ADAPTATION FUND

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:	4,398,932 (in U.S Dollars Equivalent)

Project / Programme Background and Context:

National Context

1. Honduras has an area of 112,492 km^2, the second largest country in Central America. In 2013, a population of 8,721,014 inhabitants[1] (52 % women) was estimated, where more than half (53.3 %) was rural population[2]. Honduras is home to seven indigenous groups, and 2 Afro-Honduran groups, who together represent approximately 7% of the national population[3]. 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 quintile[4]. 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[5] . 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 achieved [6].

2. Moreover, 51.4 % of the economically active population (EAP) is rural population, and from this rural EAP, only 28.2 % are women[7]. 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 Overwiew) 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 Millenium Development Goals Report)
[7] XLIV Encuesta permanente de hogares Honduras (Honduran permanent household survey) 2013

activities[8], 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 nationwide[9]. 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 country[10].

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 exclusion[11]. 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 D*ry 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 2016[12], 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

influence[13]. 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 shortages[14] . 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 impacted[15]. 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

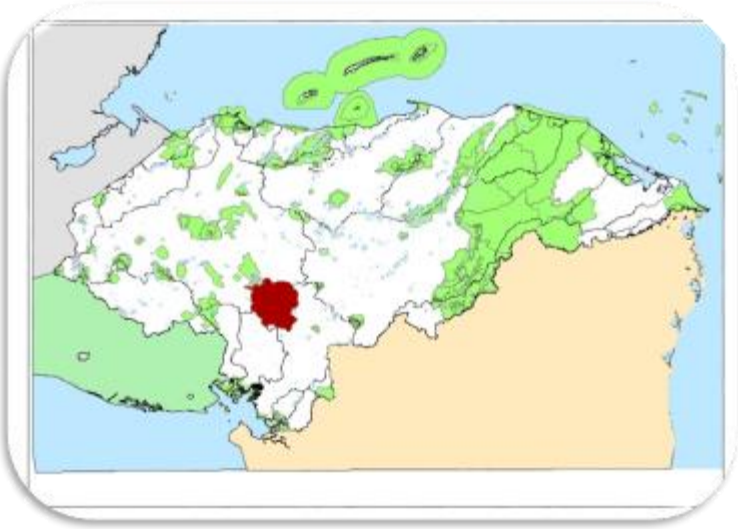
11. In 2010, the Ministry of Energy, Natural Resources, Environment and Mines (now MiAmbiente, by its acronym in Spanish) conducted a study of climate variability and climate change scenarios in Honduras. This study indicated a 5% reduction in annual rainfall by 2020. In addition, an increase of between 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 Vulnerabilty (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 inhabitants [16] (more than 16% of the total population). In three CFC municipalities (Ojojona, Santa Ana and Lepaterique) Lenca indigenous people inhabit some parts of the land [17].

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 plans[21]. 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 city[22].
    - ✓ 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.

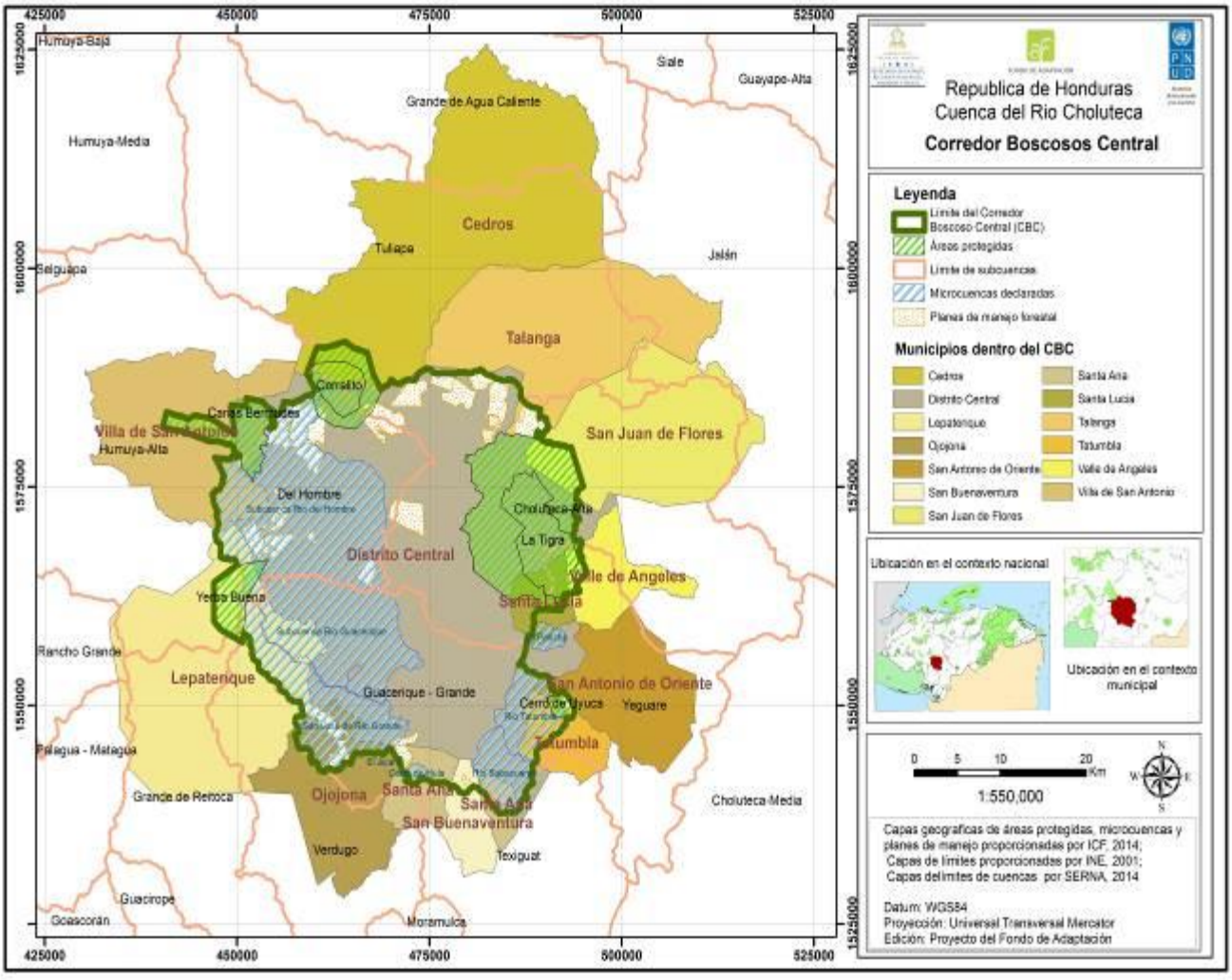
[18] The CFC was initially comprised of 13 municipalities, but the municipality of Villa de San Francisco (bordering San Juan de Flores and Valle de Angeles) has recently been included in various CFC activities, although it was originally not part of the CFC, but given its influence over the La Tigra 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 municipalities [23,] (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 cooperatives[24] 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 year[25].

[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***

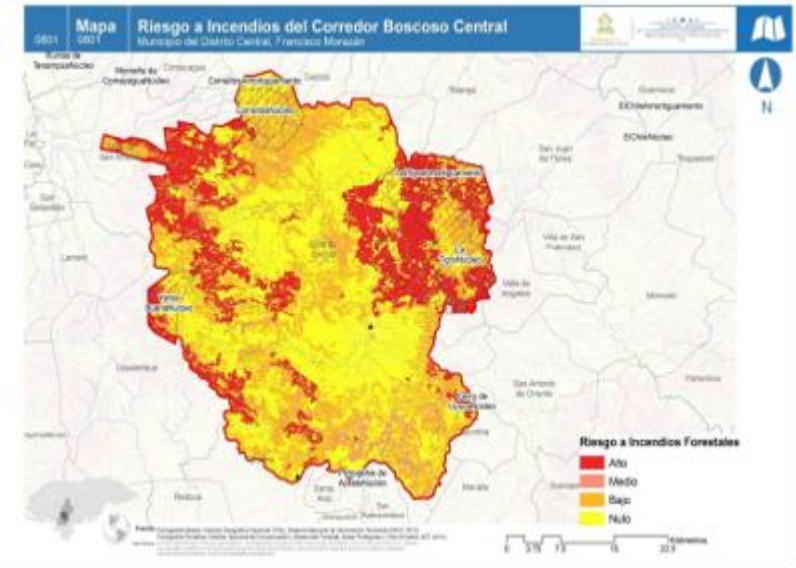
19. Temperature increase and changes in rainfall patterns are leading to water stress in the CFC, adversely affecting agricultural production and ecosystems, as well as the availability of water for human consumption. According to an evaluation of water resources in their natural regime implemented by 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 period[26]. 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 fires[27], 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 Assesment- Instituto Hondureño 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 III[28] level. It is estimated that in April 2016 a total of 800,000 ha had been affected nationwide, in phases I, II, and III[29]. 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. 1195,34[31] 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 activities[33].

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 (SANAA[34] 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 activities[35].

[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	**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. 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. 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. **fresh water**: CBC forests have a prime role in water security and all year-round water supply, considering functions of ater retention, flood reduction, water quality. 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%. 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. **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: *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.* **bio-chemicals**: the resin extracted and sold serves to produce pharmaceutical products, chemical derivate (e.g. for paintings, cosmetics). **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

	and using varieties that are more resilient to climatic impacts, such as drought.
Regulating Services Benefits obtained from regulation of ecosystem process	**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. **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. CFC forests play a major role as carbon thinks, 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. **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.
Cultural Services Nonmaterial benefits obt from ecosystems	**recreation, ecotourism, aesthetic:** CBC forests, including protected areas (like the La Tigra National Park and Uyuoca Bilogical 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. **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. 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. **inspirational:** values are linked to the landscape beauty and aesthetic aspects of the area serving inspiration for art work (painters, wood carvers, artisans, photographers). **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.
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 municipalities[36].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 proposal[37], 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 affectation 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$)
1. Strengthening of local and community governance for climate resilince.	1.1 Strengthened coordination mechanisms for climate-resilient management of CFC natural resources, including measures for the effective participation of women and indigenous people (243,313 US$) 1.2 Municipal level regulatory mechanisms strengthened for adaptive management of natural resources (20,000 US$) 1.3 Municipal level plans are revised and newly established to harmonize adaptation interventions (122,000 US$) 1.4 Payment for Ecosystem (Watershed) Services (PES) schemes developed and operationalized for CC adaptation measures (87,200 US$)	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$)	Increased capacity of communities in CFC to implement ecosystem-based CC adaptation measures	2,750,500
3. Strengthening knowledge, information management, and monitoring systems on climate change vulnerability and adaptive capacity	3.1 Applied research carried out to enhance knowledge and information on the links amongst climate change, drought, pests, fires and adaptation measures in the CFC. (142,500 US$) 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	449,500
4. Project/Programme Execution cost			381,802
5. Total Project/Programme Cost			4,054,315
6. Project/Programme Cycle Management Fee charged by the Implementing Entity (if applicable)			344,617
Amount of Financing Requested			4,398,932

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 and 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 and 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 chang 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 chnage 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 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. 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). 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 w*arning 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 (liked 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	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). 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. The project will also provide economic benefits in terms of avoided losses and costs that are referenced under the cost-effectiveness section.
Social	The project will benefit indirectly around 25.000 families through forest protection measures (fire, pest control, land use change) in 25 CFC micro basins. The project will bring benefits to the 14 CFC municipalities (including the Central District of Tegucigalpa), strengthening their local governance. Promotion of full and effective participation of communities and groups

	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. Improvements to the access food and water (both quality and quality) 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 ill also have positive impacts on health in homes. 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. 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.
Environment	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. 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)

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 lempiras[38] (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 population[39]. 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.

<u>Strategic and Political Climate Change Framework</u>

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 restrains, 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 insecurity 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.

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	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
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	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	2011-2016

Project title	Donor	Focus (and contribution to Baseline)	Value AF Project Adds	Period
		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.	also strengthen the National Climate Change and Sustainable Development Observatory by consolidating an indicators framework to monitor climate change impacts.	
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 Republic populations. It also pursues integration of observation and land monitoring-geospatial technologies to decision making for development.	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 PRCC.	2013-2017

Project title	Donor	Focus (and contribution to Baseline)	Value AF Project Adds	Period
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
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

Project title	Donor	Focus (and contribution to Baseline)	Value AF Project Adds	Period
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).

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 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		
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	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 *ad-hoc* 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.	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.
Output 1.2 Municipal level regulatory mechanisms strengthened for adaptive management of natural resources	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 governance capacity, and lack of delegation of functions (e.g. forest use permits) from central authorities to municipalities.	The AF Project will support the application and implementation of the Forestry, Protected Areas and Wildlife Law, developing local regulatory instruments and tools 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).
Output 1.3: Municipal level plans are revised and newly established to harmonize adaptation interventions	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 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

	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 instruments in this aspect.	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.
Output 1.4: Payment for Ecosystem (Watershed) Services (PES) schemes developed and operationalized for climate change adaptation measures	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		
Output 2.1: Pine and Mixed Forest areas damaged by drought-induced pest and fire hazards are reforested	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 Paraiso, Yoro, Comayagua), but it does not have resources to address community-managed forest areas. To date, there	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

	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.	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 wildfires, pests, land use change, and unsustainable forest use, assisting natural regeneration of forests	The current AF Project supported the preparation of 14 Forest Municipal Plans during before the bark beetle plague, thus without further revision and capacity support for protection measures its implementation will be ineffective to respond to the recently emerged devastating impact.	The AF Project will support trainings for municipalities and community forest management groups on forest fire and bark beetle outbreak 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.
Output 2.3: Drought management adaptation measures implemented to optimize the use of water resources for agriculture and domestic use	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		
Output 3.1: Applied	In Honduras, there is only one	The AF Project will forge alliances

research carried out to enhance knowledge and information on the links amongst climate change, drought, pests, wildfires and adaptation measures in the CFC.	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 plague outbreak, future preparedness and response measure will continue to be ineffective.	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 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.
Output 3.2: Strengthened National Climate Change Observatory for Sustainable Development (ONCCDS)	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).
Output 3.3: Community early warning and monitoring system for bark beetle pest outbreak under CFC Platform	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.
Output 3.4: Systematized and disseminated project knowledge and experience	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 (ONCDDS), 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 GHF 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 and 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 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 panning, 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 ensures 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.

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
Compliance with the Law	X	
Access and Equity		X
Marginalized and Vulnerable Groups		X
Human Rights	X	
Gender Equity and Women's Empowerment		X
Core Labour Rights	X	
Indigenous Peoples		X
Involuntary Resettlement	X	
Protection of Natural Habitats	X	
Conservation of Biological Diversity		X
Climate Change		X
Pollution Prevention and Resource Efficiency		X
Public Health	X	
Physical and Cultural Heritage	X	
Lands and Soil Conservation	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.

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 (benefitting 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 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 support thein 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.

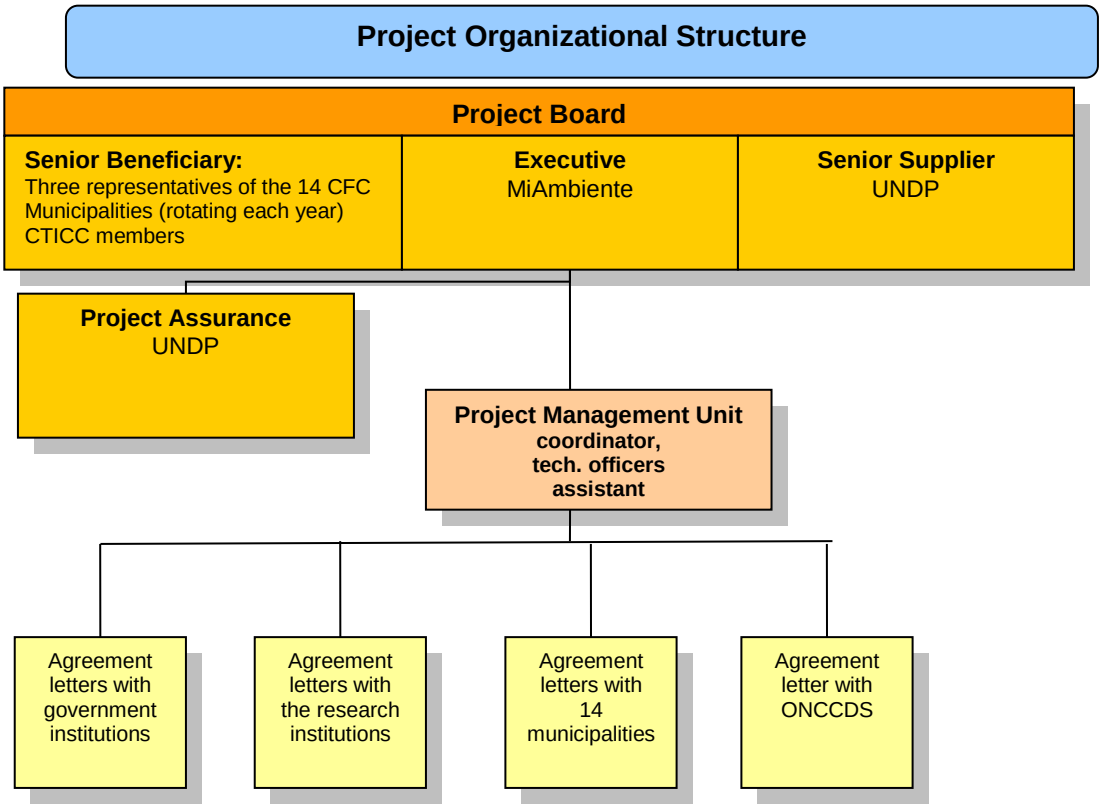
3. The implementation of the project will be conducted under the overall guidance of a Project Board / Steering Committee Project (SCP), assembled specifically for this purpose. According to UNDP policies, each project must install a Project Board as the upper body responsible for taking management decisions, 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 three 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)	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. 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. 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. 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.
14 Municipalities	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. 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). 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. The UMAS will be an important link to the Knowledge Management Plan, to generate and disseminate information.
Association of Municipalities of Honduras (AMHON)	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.
Agroforest Groups Watershed Councils Forest Consultative Board Water Boards Women's Networks	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.

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 Schoof 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 to 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 to project actions to remain a priority for the incoming government in 2018.

Risk	Level	Mitigation Strategy
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 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-	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

Risk	Level	Mitigation Strategy
grants		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.

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	▪ Project Manager ▪ UNDP Country Office	$500	Within the first two months of Project start
Inception report	▪ Project team ▪ UNDP Country Office	None	Immediately after the inception workshop
Measurement of Means of Verification for Project Purpose Indicators	▪ Project Manager	None	Beginning, half-way and completion of the project
Measurement of Means of Verification for Project Progress and Performance (annually measured)	▪ Project Manager	None	Annually, previous to the annual report and in accordance with the definition of annual work plans
Quarterly reports	▪ Project team	None	By the end of each month
Annual reports (PPR)	▪ Project team ▪ MiAmbiente ▪ UNDP Country Office	$1000	Annually, after inception workshop.
Project Coordination Committee meetings	▪ Project Manager ▪ UNDP Country Office	None	After the inception workshop, and from there, at least yearly
Technical Reports	▪ Project team ▪ External Consultants	None	To be determined by the Project Team and the UNDP Country Office
Half – term external evaluation	▪ Project team ▪ UNDP Country Office ▪ External Consultants	$ 20,000	Project halfway implementation
Final external evaluation	▪ Project team ▪ UNDP Country Office ▪ External Consultants	$ 30,000	At project completion
Final Report	▪ Project team ▪ UNDP Country Office	None	At least a month before Project completion
Auditing	▪ 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	• 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.	• 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 and Executive Decree), with coordination mechanism and institutional functions formalized (to support the functions of the Platform) through supportive legislation and staff trained	• 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
	Number of municipal level regulatory mechanisms established and operationalized	Currently there is no reporting mechanisms for communities to communicate on observed malpractices in forestry and land resource use, municipal level ordinances (e.g. zoning and forestry use by private land owners) only exist in 2 municipalities, while permits for small scale forest wood collection are managed through burocratic processes by	By the end of the project at least 4 regulatory mechanisms are operational in each municipality: 1) Community reporting mechanism, municipal ordinances on 2) land zoning and 3) forest use by private owners, and 4) permit granting functions delegated to municipalities and their Env.	• Training reports of Municipal Environmental and Justice Units • Documentations of approved regulations	

		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)	CC adaptation plans have been prepared so far in 5 municipalities and Forest Protection Plans 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. Plans for Micro basins 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		
Outcome 2 Increased capacity of communities in CBC to implement ecosystem-based CC adaptation measures	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)	• Project reports and evaluations • ICF periodic monitoring reports • Municipal reports on Forest Protection Plan implementation	Conflicts over land tenure issues and related legal security do not arise 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 Effective disbursement and management of small grants to Municipalities are does not affected by lack of transparency or corruption issues
	Level (%) of implementation of the measures set out in 14 CFC municipal Forest Protection Plans *(levels:0% null; <20% low; 20<50% medium; 50<80% high; >80 very high)*	Null and/or low (depending in the municipality)	By the end of the project at least high level in all CFC municipalities	• Project reports and evaluations • Municipal reports on Forest Protection Plan implementation	
	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)	• Municipal CC Adaptation Plans (water sector interventions) Project reports, grant agreements with Municipalities • Proof of purchase of materials and	

				equipment	
Result 3 National Platform for Knowledge and Information Management strengthened, having the CFC as a reference to contribute to research, monitoring and capacity building	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	• 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	• 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 (*MiAmbiente*) has signed collaboration agreement with ONCCDS	By the end of the project at least 10 institutions share information based on collaboration agreements signed	• 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	• 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)	• 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	Number of CFC communities that reduce their vulnerability and increase their capacity to response / recovery from climatic events Number of institutions that access and use information and knowledge for adaptation to climate change with a focus on ecosystems 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	**Outcome 2:** Strengthened institutional capacity to reduce risks associated with climate-induced socioeconomic and environmental losses **Outcome 3:** Strengthened awareness and ownership of adaptation and climate risk reduction processes at local level **Outcome 5**: Increased ecosystem resilience in response to climate change and variability-induced stress **Outcome 6:** Diversified and strengthened livelihoods and sources of income for vulnerable people in target areas	2.1. Capacity of staff to respond to, and mitigate impacts of, climate-related events from target institutions increased 3.1. Percentage of targeted population aware of predicted adverse impacts of climate change, and of appropriate responses 5. Ecosystem services and natural resource assets maintained or improved under climate change and variability-induced stress 6.1 Percentage of households and communities having more secure access to livelihood assets	
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	449,500

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	15,000	75,000	3
				72100	Contractual services (companies)	43,200	43,200	43,200	42,800	28,800	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	50,000	40,000	40,000	-	-	130,000	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	**98,500**	**120,500**	**118,500**	**48,500**	**63,500**	**449,500**	
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	**768,228**	**903,069**	**885,899**	**799,110**	**698,009**	**4,054,315**

Total components	687,813	826,900	809,900	724,000	623,900	3,672,513
Project management	80,415	76,169	75,999	75,110	74,109	381,802
Total project cost	770,228	903,069	885,899	799,110	698,009	4,054,315

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 ordenances
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, *MiAmbiente*, 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	130,000.00	Applied research carried out on forestry- bark beetle pest-climate change relations, based on grant agremenst 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		768,228	903,069	885,899	799,110	698,009	4,054,315
Implementing Entity Fee	137,847	39,180	46,057	45,181	40,755	35,598	344,617
Total		**807,408**	**949,126**	**931,080**	**839,865**	**733,607**	**4,398,932**

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

A. Record of endorsement on behalf of the government[42] *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*

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: *26 Dec 2016*	Tel. and email:+1 (212) 906 5143
Project Contact Person: Gabor Vereczi	
Tel. And Email:+507 302 4628 / Gabor.vereczi@undp.org	

6. 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

ADAPTATION FUND

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.	$17,231
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.	$51,692
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.	$68,923
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.	$155,078
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	$51,693
Total		$344,617

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**				**65,300.00**				**50,900.00**				**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 capac																					
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			52,500.00		42,500.00				42,500.00				2,500.00				2,500.00				142,500.00
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	**98,500.00**				**120,500.00**				**118,500.00**				**48,500.00**				**63,500.00**				**449,500.00**
EXECUTION COSTS	**80,415.00**				**76,169.00**				**75,999.00**				**75,110.00**				**74,109.00**				381,802.00
GRAND TOTAL	**768,228.00**				**903,069.00**				**885,899.00**				**785,110.00**				**683,609.00**				**4,054,315.00**

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 describes 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