Cómo les ha afectado la plaga (económicamente,	Patronatos, Juntas de Agua, AJARCO, Escuelas, Colegios Técnicos, Sociedad de Padres de Familia, Iglesias católicas, Asenate Mujeres Organizadas, Salud,	Con la participación de todo los actores, sociedad civil organizada y con la participación de las instituciones del Gobierno	Áreas Prioritarias previo a estudio (mapeo), en las Fuentes de Agua afectadas por la Plaga del Gorgojo.	Con las fuerzas vivas del municipio – Incentivar a las personas. Y con los propietarios del Bosque.	-Económicas -Falta de incentivos. -Falta de conciencia. Falta de Conocimiento. -Falta de Norma un instructivo a seguir - Que se garantice las

<i>Producto del Componente 2</i>	<i>¿Qué hay en el municipio?</i>	<i>¿Cómo podemos hacerlo?</i>	<i>¿Donde?</i>	<i>¿Con quiénes?*</i>	<i>Barreras y dificultades</i>
salud, clima, etc.)?, ¿Hay Cooperativas Forestales?, ¿De qué viven?, ¿Tienen acceso al crédito?)					áreas reforestadas y quien las va a cuidar. - Tenencia de la Tierra. - ICF debería de asumir su rol de restauración (ponerse la camisa)
2.- Protección y prevención contra incendios, plagas, enfermedades y tala ilegal.	-Grupos organizados AJARCO. -Municipalidad Brigadas 2 de 16 personas de 8 cada uno. -Destacamento Militar. - 2 Cuatrimotos para patrullaje y Protección. -Capacitación y Sensibilización. -Centros de Salud. -Educación. -Comunicación con los propietarios del Bosque.	-Uniendo esfuerzos. -Organización y Coordinación. -Gestión de Recursos. - Cumplimiento de las funciones asignadas a las instituciones tanto de gobierno como estructuras locales.	-Áreas Prioritarias. -Fuentes de Agua zona de recarga. -Áreas afectadas por la plaga del gorgojo. - Las áreas de regeneración Natural.	-Propietarios de bosques. - Beneficiarios de las comunidades. -Municipalidad. -Gobierno (ICF-MiAmbiente) -Juntas de Agua(Asociaciones Grupos organizados.)	_Falta de conciencia Ambiental -Falta de recursos económicos para operativizar los planes de protección. -Falta de apoyo del Gobierno Central. - No hay una coordinación con la UMA del distrito central. - poco o ninguna asistencia a productores sobre el no uso del fuego.
3.- Diseño e implementación de medidas y tecnologías de adaptación al cambio climático para el consumo responsable de agua y bosque.	-Grupos campesinos organizados. -Cooperativas de Agricultores (Hortalizas).están cosechando agua y sistema de riego por goteo.	-Organización -Gestión de recursos económicos. -Investigar que tecnología es apropiada.	-En las zonas productoras que están cerca de la microcuenca -Con grupo de productores ya	-Con productores organizados (Campesinos)	Falta de conocimiento no conocemos la tecnologías -Falta de apoyo técnico. -Falta de recursos económicos.

<i>Producto del Componente 2</i>	<i>¿Qué hay en el municipio?</i>	<i>¿Cómo podemos hacerlo?</i>	<i>¿Donde?</i>	<i>¿Con quiénes?*</i>	<i>Barreras y dificultades</i>
(Preguntas generadoras: ¿Qué tipo de sistemas de riego utilizan?)	-Cooperativas de Caficultores -Riego por Aspersión.	-Estudio para cada proyecto.	organizados que carecen de recursos económicos.		-Falta de acceso al mercado. -Acceso a la tierra.

III. Información varia

Conclusiones:

La estructura comunitaria presente en la jornada de consulta coincidieron en que se les bebe de consultar sobre las acciones que se están tomando para el control de la plaga ya que no se está tomando en cuenta a las comunidades y cuestionan que porque para al momento de restauración si quieren que sean partícipes.

Preguntan:

- Donde está la participación comunitaria sin no los informan donde van a controlar la plaga, si han talado más de lo que deben y en las fuentes de agua.
- Si reforestamos, que nos garantiza que a futuro ICF le apruebe un plan de manejo a un empresario y corte lo que nosotros nos cuesta plantar y cuidar.
- Como voluntarios nos cuesta nuestro trabajo y no percibimos ningún incentivo.
- Quieren que nosotros reforestemos y la Autoridad que hace, (ICF, MIAMBIENTE y Municipalidad...)

IV. Anexos.

Listado de participantes Municipio de Cedros, Francisco Morazán.



Listado de Asistencia / Evento: Jornada de Consulta
 Lugar y Fecha: 6 de julio del 2016 Municipio de Cedros

No.	Nombre del Participante	Mujer Hombre	Municipio/Institución	Cargo	Teléfono	Correo electrónico
1	Maira Esmeralda R.	*	El Higuerito	Presidente P.	9868 6052	
2	Aldo M. Sandoval	/	Mazagana	Vice	96506980	
3	Jose Lucas Garcia	/	quebrada grande	Fiscal	88357900	
4	Santos Edriás	/	quebrada grande	Presidente	96956703	
5	Yanis Paudales	/	Cantonal PC	Director AJAPCO	99334793	
6	Eber Noun Volle	/	Pueblo Nuevo	Fiscal junta agua	94992692	
7	Lourdes Yanary G.	*	El Favante	Presidenta	3301-77-93	
8	Gladys Gonzalez	*	CEDROS, F.M.	Vice-Presidenta	9909-52-31	yanorinikole@gmail.com



Listado de Asistencia / Evento: Jornada de Consulta.
 Lugar y Fecha: 6 de julio del 2016, Municipio de Cedros

No.	Nombre del Participante	Mujer Hombre	Municipio/Institución	Cargo	Teléfono	Correo electrónico
19	Olga Villegas	X	Sra Cedros	Secretaria	98448432	Sircavillegas24@yahoo.com
20	Ana Lidia medina	X	sra cedros		96295619	
21	Luis Alvaro Rendón	X	Cedros FM-Agricola -Tresoro		982619521	LuisaRendón27681194@yahoo.com
22	Jessieco R. Bustillo	*	Miambiente PFA	Auxiliar contable	8789-14-97	ubustillobinez@yahoo.com
23	Freddy Moreno	/	Mi ambiente- P.FA	tecnico	97594080	Freddyjmg@gmail.com



San Antonio Oriente

I. GENERALIDADES

Comunidades representadas: Tabla Grande, Jicarito, San Antonio de Occidente, Santa Inés, Santa Clara, La Ciénega, y Casco Urbano.

Participantes

Total:21	Hombres:13	Mujeres: 8	Indígenas: Hombres: 2 Mujeres: 0
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Instituciones participantes: Juntas de Aguas, Patronatos, Comité pro desarrollo, alcaldes auxiliares Unidad Municipal Ambiental.

Espacios de coordinación existentes: con juntas de agua y patronatos, comité interinstitucional de salud.

Grupos organizados existentes: (Productivos y no Productivos): Juntas de Agua, Patronatos, Iglesias, Comités

Medios de Vida de la Población: Agricultura de Sub sistencia; granos básicos (maíz, frijoles), ganadería en menor escala.

II. REVISION DE PRODUCTOS DEL CONCEPTO DE PROYECTO

Matriz completada

MATRIZ N° 1 REVISIÓN DE PRODUCTOS

<i>Producto del Componente 2</i>	<i>¿Qué hay en el municipio?</i>	<i>¿Cómo podemos hacerlo?</i>	<i>¿Dónde?</i>	<i>¿Con quiénes?*</i>	<i>Barreras y dificultades</i>
1.- Restauración del bosque de pino en el CBC de 1,000 hectáreas para fortalecer y proteger servicios ecosistémicos y medios de vida. (Preguntas generadoras: ¿Cómo les ha afectado la	-Juntas de Agua. -Patronatos y Iglesias, escuelas, colegios, -Grupo de emprendedores. -Alcaldes Auxiliares. -Comité interinstitucional de Salud.	- Organizándonos -con una buena planificación. -Vigilancia (Cuidando los bosques) -Proteger las áreas afectadas -Extraer la madera plagada ya	-Fuentes de Agua. -Zonas de Recarga. -Zonas con pendientes fuertes. -Zona donde hubo Incendios. -Sitios Saneados (Limpios)	Con todas las fuerzas vivas de la comunidad (Municipalidad, Juntas de Agua, Batallón, Apoyos Gubernamentales, ICF, Mi Ambiente.	-Falta de recursos económicos. -Falta de asistencia técnica -Tenencia de Tierra. -Áreas inaccesibles (pendientes fuertes.) -Periodos largos de sequias

<i>Producto del Componente 2</i>	<i>¿Qué hay en el municipio?</i>	<i>¿Cómo podemos hacerlo?</i>	<i>¿Dónde?</i>	<i>¿Con quiénes?*</i>	<i>Barreras y dificultades</i>
plaga (económicamente, salud, clima, etc.)?, ¿Hay Cooperativas Forestales?, ¿De qué viven?, ¿Tienen acceso al crédito?)	-Batallón Comunidad de las Mesas.	que está obstaculizando -trabajando			-Cambio uso del suelo. -Falta de educación y conciencia en la población. -Falta de aplicación de la legislación vigente. -Motivación a la población.
2.- Protección y prevención contra incendios, plagas, enfermedades y tala ilegal.	-Grupos organizados. -Cuadrillas en épocas de verano pagadas por la alcaldía (18 personas). -Comité de prevención. -Equipo contra incendios. -Voluntad de trabajar.	-Haciendo Rondas. -Evitando las quemas Agrícolas. - Concientizando a las personas. -Poder tener recursos económicos para guardar el bosque. Tener comunicación entre las aldeas. - Cumplimiento de ley y ordenanzas.	-En el bosque. - En Áreas protegidas por el municipio. - Microcuencas. -Áreas afectadas por el gorgojo.	-Propietarios del bosque. -Hacer reuniones con los Agricultores. -Sector de educación. -Fuerzas Armadas. -Zamorano. -Patronatos, Juntas de agua.	-Falta de transporte para brigadas. -Falta de equipo para combates de incendios. -Falta de radios de comunicación. -Falta de material didáctico para capacitaciones. -Faltas de vías de comunicación. -Falta de guarda bosques. -Falta de recursos económicos. Falta de organización .

<i>Producto del Componente 2</i>	<i>¿Qué hay en el municipio?</i>	<i>¿Cómo podemos hacerlo?</i>	<i>¿Dónde?</i>	<i>¿Con quiénes?*</i>	<i>Barreras y dificultades</i>
					-Falta de educación Ambiental en escuelas, colegios, y las comunidades.
3.- Diseño e implementación de medidas y tecnologías de adaptación al cambio climático para el consumo responsable de agua y bosque. (Preguntas generadoras: ¿Qué tipo de sistemas de riego utilizan?)	-No hay nada de Tecnología (solo un proyecto de eco fogones de parte del gobierno central). -Juntas de agua ,Patronatos. - Microempresas de mujeres emprendedoras.	- Organizándonos. -Haciendo gestión con el Gobierno e instituciones internacionales. -Contar con una planificación de desarrollo. -Asesoría y apoyo técnico.	-En Comunidad es. -Zonas agrícolas. -Zonas boscosas.	-Con el Agricultor. -Con el Zamorano. -Apoyo del gobierno central. -Apoyo de proyectos y ONG.	-Falta de recursos económicos. -Falta de terrenos. -Falta de apoyo gubernamental. -Falta de asesoría técnica. -Falta conocimiento -Falta de mercado con precios justos. -Acceso a la banca (préstamos blandos).

III. Información varia

Conclusiones.

- Se pudo observar la carencia de una estructura organizativa consolidada, falta de una gobernanza local, la carencia de recursos económicos, lógistica fue uno de los principales aspectos mencionados por los participantes.
- Pudimos percibir que las comunidades tienen claridad en lo que hay que hacer, pero se ven limitadas y no cuentan con el apoyo ni de la Municipalidad que carece de gestión ni del Gobierno central, ONG o Proyecto.

IV. Anexos

Listado de participantes.



Estado de Asistencia / Evento: Jornada de Consulta
 Lugar y Fecha: Municipalidad de San Antonio de Oriente 7 de julio del 2016

No.	Nombre del Participante	Mujer	Hombre	Municipio/Institución	Cargo	Teléfono	Correo electrónico
1.	Oscar Noguerón Flores	X		San Antonio	Presidente Totumar	9360-5087	
2.	Nora Lisbeth Velasco	X		San Antonio	Secretaria "	9667-6267	
3.	Daisy Catalina Sancristan	X		San Antonio	Tesorera "	3144-9133	
4.	Ramón Ernesto Ríos	X		San Antonio	Vicepresidente	9667-3589	
5.	María Marcela Saavedra	X		San Antonio de Oriente	Secretaria	9809-4884	
6.	SANTOS RAMON H	X		SAN ANTONIO DE ORIENTE	Vicepresidente	9768-0861	
7.	Ronaldo Montaña	X		SAN ANTONIO DE ORIENTE	Coordinador Oficina	9740-0593	
8.	Rosalinda diaz	X		Facultad enyele	Presidente	9954-0147	
9.	Fernando Ruedas Zeballos	X		San Antonio de Oriente	Técnico	9540-2856	
10.	Santos Ramon Zuazo			San Antonio de Oriente	Representante centro	9601-7686	
11.	Oscar Lugo Canales	X		SAN FRANCISCO	Presidente Patrullante	9912-6735	
12.	Susel Tzedma Salazar	X		San Antonio de Oriente	Presidente Patrullante	99-73-79-24	
13.	Angel R. Peral Arribalzaga	X		San Antonio de Oriente	Vocal	97-46-77-17	
14.	Ricardito Maza	X		San Antonio de Oriente	Presidente Patrullante	99-59-80-67	
15.	José Elias Vargas	X		S.A.O. Feu M. T.G	Presidente Patrullante	98-38-0602	
16.	Darwin Alvarado	X		S.A.O. Feu M.	Presidente de agua	99-44-68-77	
17.	Ricardito Vargas	X		gallardo	fiscal Patrullante	9820-65-18	
18.	Jorge Villalobos	X		Alcaldia UMA	Jefe de UMA	99-20-82-73	umajur-cu@yahoo.com



Estado de Asistencia / Evento: Jornada de Consulta
 Lugar y Fecha: Municipalidad de San Antonio de Oriente, 7 de julio 2016

No.	Nombre del Participante	Mujer	Hombre	Municipio/Institución	Cargo	Teléfono	Correo electrónico
19.	norma Flores	✓		Totumar de San	Directora	91316-78	
20.	Claesica B.	✓		Mi Ambiente PFA	Duxiliar Adm.	8789-14-27	lbuscillolainca@yahoo.com
21.	Freddy Moreno	✓		Mi Ambiente PFA	Asistente Técnico	9754-40-80	freddyjmg@gmail.com

Fotografías.



Valle de Ángeles

I. GENERALIDADES

Comunidades representadas:

Participantes

Total: 19	Hombres:9	Mujeres: 10	Indígenas: 0 Hombres: Mujeres:
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Instituciones participantes: Unidad Municipal Ambiental, Juntas de Agua, Patronatos, Unidad de Aguas de la Municipalidad, Cuerpo de Bomberos, consejo de cuencas

Espacios de coordinación existentes: Unidad de Aguas de la Municipalidad con estrecha coordinación con juntas de agua a nivel Comunitario.

Grupos organizados existentes: (Productivos y no Productivos): Juntas de Agua, Consejo de cuencas, Fundación AMITIGRA, Grupo Forestal.

Medios de Vida de la Población: Agricultura, Ganadería, caficultura, Artesanías, turismo

II. REVISION DE PRODUCTOS DEL CONCEPTO DE PROYECTO

Matriz completada

MATRIZ N° 1 REVISIÓN DE PRODUCTOS

Producto del Componente 2	¿Qué hay en el municipio?	¿Cómo podemos hacerlo?	¿Dónde?	¿Con quiénes?*	Barreras y dificultades
1.- Restauración del bosque de pino en el CBC de 1,000 hectáreas para fortalecer y proteger servicios eco	- Organizaciones (Juntas de Agua, Patronatos, Cuerpos de Bomberos, Grupo Foresta,	- Organizándonos(U nidad) -Trabajando duro -Planificar. -Gestionando fondos. -Saneamiento de áreas afectadas	-Fuentes de Agua. -Áreas afectadas. -Sitios de belleza escénica. -Sitios de Riesgo	Con todas las fuerzas vivas de la comunidad (Municipalida d, Juntas de Agua, Concejo de cuencas. --Apoyo	-Falta de recursos económicos . -Involucrar a las organizacio nes existentes. Falta de

Producto del Componente 2	¿Qué hay en el municipio?	¿Cómo podemos hacerlo?	¿Dónde?	¿Con quiénes?*	Barreras y dificultades
sistémicos y medios de vida. (Preguntas generadoras: ¿Cómo les ha afectado la plaga (económicamente, salud, clima, etc.)?, ¿Hay Cooperativas Forestales?, ¿De qué viven?, ¿Tienen acceso al crédito?)	Consejos de cuencas. -iglesias escuelas, colegios, -Vivero Municipal -Cajas Rurales -Involucrar a las empresas privadas. -Fundación Amitigra, Boyes caos -Empresa de agua (jugo) Asociación de mujeres -Oficina municipal de la mujer Medios de comunicación -Alcaldes Auxiliares.	-Proteger las áreas afectadas -Extraer la madera plagada. -Reforestar. -Sensibilización ambiental.	Vulnerable s. Microcuen cas, zonas de recarga hídrica. -Parque nacional la tigra	Gubernament ales, ICF, MiAmbiente. -SANAA, UMA -Empresas privadas. -Centro de salud -Policía nacional FFAA. Cuerpo de Bomberos.	socialización , comunicación educación. -Falta de transparencia. -Falta de prevención contra incendios. -Falta de representación comunitaria en los proyectos. Que aparezca otra emergencia nacional -Falta de involucramiento de dueños de propiedades privadas. -Falta de cumplimiento político.
2.- Protección y prevención contra incendios, plagas, enfermedades y tala ilegal.	-Grupos organizados. -Cuadrillas en épocas de verano pagadas por la alcaldía (18 personas). -Comité de prevención.	-Haciendo Rondas. -Evitando las quemas Agrícolas. -Concientizando a las personas. -Poder tener recursos económicos para guardar el bosque. Tener comunicación entre las aldeas.	-En el bosque. - En Áreas protegidas por el municipio. - Microcuen cas. -Áreas afectadas	-Propietarios del bosque. -Hacer reuniones con los Agricultores. -Sector de educación. -Fuerzas Armadas. -Zamorano.	-Falta de transporte para brigadas. -Falta de equipo para combates de incendios. -Falta de radios de

Producto del Componente 2	¿Qué hay en el municipio?	¿Cómo podemos hacerlo?	¿Dónde?	¿Con quiénes?*	Barreras y dificultades
	-Equipo contra incendios. -Voluntad de trabajar.	-Cumplimiento de ley y ordenanzas.	por el gorgojo.	-Patronatos, Juntas de agua.	comunicación. -Falta de material didáctico para capacitaciones. -Faltas de vías de comunicación. -Falta de guardabosques. -Falta de recursos económicos . -Falta de organización. -Falta de educación Ambiental en escuelas, colegios, y las comunidades.
3.- Diseño e implementación de medidas y tecnologías de adaptación al cambio climático para el consumo responsable de agua y bosque. (Preguntas generadoras: ¿Qué tipo de sistemas de	-No hay nada de Tecnología (solo un proyecto de eco fogones de parte del gobierno central). -Juntas de agua ,Patronatos. - Microempresas de	-Organizándonos. -Haciendo gestión con el Gobierno e instituciones internacionales. -Contar con una planificación de desarrollo. -Asesoría y apoyo técnico.	-En Comunidades. -Zonas agrícolas. -Zonas boscosas.	-Con el Agricultor. -Con el Zamorano. -Apoyo del gobierno central. -Apoyo de proyectos y ONG.	-Falta de recursos económicos . -Falta de terrenos. -Falta de apoyo gubernamental. -Falta de asesoría técnica.

<i>Producto del Componente 2</i>	<i>¿Qué hay en el municipio?</i>	<i>¿Cómo podemos hacerlo?</i>	<i>¿Dónde?</i>	<i>¿Con quiénes?*</i>	<i>Barreras y dificultades</i>
riego utilizan?)	mujeres emprendedoras.				-Falta conocimiento -Falta de mercado con precios justos. -Acceso a la banca (préstamos blandos).

III. Información varia

Conclusiones

- Los líderes consultados en el taller priorizan la importancia de estar organizados y la unidad en el sentido que todas las estructuras comunitarias se enfoquen en una misma dirección para lograr objetivos comunes.
- Consideran que se deben de participar todos los sectores con el apoyo del Gobierno.
- La capacitación (Educación Ambiental) y el conocimiento de nuevas tecnologías de adaptación surgieron como una necesidad, al igual que la carencia de recursos económicos.

IV. Anexos

Lista de participantes

No.	Nombre del Participante	Mujer	Nombre	Municipio/Institución	Cargo	Teléfono	Correo electrónico
1	Atilina Oñate	F		Valle de Agua Junta de agua	Presidente	97515761	
2	Karen Reyes	X		V.A / A.M.V.A	Unidad de Agua	99090252	
3	Coronado Henriquez	X		V.A / Junta de Agua	Vocal II	31380954	Kadibel@gmail.com
4	JOSÉ Víctor	X		V.A / Junta de agua	Presidente	-o-	
5	Evelyn Orenda U.S.	X		V.A / Junta de agua	Vice Presidente	97-66-54-37	
6	Maria Elena Salgado	X		V.A / Junta de agua	secretaría	9515-67-82	
7	Emmanuel Caballero			Valle de Angeles	runjuno	210	210
8	Vanessa Bernardo			Valle de Angeles	ADMON Junta de Agua	98697280	
9	Ernesto Bernardo			Valle de Angeles	V.A / Junta de Agua	95373657	Bernardo.Ernesto@utu.hn
10	José MARGARITO SOLIS			Valle de Angeles Junta de agua	Presidente	99-38-43-98	
11	Hector David Aguilar			Vall de Angeles	Sra operacione	8930-7921	operaiones.ValldeAragones@ergos.honduras.com
12	Maximiliano Garcia			Vall de Angeles	Presidente	95589239	
13	Delly Yolanda Mejia	F		Quiebra Honda	Junta de Agua Presidenta	1558-23-59	
14	Bethany Oñate	F		Vall de Angeles/2021		33536465	bethyontivera@gmail.com
15	Cecilia Juarez	M		vall de Angeles	Wma.	98091720	Departamento.mal149@gmail.com
16	Gessica Bustillo			Quiebra Honda	Facilitador Adm.	9189-14-22	gessi.bustillo.1002.al@yahoo.es
17	Yanet Quez			Paja Seca	Facilitador	96473349	
18	Luis Gutierrez Barahona			Ciudad de Roatán	Coordinador Local	9551-3434	luguibobo@yahoo.com
19	Freddy Jonathan Narro	V		Mi Ambiente P.F.A	tecnico.	9759-HU-80	Freddyjmg@gmail.com

Fotografías.





Tatumbla

I. GENERALIDADES

Comunidades representadas:

- ✓ El Sapote Cuesta Grande
- ✓ Cofradía
- ✓ Zamorano
- ✓ Casco Urbano de Tatumbla
- ✓ Linaca

Participantes

Total: 11	Hombres: 5	Mujeres: 6	Indígenas: 0 Hombres: Mujeres:
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Instituciones participantes:

- ✓ Escuela agrícola Panamericana (E.A.P Zamorano)
- ✓ Centro de salud Cuesta Grande
- ✓ Consejo Consultivo Forestal
- ✓ Junta de Agua Zapote
- ✓ Junta de Agua Cofradía
- ✓ Coordinador de la UMA
- ✓ Junta der agua Linaca y Comisión de la Transparencia Municipal
- ✓ Catastro Municipal
- ✓ Director de Justicia municipal

Espacios de coordinación existentes:

- ✓ UMA
- ✓ Escuela Agrícola Panamericana El Zamorano

Grupos organizados existentes: (Productivos y no Productivos)

- ✓ Cooperativa de Agricultores
- ✓ Caja Rural de la aldea Cuesta Grande
- ✓ Grupo de Mujeres Emprendedoras

Medios de Vida de la Población:

- ✓ Agricultura
- ✓ Extracción de madera
- ✓ Viveros
- ✓ Oficinistas
- ✓ Comerciantes individuales

II. REVISION DE PRODUCTOS DEL CONCEPTO DE PROYECTO

Matriz completada

MATRIZ N° 1 REVISIÓN DE PRODUCTOS

Producto del Componente 2	¿Qué hay en el municipio?	¿Cómo podemos hacerlo?	¿Donde?	¿Con quiénes?*	Barreras y dificultades
<p>1.- Restauración del bosque de pino en el CBC de 1,000 hectáreas para fortalecer y proteger servicios ecosistémicos y medios de vida.</p> <p>(Preguntas generadoras:</p> <p>¿Cómo les ha afectado la plaga (económicamente, salud, clima, etc.)?, ¿Hay Cooperativas Forestales?, ¿De qué viven?, ¿Tienen acceso al crédito?)</p>	<p>1-Reuniones con entes involucrados para protección</p> <p>2- Reforestación de micro cuencas y zonas limpias ; control de plagas (3 cuadrillas) técnicos (3) (C.C.F.M.)</p> <p>Consejo Consultivo Forestal Municipal</p> <p>4- Mapas con zonas identificadas</p> <p>5-Reserva biológica del Uyuca (R.B.U.), grupos voluntarios</p>	<p>1-vivero municipal</p> <p>2- Contar con guarda recursos en áreas designadas</p> <p>3- Respetar las ordenanzas</p> <p>4-emitar ordenanzas</p> <p>5-aplicación de la ley forestal</p> <p>6-formar ,capacitar a los guarda recursos</p> <p>7- presencia permanente con fondos permanentes</p> <p>8- identificar las áreas que están afectadas</p> <p>9- coordinación con el E.A.P y alcaldías que colindan la R.B.U , plan de manejo</p>	<p>1 - áreas afectadas por incendios, plagas y muérdago / identificadas en el mapa) (georreferenciadas)</p>	<p>1 -Fiscalía del ambiente</p> <p>2- F.F.AA (grupo militar)</p> <p>2- SANAA, MiAmbiente, centros educativos, patronatos, juntas de agua, organizaciones civiles del municipio, Zamorano, ICF, motosierristas, mesa de turismo, C.C.F.M., DIMASTA, Iglesias, seguridad policial.</p>	<p>1 – Recurso económico</p> <p>2- indiferencia</p> <p>De la población y autoridades locales.</p> <p>3- instituciones , la indiferencia del ICFY SANAA</p> <p>4- colores políticos , falta de conciencia ciudadana</p>
<p>2.- Protección y prevención contra incendios, plagas, enfermedades y tala ilegal.</p>	<p>1-mantenimiento de ronda (16km)</p> <p>2-cuadrilla de protección por seis meses(6) (insuficientes)</p> <p>3- Apoyo del C.C.F.M</p>	<p>1-Cumplir con 60 km de ronda en zona de reserva</p> <p>amortiguamiento transición</p> <p>2-Elaboracion de proyecto para ejecutar el trabajo.</p> <p>3- Campaña de concientización.</p> <p>4- Ordenanzas a propietarios de bosque</p> <p>cumplimiento de la ley</p> <p>5-Emitir acuerdos con las comunidades y alcaldías</p>	<p>1-Montaña de Azuacualpa</p> <p>2-La Crucitas</p> <p>3-Chile</p> <p>4-Ardillas</p> <p>5-Rodeo</p> <p>6-Suyatillo</p> <p>7-Corrales</p> <p>9-Munuare</p> <p>10-Casco Urbano</p>	<p>1 -Fiscalía del ambiente</p> <p>2- F.F.AA (grupo militar)</p> <p>2- SANAA, MiAmbiente, centros educativos, patronatos, juntas de agua, organizaciones civiles del municipio, zamorano , ICF, motosierristas,me sa de turismo,C.C..F.M., DIMASTA, Iglesias, seguridad policial.</p>	<p>1-Falta de equipo y herramienta</p> <p>2-No hay de ordenamiento territorial</p> <p>3-no hay supervisión de las autoridades</p> <p>4-indiferencia de los terratenientes</p> <p>5-falta de personal</p> <p>6-falta de recursos económicos</p>

<i>Producto del Componente 2</i>	<i>¿Qué hay en el municipio?</i>	<i>¿Cómo podemos hacerlo?</i>	<i>¿Donde?</i>	<i>¿Con quiénes?*</i>	<i>Barreras y dificultades</i>
		6-coordinacion con juntas de agua (J.A) y patronatos.		3-Propietarios de terrenos 4-Sociedad civil 5-Copeco	
3.- Diseño e implementación de medidas y tecnologías de adaptación al cambio climático para el consumo responsable de agua y bosque. (Preguntas generadoras: ¿Qué tipo de sistemas de riego utilizan?)	1-Laguna de captación de agua lluvia 2-fuentes de agua que abastecen tres (tres) comunidades 3-Mejoramiento de la línea de conducción de agua 4-Reparacion de tanques 5-Posos artesanales(1) abastece tres (3) caseríos 6-Dos (2) pozos perforados)	1-Aplicar tarifas (estación de bomberos, torres de observación crear una taza para las personas que viene de afuera. 2-Delimitar zonas 3-Zonas de reserva 4-Amortiguamiento y transición 4-Declaratoria de las micro cuencas y registro adquisition de terreno 5-Recuperar zonas ejidales, (terreno) 6-Proteccion de las micro cuencas 7-Socilaizar las actividades que se realizaran con los dueños de propiedad 8-Rehabilitar micro cuenca Murciélagos ,implementar cosechas de agua lluvia , plantas de tratamiento de agua, mejoramiento al sistema de agua	1-Microcuenca las Moras 2-Piedra grande 3-Palmira 4-Monte Crudo 5-Golondrinas 6-Las trancas 7-Rehabilitar Murciélagos, Liquidámbar, Fuentes de agua Macuelizo 8-Mejorar la calidad de agua 9-Contrucción de reservorios 10-sistema de riego por goteo 11-para cultivos agrícolas	1 -Fiscalía del ambiente 2- F.F.AA (grupo militar) 2- SANAA, MiAmbiente, centros educativos, patronatos, juntas de agua, organizaciones civiles del municipio, zamorano, ICF, motosierristas, mesa de turismo, C.C.F.M., DIMASTA, Iglesias, seguridad policial.	1- Microcuencaen propiedades 2-Colores políticos no hay interés por las autoridades locales 3-No hay respeto de las leyes dependencia de la alcaldía 4-Recurso económico 5-Educacion 6-Falta de conocimiento de las leyes 7-Comciencia del ciudadano 8-falta de voluntariado 9-Dclaratoria , registro de micro cuencas, participación ciudadana

III. Información varia

El taller de consulta en el Municipio de Tatumbla se inició a las 9:00 am con una ronda de presentación del equipo técnico organizador y luego los participantes se presentaron por su nombre y enfatizando de que comunidad u organización representaban

Seguidamente se explicó el objetivo de la reunión así como también la presentación de la propuesta la cual la realizo en Ing. Eduardo Sánchez del PFA.

Al culminar la presentación se realizó el primero ejercicio con los participantes el cual consistía en una serie de preguntas sobre la temática de cambio Climático como ser:

¿Qué es cambio Climático?

Esto para involucrar a los participantes en la jornada en donde se pretendió formar el concepto de cambio Climático por medio de lluvias de ideas donde fueron muy activos para formar dicho concepto, así como también las causas que ellos perciben por el cual se da el cambio climático, también enfatizaron sobre los daños que ocasiona el cambio climático no solo en el ambiente sino que también en la población humana como enfermedades , también comentaron que año a año el cambio climático se ha ido incrementando debido a la falta de conciencia del ser humano algunos comentarios del primer ejercicio se enuncian a continuación :

Don Donato: Resilencia capacidad de resistencia de recuperarse ante un desastre, el cambio climático nos afecta en racionamiento de agua, el ganado muere, no hay cosechas.

Don Ramiro enfatizo que de los proyectos que se han realizado en el municipio son los que se están haciendo en dos micro cuencas del municipio, recalco que se debe trabajar lo que es el cuidado del bosque trabajando en rondas preventivas, realizar un trabajo sobre la urbanización, ordenamiento territorial. Implementar talleres en temas específicos a las fuerzas vivas del municipio

Buscar la manera de crear microempresas para jóvenes mujeres, y hombres, el recurso bosque la madera que se está plagando

Don Amado Manifestó realizar cabildos abiertos para comunicar a la población que no se debe seguir construyendo en el bosque. , ver la manera de cómo realizar una asociación de las fuerzas vivas del municipio

Doña Brenda manifestó que el cambio climático provoca inundaciones, erosión del suelo provoca altas temperaturas y esto hace crecer al gorgojo en el pino. En cambio climático, no hay cosechas, la industria nos contamina altamente la capa de ozono, los afectados somos todo la población, los más afectados son los de población más baja no cuentan con muchos recursos que les ayude a sobrevivir, no cuentan con una buena alimentación que les brinde nutrición, obtener una buena educación.

Seguidamente se desarrolló el ejercicio de los productos del proyecto enfocados a la reforestación de bosques, otro a la prevención y otro sobre diseño medidas de adaptación al cambio climático la dinámica del taller consistió en levantar información relevante de los productos del proyecto en conjunto con las fuerzas vivas del Municipio , en donde por cada producto se les consultaba en general sobre que había en su municipio ya que ellos son los que conocen su zona , con esta

metodología se trabajó los otros productos . Cabe mencionar que hubo mucha participación de los presentes.

Ya una vez terminado el ejercicio de los productos del proyecto ya con actores identificados los participantes expresaron verbalmente algunas inquietudes de autoridades locales así como centrales y problemática de su municipio y de cómo se puede obtener una vinculación entre ellas los cuales se enuncian a continuación:

Primer Producto:

Don Ramiro manifestó que hay que mejorar la calidad de vida en vez de medios de vida, Sacar el mapa en hoja cartográfica del municipio

Doña Brenda Elaborar planes de manejo del bosque

Segundo Producto:

Don Donato enfatizo que las cuadrillas que sean permanentes para protección del bosque

Don Ramiro, se debe incluir zonas de reserva (núcleo) amortiguamiento y zonas de transición, implementar el plan de arbitrios

Se necesita dos (2) torres de observación para controlar incendio, posta de cuerpo de bomberos (crear estación)

Bessy, El plan de arbitrios es revisarlo anualmente y crear una tasa para las personas que vienen de afuera a vivir al municipio para protección del bosque y que la corporación crea la conciencia.

Producto Tres:

Doña Brenda: Crear conciencia en los agricultores para el buen manejo de riego. El uso de tecnologías, lograr buen tratamiento de agua y buen uso, la municipalidad organizar y apoyar técnicamente a la sociedad civil, crear conciencia por parte de la corporación municipal

Don Ramiro: Declarar y registrar cada microcuerpo del municipio para tener buen manejo del agua

Doña Odilia: Participación ciudadana (Involucrar más) Crear y seguir manteniendo los enlaces con la fiscalía del ambiente, Vigilancia zonas del bosque, lograr que el SANAA capacite a los beneficiarios, obtener ayuda por parte de instituciones , Capacitar a los niños y jóvenes de los diferentes centros educativos en el buen manejo y protección del bosque y cuidado de las micro cuencas

Don Víctor: Realizar más trabajos de campo, por parte de la fiscalía del ambiente, hacer cumplir las leyes, lograr que COPECO apoye en cosas técnicas, capacitar a los ciudadanos

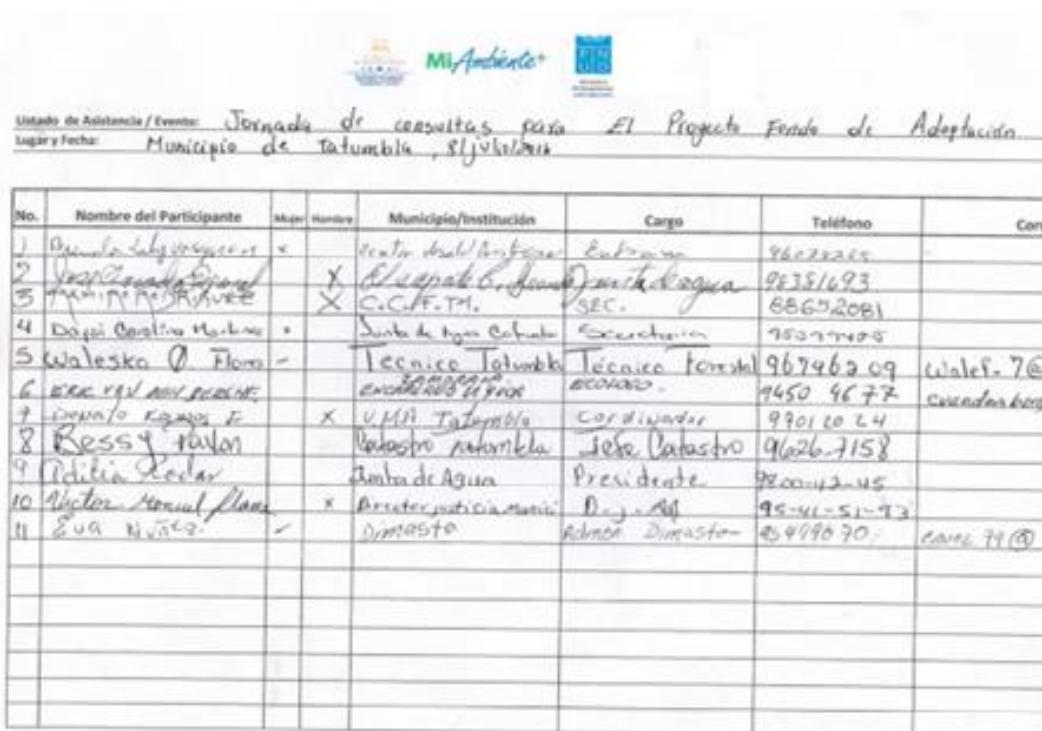
Doña Bessy: Mantener mejor coordinación con las instituciones regionales y locales

Don Donato: Las FF.AA. se involucren más en el combate de incendios y no en prevención, obtener mejor acercamiento con las instituciones involucradas en protección de agua y bosque.

IV. Conclusiones y recomendaciones

- ✓ Los participantes recalcaron del poco interés que existe por parte de las autoridades municipales y los pobladores del municipio de Tatumbla.
 - ✓ Las personas que asistieron al taller, dieron igual importancia a los problemas presentados en los sectores bosque y agua.
 - ✓ La participación de hombres y mujeres fue muy equilibrada.
 - ✓ Las herramientas de trabajo que posee el municipio son muy pocas ya que, lo único que se identificó es un mapa de zonas afectadas por incendios forestales.

V. Anexos





Villa de San Francisco

I. GENERALIDADES

Comunidades representadas:

- ✓ El Hato
- ✓ Barrio Santa Rita
- ✓ Aldea La Mesa
- ✓ Aldea El Pedregal
- ✓ Pueblo Nuevo
- ✓ Barrio Jicarito
- ✓ Guarumas

Participantes

Total: 26	Hombres:21	Mujeres: 5	Indígenas: 0 Hombres: Mujeres:
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Instituciones participantes:

- ✓ Habitad para la Humanidad
- ✓ Proyecto Mosef
- ✓ Junta de agua aldea
- ✓ Vicepresidente proyecto comité Capiro
- ✓ Comité de Ambiente
- ✓ Auxiliares
- ✓ Patronatos
- ✓ Comisión ciudadana de transparencia
- ✓ Oficina Municipal de la Mujer
- ✓ Iglesia Cristiana Evangélica

Espacios de coordinación existentes:

- ✓ UMA
- ✓ MOSEF
- ✓ CAPIRHO USF
- ✓ Oficina Municipal de la Mujer

Grupos organizados existentes: (Productivos y no Productivos)

- ✓ Cooperativa de productores de café
- ✓ Fundación CAPIRHO USF

Medios de Vida de la Población:

- ✓ Agricultura
- ✓ Labores en el ingenio azucarero
- ✓ Cría de ganado bovino y porcino.
- ✓ Cría de aves
- ✓ Oficinistas
- ✓ Comerciantes individuales

II. REVISION DE PRODUCTOS DEL CONCEPTO DE PROYECTO

Matriz completada

MATRIZ N° 1 REVISIÓN DE PRODUCTOS

Producto del Componente 2	¿Qué hay en el municipio?	¿Cómo podemos hacerlo?	¿Donde?	¿Con quiénes?*	Barreras y dificultades
1.- Restauración del bosque de pino en el CBC de 1,000 hectáreas para fortalecer y proteger servicios ecosistémicos y medios de vida. (Preguntas generadoras: ¿Cómo les ha afectado la plaga (económicamente, salud, clima, etc.)?, ¿Hay Cooperativas Forestales?, ¿De qué viven?, ¿Tienen acceso al crédito?)	1- Montaña de Capiro abastece en un 90% de agua a todo el municipio 2- cuatro aldeas en la zona 3-acuíferos en medio de la misma aldea 3- mal usos del agua 4-siembra agrícolas 5- existen rondas preventivas 6-no han tenido incendios forestales durante dos años 7-planes de acción de la micro cuenca 8-mejoramiento de sistemas de agua 9-reforestación 10-lucha contra la empresa de ingenio (quema) 11-1microcuenca declarada 12-ocho en proceso de de declaración ICF	1-recuperación de aéreas para proteger los nacimientos de agua (reforestación) 2- cambio de tecnología brindando capacitación 3-aplicación de la ley referente al bosque	1-Montaña de Capiro(zonas núcleos) Guaruma y Monte león 2-áreas de perdidas	1-ICF, Alcaldías Juntas de agua Salud , comité ambiental Capiro 2-Educación 3-Seguridad Nacional 4-Patronatos 5-beneficiarios 6-Unión Europea (MOSEF) 7-Industrias agrícola Soleados 8-MIAMBIENTE 9-Instituciones Nacionales 10-Ministerio Publico 11-Unidad de Genero de la Alcaldía Municipal	1-Ingenio azucarera) 2-Porquerizas 3-Autoridades local , regional 4-Industria agrícola Soleada 5-Las cuatro aldeas de Capiro

Producto del Componente 2	¿Qué hay en el municipio?	¿Cómo podemos hacerlo?	¿Donde?	¿Con quiénes?*	Barreras y dificultades
2.- Protección y prevención contra incendios, plagas, enfermedades y tala ilegal.	1-Vigilante (guardabosque) 2-Rondas de 7.5.km 3-alcaldes auxiliares 4-grupo ambientalista Capiro en el municipio ,áreas recuperadas 5-plan de protección municipal 6-estación de reporte incendios 7-herramientas	1-vías de acceso 2-mejorar rondas 3-capacitar a los alcaldes auxiliares 4-fortalecer fondos municipales en el ambiente 5-vigilancia en época de incendios forestales(IF) 6-recurso humano 7 aplicar ley 8-cumplir acuerdos 9-reforestación	1-montaña capiro y áreas de producción 2-concientización a la población del municipio , monte león ,guaruma (CU)	1-ICF, Alcaldías Juntas de agua Salud , comité ambiental Capiro 2-Educación 3-Seguridad Nacional 4-Patronatos 5-beneficiarios 6-Unión Europea (MOSEF) 7-Industrias agrícola Soleados 8-MIAMBIENTE 9-Instituciones Nacionales 10-Ministerio Publico 11-Unidad de Genero de la Alcaldía Municipal	1-dinero (financiamiento) 2-tenencia de tierra 3-uso del suelo 4-no hay participación de la mujer
3.- Diseño e implementación de medidas y tecnologías de adaptación al cambio climático para el consumo responsable de agua y bosque. (Preguntas generadoras: ¿Qué tipo de sistemas de riego utilizan?)	1-represa (20,000M2 2-pozos pero no habilitados 3-2 pozos habilitados en verano 4- nueve (9) bocatoma en buenas condiciones 5-funcionando treinta(30)micro riegos (150 M2 C/U) 6-huertos familiares 7-Río Choluteca(protección)	1-aprovechamiento del agua subterránea 2-Gestión de recursos 3-concientización a las autoridades locales 4-protección de las zonas núcleo 5-descentralización de fondos de ambiente y aguas 6-regular la explotación del río Choluteca 7-Delimitación municipal 8- Involucrar a las comunidades vecinas 9-Aforar fuentes , (fuentes alternas) 10-reservorio para agua lluvia	1-todo el municipio 2-Río Choluteca 3-Montaña Capiro 4-Áreas de producción	ICF, Alcaldías Juntas de agua Salud , comité ambiental Capiro 2-Educación 3-Seguridad Nacional 4-Patronatos 5-beneficiarios 6-Unión Europea (MOSEF) 7-Industrias agrícola Soleados 8-MIAMBIENTE 9-Instituciones Nacionales 10-Ministerio Publico 11-Unidad de Genero de la Alcaldía Municipal	1-Mal funcionamiento de las juntas de agua (J.A) 2-Financiamiento 3- Falta de aplicación de la ley 4-Usurpadores de tierra 5-Consumo de agua por parte del ingenio azucarero 6- Contaminación del Río Choluteca

<i>Producto del Componente 2</i>	<i>¿Qué hay en el municipio?</i>	<i>¿Cómo podemos hacerlo?</i>	<i>¿Donde?</i>	<i>¿Con quiénes?*</i>	<i>Barreras y dificultades</i>

III. Información varia

El taller de consulta en el Municipio de la Villa de San Francisco se inicio a las 9:00 am con una ronda de presentación del equipo técnico organizador y luego los participantes se presentaron por su nombre y enfatizando de que comunidad u organización representaban

Seguidamente se explico el objetivo de la reunión así como también la presentación de la propuesta la cual la realizo en Ing. Eduardo Sánchez del PFA.

Al culminar la presentación se realizo el primero ejercicio con los participantes el cual consistía en una serie de preguntas sobre la temática de cambio Climatico como ser:

¿Que es cambio Climático?

Esto para involucrar a los participantes en la jornada en donde se pretendió formar el concepto de cambio Climático por medio de lluvias de ideas donde fueron muy activos para formar dicho concepto

- ✓ Cambio Climático es todo lo que el hombre ha generado (trastornado) el ambiente
- ✓ Que eran muchos incendios
- ✓ Así se fue desarrollando las otras preguntas como ser que más conocían sobre cambio Climático , donde expresaban que tiempos atrás de niños se acordaban que el pueblo amanecía nublado , lluvias constantes y hasta la fecha ha mirado la diferencia , mas ahora que se instalo el ingenio azucarero a afectado mas al municipio .
- ✓ También manifestaron que a consecuencia del cambio Climático en la actualidad ya no existen las cuatro estaciones del año
- ✓ Destrucción por la mano del hombre al medio ambiente, tomar conciencia para cambiar.
- ✓ Los fenómenos que provocan el cambio climático manifestaron, los descombros crecimiento de infraestructura aumento de la temperatura.
- ✓ El cambio Climático provoca el niño y la niña
- ✓ El cambio Climatico provoca altas contaminaciones, incendios forestales, reduce el agua, perdidas de cultivo
- ✓ Con el cambio Climatico todos son afectados (seres vivos)
- ✓ El fenómeno que afecta el cambio Climatico es la falta de educación a la población en general ; uso excesivo de aerosoles , por ende la población se esta autodestruyendo por esa falta de conciencia

Seguidamente se desarrollo el ejercicio de los productos del proyecto enfocados a la reforestación de bosques, otro a la prevención y otro sobre diseño medidas de adaptación al cambio climático la dinámica del taller consistió en levantar información relevante de los productos del proyecto en conjunto con las fuerzas vivas del Municipio , en donde por cada producto se les consultaba en general sobre que había en su municipio ya que ellos son los que conocen su zona , con esta metodología se trabajo los otros productos . Cabe mencionar que hubo mucha participación de los presentes.

Ya una vez terminado el ejercicio de los productos del proyecto ya con actores identificados los participantes expresaron verbalmente algunas inquietudes de autoridades locales así como centrales y problemática de su municipio los cuales se enuncian a continuación:

- ✓ Tomar en cuenta el municipio no dejarlo por fuera
- ✓ El municipio no aprovecha el sector forestal de ninguna índole
- ✓ Pastor evangélico: La personas encargadas de las UMA asistir mas al campo y vigilancia permanente en los bosques;
- ✓ Mal uso del agua evitar la construcción de cisternas ya que el agua no se usa para uso doméstico si no que para construcción
- ✓ Josué: Fortalecer a las comunidades en el uso del agua y manejo a futuro el problema que vamos a tener va a hacer el tema del agua, tener apoyo por el gobierno local
- ✓ Comunicar a las autoridades respectivas sobre la problemática e involucrar a cada institución para identificar las necesidades del municipio, brindar soluciones, trabajar en conjunto todas las organizaciones.
- ✓ Don José: El problema mayor es la toma de decisiones que solo las autoridades municipales deciden, involucrar a la sociedad civil para apoderarse del tema, creación de grupos ambientalistas; fortalecer la relación alcalde, sociedad civil
- ✓ Don Mario: de niño se acordaba que el pueblo amanecía nublado, lluvias constantes; pero que a través que se instaló el ingenio ha afectado el municipio en cuanto a ladrones, droga, no manejan el bosque como debería ser, calles en mal estado, ocasionan descombros para ampliar la siembra de caña, haciendo mención que las autoridades municipales se hacen de la vista gorda con el problema del ingenio.
- ✓ Don Justo: Ocasionan quemas en las cañeras que perjudican, mal uso de las chancheras, no utilizan el sistema de alcantarillado.
- ✓ Edy: Uno de los barrios han tenido problemas de agua no llega; porqué lo usan para sistemas agrícolas, autoridades municipal no toma importancia al tema del agua, descombros de arboles en la calle principal por la azucarera.
- ✓ Nubia: No hay propuestas para sostenibilidad familiar por parte del PFA ; el área rural es más afectado .
- ✓ Rodolfo: ICF cumple un rol importante e influir de mucho en la dotación de plantas para reforestar apoyar en la delimitación de micro cuencas, influir en zonas afectadas por el gorgojo, no hacer uso de cambio de suelo.
- ✓ Denis: Se realizó cabildo abierto en la comunidad de Coyolitos donde las autoridades comunicaron que no se hará cambio y uso de suelo en áreas afectadas por el gorgojo
- ✓ Don Gerónimo: Autoridades municipales informar a la comunidad con datos de cuanto de área fue afectada por el gorgojo y establecer la ley forestal.

- ✓ Gerardo: Crear conciencia y capacitación a los pobladores de no hacer cambio de uso de suelo.
- ✓ Don José: Vigilancia cuando se den proyectos de reforestación y cuidar de la fuente de agua y bosque, capacitarlos, crear un consejo de cuencas.
- ✓ Don José: Presidente del comité ambientalista CAPIRO (ex alcalde), mejorar las condiciones administrativas del municipio en cuanto al recurso agua y bosque, interactuar con las organizaciones locales para hacer conciencia .plantear los problemas que existen y ejecutar las acciones que correspondan.
- ✓ Don Gerónimo: Colegios y escuelas juegan un papel importante en realizar campañas de capacitación y hacerles conciencia sobre el buen uso del agua y bosque, realizar excursiones con ambos centros educativos a los diferentes micros cuencas del municipio.
- ✓ Capacitar a las F.F.AA , policía nacional y ministerio público , sobre el tema de prevención y control de recursos naturales , sin politizar los recursos naturales .
- ✓ Los beneficiarios es eslabón principal de cada uno de las actividades a ejecutar y ser voluntarios y combate de incendios forestales (I.f)
- ✓ Zaid: La Unión Europea ha realizado mucho apoyo en mejora de abastecimiento de agua, declaración de las micro cuencas y capacitación
- ✓ Las ONGs juegan un papel fundamental con la ejecución de proyectos
- ✓ Regular las medidas, crear conciencia sobre el buen manejo de las buenas prácticas agrícolas (BPA)
- ✓ Estrechar lazos entre gobiernos locales y nacionales
- ✓ buscar la manera de declarar en área protegida la montaña de CAPIRO

IV. Conclusiones y recomendaciones

- ✓ Las personas que asistieron al taller de consultas, conocen muy bien de la estrecha relación que existe entre el agua y el bosque, por lo que mostraron igual importancia para ambos sectores.
- ✓ La principal preocupación de los líderes de la Villa de San Francisco son las grandes empresas que se han asentado en dicho municipio.
- ✓ De acuerdo a la representación masculina, la participación de las mujeres en todos los procesos es muy necesaria, y a la vez se sienten satisfechos con las líderes femeninas que tienen en sus organizaciones.
- ✓ Los pobladores expresaron que el interés que existe por parte de las autoridades municipales es casi nulo.

V. Anexos

No.	Nombre del Participante	Món. Número	Municipio/Institución	Cargo	Teléfono	Correo electrónico
1	Dennis Salgado	/	Proyecto Mesoer VSP	Coordinador	96885101	dabersalpeta@yahoo.com
2	S. Cecilia Montes	/	Jefatura Agua El Hatillo	Agua	202330128	manzanaresagua1.com
3	Rafael Mata	/	Habitat	-	-	angelabunegua@gmail.com
4	Nubia Casco	X	Tesis & HABITAT	Facilitación	936183891	angela.bunegua@gmail.com
5	Orlando Peralta	X	Polvo Peralta	Alc. Municipal	9850-2246	angela.bunegua@gmail.com
6	Hector Ollero villa	/	ESTUDIOS AGROPECUARIOS SANTO DOMINGO	gerente	22772408	-
7	SANTO DOMINGO	/	SANTO DOMINGO	-	89370997	-
8	Eduardo Cárdenas	/	Armenio Cárdenas	-	958227421	-
9	Pedro Antonio	/	\$MAYA\$ 029	-	99001293	-
10	Edil Ponce	/	Edil Ponce	Presidente Pueblo	98902052	-
11	Mario Pérez Mejía	/	B° Santo Rito	Presidente Pueblo	98902052	-
12	Santo Ildo Vásquez	/	Ildo Vásquez	asistente Jefe	99234211	-
13	Edil Cárdenas	/	Edil Cárdenas	ag. 1.º	96021220	-
14	Sofía Mariana Martínez	/	Pueblo Nuevo	Tesorera	98462492	Sofía Martínez
15	Samir Díaz	/	CAPIRHO	APOYO	933347777	-
16	Edgar Cecilio Tercero	/	Concejo de Capirote	Directivo	52312345	-
17	Jairo Durán	/	Jairo Durán	Pastor	32912995	-
18	José Rico Tovar	/	Ob. Ob. B. Arístides	-	79100726	-

No.	Nombre del Participante	Món. Número	Municipio/Institución	Cargo	Teléfono	Correo electrónico
19	Leticia Rodríguez	/	oficina Mpal de la Hwy (Coordinadora)	9716-3739	leticiarodriguezp	-
20	Oscar Orlando P.	/	Gobernación	Presidente Junta	98878969	-
21	Nery Ponce	/	Villa de San Fermín	Tesorera	2769-6575	-
22	Jairo Aniceto Bráitez	/	Villa de San Francisco - Col. Villa de San Francisco	Presidente junta	94565379	-
23	JOSÉ JORGE AQUINO	/	CAPIRHO VSP	PRESIDENTE	97266139	jaguip@yahoo.com
24	R. B. - Q.B. - q.B. - q.B.	/	CAPIRHO VSP	Vice presid. 1.º o. presid.	9246144	-
25	JOSÉ JORGE AQUINO	/	CAPIRHO VSP	Fiscal	75-13644	375rvelizqueza@
26	Waleska O. Flores	-	-	Técnico	96746209	walef_1@yahoo.com



Lepaterique

I. GENERALIDADES

Municipio: Lepaterique

Comunidades representadas:

- | | |
|--------------------|------------------|
| ✓ Ocote Hueco | ✓ La Estancia |
| ✓ El Guayabo | ✓ La Brea |
| ✓ La Ruda | ✓ El Escarbadero |
| ✓ Apóstol Santiago | ✓ Guanacaste |
| ✓ Hatillo | ✓ Trinidad |

Participantes

Total: 34	Hombres: 29	Mujeres: 5	Indigenas: Aunque no hubo representación de una organización específica, todos los pobladores se consideran de ascendencia lenca.
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Instituciones participantes:

- | | |
|----------------------------|--------------------|
| ✓ ICF | ✓ ADAL |
| ✓ FAO | ✓ Guías Familias |
| ✓ Red de mujeres | ✓ Mejores familias |
| ✓ Alcaldía | |
| ✓ Cooperativa agroforestal | |

Espacios de coordinación existentes:

- | | |
|-------------------------------|----------------------------|
| ✓ Juntas de agua | ✓ Mejores Familias |
| ✓ Patronatos | ✓ Guías Familias |
| ✓ Cooperativas Agroforestales | ✓ Cooperativa agroforestal |

Grupos organizados existentes: (Productivos y no Productivos)

- | | |
|------------------|----------------------------|
| ✓ ADAL | ✓ Mejores Familias |
| ✓ Kielsa | ✓ Guías Familias |
| ✓ Child fund | ✓ Cooperativa agroforestal |
| ✓ FAO | ✓ Bosques de Lepaterique |
| ✓ Red de Mujeres | |

Medios de Vida de la Población:

- ✓ Resina
- ✓ Agricultura

II. REVISION DE PRODUCTOS DEL CONCEPTO DE PROYECTO

MATRIZ N° 1 REVISIÓN DE PRODUCTOS

Producto del Componente 2	¿Qué hay en el municipio?	¿Cómo podemos hacerlo?	¿Dónde?	¿Con quiénes?*	Barreras y dificultades
1.- Restauración del bosque de pino en el CBC de 1,000 hectáreas para fortalecer y proteger servicios ecosistémicos y medios de vida. (Preguntas generadoras: ¿Cómo les ha afectado la plaga (económicamente, salud, clima, etc.)?, ¿Hay Cooperativas Forestales?, ¿De qué viven?, ¿Tienen acceso al crédito?)	<p>1. Cooperativa agroforestal 930 socios en el municipio, hay más actividad en el espino.</p> <p>2. Bosques de Lepaterique 150</p> <p>3. Cafetaleros dan semillas de especies preciosas a las personas</p> <p>4. Asistencia solidaria a las personas de escasos recursos</p> <p>5. Familias afectadas por el gorgojo, no hay datos pero están en proceso, se estima que un 40% ha obtenido perdidas. 1150 familias resineros y están siendo afectados. Yerba buena 422 has fundidas</p> <p>6. El hombre ha sido afectado fuertemente por ámbito laboral los más afectados son los</p>	<p>Asistencia técnica forestal</p> <p>Reforestar con familias afectadas a cambio de ayudas solidarias</p> <p>Visualización con cafeteros para sistemas agroforestales, se estima 1000 productores</p> <p>Instalación de viveros de especies nativas o cedros y caoba o frutales (guayaba, aguacate) y explorar con Cacao</p> <p>Retomar el ejercicio del fondo de manejo</p>	<p>Espino, Carrizal, Yerba Buena, Mulhuaca, Culguaque, Casco Urbano</p> <p>Culguaque y Carrizal</p> <p>Culguaque</p> <p>Lepaterique centro</p> <p>Lepaterique centro para beneficio de</p>	<p>Con personas que trabajan solamente con la recina</p> <p>Hombres y mujeres</p> <p>Personas que trabajan con la resina</p> <p>Asociaciones (cooperativas, cajas, juntas de agua, patronatos, guarda reserva, grupos de mujeres) dándole prioridad a las mujeres</p> <p>El consejo municipal</p>	<p>*Incendios *Las medidas no toman en cuenta el aumento de enfermedades respiratorias y emisiones(amigdalitis, resfriados, menores de 5 años afectados y ancianos)</p> <p>*Cuanto es el costo ambiental para el control de un área y el daño causado *La siembra es demasiado extensiva, en vez de cultivar en menos áreas la misma cantidad</p> <p>*Vinculación entre cooperativas y resineros</p> <p>*No se cuenta con información para realizar análisis de la afectación de la plaga multitemporales *No hay sinergias entre ICF con la municipalidad de Lepaterique</p> <p>Estructura interna, supervisión hacia los prestadoras de servicios</p>

<i>Producto del Componente 2</i>	<i>¿Qué hay en el municipio?</i>	<i>¿Cómo podemos hacerlo?</i>	<i>¿Dónde?</i>	<i>¿Con quiénes?*</i>	<i>Barreras y dificultades</i>
	<p>infantes, medios de vida solo resinación (espino).</p> <p>7. Zona más afectada Aldea Carrizal (Oropole), Espino(Ulazala, turturupe, aguacate, el naranjito, el yaz, el llano del conejo, granadillo) y Mulhuaca</p> <p>8. El comercio va cayendo por la pérdida de resina.</p> <p>9. Resinación, leña y carbón, ha afectado bastante en negocios, campesinos</p> <p>10. Nutrición, 250 fam (Ulazala, espino, estancia, aguacate) bolsas solidarias y trabajando huertos familiares</p>	<p>forestal (agua y bosque)</p> <p>Cajas de ahorro y crédito, vincularse con estructuras organizativas,(para poder capitalizar)</p>	<p>todo el municipio</p>		<p>de agua, no están delimitadas por ICF</p> <p>*No hay retribución de los pobladores hacia el recurso</p>
2.- Protección y prevención contra incendios, plagas, enfermedades y tala ilegal.	<p>1. 3 cuadrillas trabajando en el municipio las cuales se tardan aprox. 3 días para apagar el incendio</p> <p>2. Ordenanzas, guarda recursos, plan de protección</p>	<p>Campañas de no quema y control de plaga (agrícola y forestal)</p> <p>Aplicación de las ordenanzas Monitoreos constantes</p>	<p>La Mani y Curaren</p> <p>En todo el municipio</p>	<p>Alcaldías, cooperativas, juntas de agua, patronatos fuerzas vivas</p> <p>Alcaldía</p>	<p>Como no se obtiene beneficio por resinación ya no hay interés por cuidarlo sobre todo con límites ganaderos</p> <p>Las leyes no se aplican</p> <p>Equipo de mala calidad no son utilizados, tramos largos para cargar el equipo (apaga fuegos)</p>

<i>Producto del Componente 2</i>	<i>¿Qué hay en el municipio?</i>	<i>¿Cómo podemos hacerlo?</i>	<i>¿Dónde?</i>	<i>¿Con quiénes?*</i>	<i>Barreras y dificultades</i>
	<p>3. La población está preocupada porque no se visualiza mejora en el control de plagas.</p> <p>4. Se cuenta con plan de manejo de yerba buena *Planes municipales</p> <p>5. El gorgojo afecta más en invierno y más en las zonas cercanas a las fuentes de agua</p>	<p>Sistemas de alerta temprana</p> <p>Comités comunitarios contra incendios</p> <p>*Formar red de capacitadores *Fortalecimiento de las capacidades a las familias para monitoreo</p>	<p>En las comunidades más vulnerables</p> <p>Para todas las aldeas</p> <p>Para todas las aldeas</p>	<p>Organizaciones locales</p> <p>UMA</p> <p>UMA</p>	<p>Los beneficiarios solicitan un informe sobre los impactos por el gorgojo y proyecciones de clima para tener una idea de lo que se pueda hacer</p> <p>Al saber que hay personal para control, los incendios aumentan (chamba vivís mejor)</p> <p>Al saber que hay personal para control, los incendios aumentan (chamba vivís mejor)</p>
3.- Diseño e implementación de medidas y tecnologías de adaptación al cambio climático para el consumo responsable de agua y bosque. (<u>Preguntas generadoras:</u> ¿Qué tipo de sistemas de riego utilizan?)	<p>1. 500 huertos familiares alcaldía pozos</p> <p>2. 300 con ADAL y FAO</p> <p>3. Mujeres microempresarias</p> <p>1,080 mejores familias programa impulsado por el gobierno</p>	<p>Pozos</p> <p>Instalar sistemas de riego lagunas</p> <p>Enseñar a cultivar pescado diversificar en nivel de huerto, de seguridad alimentaria y mercado local y alianzas con productores</p> <p>Ecoturismo</p> <p>Construcción y mejoramiento de sistema de agua potable en las comunidades,</p>	<p>5 aldeas</p> <p>En zonas agrícolas</p> <p>En zonas agrícolas</p> <p></p>	<p>Juntas de agua</p> <p>Asociaciones de productores y grupo de mujeres</p> <p>Asociaciones de productores y grupo de mujeres</p> <p>Consejo municipal y alcaldía</p> <p>Asociaciones de juntas de agua y alcaldía y consejo municipal</p>	<p>Insumos, equipos y asistencia técnica</p> <p>Insumos, equipos y asistencia técnica</p> <p>Insumos, equipos y asistencia técnica</p> <p>Estudio de factibilidad</p> <p>Estudios de los sistemas y financieros</p>

<i>Producto del Componente 2</i>	<i>¿Qué hay en el municipio?</i>	<i>¿Cómo podemos hacerlo?</i>	<i>¿Dónde?</i>	<i>¿Con quiénes?*</i>	<i>Barreras y dificultades</i>
		aguas grises y pozos			

III. Información varia

- ✓ La ADAL trabaja con 74 familias del Municipio de Lepaterique.
- ✓ La producción de resina se ha disminuido considerablemente por afectación de la plaga del gorgojo anteriormente se producía 1 barril en 15 días y ahora solo se produce menos den un galón. Son 1,150 familias que se benefician de la resina y se encuentran en una situación muy crítica.
- ✓ La población de Lepaterique considera que el control para la plaga del gorgojo no es la adecuada porque no perciben alguna mejora en el bosque.
- ✓ En el taller de consultas, todos los participantes presentes se consideran de ascendencia lencas, a pesar de que no se encontraban representantes de organizaciones indígenas, todos los presentes se sienten identificados como indígenas lencas.
- ✓ Ejemplo de perdida de producción: un productor antes hacia 7 barriles al mes y 7 mozos, por los momentos ya no se puede hacer eso
- ✓ Ejemplo de perdida de resina: un barril se resina se hacía en 15 días, ahora en 15 días solo se puede almacenar 3" de resina menos del galón

IV. Anexos
Listados de Asistencia

Listado de Asistencia / Evento:

Lugar y Fecha: 6/Julio/2016 Lepaterique.

No.	Nombre del Participante	Mujer	Hombre	Municipio/Institución	Cargo	Teléfono	Correo electrónico
1	Santos Tomás R G		✓	La Puda	Presidente Patronato	95 28 64 62	
2	Austo Pastor Martínez		✓	Apóstol Santiago	trabajador Alcalde	96 95 16 89	
3	Santos Tomás Rodas			La Piedad		99 49 42 55	
4	Tsidiere Panescencia			La Puda.	trabajador,	98 58 19 30	
5	Marino Funes			Apóstol Santiago	Presidente Patronato	94 88 46 57	
6	Pedro Antonio Chevez		✓	Altijo Carrizo	Coordinador CPT	31 54 80 18	ChevezPedro@yahoocom
7	Marino Funes Ramírez		✓	Estación Espino	Choperadero p.F	98-56-35-85	
8	Gloria Yamileth Martínez M.	✓		La Brea, Tepaterique	Mujeres Familias	9506-8330	gloria.martinez03@gmail.com
9	Raimey Paúl Pérez	✓			presidenta	91 80 34 800	
10	Pablo Roberto Martínez		✓		Oncas Familias	8786-0186	
11	Santos Heriberto			El Grado Valderrama	gerente APPMA	95 66 751	
12	Cristina Osorio			Monacate	Presidente patronato	91 66 66 33	
13	Angel Emmanuel Martínez		✓	Apoderado/Fiscalía	Técnico FA	9895 33 64	martinezangel90@gmail.com
14	Jesús Ubaldo				Técnico Ambiental	90 59 29 96	Konkigisck@gmail.com
15	Abel Olánisco		✓	P.F.A	Coordinador AML	9454-21 22	abel.haninus@gmail.com
16	Sofianino Benítez		✓	Lepaterique	Presidente patronato	9660 70 00	
17	Julian Sívori Rodas				Presidente R. Logo	99-74-28-26	
18	José Pablo Sánchez		✓	Monasterio	Sistema de riego	9690 51 68	

Listado de Asistencia / Evento:

Lugar y Fecha: 6/Julio/2016 Lepaterique

No.	Nombre del Participante	Mujer	Hombre	Municipio/Institución	Cargo	Teléfono	Correo electrónico
19	Antonio Martínez M.		✓	Ocote Huaca	P. Junta de agua	95-30-60-78	
20	Jestino Gómez Funes		✓	Lepaterique Agroecosist	Contador	9769-44-74	jgomez2013@gmail.com
21	Julio César Martínez A.		✓	Lepaterique/Alcaldía	Sistema de Riego	9659-9841	
22	Cesar David Martínez		✓	Lepaterique/Alcaldía	Sistema de Riego	9925-1343	
23	Santos Fausto Rodas		✓	Lepaterique, patrovial	Presidente	98670100	
24	Nestor Sardíles		✓	FAO / Andino	Coordinador proyecto	32377057	nestor.sardilesfernandez@fao.org
25	Sergio A. Sánchez S.		✓	Municipal Lepaterique	Jefe Alcalde	93993281	Sergiosanchez1968@gmail.com
26	Jorge Esteban Vuelque	✓		Zona Menor/Perilla	Dirección	33752678	reducciónvuelque@gmail.com
27	Luzia M. Peñaloza	✓		CIS Lepaterique	Dirección municipal de	51947450	luziapeñaloza@gmail.com
28	Horacio Leonel Valdés		✓	CIS Lepaterique		9907-2042	
29	Luis Antonio Martínez		✓	El Grado	P. Patronato	95-78-85-05	
30	Eduardo Miguel Morales		✓	ICF	Técnica de Campo	9819576	
31	José Luis Espinoza R.		✓	ICF	Técnico forestal	96444974	joselu.espinoza@yahoocom
32	Denis Oñate Martínez		✓	ICF	Tec. forestal	9800-5977	denis-matty@alumno.com
33	Andrés Abelino Saenz L.			Alcalde/Lepaterique	Alcalde Municipal	96272164	
34	Milton F Domínguez		✓	Alcalde Lepaterique FA	Entlace león	97403405	fatotekic.mendoza@gmail.com

Fotografías



Santa Ana

I. GENERALIDADES

Comunidades representadas:

- ✓ El Limón
- ✓ Arcadia
- ✓ La Cali
- ✓ Zarzagagua
- ✓ Las Mesitas

Participantes

Total: 18	Hombres: 10	Mujeres: 8	Indígenas: Hombres: 2 Mujeres:
--------------	----------------	---------------	--------------------------------------

Instituciones participantes:

- ✓ Red de Mujeres
- ✓ Organizaciones Indígenas: Federación Hondueña de Indígenas Lencas (FHONDIL)
- ✓ UMA

Espacios de coordinación existentes:

- ✓ Patronatos
- ✓ Juntas de Agua
- ✓ Red de mujeres
- ✓ FHONDIL
- ✓ ONILH

Grupos organizados existentes: (Productivos y no Productivos)

- ✓ Visión Mundial
- ✓ Energía Eólica

Medios de Vida de la Población:

- ✓ Agricultura
- ✓ Ganadería

II. REVISIÓN DE PRODUCTOS DEL CONCEPTO DE PROYECTO

MATRIZ N° 1 REVISIÓN DE PRODUCTOS

Producto del Componente 2	¿Qué hay en el municipio?	¿Cómo podemos hacerlo?	¿Dónde?	¿Con quiénes?	Barreras y dificultades
1.- Restauración del bosque de pino en el CBC de 1,000 hectáreas para fortalecer y proteger servicios ecosistémicos y medios de vida. (Preguntas generadoras: ¿Cómo les ha afectado la plaga (económicamente, salud, clima, etc.)?, ¿Hay Cooperativas Forestales?, ¿De qué viven?, ¿Tienen acceso al crédito?)	<p>1. Supervisión y seguimiento de cuadrillas</p> <p>2. Plan de reforestación por ICF manejado por Ojojona y santa Ana en proceso</p> <p>3. Empresa eólica apoya iniciativas de reforestación con propietarios privados y patronatos</p> <p>4. Colegios hacen servicio social en reforestación</p> <p>5. Afectado fuentes de agua se nueva arcadia y otras... matasano, palo de uva, kina, anona, higo especies afectadas por el gorgojo</p> <p>6. Mesa grande (sitio municipal) 80 o 120 más manzanas... ha afectado la</p>	<p>Reforestar los límites entre propiedades (guarda rayas o terrazas como práctica ancestral la cual sigue vigente)</p> <p>Conformar y fortalecer comités de vigilancias y monitoreo de reforestación (comités de juntas de agua)</p> <p>Retomar estudios de suelo y especies por la universidad</p> <p>Aliados estratégicos para la protección del ambiente(fuerzas armadas, energía eólica)</p>	<p>Cerro de Hula(parte alta)</p> <p>*En cada comunidad</p> <p>Aplicación en Cerro de Hula</p> <p>En todo el municipio</p>	<p>Patronatos, juntas de agua, colegios, iglesias(para motivar a la población, involucración de jóvenes y mediadores en negociación), corporación municipal, red de mujeres(apoyo en la práctica de reforestación), grupos organizados indígenas,</p> <p>*Juntas de agua y patronatos</p> <p>Juntas de agua y patronatos</p> <p>ONG's (Visión Mundial, energía eólica), *Empresas dentro del municipio</p>	<p>*Terrenos privados difícil concertación con los propietarios no se ha socializado los proyectos, falta de información y sensibilización ambiental</p> <p>*Darles alternativas con el mantenimiento de las áreas</p> <p>*voluntad de las autoridades</p> <p>coordinación y comunicación entre las instancias locales</p> <p>Obtención de especies requeridas con ICF, SANAA, eólicas</p> <p>Coordinación y comunicación</p>

<i>Producto del Componente 2</i>	<i>¿Qué hay en el municipio?</i>	<i>¿Cómo podemos hacerlo?</i>	<i>¿Dónde?</i>	<i>¿Con quiénes?</i>	<i>Barreras y dificultades</i>
	<p>7. Caserío San Simón (terreno privado), se ha afectado en los arroyos de agua se han secado por el ataque y control de la plaga y obtienen permisos para tala,</p> <p>8. Cerro Colorado(área municipal) aprox 100 manzanas ya no se puede hacer aprovechamiento forestal</p> <p>9. Las crucitas área municipal, 50 o 60 manzanas afectadas</p> <p>10. Sitio reconocido como patrimonio cultural por la presencia de vestigios Lencas y actividad</p>	<p>plaga ya que ellos sacaban madera para construir casas</p> <p>*Instalación de viveros forestales(roble, encino, pino)</p> <p>Viveros frutales(matasano, limón manzanita, ciruela en invierno, pito en verano, naranjo, mango, aguacate, zapote)</p> <p>Conformar consejos de desarrollo para seguimiento de proyectos</p>	<p>6 viveros una por aldea</p> <p>Un vivero céntrico</p> <p>En todo el municipio</p>	<p>Patronato, juntas de agua y alcaldía</p> <p>Grupo mujeres</p>	<p>*Organización, seguimiento y control(solo quedo como piloto el primer piloto) *Apoyo técnico por parte de la alcaldía</p> <p>Comunicación</p> <p>Coordinación, comunicación e interés entre las instancias locales, no hay estímulos, incentivos</p>

<i>Producto del Componente 2</i>	<i>¿Qué hay en el municipio?</i>	<i>¿Cómo podemos hacerlo?</i>	<i>¿Dónde?</i>	<i>¿Con quiénes?</i>	<i>Barreras y dificultades</i>
	agrícola ancestral, montaña de cerro de hula, partes rupestre Cerro de Ayastas 11. Energía eólica tiene vivero 12. Disminución de pino y roble				
2.- Protección y prevención contra incendios, plagas, enfermedades y tala ilegal.	1. Rondas en verano para proteger fuentes de agua, lo realizan los dueños y cuadrillas 2. Plan de manejo forestal	Socializar e implementar el plan	Áreas protegidas, áreas comunales	UMA e ICF	*Información y capacitación en áreas de importancia los líderes comunitarios (patronatos, juntas de agua y fuerzas vivas) *Factor económico y voluntad
		Práctica medidas de control	Todas las comunidades	UMA y comunidades	*No se ha socializado los daños y magnitudes de la plaga, no habido posicionamiento a nivel de alcaldía sobre el tema, riesgo a nivel de municipio
		Capacitaciones a grupos comunitarios y dotarlos de equipo adecuado	Todas las comunidades	UMA, patronato y juntas de agua de las comunidades	*Vigilancia y monitoreo, *Plan de manejo adecuado ni coordinación efectiva entre el ICF y la municipalidad

Producto del Componente 2	¿Qué hay en el municipio?	¿Cómo podemos hacerlo?	¿Dónde?	¿Con quiénes?	Barreras y dificultades
3.- Diseño e implementación de medidas y tecnologías de adaptación al cambio climático para el consumo responsable de agua y bosque. (Preguntas generadoras: ¿Qué tipo de sistemas de riego utilizan?)	1. Registros, presencia de prácticas agrícolas ancestrales 2. Asociación de agricultores, 3. Organizaciones de pueblos indígenas 4. Asociación de juntas de agua 5. Asociación de patronatos 6. Red de mujeres y oficina de la mujer 7. Plan de desarrollo municipal 8. La universidad realizo un diagnóstico sobre los sistemas de agua en todo el municipio	Retomar prácticas ancestrales (terrazas), como medida para conservación de suelos , promoción de infiltración, conservación de semilla, mejora de riego Viveros agroforestales Reciclaje de agua y huertos familiares y cosecha de aguas Mejoramiento del sistema de agua potable	Cerro de hula(parte alta) Las Mesitas o la Cali *En los hogares las mesitas, nueva arcadia, el cruce, zarzacagua, la bodega, la Cali *Analizar cosecha de agua en hogares en el casco urbano La mayoría	Propietarios agricultores Patronatos, juntas de agua, colegios, red de mujeres, grupos organizados indígenas Patronatos y juntas de agua y patronatos	*Terrenos privados difícil concertación con los propietarios no se ha socializado los proyectos, falta de información y sensibilización ambiental *Darles alternativas con el mantenimiento de las áreas *Voluntad de las autoridades *Insumos y equipo *Formación técnica logística *mantenimiento *Aspecto económico, estudios, tecnificación *Tarifa baja en algunas comunidades *Falta de involucramiento de los abonados

III. Información varia

- ✓ Los pobladores de Santa Ana se encuentran inconformes con la empresa de energía eólica, ya que se han colocado turbinas en zonas de recarga y han afectado a las fuentes de agua de las comunidades una de las más afectadas y que mencionada es la de Nueva Arcadia. Y ahora los pobladores se ven forzados a comprar agua.
- ✓ Los participantes concluyeron en que se les haga una presentación del producto terminado.

IV. Anexos

Listado de Asistencia

No.	Nombre del Participante	Mujer	Hombre	Municipio/Institución	Cargo	Teléfono	Correo electrónico
1	Naelia Abasai Bonilla	✓		El Limón	Coordinadora	97-75-55-81	
2	Melida Andrade	✓		Santa Bárbara	Coordinadora	81 53-0167	meliandrade2007@yahoo.com
3	Mariapatricia Lopri	✓		Arcadia Santa Ana	Red de mujeres	31 86-57-83	
4	Dagoberto Salgado		✓	Arcadia	Concejal de MA	98 14-01 58	
5	cooperativa Motule	✓		arcadia	Red de mujeres	32 78 98 39	
6	Raoul Alexander Vargas	✓		La Cali	Cajero	96 53-11 99	
7	Jimmy Edwin Silva	✓		Patronato La Cali	Presidente	96 05-17 37	alexander.vargas69@gmail.com
8	L'Anversoica Losque	✓		arcadia		99 93-78-88	
9	Lilian Ramona Lopez Martinez	✓		arcadia	Red de mujeres	87-43-3003	
10	Mrs. Luisa Motule			La Cali	Presidenta		
11	Mag Silvana mesilla			La Cali	Presidenta	986-214-17	camimilla1964@gmail.com
12	El Jose Marroqna			arcadia sante ana			
13	Salvio Amador			sus aqua que	representante popular	87607926	
14	Domingo Martínez			arcadia	Director municipal	95-50-54-29	
15	Jose Marroqna			Patronato-mesillas	Presidente	979-6276	
16	Arvel Eduardo Alvarado			agua la mesitas	Presidente	96-50-16-32	
17	Ezequiel Esteban Huerta			Alcalde judicial	Alcalde	96 91-06-60	
18	Alejandro Noel Vando	✓		Foton BiZ	presidente	96 16 66 86	

Fotografías



Talanga

I. GENERALIDADES

Comunidades representadas:

- ✓ El Rosario
- ✓ El Terrero
- ✓ El Roble
- ✓ Pantio
- ✓ El Portillo
- ✓ Rio Dulce

Participantes

Total: 21	Hombres: 10	Mujeres: 11	Indígenas: Hombres: Mujeres:
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Instituciones participantes:

- ✓ Patronatos
- ✓ Juntas de Agua

Espacios de coordinación existentes:

- ✓ Patronatos
- ✓ Juntas de Agua

Grupos organizados existentes: (Productivos y no Productivos)

- ✓ Patronatos
- ✓ Juntas de Agua
- ✓ Cooperativa Industrial de Madera

Medios de Vida de la Población:

- ✓ Agricultura

II. REVISIÓN DE PRODUCTOS DEL CONCEPTO DE PROYECTO

MATRIZ N° 1 REVISIÓN DE PRODUCTOS

<i>Producto del Componente 2</i>	<i>¿Qué hay en el municipio?</i>	<i>¿Cómo podemos hacerlo?</i>	<i>¿Dónde?</i>	<i>¿Con quiénes?*</i>	<i>Barreras y dificultades</i>
1.- Restauración del bosque de pino en el CBC de 1,000 hectáreas para fortalecer y proteger servicios ecosistémicos y medios de vida. (Preguntas generadoras: ¿Cómo les ha afectado la plaga (económicamente, salud, clima, etc.)?, ¿Hay Cooperativas Forestales?, ¿De qué viven?, ¿Tienen acceso al crédito?)	1. Juntas de agua y patronato organizadas en cada comunidad 2. Campañas de reforestación ya establecidas (plantaron) manejado UMA y Comunidades. 3. Escuelas, colegios e iglesias trabajando en reforestación 4. Declarada la Reserva del Chile como microcuenca 5. Rio Dulce declarada como microcuenca 6. Planes de aprovechamiento 7. Planes operativos 8. Comunidades dispuestas a apoyar contrapartes para mejoramiento del sistema de agua 9. Conflictos con los propietarios privados al momento de reforestar 10. Disposición de la UMA para trabajar con la unidad comunitaria	*Reforestación *Definir límites para la reforestación *Viveros *Considerar tipo de especies para cada zona (higo, cedro, pino, roble, pino, nance, Macuelizo, Guanacaste, acacia, carao, guama (cafetales), caoba y manzanita). *Considerar el tiempo de siembra ya que se han perdido *Coordinar la UMA y las empresas madereras alianzas y estrategias *Promover diálogos para compensación de bienes y servicios ecosistémicos (agua y bosque)	Todas las comunidades de Talanga, fuentes de agua, microcuencas, las quebradas, donde están más afectados por el gorgojo, zonas de reserva, microcuenca declaradas Vivero municipal y en puntos estratégicos (4 o 5) En todo el municipio	UMA, juntas de agua y patronatos, escuelas, sociedad de padres de familia UMA, juntas de agua y patronatos, escuelas, sociedad de padres de familia Coordinando en el municipio la UMA y sociedad civil	No hay insumos, y es costoso obtener los arboles No hay tiempo por situación de emergencia, asistencia técnica, financiamiento Coordinación, información, interés

<i>Producto del Componente 2</i>	<i>¿Qué hay en el municipio?</i>	<i>¿Cómo podemos hacerlo?</i>	<i>¿Dónde?</i>	<i>¿Con quiénes?*</i>	<i>Barreras y dificultades</i>
	11.Se está afectando las fuentes de agua las autoridades han perdido credibilidad 12.Los primeros brotes de gorgojo se dieron en los izotes 13.Plan de protección 14.Cooperativa industrial de la madera	*Control de planes de aprovechamiento, se están cortando 500 árboles cuando solo estaban aprobados 100 árboles *Regulación para El manejo y control del aprovechamiento aplicación rigorosa de la ley	En todo el municipio es un ejercicio legal	ICF, UMA, pobladores	Trámites engorrosos, voluntad institucional y política
		*Invertir en conservar la regeneración de árboles, se ha perdido la regeneración natural para disminuir los impactos por mal manejo de la plaga(eroción por arrastre) cosecha de semillas, promover regeneración natural	En todas las comunidades	Juntas de agua, patronatos, sociedad civil	No se cree en la regeneración, se confía más en los viveros, asesorías técnicas, no hay cuidado, los asesores no promueven la regeneración
		Declaración de microcuencas	En todas las comunidades que tenga área	Patronatos y juntas de agua, UMA, ICF	*Desconocimiento, información sobre las declaratoria, *personería jurídica, recurso *económico, *capacitación y seguimiento
		Reforestación asocio de con café (guama, guaníqu, liberon) y riveras del rio	En zonas de café, riveras y fuentes de agua	Patronatos y juntas de agua, UMA, ICF	Falta de viveros, plantas, diálogos con los caficultores

<i>Producto del Componente 2</i>	<i>¿Qué hay en el municipio?</i>	<i>¿Cómo podemos hacerlo?</i>	<i>¿Dónde?</i>	<i>¿Con quiénes?*</i>	<i>Barreras y dificultades</i>
		*Identificar tierras comunales con apoyo de las autoridades (ejidal 4,784 has de bosques ejidales) (tres títulos comuneros).	Terrero Colorado, Portillo, La Labranza, Rincón Grande, Monte Grande y Ejidales	La alcaldía (catastro, UMA), comuneros, ICF	Comunicación
		*Transformación de industria maderera mercado local	En Talanga centro	Madereros, UMA, industria de la transformación de la madera	No se aceptaban la madera por el tamaño del diámetro, acceso al mercado
		Más supervisión de las instituciones de Tegucigalpa	En las partes altas de las microcuencas	ICF, UMA	Comunicación e interés
2.- Protección y prevención contra incendios, plagas, enfermedades y tala ilegal.	Riesgo alto social(perdida de vida) al momento de denunciar a las autoridades	*Organización comunitaria para la prevención de incendios, capacitación y obtención de insumos rondas preventivas para incendios , capacitar e insumos para combatir	En todas las comunidades	Todas las organizaciones comunitarias	*Herramientas, *Capacitaciones, *Apoyo en la organización
		*Impulsar programas de educación ambiental en las escuelas. concientización ambiental por grupos de jóvenes organizados	Desde la cabecera municipal a todas las comunidades	Juntas de agua y patronatos, UMA	*Apoyo a la organización, falta de promoción del voluntariado
		*Denunciar la tala ilegal de cortar árboles sanos	Talanga centro en todas la comunidades	Organización civil	Coordinación, liderazgo y apoyo a los líderes de las comunidades

<i>Producto del Componente 2</i>	<i>¿Qué hay en el municipio?</i>	<i>¿Cómo podemos hacerlo?</i>	<i>¿Dónde?</i>	<i>¿Con quiénes?*</i>	<i>Barreras y dificultades</i>
		Control de quema de basura y agricultura	En todas las comunidades	Toda la comunidad y UMA, ICF, ministerio publico	*Vigilancia, interés de las autoridades y riesgo para la vida
		Promoción de un consejo de desarrollo	Talanga centro en todas la comunidades	Sociedad civil	Coordinación, liderazgo y apoyo a los líderes de las comunidades
3.- Diseño e implementación de medidas y tecnologías de adaptación al cambio climático para el consumo responsable de agua y bosque. (Preguntas generadoras: ¿Qué tipo de sistemas de riego utilizan?)	*Hay producción de Caña, frijoles, arroz, yuca, plataneras	Apoyo para la construcción y mejoramiento al sistema, en	*Roble, Rio Dulce, Terrero Colorado, El Portillo, Agua Blanca, El Rosario, Corralitos(están dentro de los límites del corredor boscoso) *Hermita, La Cuesta, Palmira, Chorrera(fuera del corredor boscoso)	Juntas de agua y patronato	
	*Jardineras	*Capacitaciones a las juntas de agua sobre el manejo de la microcuenca y administrativo y revisión de tarifa	Todas la comunidades del municipio	*Juntas de agua, patronato, fuerzas vivas, COMAS, USCL, ERSAPS, DIMAS de Talanga	Interés, oportunidades de capacitación, desconocimiento de la ley
		*Capacitación y asistencia agrícola y tecnificación de riego promover la organización y empresariado con los ganaderos y agricultores	Valle de Talanga	Pequeños productores de subsistencia y agricultores organizados, la SAG	Trabajo individual, apoyo técnico y organización

<i>Producto del Componente 2</i>	<i>¿Qué hay en el municipio?</i>	<i>¿Cómo podemos hacerlo?</i>	<i>¿Dónde?</i>	<i>¿Con quiénes?*</i>	<i>Barreras y dificultades</i>
		*Perforación de pozos	*Comunidades con mayor estrés hídrico	*Juntas de agua, patronato (COMAS Y USCL no están conformado todavía)	*Factor económico, la comunidad puede aportar contraparte pero no lo suficiente para ejecutarlo
		*Reservorios y cosecha de aguas lluvias aprovechamiento de agua reciclada para cosecha y flores	*Aldea El Roble y otras comunidades con estrés hídrico	*Juntas de agua, patronato (COMAS Y USCL no están conformado todavía)	*Factor económico, la comunidad puede aportar contraparte pero no lo suficiente para ejecutarlo

III. Información varia

- ✓ En el taller de consultas hubo más participación de las mujeres tanto en cantidad como en dar aportes durante el taller.
- ✓ Los aldeanos de Talanga se encuentran inconformes con la iniciativa que está impulsando el gobierno sobre realizar reforestaciones, porque en los centros educativos no se les brindan los árboles y son los estudiantes (niños) los que tienen que realizar la actividad y los niños ya no quieren seguir, ellos perciben que la industria de madera del municipio son los causantes de la deforestación y no hacen nada por compensar al medio ambiente.
- ✓ Otra inconformidad es sobre el método para controlar la plaga del gorgojo, las instituciones no respetan a los propietarios y realizan el corte de árboles, no solamente cortan el árbol dañado sino que también los sanos.
- ✓ Cuando se han dado los permisos de tala para aprovechamiento de madera, cortan más árboles de los que se permitieron, exigen más control sobre los permisos.
- ✓ Se están perdiendo las fuentes de agua en el municipio por tanta degradación que está sufriendo el bosque en la actualidad y los propietarios de terreno no dejan que trabajen dentro de las áreas.

IV. Anexos
Listado de asistencia

Lugar y Fecha: Talanga F.M. Viernes 08/07/2016

No.	Nombre del Participante	Sexo	Municipio/Institución	Cargo	Teléfono	Correo electrónico
1	Rutha Rayett Valle	✓	Patronato del Rosario	Presidenta	93572298	Isajett.valle@gmail.com
2	Maria Lluna Gómez	✓	Patronato del rosario	Secretaria	95321643	
3	Ana Liliana Nuñez	✓	Junta de aguas	Secretaria	99520780	
4	Nelson Vélez Cárdenas		Junta de agua	Presidente	96894068	
5	Efraín Delila Velasquez	✓	Patronato Directorio	Presidente	99183741	
6	Margarita Melisa Alvarado		Junta de agua T.S. Sub. Secretaria			melalvarado195@gmail.com
7	Francisco Calgarce		Patronato	Presidente	99364786	
8	FREDY ARENAL		junta de agua	Presidente	99168625	
9	Martina Lilián Flores	✓	Patronato T.B. Dpto	Presidenta	99-25-31-61	
10	J. Delalba Pérez		Proyecto agua	Presidente	98039500	
11	Karen Gómez		Ayuntamiento	biblioteca	985854113	
12	Sofenia Gómez		IDEA El Poblado	Salón de fiestas	09944953	
13	Tony Alvaro Chamelein		Patronato El Pueblo	Vice Presidente	97-42-96-06	chamelein@bol.net.com
14	Scintos Cuadillo		Patronato mujer	Presidente	0824	99940442
15	Vizcarra Fredy Carrasco		Patronato El Pueblo	Presidente	3334-85-85	
16	Judy Amparo Cárdenas	✓	Patronato El Pueblo	Vice Presidenta	84-72-36-59	
17	Citancio Vizcarra	✓	" " "	Secretario	89005645	
18	Tima Yesselin Merino		Patronato Comunal	Toma Vocal	9973-94-79	

Fotografías



ANNEX 11: VALIDATION LETTERS OF THE CFC MUNICIPALITIES



*Municipalidad de Cantarranas, F.M.
Honduras, C.A.*

Teléfonos: 2769-0207 / 2769-0239



Constancia de Consulta Comunitaria

Por este medio hacemos constar que en el marco de la preparación de la propuesta; Adaptación Basada en Ecosistemas y Comunidades en el Corredor Boscoso Central a presentarse por parte de Honduras ante el Fondo de Adaptación, nuestro Municipio de Cantarranas como parte del Corredor Boscoso Central, fue consultado para lo que se realizó una jornada participativa con la inclusión de representantes de los sectores agua y bosque.

Durante la jornada de consulta los participantes brindaron insumos que fueron incorporados a la propuesta.

Para constancias firmamos la presente a los 15 días del mes de Julio del año 2016.

A circular stamp is visible, containing the text "UNIDAD MUNICIPAL DEL AMBIENTE" and "CANTARRANAS, F.M.". Below the stamp is a handwritten signature and the name "Oscar Reyes".
Técnico Encargado de la Unidad Municipal Ambiental
Municipio de Cantarranas-Francisco Morazán

Nuestro Municipio necesita de la participación de todos para su desarrollo, **Juntos lo lograremos.**



ALCALDIA MUNICIPAL
Lepaterique, Francisco Morazán
HONDURAS C.A.
TEL 2778-1171

Constancia de Consulta Comunitaria

Por este medio hacemos constar que en el marco de la preparación de la propuesta; Adaptación Basada en Ecosistemas y Comunidades en el Corredor Boscoso Central a presentarse por parte de Honduras ante el Fondo de Adaptación, nuestro Municipio de Lepaterique Francisco Morazán como parte del Corredor Boscoso Central, fue consultado para lo que se realizó una jornada participativa con la inclusión de representantes de los sectores agua y bosque.

Durante la jornada de consulta los participantes brindaron insumos que fueron incorporados a la propuesta.

Para constancias firmamos la presente a los 18 días del mes de Julio del año 2016.


ANDRES ABELINO SERVELLON AGUIRRE
ALCALDE MUNICIPAL



Alcaldía Municipal de San Juan de Ojojona

San Juan de Ojojona F.M. Honduras C.A.

Tels. 2767-0173; 2767-0491.

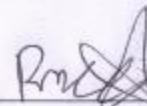


Constancia de Consulta Comunitaria

Por este medio hacemos constar que el marco de la preparación de la propuesta de Adaptación basada en ecosistemas y comunidades del CBC, a presentarse por parte de Honduras ante el Fondo de Adaptación, nuestro municipio de Ojojona como parte del Corredor Boscoso Central, fue consultado, para lo cual se realizó una jornada participativa con la inclusión de representantes de los sectores agua y bosque.

Durante la jornada de consulta los participantes brindaron insumos a las a la propuesta, identificaron las acciones que ya se están realizando, las barreras existentes y los actores que se deben involucrar.

Firmamos la presente a los 13 días del mes de Julio del año 2016



Remberto González

Jefe de la Unidad Municipal Ambiental
Municipio de Ojojona-Francisco Morazán



Municipalidad de San Buenaventura

San Buenaventura, F.M.

Tel/Fax: 2798-9496

R.T.N. 0818-9995413023

Constancia de Consulta Comunitaria

Por este medio hacemos constar que en el marco de la preparación de la propuesta: **Adaptación Basada en Ecosistemas y Comunidades** en el Corredor Boscoso Central a presentarse por parte de Honduras ante el Fondo de Adaptación, nuestro Municipio de San Buenaventura Departamento de Francisco Morazán como parte del Corredor Boscoso Central, fue consultado para lo que se realizó una jornada participativa con la inclusión de representantes de los sectores agua y bosque.

Durante la jornada de consulta los participantes brindaron insúmos que fueron incorporados a la propuesta.

Para constancias firmamos la presente a los 19 días del mes de Julio del año 2016,



José Andrés Amador Flores

Alcalde Municipal



Constancia de Consulta Comunitaria

Por este medio hacemos constar que en el marco de la preparación de la propuesta; Adaptación Basada en Ecosistemas y Comunidades en el Corredor Boscoso Central a presentarse por parte de Honduras ante el Fondo de Adaptación, nuestro Municipio de Santa Ana como parte del Corredor Boscoso Central, fue consultado para lo que se realizó una jornada participativa con la inclusión de representantes de los sectores agua y bosque.

Durante la jornada de consulta los participantes brindaron insumos que fueron incorporados a la propuesta.

Para constancias firmamos la presente a los 07 días del mes de Julio del año 2016.

Agusto Salgado


Constancia de Consulta Comunitaria

Por este medio hacemos constar que en el marco de la preparación de la propuesta: Adaptación Basada en Ecosistemas y Comunidades en el Corredor Boscoso Central a presentarse por parte de Honduras ante el Fondo de Adaptación, nuestro Municipio de Santa Lucia como parte del Corredor Boscoso Central, fue consultado para lo que se realizó una jornada participativa con la inclusión de representantes de los sectores agua y bosque.

Durante la jornada de consulta los participantes brindaron insumos que fueron incorporados a la propuesta.

Para constancias firmamos la presente a los 8 días del mes de Julio del año 2016.


José Benito Medina Lebias
Técnico Encargado de la Unidad Municipal Ambiental
Municipio de Santa Lucia Francisco Morazán



MUNICIPALIDAD DE TATUMBÁ, F. M. HONDURAS, C. A

TEL. 2778-2048

RTN: 08259995416343

Correo: municipalidadtatumbla@yahoo.com

Constancia de Consulta Comunitaria

Por este medio hacemos constar que en el marco de la preparación de la propuesta; Adaptación Basada en Ecosistemas y Comunidades en el Corredor Boscoso Central a presentarse por parte de Honduras ante el Fondo de Adaptación, nuestro Municipio de Tatumbá como parte del Corredor Boscoso Central, fue consultado para lo que se realizó una jornada participativa con la inclusión de representantes de los sectores agua y bosque.

Durante la jornada de consulta los participantes brindaron insumos que fueron incorporados a la propuesta.

Para constancias firmamos la presente a los 19 días del mes de Julio del año 2016.

Atentamente;



Hugo Saúl Ochoa Pinto
Alcalde Municipal de Tatumbá, F.M.



Municipalidad Villa de san Francisco F. M.



Constancia de Consulta Comunitaria

Por este medio hacemos constar que en el marco de la preparación de la propuesta; Adaptación Basada en Ecosistemas y Comunidades en el Corredor Boscoso Central a presentarse por parte de Honduras ante el Fondo de Adaptación, nuestro Municipio de La Villa de San Francisco como parte del Corredor Boscoso Central, fue consultado para lo que se realizó una jornada participativa con la inclusión de representantes de los sectores agua y bosque.

Durante la jornada de consulta los participantes brindaron insumos que fueron incorporados a la propuesta.

Para constancias firmamos la presente a los 19 días del mes de Julio del año

2016.

Alcalde Municipal
Ing Janio Borjas



Coordinador de la UMA

Ing Zaid Quezada

"Trabajando de la mano del pueblo y para el pueblo"
Telefax: 2769-6333, Tels.: 2769-6655, 2769-6657



MUNICIPALIDAD DE CEDROS
FRANCISCO MORAZÁN, REPÚBLICA DE HONDURAS
TEL.: 2768-1103, 2768-1144, 2768-1023, FAX: 2768-1029
E-mail: municipalidadcedrosfm@hotmail.com



Constancia de Consulta Comunitaria

Por este medio hacemos constar que en el marco de la preparación de la propuesta; Adaptación Basada en Ecosistemas y Comunidades en el Corredor Boscoso Central a presentarse por parte de Honduras ante el Fondo de Adaptación, nuestro Municipio de Cedros como parte del Corredor Boscoso Central, fue consultado para lo que se realizó una jornada participativa con la inclusión de representantes de los sectores agua y bosque.

Durante la jornada de consulta los participantes brindaron insumos que fueron incorporados a la propuesta.

Para constancias firmamos la presente a los 19 días del mes de Julio del año 2016.



JEFE U.M.A

Zedros in nostra Sanguinis



Municipalidad de Talanga

DEPARTAMENTO DE FRANCISCO MORAZAN - HONDURAS C.A.

Tel. 2775-8010 - 2775-8018



CONNSTANCIA DE CONSULTA COMUNITARIA

POR ESTE MEDIO DE LA PRESENTE HACEMOS CONSTAR QUE EN EL MARCO DE LA PREPARACION DE LA PROPUESTA; ADAPTACION BASADA EN ECOSISTEMAS Y COMUNIDADES DEL CORREDOR BOSCOZO CENTRAL A PRESENTARSE POR PARTE DE HONDURAS ANTE EL FONDO DE ADPTACION, NUESTRO MUNICIPIO DE TALANDGA COMO PARTE DEL CORREDOR BOSCOZO CENTRAL, FUE CONSULTADO PARA LO QUE SE REALIZOUNA JORNADA PARTICIPATIVA CON LA INCLUSION DE REPRESENTANTES DE LOS SECTORES AGUA Y BOSQUE.

DURANTE LA JORNADA DE CONSULTA LOS PARTISIPANTES BRINDARON ISUMOS QUE FUERON INCORPORADOS A LA PROPUESTA.

PARA CONSTANCIA FIRMAMOS LA PRESENTE EN LA CIUDAD DE TALANGA A LOS 15 DIAS DEL MES DE JULIO DEL 2016


Nahun Humberto Nunez

UNIDAD MUNICIPAL AMBIENTAL UMA
TALANGA FRANCISCO MORAZAN



UNIDAD MUNICIPAL AMBIENTAL UMA

TALANGA FRANCISCO MORAZAN





Alcaldía Municipal de Valle De Angeles

Departamento de Francisco Morazán, Honduras, C.A.

Ciudad Turística

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Constancia de Consulta Comunitaria

Por este medio hacemos constar que en el marco de la preparación de la propuesta; Adaptación Basada en Ecosistemas y Comunidades en el Corredor Boscoso Central a presentarse por parte de Honduras ante el Fondo de Adaptación, nuestro Municipio de Valle De Ángeles como parte del Corredor Boscoso Central, fue consultado para lo que se realizó una jornada participativa con la inclusión de representantes de los sectores agua y bosque.

Durante la jornada de consulta los participantes brindaron insumos que fueron incorporados a la propuesta.

Para constancias firmamos la presente a los 19 días del mes de Julio del año 2016.

Cesar Cerrato

ANNEX 12: CTICC VALIDATION MEETING



CONSTANCIA DE CONSULTA

PROPUESTA FONDO DE ADAPTACION ANTE

EL COMITÉ TECNICO INTERSINSTITUCIONAL DE CAMBIO CLIMATICO (CTICC)

El Comité Técnico Interinstitucional de Cambio Climático, instancia en la que por Ley se analizan las iniciativas de cambio climático país , llevó a cabo una reunión el día 26 de julio del 2016 con el objetivo de conocer tres temas:

1. La propuesta ante del Fondo de Adaptación que está elaborando PNUD con Mi Ambiente
2. Plan de Acción Climático Nacional y proceso de inventario de Gases Efecto de Invernadero
3. Avances en el Proceso Reed+

A la reunión asistieron 37 funcionarios representantes de 16 instituciones miembros del CTICC, quienes de manera general, no tuvieron ninguna objeción a la propuesta que se está presentando al fondo de adaptación, sino más bien la preguntas fueron orientadas a la necesidad de cubrir más área, dada las necesidades que enfrenta el país en materia forestal. Las siguientes fueron las intervenciones y las respuestas:

ENEE: Como se seleccionó el área?

Respuesta: Los principales factores es el nivel de afectación por el gorgojo (22,000 ha), y su importancia en la aportación del recursos hídrico para el Región más poblada del país. Otros elemento es que el monto a aspirar tiene un límite, al igual que la disponibilidad de la información existente como la línea base.

COHEP: Se puede incluir municipios vecinos, San Ignacio, El Provenir, que da tristeza como esta de afectado el bosque?

Respuesta: El mapeo de otras iniciativas nos indicó que en el resto de Francisco Morazán estará trabajando el BID; con 25 Millones en un proyecto netamente de manejo forestal. Que entendemos que el país está trabajando a mayores escalas, desde SEFIN, para el FVC.

SEFIN: No es muy poco 268 personas en las consultas locales?

Respuesta: la consulta fue dirigida a actores claves de los sectores Recursos Hídricos y Recursos Bosque.

Por lo anterior hacemos constar que conocemos la propuesta y no tenemos ninguna objeción a la misma.



Ing. Sergio Adrián Palacios Cárcamo
Director Nacional de Cambio Climático
Delegado por el Ministro de Ambiente para presidir la Reunión del CITCC

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Annex 13: Social and Environmental Screening Template

The completed template, which constitutes the Social and Environmental Screening Report, must be included as an annex to the Project Document. Please refer to the [Social and Environmental Screening Procedure](#) and [Toolkit](#) for guidance on how to answer the 6 questions.

Project Information

Project Information	
1. Project Title	Ecosystem-Based Adaptation Communities of the Central Forest Corridor in Tegucigalpa
2. Project Number	5839
3. Location (Global/Region/Country)	Honduras

Part A. Integrating Overarching Principles to Strengthen Social and Environmental Sustainability

QUESTION 1: How Does the Project Integrate the Overarching Principles in order to Strengthen Social and Environmental Sustainability?
<i>Briefly describe in the space below how the Project mainstreams the human-rights based approach</i>
In the face of climate change impacts and unsustainable forest management and agricultural practices, the project supports the Honduran government's efforts to ensure continued provision of clean water resources (right to water) to communities in the Central Forest Corridor through integrated water resources management and restoration and conservation of critical ecosystem services. The project will directly benefit an estimated 12,000 families who are especially vulnerable to the impacts of climate change, through the design and implementation of concrete adaptation measures for more efficient agricultural practices and use of water resources. These measures will also provide economic benefits to the families in terms of savings of expenditures/costs of water, and through savings and revenues generated by increasing agricultural yields and production (for household consumption and sales). In addition, the introduction of eco-stoves (benefiting 500 families) will have positive health impacts (right to health) by generating less smoke. The project seeks to ensure that benefits of the project are shared broadly in a nondiscriminatory, equitable manner through participatory processes and transparent selection criteria. Extensive stakeholder consultations were held during project preparation (see Annex 10) and will be continued throughout project implementation. The consultations involved the 3 municipalities where Lenca indigenous communities are present (and the project notes that Free and Informed Prior Consent (FPIC) processes will be instituted if needed). Potential project-related concerns and/or grievances of local communities will be addressed through a complaint's register along with a Grievance Redress Mechanism consistent with the UNDP's Stakeholder Response Mechanism: Overview and Guidance (2014). The Grievance Redress Mechanism will be designed in consideration of the specific local context and draws on existing processes and procedures for the resolution of complaints and grievances in Honduras.
<i>Briefly describe in the space below how the Project is likely to improve gender equality and women's empowerment</i>
Honduras has a relatively high Gender Inequality Index rating (0.480) and women are underrepresented in rural economically active persons (only 28%). The stakeholder participation mechanisms for project formulation and implementation will include provisions to ensure that women are able to represent their interests effectively, and the social impact indicators and corresponding targets of the project will be gender-sensitive, ensuring that women receive an equitable share of benefits and that their status and interests are not marginalized. Commonly women are part of community-based organizations and groups but are not generally part of the decision-making committee. The project seeks

to encourage greater involvement of women in the Forest Cooperatives (FC) and/or community-based organizations or stronger links between the FC and women's organizations in the rural areas. A gender analysis will be undertaken in the initial phase of the project to ensure appropriate benefit targeting and design of gender sensitive participatory processes. Women representation in project decision-making bodies (e.g. Project Board, CFC Platform, community water boards) will be ensured, using existing mechanisms for representing women's views, such as the Municipal Office of Women and women's associations.

Briefly describe in the space below how the Project mainstreams environmental sustainability

The project supports implementation of several key national environmental strategies and plans, specifically the National Climate Change Strategy as well as the National Adaptation Plan (still under development) and the country's Determined National Contribution (INDC) (targeting both mitigation and adaptation, highlighting a goal on afforestation/reforestation of a million hectares in the country). The creation of the Central Forest Corridor (CFC) is a national effort to promote climate change adaptation for the protection of water resources and restoration of degraded forest areas. The government has adopted a 2016-2026 Restoration Plan for degraded forest areas which the project directly supports by incorporating ecosystem-based adaptation measures and techniques into the forestry sector and into integrated watershed planning and management, working with communities, local and national institutions to increase climate resilience of the most vulnerable communities in the Central Forest Corridor and the adaptation capacity of its municipalities with emphasis on securing livelihoods and the continued provision of ecosystem goods and services for Tegucigalpa and surroundings. Climate change adaptation will also be mainstreamed into strengthened multi-sectoral policies and legal / regulatory frameworks for integrated land use planning to minimize land degradation, improve carbon sequestration and maximize environmental sustainability. The project will apply a precautionary approach to conservation of biodiversity and ecosystem services. The project also seeks to improve livelihoods through more efficient and environmentally sustainable forest management and agriculture practices.

Part B. Identifying and Managing Social and Environmental Risks

QUESTION 2: What are the Potential Social and Environmental Risks? <i>Note: Describe briefly potential social and environmental risks identified in Attachment 1 – Risk Screening Checklist (based on any “Yes” responses). If no risks have been identified in Attachment 1 then note “No Risks Identified” and skip to Question 4 and Select “Low Risk”. Questions 5 and 6 not required for Low Risk Projects.</i>	QUESTION 3: What is the level of significance of the potential social and environmental risks? <i>Note: Respond to Questions 4 and 5 below before proceeding to Question 6</i>			QUESTION 6: What social and environmental assessment and management measures have been conducted and/or are required to address potential risks (for Risks with Moderate and High Significance)?
Risk Description	Impact and Probability (1-5)	Significance (Low, Moderate, High)	Comments	Description of assessment and management measures as reflected in the Project design. If ESIA or SESA is required note that the assessment should consider all potential impacts and risks.
Risk 1: Principle 1 (Q3): There is a risk that project activities could potentially restrict availability, quality of and access to resources or basic services, in particular to marginalized individuals or groups	I: 3 P: 2	Moderate	Changes to water tariffs and access restrictions to forest resources may limit availability/accessibility to some basic services	The Project will support the replication of the municipal level Payment for Ecosystem Services (PES) scheme from Tatumbla introduced through the previous AF project. Its implementation involved the revision of the water tariff system to internalize the costs of protection and maintenance of water source and recharge areas. Building on this successful

				experience, the proposed project will engage with communities, local and national stakeholders and the municipalities of the CFC to implement PES schemes. It is expected that these actions will help CFC communities to have better access to water resources whilst they apply more efficient and better adaptive water management practices for both human consumption and agriculture use. Per the project's Environmental and Social Management Framework (ESMF), a participatory risk assessment of PES will be undertaken to ensure water resources remain affordable and accessible and do not disproportionately impact marginalized groups. Participatory processes (per Stakeholder Engagement Plan in ESMF) will further ensure affordability and access of water and forest resources by poor and marginalized groups. Municipal plans and revised local water tariff systems will support municipalities to protect and manage water sources and surrounding catchment and recharge areas.
Risk 2: Principle 1 (Q4): Potentially affected stakeholders, in particular marginalized groups, could potentially be excluded from fully participating in decisions that may affect them	I: 3 P: 2	Moderate	Limitations may exist in the capacities of local stakeholders, in particular poor and vulnerable groups, to participate effectively in decision making that can affect them.	Marginalized groups in the project area of CFC can be considered poor and vulnerable population, facing food security issues (municipalities with chronic malnutrition), and water security problems (difficult access to year round and safe water supply). These groups will be analyzed in the project inception phase and prioritized for adaptation interventions. The stakeholder engagement process (see Stakeholder Engagement Plan) will be conducted in similar inclusive fashion as it was for the proposal preparation phase consultations, assuring broad representation of existing relevant community-based organizations/groups. These involve Community Development Associations that are represented in municipalities, women's committees, water associations, community producer associations, forestry cooperatives, communal health promoters. These organizations will be principally involved through local governments-coordinated consultation and decision making processes, which is the local current practice. The CFC Platform will also facilitate broad stakeholder consultation processes in participatory ways.
Risk 3: Principle 1 (Q5): There is a risk that duty-bearers do not have the capacity to meet their obligations in the Project.	I: 3 P: 4	Moderate	Limitations exist in the capacities of institutions of central, regional and local governments and community to carry out governance roles in support of	The project will finance targeted capacity building activities at community, local and national government levels and strengthen key institutions in relation to critical institutional functions, based on analysis of institutional frameworks and related capacities carried out during the project preparation.

			the sustainable management of the target landscapes.	
Risk 4: Principle 2 (Q2): There is a risk of potentially reproducing discrimination against women based on gender, especially regarding participation in design and implementation or access to opportunities and benefits	I: 3 P: 3	Moderate	Women may be excluded from decision-making or not adequately participate in the design/implementation of the project. As a result, they might have unequal access to resources and/ or access to opportunities and benefits.	A gender analysis will be undertaken in the initial phase of the project to assess divisions of labor and women's role and access to resources and to develop recommendations on how project will promote women's equality and empowerment, including participation in project decision-making, as outlined in the ESMF. Measures will ensure that women receive an equitable share of benefits and that their status and interests are not marginalized. Participatory processes will include specially designed methodologies that enhance the participation of women and therefore enhance the inclusion of their views into the activities of the project, using existing mechanisms for representing women's views, such as the Municipal Office of Women and women's associations. For monitoring, disaggregated and measurable data related to gender equality and empowerment of women will be incorporated. Furthermore, when possible, measures and techniques that can have a positive impact by closing the gap of inequality between men and women will be promoted.
Risk 5: Standard 1 (Q1.2): Some project activities will take place within or adjacent to critical habitats and/or environmentally sensitive areas, including legally protected areas.	I: 1 P: 4	Low	Restoration activities in degraded forest areas will occur in some protected areas. Targeted productive sectors (e.g. agriculture) are expanding in some environmentally sensitive areas. State institutions have poor capacities and weak law enforcement. The project will work with these sectors in these areas in order to reduce their environmental impacts but will not result in increases in this expansion.	The Project will support the application and implementation of the Forestry, Protected Areas and Wildlife Law, by developing a reporting mechanism for communities (on malpractices, illegal logging, fires, and pest outbreaks, etc.); municipal level norms and ordinances (especially land use zoning and forestry use by private land owners) with communication, inspection and feedback mechanisms. A restoration protocol (per ESMF) will ensure siting and conduct of restoration activities will not cause adverse impacts on critical habitats, and will be consistent with any area management plans. It also expects to support the National Environmental Prosecution Office in delivery of targeted trainings to municipalities and review ICF's permit system to delegate authority to Municipal Environmental Management Units (UMAs) for small scale and non-commercial community use wood material (e.g. firewood). This will allow not only more effective locally controlled process, but also the opportunity to work with the productive sectors in order to adopt ecosystem-based adaptation measures and techniques and watershed and natural resources management activities in these sensitive areas, thereby reducing negative impacts. The project will

				support zoning in order to reduce productive expansion into particularly sensitive areas.
Risk 6: Standard 1 (Q1.5): With reforestation activities, there is a risk of potential use of alien and invasive alien species	I: 3 P: 2	Moderate	Forest restoration will involve planting of more resilient tree species, using native varieties	The Project will promote the restoration of the CFC and reforestation of areas completely devastated and complementary planting (completion) of areas with some level of plants survived after the bark beetle outbreak. Restoration areas will be defined with the municipalities within the CFC Platform, and will focus on priority areas, such as main water supply areas (including protected areas) and community forest management areas. The work will be undertaken following the establishment of a restoration protocol/guide for CFC municipalities integrating climate change and variability, as outlined in the ESMF. This will also involve enhanced techniques such as the use of more resilient native tree varieties, ensuring that the plants used for reforestation and completion in areas affected by the bark beetle plague and wildfires are native and appropriate. Therefore, the Project will generate a positive impact on the conservation of biological biodiversity through forest protection and restoration. The Project will also support the setting up of a procedure for tracking, monitoring and registration of restoration actions implemented. During the last year of the project an ecological and land use assessment will be carried out to evaluate the rate of success of the restoration.
Risk 7: Standard 1 (Q1.6): The Project involves reforestation of degraded forest areas in which community harvesting of forest resources occurs	I: 1 P: 5	Low	The project will promote reforestation of degraded forests. The project targets community managed forest areas where use of forestry resources is being practiced (wood, charcoal, resin extraction).	Reforestation activities will be designed to enhance biodiversity and ecosystem services of degraded areas. Reforestation activities will be guided by existing forest management plans as well as a Project "restoration protocol." In addition, the Project will provide training for more sustainable use of forest resources, e.g. more efficient resin extraction techniques and introduction of eco-stoves to families to reduce the use of wood material. Community-level harvesting will be small scale and will follow sustainable practices, as noted in the ESMF. The Project also incorporates ecosystem-based adaptation measures and technologies into the forestry sector and into integrated watershed planning and management.
Risk 8: Standard 2 (Q2.2): Some of the expected outcomes of the project, particularly the forest restoration component, are sensitive to potential impacts of climate change	I: 3 P: 3	Moderate	The project is directly addressing climate change vulnerabilities and adaptation capacities in the Central Forest Corridor, and while it directly promotes	The project is directly supporting the implementation of adaptation measures at the ecosystems and community level as well, including the reforestation of areas affected by the drought-induced bark beetle plague, protection of a broader forest area through introducing pest and fire control and

			adaptation measures, adverse impacts of extreme climatic events (particularly drought) can affect forest and agricultural areas and related livelihoods.	monitoring mechanisms, and through introducing on-the-ground adaptation measures on water resource management for human consumption and agricultural use, as well as more sustainable forestry resource use practices in communities. Other risk management measures include expanded research and monitoring of climate impacts, adoption of Early Warning Systems, and strengthened regulations and enforcement to combat illegal/unsustainable practices.
Risk 9: Standard 3 (Q3.1): Project may involve community safety risks from small-scale construction activities	I: 3 P: 1	Low	The adaptive water management activities may involve construction of community water storage tanks, cisterns; micro-reservoirs and dams; terracing, drip irrigation systems.	As noted in ESMF, the Project will ensure compliance with environmental impact assessment procedures of MiAmbiente, in addition to Honduran building codes and forestry, water, and sanitation regulations (for low risk projects, MiAmbiente requires project description and geo-referencing prior to conducting a field assessment). In addition, the Project will follow technical guidance developed by previous AF project on rain water harvesting systems, micro-reservoirs and drip irrigation techniques.
Risk 10: Standard 6 (Q6.1): Lenca indigenous families are present in 3 municipalities of the project area	I: 1 P: 5	Low	The area of the CFC involves 3 municipalities (Ojojona, Santa Ana and Lepaterique) that feature Lenca indigenous communities.	These communities have been directly engaged during the proposal preparation consultations. The project does not foresee any change or negative impact on the current livelihood of these communities or their natural resource base, in fact it will promote the use of ancestral knowledge and will support the implementation of adaptive techniques to their current livelihood activities. In case any project activities would require formal processes of Free and Informed Prior Consent, then the project will recur existing national mechanisms. These mechanisms involve the preliminary draft Law on FPIC that is currently undergoing national consultation and socialization, and is expected to be already into force during the proposed project implementation period. UNDP SES Standard 6 Indigenous Peoples would also be applied. For any instance that the FPIC Law would not be formally approved and operationalized by the time of the project start the existing legal framework, which is based on current international standards, will be taken as reference, such as the 169 ILO Convention, the Declaration by United Nations on the Rights of Indigenous Peoples, Jurisprudence produced by the Inter-American Human Rights system.
Risk 11: Standard 7 (Q7.4): There may be a risk of application of pesticides that may have a negative effect on the environment or human health	I: 3 P: 1	Low	Pest control measures and agricultural support may involve potential use of pesticides	As noted in the ESMF, the Project will support producers to adopt improved farming techniques (e.g. organic agriculture, soil and water conservation) that would reduce the use of fertilizers and harmful pesticides, thus reducing the

				contamination of soil and water bodies. Biological pest control refers to agricultural production and the application of solutions (locally prepared using natural ingredients) that has properties as natural pesticides and fungicides. These measures will promote agro-ecological practices, in accordance with the Organic Agriculture Regulations and the Manuals of Good Agricultural Practices by the Ministry of Agriculture and Livestock (SAG). Though not foreseen, but if potentially harmful pesticides are needed and/or will be used, they will be properly managed, stored, used, following national and international standard regulation and procedures.
QUESTION 4: What is the overall Project risk categorization?				
Select one (see SESP for guidance)				Comments
<input checked="" type="checkbox"/> Low Risk <input type="checkbox"/> Moderate Risk <input type="checkbox"/> High Risk				Project activities aim at supporting practices that incorporate ecosystem-based adaptation measures and techniques into the forestry sector and into integrated watershed planning and management to increase climate resilience of the most vulnerable communities in the Central Forest Corridor and the continued provision of ecosystem goods and services for Tegucigalpa and surroundings. Although the Project will not lead to increases in environmental impacts, the presence of Lenca population in the intervention area and the adoption of forestry afforestation/restoration activities demand technical procedures and a more careful risk management plan and monitoring activities. However, it is expected that the Project will result in overall positive environmental and social sustainability.
QUESTION 5: Based on the identified risks and risk categorization, what requirements of the SES are relevant?				
Check all that apply				Comments
<input checked="" type="checkbox"/> Principle 1: Human Rights				Institutional and stakeholder limitations in capacity may result in less than optimal implementation of Project interventions, that will be addressed through capacity assessment, targeted training and institutional strengthening actions during project implementation.

	<i>Principle 2: Gender Equality and Women's Empowerment</i>	<input type="checkbox"/>	
	<i>1. Biodiversity Conservation and Natural Resource Management</i>	<input checked="" type="checkbox"/>	The Project will be supporting activities in environmentally sensitive areas, but this work will aim at reducing impacts in these areas with a net positive impacts.
	<i>2. Climate Change Mitigation and Adaptation</i>	<input checked="" type="checkbox"/>	Although the project directly supports adaptation actions, adverse impacts of extreme climatic events (particularly drought) may affect forest and agricultural areas and related livelihoods.
	<i>3. Community Health, Safety and Working Conditions</i>	<input type="checkbox"/>	
	<i>4. Cultural Heritage</i>	<input type="checkbox"/>	
	<i>5. Displacement and Resettlement</i>	<input type="checkbox"/>	
	<i>6. Indigenous Peoples</i>	<input checked="" type="checkbox"/>	The Project target area involves 3 municipalities with Lenca indigenous communities, which have been directly engaged during consultations for project preparation, and will continued to be engaged during project implementation. In case necessary, the project will recur FPIC processes according to national and international standards.
	<i>7. Pollution Prevention and Resource Efficiency</i>	<input checked="" type="checkbox"/>	The AF Project will support producers to adopt improved farming techniques (organic agriculture, soil and water conservation, more resilient crop varieties) that would reduce the use of fertilizers and pesticides. Although biological pest control will be preferred, and nor foreseen, potentially harmful pesticides may be needed for specific use. In this particular case, they will be properly managed, stored, used, following national and international standard regulation and procedures.

SESP Attachment 1. Social and Environmental Risk Screening Checklist

Checklist Potential Social and Environmental Risks		
Principles 1: Human Rights		Answer (Yes/No)
1.	Could the Project lead to adverse impacts on enjoyment of the human rights (civil, political, economic, social or cultural) of the affected population and particularly of marginalized groups?	No
2.	Is there a likelihood that the Project would have inequitable or discriminatory adverse impacts on affected populations, particularly people living in poverty or marginalized or excluded individuals or groups? ¹	No
3.	Could the Project potentially restrict availability, quality of and access to resources or basic services, in particular to marginalized individuals or groups?	Yes
4.	Is there a likelihood that the Project would exclude any potentially affected stakeholders, in particular marginalized groups, from fully participating in decisions that may affect them?	Yes
5.	Is there a risk that duty-bearers do not have the capacity to meet their obligations in the Project?	Yes
6.	Is there a risk that rights-holders do not have the capacity to claim their rights?	No
7.	Have local communities or individuals, given the opportunity, raised human rights concerns regarding the Project during the stakeholder engagement process?	No
8.	Is there a risk that the Project would exacerbate conflicts among and/or the risk of violence to project-affected communities and individuals?	No
Principle 2: Gender Equality and Women's Empowerment		
1.	Is there a likelihood that the proposed Project would have adverse impacts on gender equality and/or the situation of women and girls?	No
2.	Would the Project potentially reproduce discriminations against women based on gender, especially regarding participation in design and implementation or access to opportunities and benefits?	Yes
3.	Have women's groups/leaders raised gender equality concerns regarding the Project during the stakeholder engagement process and has this been included in the overall Project proposal and in the risk assessment?	No
4.	Would the Project potentially limit women's ability to use, develop and protect natural resources, taking into account different roles and positions of women and men in accessing environmental goods and services? <i>For example, activities that could lead to natural resources degradation or depletion in communities who depend on these resources for their livelihoods and well being</i>	No
Principle 3: Environmental Sustainability: Screening questions regarding environmental risks are encompassed by the specific Standard-related questions below		
Standard 1: Biodiversity Conservation and Sustainable Natural Resource Management		
1.1	Would the Project potentially cause adverse impacts to habitats (e.g. modified, natural, and critical habitats) and/or ecosystems and ecosystem services?	No

¹ Prohibited grounds of discrimination include race, ethnicity, gender, age, language, disability, sexual orientation, religion, political or other opinion, national or social or geographical origin, property, birth or other status including as an indigenous person or as a member of a minority. References to "women and men" or similar is understood to include women and men, boys and girls, and other groups discriminated against based on their gender identities, such as transgender people and transsexuals.

<i>For example, through habitat loss, conversion or degradation, fragmentation, hydrological changes</i>		
1.2	Are any Project activities proposed within or adjacent to critical habitats and/or environmentally sensitive areas, including legally protected areas (e.g. nature reserve, national park), areas proposed for protection, or recognized as such by authoritative sources and/or indigenous peoples or local communities?	Yes
1.3	Does the Project involve changes to the use of lands and resources that may have adverse impacts on habitats, ecosystems, and/or livelihoods? (Note: if restrictions and/or limitations of access to lands would apply, refer to Standard 5)	No
1.4	Would Project activities pose risks to endangered species?	No
1.5	Would the Project pose a risk of introducing invasive alien species?	Yes
1.6	Does the Project involve harvesting of natural forests, plantation development, or reforestation?	Yes
1.7	Does the Project involve the production and/or harvesting of fish populations or other aquatic species?	No
1.8	Does the Project involve significant extraction, diversion or containment of surface or ground water? <i>For example, construction of dams, reservoirs, river basin developments, groundwater extraction</i>	No
1.9	Does the Project involve utilization of genetic resources? (e.g. collection and/or harvesting, commercial development)	No
1.10	Would the Project generate potential adverse transboundary or global environmental concerns?	No
1.11	Would the Project result in secondary or consequential development activities which could lead to adverse social and environmental effects, or would it generate cumulative impacts with other known existing or planned activities in the area? <i>For example, a new road through forested lands will generate direct environmental and social impacts (e.g. felling of trees, earthworks, potential relocation of inhabitants). The new road may also facilitate encroachment on lands by illegal settlers or generate unplanned commercial development along the route, potentially in sensitive areas. These are indirect, secondary, or induced impacts that need to be considered. Also, if similar developments in the same forested area are planned, then cumulative impacts of multiple activities (even if not part of the same Project) need to be considered.</i>	No
Standard 2: Climate Change Mitigation and Adaptation		
2.1	Will the proposed Project result in significant ² greenhouse gas emissions or may exacerbate climate change?	No
2.2	Would the potential outcomes of the Project be sensitive or vulnerable to potential impacts of climate change?	Yes
2.3	Is the proposed Project likely to directly or indirectly increase social and environmental vulnerability to climate change now or in the future (also known as maladaptive practices)? <i>For example, changes to land use planning may encourage further development of floodplains, potentially increasing the population's vulnerability to climate change, specifically flooding</i>	No
Standard 3: Community Health, Safety and Working Conditions		
3.1	Would elements of Project construction, operation, or decommissioning pose potential safety risks to local communities?	Yes
3.2	Would the Project pose potential risks to community health and safety due to the transport, storage, and use and/or disposal of hazardous or dangerous materials (e.g. explosives, fuel and other chemicals during construction and operation)?	No

² In regards to CO₂, 'significant emissions' corresponds generally to more than 25,000 tons per year (from both direct and indirect sources). [The Guidance Note on Climate Change Mitigation and Adaptation provides additional information on GHG emissions.]

3.3	Does the Project involve large-scale infrastructure development (e.g. dams, roads, buildings)?	No
3.4	Would failure of structural elements of the Project pose risks to communities? (e.g. collapse of buildings or infrastructure)	No
3.5	Would the proposed Project be susceptible to or lead to increased vulnerability to earthquakes, subsidence, landslides, erosion, flooding or extreme climatic conditions?	No
3.6	Would the Project result in potential increased health risks (e.g. from water-borne or other vector-borne diseases or communicable infections such as HIV/AIDS)?	No
3.7	Does the Project pose potential risks and vulnerabilities related to occupational health and safety due to physical, chemical, biological, and radiological hazards during Project construction, operation, or decommissioning?	No
3.8	Does the Project involve support for employment or livelihoods that may fail to comply with national and international labor standards (i.e. principles and standards of ILO fundamental conventions)?	No
3.9	Does the Project engage security personnel that may pose a potential risk to health and safety of communities and/or individuals (e.g. due to a lack of adequate training or accountability)?	No
Standard 4: Cultural Heritage		
4.1	Will the proposed Project result in interventions that would potentially adversely impact sites, structures, or objects with historical, cultural, artistic, traditional or religious values or intangible forms of culture (e.g. knowledge, innovations, practices)? (Note: Projects intended to protect and conserve Cultural Heritage may also have inadvertent adverse impacts)	No
4.2	Does the Project propose utilizing tangible and/or intangible forms of cultural heritage for commercial or other purposes?	No
Standard 5: Displacement and Resettlement		
5.1	Would the Project potentially involve temporary or permanent and full or partial physical displacement?	No
5.2	Would the Project possibly result in economic displacement (e.g. loss of assets or access to resources due to land acquisition or access restrictions – even in the absence of physical relocation)?	No
5.3	Is there a risk that the Project would lead to forced evictions? ³	No
5.4	Would the proposed Project possibly affect land tenure arrangements and/or community based property rights/customary rights to land, territories and/or resources?	No
Standard 6: Indigenous Peoples		
6.1	Are indigenous peoples present in the Project area (including Project area of influence)?	Yes
6.2	Is it likely that the Project or portions of the Project will be located on lands and territories claimed by indigenous peoples?	No
6.3	Would the proposed Project potentially affect the human rights, lands, natural resources, territories, and traditional livelihoods of indigenous peoples (regardless of whether indigenous peoples possess the legal titles to such areas, whether the Project is located within or outside of the lands and territories inhabited by the affected peoples, or whether the indigenous peoples are recognized as indigenous peoples by the country in question)? <i>If the answer to the screening question 6.3 is “yes” the potential risk impacts are considered potentially severe and/or critical and the Project would be categorized as either Moderate or High Risk.</i>	No

³ Forced evictions include acts and/or omissions involving the coerced or involuntary displacement of individuals, groups, or communities from homes and/or lands and common property resources that were occupied or depended upon, thus eliminating the ability of an individual, group, or community to reside or work in a particular dwelling, residence, or location without the provision of, and access to, appropriate forms of legal or other protections.

6.4	Has there been an absence of culturally appropriate consultations carried out with the objective of achieving FPIC on matters that may affect the rights and interests, lands, resources, territories and traditional livelihoods of the indigenous peoples concerned?	No
6.5	Does the proposed Project involve the utilization and/or commercial development of natural resources on lands and territories claimed by indigenous peoples?	No
6.6	Is there a potential for forced eviction or the whole or partial physical or economic displacement of indigenous peoples, including through access restrictions to lands, territories, and resources?	No
6.7	Would the Project adversely affect the development priorities of indigenous peoples as defined by them?	No
6.8	Would the Project potentially affect the physical and cultural survival of indigenous peoples?	No
6.9	Would the Project potentially affect the Cultural Heritage of indigenous peoples, including through the commercialization or use of their traditional knowledge and practices?	No
Standard 7: Pollution Prevention and Resource Efficiency		
7.1	Would the Project potentially result in the release of pollutants to the environment due to routine or non-routine circumstances with the potential for adverse local, regional, and/or transboundary impacts?	No
7.2	Would the proposed Project potentially result in the generation of waste (both hazardous and non-hazardous)?	No
7.3	Will the proposed Project potentially involve the manufacture, trade, release, and/or use of hazardous chemicals and/or materials? Does the Project propose use of chemicals or materials subject to international bans or phase-outs? <i>For example, DDT, PCBs and other chemicals listed in international conventions such as the Stockholm Conventions on Persistent Organic Pollutants or the Montreal Protocol</i>	No
7.4	Will the proposed Project involve the application of pesticides that may have a negative effect on the environment or human health?	Yes
7.5	Does the Project include activities that require significant consumption of raw materials, energy, and/or water?	No

Annex 14

Ecosystem-Based Adaptation at Communities of the Central Forest Corridor in Tegucigalpa, Honduras

Environmental and Social Management Framework

5 March 2017

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EXECUTIVE SUMMARY

Honduras is the second largest country in Central America. In 2013, a population of 8,721,014 inhabitants (52 % women) was estimated, where more than half (53.3 %) was considered rural. Honduras is home to seven indigenous groups, and 2 Afro-Honduran groups, who together represent approximately 7% of the national population. Honduras is considered a mid-level human development country, ranking in position number 131, with a Human Development Index (HDI) of 0.606 (gender inequality index of 0.480), which is the penultimate position in Latin America. The country faces the highest poverty, economic and social inequality levels in Latin America. The Gini coefficient is 0.52, and only 3.2 % of income belongs to the poorest quintile. It is estimated that 64.5 % of Honduran' households experience poverty, and of these, 42.6% are in extreme poverty. The most affected are rural areas with 68.5 % of the population living in poverty, and 55.6 % in extreme poverty. In rural areas, almost seven out of ten households live in extreme poverty. Moreover, 51.4 % of the Economically Active Population (EAP) is rural population, and from this rural EAP, only 28.2 % are women. 35% of total EAP performs agricultural, forestry, hunting and fishing activities, mainly in rural areas; and most are severely affected by climate change and extreme events related to tropical cyclones or the El Niño-Southern Oscillation (ENSO) phenomenon.

Honduras has an area of 5.4 million hectares of natural forests. Pine and mixed pine woods coverage is approximate 2.2 million hectares, representing 41% of forest nationwide. Pine forests are ecosystems of great environmental, economic and social importance, which are managed as productive forests, and also for ecosystem services such as water supply and protection of biodiversity. In terms of water resources, the general situation in the country regarding meeting basic needs related to fresh water provision and sanitation coverage in the urban and rural sector, although having increased, remains proportionally unequal, with more than one million people in 2010 lacking access to improved drinking water services; and around 2.2 million lacking access to improved sanitation services, of which 80 % and 66 % respectively, live in rural areas.

The main objective of the project is to increase climate resilience of the most vulnerable communities in the Central Forest Corridor and the adaptation capacity of its municipalities with emphasis on securing livelihoods and the continued provision of ecosystem goods and services for Tegucigalpa and surroundings.

To achieve this objective, the project will focus on three components that are closely related through (1) governance strengthening at the municipal level, (2) support for on-the-ground adaptation measures for forest restoration and management of water, land and forest resources, and supplemented (3) with activities to strengthen knowledge and information management, and monitoring of vulnerability and adaptive capacity to climate change.

Stakeholder consultations were conducted across the project areas. The stakeholders are aware of the close link that exists between forests and climate change in terms of livelihoods and the state of natural resources in the region, particularly water. Stakeholders also know that a number of measures need to be implemented to face the challenges posed by climate change and the need for adaptation, but they see several shortcomings in terms of governance mechanisms, stakeholders' inclusion and participation, financial resources, biodiversity conservation incentives and support to local governments and communities. Knowledge management is another issue that the stakeholders see as very important as the consultations highlighted the need for more research, monitoring, early warning system and technologies, particularly focusing on the bark beetle plague.

A preliminary analysis and screening identified a number of limited potential social and environmental risks associated with the project activities. This Environmental and Social Management Framework (ESMF) has been prepared to address these risks during project implementation.

1 INTRODUCTION

This Environmental and Social Management Framework (ESMF) has been prepared in support of the project titled Ecosystem-Based Adaptation Communities of the Central Forest Corridor in Tegucigalpa that UNDP has prepared together with the Government of Honduras.

The project has been reviewed with UNDP's Social and Environmental Screening Procedure (SESP, see Annex 13). The screening and preliminary analysis found that certain project activities could generate a number of limited adverse social and environmental impacts. The screening resulted in an overall social and environmental risk categorization of "Moderate." The ESMF is designed to avoid, and where avoidance is not possible, mitigate and manage these limited potential impacts.

1.1 OVERVIEW OF THE PROJECT

The main objective of the project is to increase climate resilience of the most vulnerable communities in the Central Forest Corridor and the adaptive capacity of its municipalities with emphasis on securing livelihoods and the continued provision of ecosystem goods and services for Tegucigalpa and surroundings. Enhancement of biodiversity and ecosystem services represents a key adaptation strategy for communities of CFC, given that there is a very significant dependency between communities in the CFC and the natural resources present, as source of a range of ecosystem services. Climate-related challenges identified in the CFC are intrinsically linked to water resources availability and climate variability and change, as rainfall patterns have direct impacts on water quantity and quality to satisfy the demands from communities that live in the CFC. On the other hand, the loss of forest cover poses a high risk on these communities. Natural resources vulnerability towards the impacts of extreme events exacerbated by climate change, have a strong negative effect on livelihoods directly related to these natural resources. Therefore, the project aims to enhance how these communities make a better use of their resources and to recover the lost forest coverage, reducing the current threats to biodiversity and ecosystem services. These biodiversity and ecosystem services can help to buffer these forests from perturbation, promoting natural reforestation and conservation, having communities to manage protected areas, that will increase their resilience to climate change.

To achieve the above objective, the project will focus on three components that are closely related through governance strengthening at the municipal level, enabling them to implement on-the-ground adaptation measures for forest restoration and management of water, land and forest resources, supplemented with activities to strengthen knowledge and information management, and monitoring of climate change vulnerability and adaptive capacity.

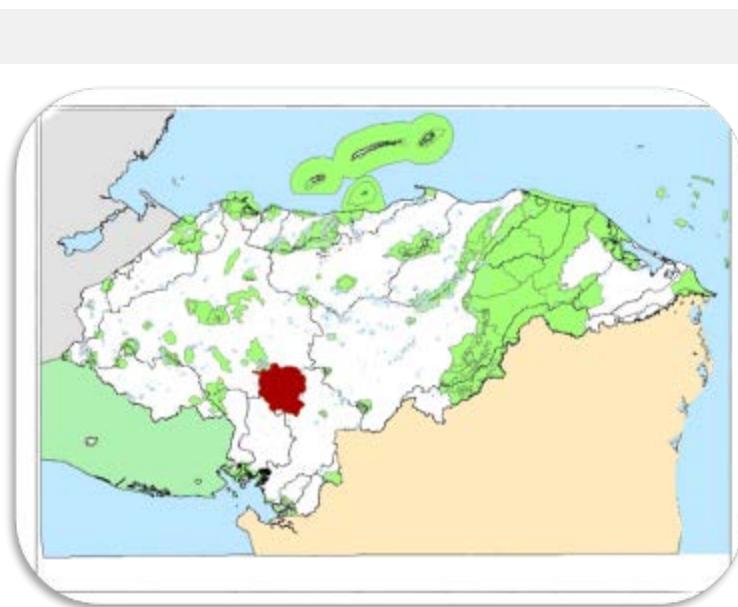


Figure 1 - Map of the Central Forest Corridor (target area)

The project supports implementation of key national environmental strategies and plans, specifically the National Climate Change Strategy as well as the National Adaptation Plan (still under development) and the country's Determined National Contribution (NDC) (targeting both mitigation and adaptation, highlighting a goal on afforestation/reforestation of a million hectares in the country). The creation of the Central Forest Corridor (CFC) is a national effort to promote climate change adaptation for the protection of water resources and restoration of degraded forest areas. The government has adopted a 2016-2026 Restoration Plan for degraded forest areas which the project directly supports by incorporating ecosystem-based adaptation measures and techniques into the forestry sector and into integrated watershed planning and management, working with communities, local and national institutions to increase climate resilience of the most vulnerable communities in the Central Forest Corridor and the adaptation capacity of its municipalities with emphasis on securing livelihoods and the continued provision of ecosystem goods and services for Tegucigalpa and surroundings. Climate change adaptation will also be mainstreamed into strengthened multi-sectoral policies and legal / regulatory frameworks for integrated land use planning to minimize land degradation, improve carbon sequestration and maximize environmental sustainability. The project will apply a precautionary approach to conservation of biodiversity and ecosystem services. The project also seeks to improve livelihoods through more efficient and environmentally sustainable forest management and agriculture practices.

1.1.1 Summary of Activities

The proposed project will have the following activities:

Project Components	Expected Outputs	Project Activities
1. Strengthening of local and community governance for climate resilience		
	1.1 Strengthened coordination mechanisms for climate-resilient management of CFC natural resources, including measures for the effective participation of women and indigenous people	<ul style="list-style-type: none"> • Create CFC Technical Implementation Unit • Develop Action Plan and internal procedures for CFC Platform • Develop communications and consultation plan
	1.2 Municipal level regulatory mechanisms strengthened for adaptive management of natural resources	<ul style="list-style-type: none"> • Develop norms and ordinances, especially those related to land use zoning and forestry use by private land owners • Develop a reporting mechanism for communities (on malpractices, illegal logging, fires, and pest outbreaks, etc.) • Review ICF permit system to delegate authority to Municipal Environmental Units for small-scale and non-commercial community use wood material (e.g. firewood).
	1.3 Municipal level plans are revised and newly established to harmonize adaptation interventions	<ul style="list-style-type: none"> • Revise 5 existing Municipal Climate Change Adaptation Plans • Develop 9 additional Municipal Climate Change Adaptation Plans • Revision of Forest Protection Plans in all 14 Municipalities • Develop 25 Micro-Basin Plans • Undertake participatory community assessments (social-economic, technical, regulatory) and gender analysis to support development of above plans
	1.4 Payment for Ecosystem (Watershed) Services (PES) schemes developed and operationalized for CC adaptation measures	<ul style="list-style-type: none"> • Introduce municipal level Payment for Ecosystem Services (PES) schemes • Pilot inter-municipal PES in one main sub-basin • Undertake necessary assessments and valuation of ecosystem services

2. On the ground adaptation measures for forest, land and water resources management		
	2.1 Pine and Mixed Forest areas damaged by drought-induced pest and fire hazards are reforested	<ul style="list-style-type: none"> • Restore 1,000 ha of mix and pine forest in the CFC damaged by bark beetle • Develop restoration protocol/guide for CFC • Provide training to key stakeholders
	2.2 Protection measures are introduced against fires, pests, land use change, and unsustainable forest use, assisting natural regeneration of forests	<ul style="list-style-type: none"> • Revise and update 14 Municipal Forest Protection Plans to reflect post-bark beetle plague situation • Provide training for municipalities and community forest management groups on forest fire and bark beetle outbreak detection and control • Provide training of community forest management groups on good practices of charcoal production and resin extraction • Provide efficient eco-stoves to reduce pressure on firewood consumption
	2.3 Drought management adaptation measures implemented to optimize the use of water resources for agriculture and domestic use	<ul style="list-style-type: none"> • Provide protection of water source and recharge areas (demarcation, fencing, replanting) • Improve water intakes and filters • Construct community water storage (cisterns, tanks) • Reduce leakage in water distribution schemes • Provide household level rainwater capture and storage (tanks) • Improve water storage via small reservoirs, dams, ponds and iron-cement tanks • Support adoption of drip irrigation systems • Improve soil and water conservation measures (terracing, intercropping, mulching, enhanced agro-forestry and silvo-pastoral techniques) • Introduction of biological pest control and fertilizer techniques (reduce use of agro-chemicals, and consequent runoff and contamination of streams) • Introduction of drought-resilient crop varieties and crop diversification
3. Strengthening knowledge, information management, and monitoring systems on climate change vulnerability and adaptive capacity		
	3.1 Applied research carried out to enhance knowledge and information on the links amongst climate change, drought, pests, fires and adaptation measures in the CFC.	<p>Research key topics including:</p> <ul style="list-style-type: none"> • the relationship among climate change, forest fires and increased bark beetle pest • new pest control techniques (e.g. application of pheromones, etc.) • behavior of natural regeneration processes after infestation • correlation among community forest management areas where resin extraction is performed and plague outbreaks occurrence • characterization of the bark beetle infestation by altitude, pine species, diameter • innovative restoration techniques • Proposals for improved genetic planting material (more resilient tree varieties)

	3.2 Strengthened National Climate Change Observatory for Sustainable Development (ONCCDS)	<ul style="list-style-type: none"> • Strengthen institutional linkages through technical expert groups, harmonized data, trainings • Develop ONCCDS Communication and Knowledge Management Strategy • Develop community level information products • Provide technical assistance, training, and operational support
	3.3 Community early warning and monitoring system for bark beetle pest outbreak under CFC Platform	<ul style="list-style-type: none"> • Develop protocols and capacities for community pest monitoring (inspections, patrols and reporting of outbreaks, with a registry system) • Develop Community Contingency plans against the bark beetle outbreak • Channel early warning drought information (seasonal forecasts) • Awareness raising on the forest ecosystem benefits and the need to preserve these assets
	3.4 Systematized and disseminated project knowledge and experience	<ul style="list-style-type: none"> • Develop Communication and Knowledge Management Plan

1.2 POTENTIAL SOCIAL AND ENVIRONMENTAL IMPACTS

Preliminary analysis has identified a range of potential limited social and environmental impacts associated with various project activities. These potential impacts are summarized in the table below.

The project has been reviewed with UNDP's Social and Environmental Standards Procedure (SESP). The Social and Environmental Screening Template was prepared (See Annex 13) and the project deemed to be a moderate risk (Category B) project. Discussions on the impact assessment are provided in the Social and Environmental Screening Template, which provided the rationale for the project being classified as a moderate risk. This ESMF provides further discussion below.

Activity	Potential Social and Environmental Impact	Potential Project Benefit	Mitigation	Monitoring
Revision of municipal regulatory mechanisms, zoning, and management plans for natural resource management	Potential adverse livelihood impacts due to limited access to forest resources currently utilized by local communities	Reduced forest degradation and improved livelihoods due to more sustainable practices	Participatory revision/development of forest management plans. Public hearings on zoning changes. Continued access small scale (just improved techniques)	Mid-term review; Supervision missions
Payment for Ecosystem (Watershed) Services (PES) schemes developed and operationalized	Changes to water tariffs could potentially create affordability issues for water resources	Generation of revenues for water conservation and more realistic pricing of water consumption	Undertake participatory risk assessment of PES to ensure water resources remain affordable and accessible and do not disproportionately impact marginalized groups	Consultation capacity workshops; mid-term review
Reforestation in or adjacent to critical or sensitive natural habitats	Restoration activities in degraded forest areas will occur in some protected areas. Targeted productive sectors (e.g. agriculture) are expanding in some environmentally sensitive areas	Improved ecosystem services, reduced forest degradation, control of bark beetle pest outbreaks	Support the implementation of municipal and restoration plans; develop a restoration protocol building on the instruments/tools that ICF has in place so far, ensuring no adverse impacts on critical habitats The project will also work with productive sectors to adopt ecosystem-based adaptation measures and techniques and watershed and natural resources management activities in these sensitive areas, thereby reducing negative impacts. The project will support zoning in order to reduce productive expansion into particularly sensitive areas.	Consultation capacity workshops; building annual supervision missions
Use of more resilient species for reforestation activities	There is a risk of potential use of alien and invasive alien species	Reduced forest degradation, control of bark beetle pest outbreaks	Restoration areas will be defined with the municipalities within the CFC Platform, and will focus on priority areas, such as main water supply areas	Set up a procedure for tracking, monitoring and registration of restoration actions implemented;

Environmental and Social Management Framework

			(including protected areas) and community forest management areas. The work will be undertaken following the establishment of a restoration protocol/guide for CFC municipalities integrating climate change and variability. This will also involve enhanced techniques such as the use of more resilient native tree varieties, ensuring that the plants used for reforestation and completion in areas affected by the bark beetle plague and wildfires are native and appropriate	ecological and land use assessment to evaluate the rate of success of the restoration (last year); mid-term review
Community harvesting of forest resources	Community harvesting may adversely affect project forest areas, particularly if unsustainable practices continue	More sustainable practices will enhance biodiversity and ecosystem services of degraded areas	Project will provide training for more sustainable use of forest resources, e.g. more efficient resin extraction techniques and introduction of eco-stoves to families. Community-level harvesting will be small scale and sustainable practices will be promoted. The project also incorporates ecosystem-based adaptation measures and technologies into the forestry sector and into integrated watershed planning and management.	Mid-term review; capacity building workshops; supervision missions
The potential outcomes of the Project, particularly the forest restoration component, are sensitive to potential impacts of climate change	Adverse impacts of extreme climatic events (particularly drought) may affect forest, agricultural areas and related livelihoods and increase the risk of soil erosion and landslides (rainfall excess)	More availability of water for household consumption and/or irrigation to support livelihoods in case of rainfall excess	Direct support to adaptation measures at the ecosystems and community levels as well as including the reforestation of areas affected by the drought-induced bark beetle plague, protection of a broader forest area through introducing pest and wildfire control and monitoring mechanisms, and through introducing on-the-ground adaptation measures on water resource management for human consumption and agricultural use	Use of climate risk management tools and assessment; mid-term review; supervision missions

			Promotion of sustainable forestry resource use practices in communities; other risk management measures include expanded research and monitoring of climate impacts, adoption of Early Warning Systems, and strengthened regulations and enforcement to combat illegal/unsustainable practices	
Construction of small scale water infrastructure and irrigation systems	Potential land perturbances, water usage, and community safety risks from construction of community water storage tanks, cisterns; micro-reservoirs and dams; terracing, drip irrigation systems	Improved water access to household and agriculture	<p>Compliance with MiAmbiente's environmental impact assessment procedures, in addition to Honduran building codes and forestry, water, and sanitation regulations (for low risk projects, MiAmbiente requires project description and geo-referencing prior to conducting a field assessment)</p> <p>In addition, project will follow additional guidance on micro-reservoirs and drip irrigation systems developed by previous AF project on rain water harvesting systems</p>	Mid-term review; supervision missions
Lenca indigenous communities are present in 3 municipalities of the project area	Potentially affected stakeholders such as Lenca indigenous communities could potentially be affected by the project and excluded from fully participating in decisions that may affect them	The project will promote the use of ancestral knowledge and will support the implementation of adaptive techniques to their current livelihood activities	<p>These communities have been directly engaged during the proposal preparation consultations</p> <p>In case any project activities would require formal processes of Free and Informed Prior Consultation, then the project will recur existing national mechanisms and UNDP SES Standard 6 Indigenous Peoples</p> <p>Compliance with existing legal framework, which is based on current</p>	Consultation workshops (if needed); mid-term review; supervision missions

			international standards, such as the 169 ILO Convention, the Declaration by United Nations on the Rights of Indigenous Peoples, and Jurisprudence produced by the Inter-American Human Rights system	
Pest control and agricultural support activities	Potential use of pesticides that have a negative effect on the environment or human health	<p>Limit bark beetle pest outbreaks, improve water quality through reduced agricultural use of harmful pesticides</p> <p>Improve farming techniques (e.g. organic agriculture, soil and water conservation) that would reduce the use of fertilizers and pesticides, thus reducing the contamination of soil and water bodies</p>	<p>Project will only promote use of biological pesticides that refers to agricultural production and the application of solutions (locally prepared using natural ingredients) that has properties as natural pesticides and fungicides</p> <p>Promotion of agro-ecological practices, in accordance with the Organic Agriculture Regulations and the Manuals of Good Agricultural Practices by the Ministry of Agriculture and Livestock (SAG)</p> <p>If potentially harmful pesticides are needed and/or will be used, they will be properly managed, stored, used, following national and international standard regulation and procedures</p>	Mid-term review; supervision missions
Potentially affected stakeholders, in particular marginalized groups, could potentially be excluded from fully participating in decisions that may affect them	Potentially affected stakeholders, in particular marginalized groups, could potentially be excluded from fully participating in decisions that may affect them	Marginalized groups in the project area of CFC can be considered poor and vulnerable population, facing food security issues (municipalities with chronic malnutrition), and water security problems (difficult access to year round and safe water supply). The project will implement a number of measures and actions that will benefit these groups	<p>Undertake an analysis of marginalized and vulnerable groups in the project inception phase and prioritize them for adaptation interventions</p> <p>Promote a stakeholder engagement process per Stakeholder Engagement Plan that will be conducted in similar inclusive fashion as it was for the proposal preparation phase</p>	Inception assessment; mid-term review; consultation workshops; supervision missions

			consultations, assuring broad representation of existing relevant community-based organizations/groups, involving community development associations, women's committees, water associations, community producer associations, forestry cooperatives, communal health promoters	
Women may be excluded from decision-making or not adequately participate in the design/implementation of the project Women might have unequal access to resources and/ or access to opportunities and benefits	There is a risk of potentially reproducing discrimination against women based on gender, especially regarding participation in design and implementation or access to opportunities and benefits	Women receive an equitable share of benefits and that their status and interests are not marginalized	A gender analysis will be undertaken in the first phase of the project to assess divisions of labor and women's role and access to resources and to develop recommendations on how project will promote women's equality and empowerment, including participation in project decision-making Promotion of measures and techniques that can have a positive impact by closing the gap of inequality between men and women Measures will ensure that women receive an equitable share of benefits and that their status and interests are not marginalized. Participatory processes will include specially designed methodologies that enhance the participation of women and therefore enhance the inclusion of their views into the activities of the project, using existing mechanisms for representing women's views, such as the Municipal Office of Women and women's associations	Gender assessment; use of disaggregated and measurable indicators related to gender equality and women's empowerment; capacity building workshops; mid-term review

2 LEGAL AND INSTITUTIONAL FRAMEWORK FOR ENVIRONMENTAL AND SOCIAL MATTERS

2.1 LEGISLATION, POLICIES AND REGULATIONS

The following legislation is relevant to the project:

National Legislations	Objective/Relevance	Authority
Agreement No. 169	About Indigenous Peoples and Tribes in independent countries	National Directorate of Indigenous Peoples and Afro-descendants (DINAFRO)
Municipality Law	Regulatory Framework for Municipal Management	Municipalities
Forestry Law	Protection, exploitation and conservation of forests and wildlife	Forest Conservation Institution (ICF)
General Law for the Environment	Orientates human activities towards sustainable development.	Ministry of Energy, Natural Resources, Environment and Mines (MiAmbiente)
Regulations for Organic Agriculture	Promotion of environmental and sustainable agricultural production	Ministry of Agriculture and Livestock (SAG)
Law of the National System for Risk Management	Legal framework oriented to the development of prevention capacities, and decrease the risk to potential disasters, as well as to preparedness and recovery of damage due to natural disasters or those caused by human activities	Permanent Contingency Committee (COPECO)
General Water Law	Establish principles and regulations applicable to the adequate management of water resources, for the protection, conservation, valuation and exploitation towards the integrated management of water resources at the national level	Ministry of Energy, Natural Resources, Environment and Mines (MiAmbiente)
Framework Legislation for Water and Sanitation	Promote the expansion of service coverage for drinking water and sanitation; ensure water quality to guarantee water consumption for the population; establish the environmental management regulatory framework, for the protection and preservation of water sources, as for the sanitation and management of wastewater discharges; establish criteria for service valuation, tariff schemes and compensation mechanisms that guarantee water access and sanitation infrastructure by households and communities that are in poverty situation; strengthen spatial planning, water governance and sanitation management through an adequate delegation of functions, competencies and responsibilities	CONASA ERSAPS SANAA
Technical Standard for Water Quality (public health safety about delivery of drinking water services)	Protect public health through the establishment of appropriate levels or standards that water quality should meet, and parameters that might represent a health risk to the community or inconvenient for the conservation of water sources systems	Ministry of Public Health
Municipal Arbitration Plan	Municipal regulation every 5 years, referred to arbitration of municipal taxes, that are valid for activities carried out under the municipal area	Municipalities
Municipal Development Plans	Planning instruments prepared under the mandate of the General Coordination Secretary of the Government for Municipal Governments	General Coordination Secretary, Secretary of the Interior

		Municipalities
National Forest Restoration Strategy	Forest Restoration	ICF
Forest Protection Plans	Methodology Guide for the planning of municipal forest protection	ICF
Resin, Charcoal and Forest Exploitation activities	Regulation for resin extraction and utilization activities attached to Forest Protection Plans	ICF
Organic agriculture regulations	Promoting sustainable agriculture and disseminate best agriculture practices and guidelines	Ministry of Agriculture and Livestock (SAG)
Environmental Impact Assessments (EIA)	Building of Water Systems	MiAmbiente
Regulation of Compensation for Ecosystem Services	Establishes the criteria for services valuation, tariff schemes and compensation mechanisms to ensure the access to natural resources by households and communities that are in social vulnerability condition	MiAmbiente

2.2 ENVIRONMENTAL IMPACT ASSESSMENT REGULATIONS

Honduras introduced the principles of Environmental Impact Assessment (EIA) in 1993, when the General Law of the Environment was enacted by Executive Decree No.104-93. The law required an assessment of environmental impacts caused by all public or private projects, so, the National System of Environmental Impact Assessment (SINEIA), in charge all EIAs in Honduras, was established. The Environmental Evaluation and Control Directorate (DECA) is the organisation in charge of coordinating the SINEIA. The Secretariat of Natural Resources and Environment (SERNA) was redesigned by Decree-218-96. To identify, predict and describe the possible positive and negative impacts of a project proposal, as well as the proposed mitigation measures for negative impacts and a regular monitoring and control plan (Article 4.16 of ED189-2009).

All projects, construction works or activities that, by their nature fall in category 1 (e.g. very low environmental impact or risk classification) shall not be subject to comply with the formality of an environmental license. However, these shall be subject to comply with existing environmental legislation and the Good Environmental Practice Code of Honduras (Article 30 of ED 189-2009).

2.3 MULTILATERAL ENVIRONMENTAL AGREEMENTS

Honduras is a signatory to a number of international and regional agreements and conventions, which are relevant to the project. They include:

- 1992 United Nations Framework Convention on Climate Change
- 1997 Kyoto Protocol to the United Nations Framework Convention on Climate Change
- 1972 Convention Concerning the Protection of the World Cultural and Natural Heritage
- 1992 Convention on Biological Diversity
- 1971 Convention on Wetlands of International Importance (Ramsar)
- 2000 Cartagena Protocol on Biosafety on the Convention on Biological Diversity
- 1992 Regional Central American Agreement for Biodiversity Conservation and Wild Protection
- 1997 Regional Central American Agreement for Sustainable Ecosystem Management
- 1990 Central American Commission for Environment and Development

2.4 UNDP SOCIAL AND ENVIRONMENTAL STANDARDS

UNDP's Social and Environmental Standards (SES) have been applied during development of the project. The SES objectives are to: (i) strengthen the social and environmental outcomes of programmes and Projects; (ii) avoid adverse impacts to people and the environment; (iii) minimize, mitigate, and manage adverse impacts where avoidance is not possible; (iv) strengthen UNDP and partner capacities for managing social and environmental risks; and (v) ensure full and effective stakeholder engagement, including through a mechanism to respond to complaints from project-affected people.

UNDP will not support activities that do not comply with national law and obligations under international law, whichever is the higher standard (hereinafter "Applicable Law"). UNDP seeks to support governments to adhere to their human rights obligations and empower individuals and groups, particularly the most marginalized, to realize their rights and to ensure that they fully participate throughout UNDP's programming cycle.

UNDP's SES have been reviewed by the Adaptation Fund and it was determined that the SES address the requirements of the Adaptation Fund's Environmental and Social Policy.

The project was screened with UNDP's Social and Environmental Screening Procedure (see Annex 13) which resulted in a "Moderate" (e.g. Category B) overall project social and environmental risk categorization. It was determined that the following UNDP Social and Environmental Standards were particularly relevant to the project:

Principle 1: Human Rights

Principle 2: Gender Equality and Women's Empowerment

Standard 1: Biodiversity Conservation and Natural Resource Management

Standard 2: Climate Change Mitigation and Adaptation

Standard 3: Community Health, Safety and Working Conditions

Standard 6: Indigenous Peoples

Standard 7: Pollution Prevention and Resource Efficiency

3 ESMF REQUIREMENTS AND PROCEDURES FOR SCREENING, ASSESSMENT AND MANAGEMENT

3.1 OBJECTIVES AND REQUIREMENTS OF THE ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK

An ESMF is a management tool used to assist in addressing potential adverse social and environmental impacts associated with project activities. To ensure the environmental and social objectives of the projects are met and adverse impacts are avoided and/or mitigated, this ESMF will be used by the project implementers.

The ESMF identifies steps for screening potential social and environmental issues and impacts of particular project activities as their specific locations are further defined and for preparing and approving appropriate action plans for avoiding, and where avoidance is not possible, reducing, mitigating, and managing adverse impacts.

The environmental and social objectives of the project and ESMF are to:

- increase climate resilience and adaptive capacity of CFC municipalities;
- protect forest and important ecosystems related to water resources;
- implement on the ground adaptation measures for forest, land and water resources management in the targeted areas;
- improve national capacities to prevent/control bark beetle outbreaks;
- strengthen knowledge, information management, and monitoring systems on climate change vulnerability and adaptive capacity;
- promote sustainable livelihoods and management practices in utilization of natural resources;
- adopt the best practicable means available to prevent or minimise environmental impact and ensure compliance with applicable laws, regulations and standards;
- describe monitoring procedures required to identify social and environmental impacts.

3.2 SCREENING PROCEDURES OF THE ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK

All project activities with a physical footprint will be screened and assessed according to MiAmbiente environmental assessment regulations and procedures. The Environmental Control and Evaluation Directorate at MiAmbiente is responsible to coordinate the National Environmental Impact Assessment System.

No activities considered potentially “high risk” (or category 2 or 3 according to the national assessment regulations and procedures) will be permitted.

In addition, project activities will be screened against the following “negative list”. The following subprojects or activities will be deemed ineligible for the Ecosystem-based Adaptation Project in the CFC if they:

- Involve significant conversion or degradation of natural habitats and/or may cause measurable adverse impacts to critical natural habitats;
- Risk the introduction of alien and potentially invasive alien species;
- May negatively affect endangered species;
- Involve physical displacement of people;
- Could result in damage or loss to cultural heritage;
- Do not meet minimum design standards with poor design or construction quality, particularly located in vulnerable areas;
- Require or involve:

- Production or trade in any product or activity deemed illegal under host country laws or regulations or international conventions and agreements;
- Purchase, application or storage of harmful pesticides or hazardous materials;
- Production or activities involving forced labor / harmful child labor;
- Production or trade in wood or other forestry products from unmanaged forests;
- Trade in wildlife or wildlife products regulated under CITES (Convention on International Trade in Endangered Species of Wild Fauna and Flora).

3.3 ENVIRONMENTAL AND SOCIAL ASSESSMENT PROCEDURES OF THE ESMF

All project activities that are determined to present potential “moderate risks” will be assessed according to MiAmbiente environmental assessment regulations and procedures. Targeted forms of assessment are to be undertaken, addressing the specific potential social and environmental risks presented by the activity. No “high risk” activities are permitted (and thus, no comprehensive ESAs will be required).

All such project activities will be required to obtain the appropriate permits from the regulatory authorities.

The Project’s stakeholder engagement plan (section 4) will be fully implemented.

In addition, the following targeted assessments and mitigation/management measures will be required:

- Gender assessment in the initial phase of the project to assess divisions of labor and women’s role and access to resources in order to develop recommendations on how the project will promote women’s equality and empowerment.
- Marginalized and vulnerable groups assessment in the project inception to prioritize communities and groups for adaptation interventions.
- PES risk analysis: an analysis will be undertaken of potential social and environmental risks posed by the Payment for Ecosystem Services project activity.
- A Forest Restoration Protocol will be developed and include key performance standards. All restoration activities in protected and community managed forest areas will take place according to the restoration protocol, area management plans, and national forest regulations.
- Ecological and land use assessment to evaluate the rate of success of the forest restoration activities.
- Appropriate erosion and sediment control for micro water infrastructure and will be undertaken during all stages of the project.
- There will be no release of pollution and/or chemicals as a result of the project activities.
- Appropriate waste management procedures will be followed.
- Community safety measures will be employed regarding construction and micro water infrastructure activities (e.g. fencing, community notification)
- For bark beetle control and agricultural activities, only biological pesticide control techniques will be employed.
- No project activities will take place on lands and/or territories claimed by indigenous peoples without their Free, Prior Informed Consent (FPIC).

Land issues: Some project activities may be projected to take place on land that has disputed ownership, tenure or user rights. The Agrarian Reform Law and the Municipal Law provide clear criteria to analyze the land ownership, tenure and user rights that the project will comply to. The project will also use the municipal land databases available in each municipality as reference; if not available, the project will refer to the Property Institute, which is the national responsible organization to manage land ownership, tenure and user rights. In addition, the project’s grievance redress mechanism will also provide a forum for such issues to be discussed and reviewed.

Timing of assessments: In all cases, social and environmental assessments and adoption of appropriate mitigation plans/measures must be completed, disclosed, and discussed with stakeholders prior to initiation of any project activities that may cause adverse social and environmental impacts.

The ESMF will be updated from time to time by the project team/PMU in consultation with the UNDP staff to incorporate any needed changes as particular project activities are designed in detail and any needed assessments are undertaken.

3.4 EMERGENCY MANAGEMENT MEASURES

In the event of actions occurring which may result in serious health, safety and environmental damage, emergency response or contingency actions will be implemented as soon as possible to limit the extent of environmental damage.

The delivery organisation will need to incorporate emergency responses into the project complying with the requirements under the Occupational, Health and Safety Policy of the delivery organisation and the relevant Honduran legislation.

3.4.1 Performance Criteria

The following performance criteria are set for project construction activities:

- no incident of fire outbreak;
- no failure of water retaining structures;
- no major chemical or fuel spills;
- no preventable industrial or work related accidents;
- provide an immediate and effective response to incidents that represent a risk to public health, safety or the environment; and
- minimise environmental harm due to unforeseen incidents.

3.4.2 Reporting

Responsible authorities and UNDP staff must be notified immediately in the event of any emergency, including fire or health related matter including those that have resulted in serious environmental harm.

4 STAKEHOLDER ENGAGEMENT PLAN

4.1 INTRODUCTION

The Ecosystem-based Adaptation Project in the CFC involves a wide range of stakeholder engagement activities. These are outlined below.

The Honduran legislation on stakeholder engagement is based on the Municipalities Law and the Transparency and Citizen Participation Law. These legislations establish a number of stakeholder engagement mechanisms, such as: public hearings, citizen commissions on transparency among other topics (health, education, development, disaster risk management), community assemblies, community development associations that are represented in municipal government. The Water and Sanitation Law defines the function of community water boards. The Cooperatives Law determines the function of community producer associations and the Forestry Law defines roles for the forestry cooperatives. In addition, UNDP requires meaningful, effective stakeholder consultations throughout project design and implementation.

The project was discussed with a wide range of stakeholders including relevant government organisations, NGOs, and individual community members and approved by the Government. Extensive on-ground consultation has been undertaken during the design of the project, including:

- consultation with technical experts about restoration, bark beetle pest, watershed management, knowledge management, meteorological/climate information and agriculture that took place through bi-lateral meetings and/or focus groups with experts from government institutions (MiAmbiente, SAG, SANAA, ICF, CONADEH, COPECO and Honduran Coffee Institute - IHCAFE);
- consultation with experts from academic institutions such as UNAH, U-ESNACIFOR, and UNA-Catacamas;
- consultation with ONCCDS staff;
- consultation with international organisations, development banks, cooperation agencies such as the IADB, the World Bank, UNDP, UNEP, GIZ and EU; and the Honduran Federation of Agroforestry Cooperatives;
- a workshop on Theory of Change was held in May 2016 with experts from the same institutions mentioned above to raise inputs and concerns for the project design;
- several community consultations were conducted in July 2016 in the CFC municipalities, ensuring the participation of women and Lenca indigenous groups;
- a preliminary assessment of municipalities (regarding issues of planning, financial mechanisms and current incentives, livelihoods, etc.) to obtain information on expectations, concerns and interests of key CFC municipal and community stakeholder;
- validation letters issued by CFC municipalities;
- validation by the National Climate Change Directorate supported by a meeting of the CTICC.

4.2 PROJECT STAKEHOLDERS

The following table is a summary of stakeholders that will be informed and/or engaged by the project:

Represented Organizations	Roles
Community Patronage	Community-based development organisations/associations

Water Boards	Oversights the construction, maintenance and administration of water system that supply rural communities
Healthcare Centers	Sanitation surveillance and medical attention and services
Agriculture schools	Technical assistance to municipalities
Municipalities and their several Units (Environmental Management Units, Land Registry, Municipal Justice, Women's Office, Transparency commissions)	Local governance
Forest Consultative Council	By law, these are decision making bodies for the forest management in a municipality or community
Education Directorate	Educational projects about the environment
International NGOs and partner organisations (i.e. World Vision, Habitat for Humanity, etc.)	Technical assistance and development cooperation
Agroforestry Cooperatives	Forest management and use
CONEANFO (National Commission for the Development of Non-formal Education)	Educational projects about the environment
Women's Network	Organizational and productive strengthening of women's groups
Permanent Contingency Committee (COPECO)	Respond to emergencies and calamities caused by natural disasters
Churches	Development of social projects
Co-manager NGOs of protected areas	Responsible for protected area management in the Central Forest Corridor
Military Posts	Coordinate environmental activities of the Armed Forces (reforestation, forest protection)
Pro development Committees	Community-based organisations for community development.
Water Services providers	Water management
Fire Department	Participation in wildfire protection, pests and emergency response
Watershed Councils	Coordination of watershed management and protection activities between municipalities
Citizen Transparency Commission	Social Audit
Forest Conservation Institute (ICF)	Responsible for managing the regulatory framework for forest resources management
Development Associations	Coordination Platform for technical support to municipalities
Honduras Federation of Indigenous Lenca (FHONDIL)	Represent Lenca indigenous peoples' interests

4.3 STAKEHOLDER ENGAGEMENT PROGRAM

The Stakeholder Engagement Program seeks to set the procedures for ensuring consultation and stakeholder engagement during assessment, development of action plans, and monitoring of social and environmental impacts associated with specific project activities, including information disclosure requirements.

The UNDP and MiAmbiente will develop and release project-related information to communities, organisations and municipalities where the project is implementing its activities. In order to do so, the project will make use of:

- Newspapers, local radio podcasts, and local television
- Brochures, leaflets, non-technical summary documents and technical reports

In addition, UNDP information disclosure requirements are to be addressed. The draft UNDP Social and Environmental Screening Procedure (SESP) will be made available to project stakeholders prior to project approval, and the final SESP will be made available upon approval. If/when site-specific, targeted environmental and social assessments are required, the draft assessment and findings, including specific management measures, will be made available to project stakeholders for public comment. Final assessments and plans will be disclosed upon completion. Summary reports of assessment findings should be disclosed. Stakeholders will be notified on the availability of draft and final documents.

The project will ensure that women and other relevant groups such as indigenous groups, elderly, and youth receive an equitable share of benefits and that their status and interests are not marginalized. Participatory processes will include specially designed methodologies that enhance the participation of women and these other groups; therefore, it is expected to enhance the inclusion of their views into the activities of the project, using existing mechanisms for representing their views such as the municipal units and units, community-based organisations, community development associations, forestry cooperatives. The project does not foresee any change or negative impact on the current livelihood of indigenous groups or their natural resource base. In case any project activity requires a formal process of Free and Informed Prior Consent (FIPC), then the project will recur to existing national mechanisms. These mechanisms involve the preliminary draft Law on FPIC that is currently undergoing national consultation and socialization, and is expected to be already into force during the proposed project implementation period. UNDP's SES Standard 6 Indigenous Peoples will also be applicable. In case that the FPIC Law is not formally approved or in place by the time of the project start, the existing legal framework, which is based on current international standards, will be taken as reference such as the 169 ILO Convention, the Declaration by United Nations on the Rights of Indigenous Peoples, and Jurisprudence produced by the Inter-American Human Rights system.

The Stakeholder Engagement Program will build on various activities and methods, including the promotion of participatory processes, joint decision-making, and partnerships undertaken with local communities, NGOs, and local governments. The project will support the operationalization and formalization of the CFC Platform, which is envisaged as a key multi-stakeholder coordination, consultations and information sharing mechanism involving national and municipal entities, as well as community based- and civil society organisations. The project will also support exchange visits, South-South cooperation and training and capacity building initiatives.

The stakeholder engagement activities will take place in different moments of the project and in specific locations of the CFC. Two major stakeholder engagement activities will be the inception and final workshops where various stakeholders will have the opportunity to participate and be informed about the project outcomes.

The National Project Coordinator is responsible for carrying out the specific stakeholder engagement activities. These activities will be supported by the Project Management Unit (PMU); in case the PMU is not capable of undertaking the activities, technical assistance will be provided. Stakeholder engagement activities and required technical assistances will be funded by the project's budget as part of specific Outputs.

The project team will develop and release updates on the project on a regular basis to provide interested stakeholders with information on project status. Updates may be via a range of media (e.g. print, radio, social media or formal reports).

Key project materials are to be made available in Spanish.

4.4 COMPLAINTS REGISTER AND GRIEVANCE REDRESS

The project will include a complaints and grievance redress process. A publicized telephone number will be maintained throughout the project to serve as a point of contact for enquiries and concerns. All enquiries, concerns and complaints will be recorded on a register and the appropriate manager will be informed. Where there is a community issue raised, the following information will be recorded:

- time, date and nature of enquiry, complaint or concern;

- type of communication (e.g. telephone, letter, personal contact);
- name, contact address and contact number;
- response and investigation undertaken as a result of the enquiry, complaint or concern; and
- actions taken and name of the person taking action.

All enquiries, complaints and concerns will be investigated and a response given to the complainant in a timely manner. The National Project Coordinator will be responsible for undertaking a review of all enquiries, complaints and concerns and ensuring progress toward resolution of each matter.

Some enquiries, complaints and concerns may require an extended period to address. The complainant(s) will be kept informed of progress towards rectifying the concern.

Wherever possible, the project team will seek to resolve the complaint as soon as possible, and thus avoid escalation of issues.

Any complaint will be advised to the UNDP within 24 hours of receiving the complaint.

A summary list of complaints received and their disposition must be published in a report produced every six months.

The project complaints and grievance process has been designed to be problem-solving mechanism with voluntary good-faith efforts. The Grievance Redress Mechanism is not a substitute for the legal process. The Grievance Redress Mechanism will as far as practicable, try to resolve complaints and/or grievances on terms that are mutually acceptable to all parties. When making a complaint and/or grievance, all parties must act at all times, in good faith and should not attempt to delay and or hinder any mutually acceptable resolution.

In addition to the project-level and national grievance redress mechanisms, complainants have the option to access UNDP's Accountability Mechanism, with both compliance and grievance functions. The Social and Environmental Compliance Unit investigates allegations that UNDP's Standards, screening procedure or other UNDP social and environmental commitments are not being implemented adequately, and that harm may result to people or the environment. The Social and Environmental Compliance Unit is housed in the Office of Audit and Investigations, and managed by a Lead Compliance Officer. A compliance review is available to any community or individual with concerns about the impacts of a UNDP programme or project. The Social and Environmental Compliance Unit is mandated to independently and impartially investigate valid requests from locally impacted people, and to report its findings and recommendations publicly.

The Stakeholder Response Mechanism offers locally affected people an opportunity to work with other stakeholders to resolve concerns about the social and environmental impacts of a UNDP project. Stakeholder Response Mechanism is intended to supplement the proactive stakeholder engagement that is required of UNDP and its Implementing Partners throughout the project cycle. Communities and individuals may request a Stakeholder Response Mechanism process when they have used standard channels for project management and quality assurance, and are not satisfied with the response (in this case the project level grievance redress mechanism). When a valid Stakeholder Response Mechanism request is submitted, UNDP focal points at country, regional and headquarters levels will work with concerned stakeholders and Implementing Partners to address and resolve the concerns. Visit www.undp.org/secu-srm for more details. The relevant form is attached at the end of the ESMF.

See Appendix 1 for further guidance on accessing UNDP's Accountability Mechanism.

5 IMPLEMENTATION AND OPERATION

5.1 GENERAL MANAGEMENT STRUCTURE AND RESPONSIBILITIES

The implementation of the project will be conducted under the overall guidance of a Project Board / Steering Committee Project (SCP), assembled specifically for this purpose. According to UNDP policies, each project must install a Project Board as the upper body responsible for taking management decisions, including approval of budget revisions, and if required, advising the Project Manager or Coordinator. Project Control Reviews conducted by the Project Board are made in accordance with Decision Points defined during the development of the project, or, if necessary, when the Project Manager or Coordinator considers it necessary.

The Project Board/Steering Committee is comprised of Implementing Partner and Responsible Parties. The Implementing Partner for this project is the WHO. The WHO is accountable to UNDP for managing the project, including the monitoring and evaluation of project interventions, achieving project outcomes, and for the effective use of UNDP resources.

The following parties have entered into agreements with WHO to assist in successfully delivering project outcomes and are directly accountable to the WHO as outlined in the terms of their agreement.

UNDP Honduras will support project implementation by assisting in monitoring project budgets and expenditures, recruiting and contracting project personnel and consultant services, subcontracting and procuring equipment. UNDP Honduras will also monitor the project implementation and achievement of the project outcomes/outputs and ensure the efficient use of donor funds through an assigned UNDP Programme Officer to support the Project Board to objectively and independently oversee and monitor the project.

5.1.1 Administration of ESMF

MiAmbiente (as national executing agency) will be responsible for the revision or updates of this document during the course of work.

The ESMF will be part of the project documentation.

UNDP is accountable for the provision of specialist advice on environmental and social issues to the delivery organisations (eg contractors and/or NGOs). During operations the delivery organisations will be accountable for implementation of the ESMF measures. Personnel working on the projects have accountability for preventing or minimising environmental and social impacts.

The delivery organisation (e.g. contractor) will maintain and keep all administrative and environmental records, which would include a log of complaints together with records of any measures taken to mitigate the cause of the complaints.

The delivery organisation will be responsible for the day to day compliance of the ESMF. Any incidents, including non-conformances to the procedures of the ESMF are to be recorded using an Incident Record and the details entered into a register. For any incident that causes or has the potential to cause material or serious environmental or social harm, the delivery organization shall notify the Project Manager as soon as possible. The delivery organisation/contractor must cease work until remediation has been completed.

5.1.2 Monitoring, review and auditing

The ESMF and its procedures are to be reviewed at least every 6 months by the Project Board/Steering Committee. The objective of the review is to update the document to reflect knowledge gained during the course of project delivery/construction and to reflect new knowledge and changed community standards (values).

The ESMF will be reviewed and amendments made if:

- There are relevant changes to environmental conditions or generally accepted environmental practices; or
- New or previously unidentified environmental risks are identified; or
- Information from the project monitoring and surveillance methods indicate that current control measures require amendment to be effective; or
- There are changes to environmental legislation that are relevant to the project; or

- There is a request made by a relevant regulatory authority; or
- Any changes are to be developed and implemented in consultation with UNDP Staff.

5.2 CAPACITY BUILDING AND TRAINING

Delivery organisations have the responsibility for ensuring systems are in place so that relevant employees, contractors and other workers are aware of the environmental and social requirements for construction, including the ESMF.

All project personnel will attend an induction that covers health, safety, environment and cultural requirements.

All workers engaged in any activity with the potential to cause serious environmental harm (e.g. handling of hazardous materials) will receive task specific environmental training.

5.3 BUDGET FOR ESMF IMPLEMENTATION

The ESMF implementation will rely on funding from specific activities within the project's total budget, and will be considered in the stakeholder or site-specific design of the activities. ESMF activities are also aligned with the Monitoring & Evaluation framework, particularly those for the inception assessment, mid-term and final reviews and site visits and supervision missions.

Appendix 1



Guidance for Submitting a Request to the Social and Environmental Compliance Unit (SECU) and/or the Stakeholder Response Mechanism (SRM)

Purpose of this form

- If you use this form, please put your answers in bold writing to distinguish text
- The use of this form is recommended, but not required. It can also serve as a guide when drafting a request.

This form is intended to assist in:

- (1) Submitting a request when you believe UNDP is not complying with its social or environmental policies or commitments and you are believed you are being harmed as a result. This request could initiate a 'compliance review', which is an independent investigation conducted by the Social and Environmental Compliance Unit (SECU), within UNDP's Office of Audit and Investigations, to determine if UNDP policies or commitments have been violated and to identify measures to address these violations. SECU would interact with you during the compliance review to determine the facts of the situation. You would be kept informed about the results of the compliance review.

and/or

- (2) Submitting a request for UNDP "Stakeholder Response" when you believe a UNDP project is having or may have an adverse social or environmental impact on you and you would like to initiate a process that brings together affected communities and other stakeholders (e.g., government representatives, UNDP, etc.) to jointly address your concerns. This Stakeholder Response process would be led by the UNDP Country Office or facilitated through UNDP headquarters. UNDP staff would communicate and interact with you as part of the response, both for fact-finding and for developing solutions. Other project stakeholders may also be involved if needed.

Please note that if you have not already made an effort to resolve your concern by communicating directly with the government representatives and UNDP staff responsible for this project, you should do so before making a request to UNDP's Stakeholder Response Mechanism.

Confidentiality If you choose the Compliance Review process, you may keep your identity confidential (known only to the Compliance Review team). If you choose the Stakeholder Response Mechanism, you can choose to keep your identity confidential during the initial eligibility screening and assessment of your case. If your request is eligible and the assessment indicates that a response is appropriate, UNDP staff will discuss

the proposed response with you, and will also discuss whether and how to maintain confidentiality of your identity.

Guidance

When submitting a request please provide as much information as possible. If you accidentally email an incomplete form, or have additional information you would like to provide, simply send a follow-up email explaining any changes.

Information about You

Are you...

1. A person affected by a UNDP-supported project?

Mark "X" next to the answer that applies to you: Yes: No:

2. An authorized representative of an affected person or group?

Mark "X" next to the answer that applies to you: Yes: No:

If you are an authorized representative, please provide the names of all the people whom you are representing, and documentation of their authorization for you to act on their behalf, by attaching one or more files to this form.

3. First name:

4. Last name:

5. Any other identifying information:

6. Mailing address:

7. Email address:

8. Telephone Number (with country code):

9. Your address/location:

10. Nearest city or town:

11. Any additional instructions on how to contact you:

12. Country:

What you are seeking from UNDP: Compliance Review and/or Stakeholder Response

You have four options:

- Submit a request for a Compliance Review;
- Submit a request for a Stakeholder Response;
- Submit a request for both a Compliance Review and a Stakeholder Response;
- State that you are unsure whether you would like Compliance Review or Stakeholder Response and that you desire both entities to review your case.

13. Are you concerned that UNDP's failure to meet a UNDP social and/or environmental policy or commitment is harmful, or could harm, you or your community? Mark "X" next to the answer that applies to you: Yes: No:

14. Would you like your name(s) to remain confidential throughout the Compliance Review process?

Mark "X" next to the answer that applies to you: Yes: No:

If confidentiality is requested, please state why:

15. Would you like to work with other stakeholders, e.g., the government, UNDP, etc. to jointly resolve a concern about social or environmental impacts or risks you believe you are experiencing because of a UNDP project?

Mark "X" next to the answer that applies to you: Yes: No:

16. Would you like your name(s) to remain confidential during the initial assessment of your request for a response?

Mark "X" next to the answer that applies to you: Yes: No:

If confidentiality is requested, please state why:

17. Requests for Stakeholder Response will be handled through UNDP Country Offices unless you indicate that you would like your request to be handled through UNDP Headquarters. Would you like UNDP Headquarters to handle your request?

Mark "X" next to the answer that applies to you: Yes: No:

If you have indicated yes, please indicate why your request should be handled through UNDP Headquarters:

18. Are you seeking both Compliance Review and Stakeholder Response?

Mark "X" next to the answer that applies to you: Yes: No:

19. Are you unsure whether you would like to request a Compliance Review or a Stakeholder Response?
Mark "X" next to the answer that applies to you: Yes: No:

Information about the UNDP Project you are concerned about, and the nature of your concern:

20. Which UNDP-supported project are you concerned about? (if known):

21. Project name (if known):

22. Please provide a short description of your concerns about the project. If you have concerns about UNDP's failure to comply with its social or environmental policies and commitments, and can identify these policies and commitments, please do (not required). Please describe, as well, the types of environmental and social impacts that may occur, or have occurred, as a result. If more space is required, please attach any documents. You may write in any language you choose

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23. Have you discussed your concerns with the government representatives and UNDP staff responsible for this project? Non-governmental organisations?

Mark "X" next to the answer that applies to you: Yes: No:

If you answered yes, please provide the name(s) of those you have discussed your concerns with

Name of Officials You have Already Contacted Regarding this Issue:

First Name	Last Name	Title/Affiliation	Estimated Date of Contact	Response from Individual	the
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24. Are there other individuals or groups that are adversely affected by the project?

Mark "X" next to the answer that applies to you: Yes: No:

25. Please provide the names and/or description of other individuals or groups that support the request:

First Name

Last Name

Title/Affiliation

Contact Information

Please attach to your email any documents you wish to send to SECU and/or the SRM. If all of your attachments do not fit in one email, please feel free to send multiple emails.

Submission and Support

To submit your request, or if you need assistance please email: project.concerns@undp.org