



ADAPTATION FUND

## REGIONAL PROJECT PROPOSAL

### PART I: PROJECT INFORMATION

Title of Project:	Improve livelihood resilience through community-based climate change adaptation in the transboundary watershed of Goascorán in El Salvador and Honduras
Countries:	El Salvador, Honduras (Central América)
Thematic Focal Area:	Food security
Type of Implementing Entity:	Multilateral Implementing Entity (MIE)
Implementing Entity:	World Food Programme (WFP)
Executing Entities:	El Salvador: Ministry of Environment and Natural Resources (MARN) and National Center for Agricultural and Forestry Technology (CENTA), Ministry of Agriculture (MAG). Honduras: Ministry of Natural Resources and Environment (MiAmbiente), Ministry of Agriculture and Livestock (SAG), the Institute of Forest Conservation and Development, Protected Areas and Wildlife (ICF), Presidential Office for Climate Change (Clima+)
Amount of Financing Requested:	14.000.000 (in U.S Dollars Equivalent)

### Project Background and Context:

#### Geography and climate

This project is a regional initiative focused on the transboundary watershed of Goascorán which lies between the Eastern Region of El Salvador and south-western Honduras. The Goascorán watershed consists of 36 sub-basins, covering 13 municipalities in the El Salvadorean departments of La Unión and Morazán and 16 municipalities in the Honduran departments of La Paz, Valle, Comayagua and Francisco Morazán. The watershed falls within the Central American Dry Corridor, which stretches from southern Mexico to Panama, and which has recently experienced multiple years of severe drought.

According to a management plan prepared in 2007, the watershed covers an area of 2,345 km<sup>2</sup> with 52 per cent in Honduras and 48 per cent in El Salvador.<sup>1</sup> Data generated in 2013 by the Honduras Millennium Account calculates an area of 2,613.89 km<sup>2</sup> of which 61.2 per cent lies in Honduras and 38.8 per cent in El Salvador<sup>2</sup> (IUCN, 2016).<sup>3</sup>

The watershed can be divided into three main areas: i) a mainly mountainous upper basin with slopes greater than 50 per cent; ii) a middle basin, constituted by rugged hills with slopes varying from 20 to 50 per cent; and peaks reaching 540 metres above sea level and iii) a lower basin, mostly constituted by plains.

There are four climatic zones in the Goascorán watershed:

- i) tropical hot savannah: rising from sea level to 800 metres with average annual temperatures of 20 - 27° C, and annual rainfall of 1,700 mm
- ii) tropical warm savannah: between 800 to 1,200 metres with annual average temperatures of 20 - 22° C and rainfall of less than 2,000 mm per annum.

<sup>1</sup> El Centro Agronómico Tropical de Investigación y Enseñanza (CATIE), 2007, *Plan de manejo de la cuenca binacional del río Goascorán*, [www.cartografia.mag.gob.sv/index.../category/8-planes-de-manejo?...goascoran-catie](http://www.cartografia.mag.gob.sv/index.../category/8-planes-de-manejo?...goascoran-catie)

<sup>2</sup> The International Union for Conservation of Nature (IUCN), 2016, *La cuenca del Río Goascorán: Honduras y El Salvador: revitalizar la gestión transfronteriza integrando nuevos y diversos actores* <https://portals.iucn.org/library/node/47631>

<sup>3</sup> Such data discrepancies regarding the extent of watersheds are common in Central America, highlighting the need for greater regional collaboration in generation of geographic information).

- iii) high-altitude tropical climate: between 1,200 to 1,800 metres with average annual temperatures of 16 - 20° C and maximum variations of 20.6 to 22. 4° C in the rainy season and rainfall exceeding 2,000 mm per annum.
- iv) highland climate: from 1,800 to 2,700 metres with temperatures between 10 to 16° C and a three-month dry season.

In a normal year, the rainy season runs from mid-April until October, interrupted by the *canicula*, a one-week dry period, typically occurring between mid-July and mid-August. The dry season normally lasts between November and mid-April. In both Honduras and El Salvador the agricultural calendar and food availability is determined by the rainfall regime.

Map 1. The Goascorán watershed and its municipalities. As the border demarcation remains under dispute, this map does not delineate the frontier between the two countries.



Map produced by: VAM WFP HON-SVL

Sources: SINIT, ICF, WFP HON, MARN, CNR, RREE, WFP SVL

The limits and names used in this map do not imply an official endorsement or acceptance by the United Nations or the governments of El Salvador and Honduras

### Socio-economic context and analysis of livelihoods

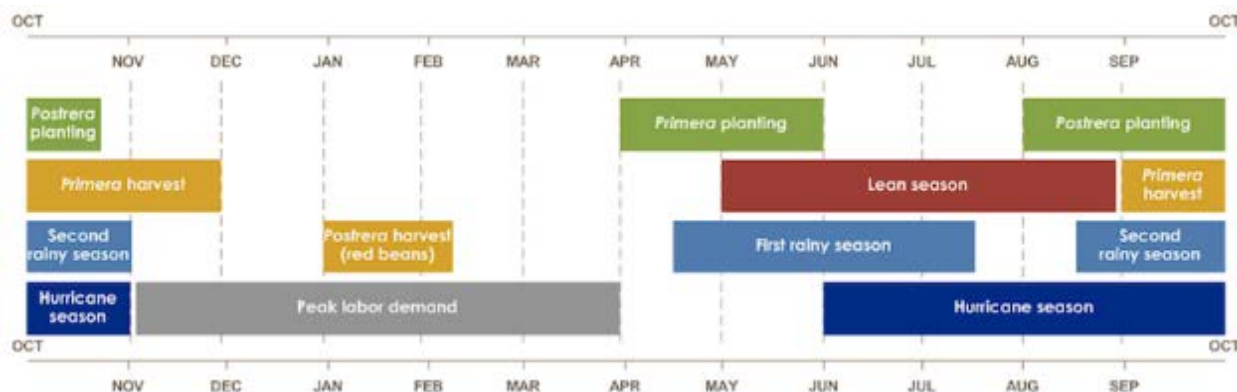
Some 215,000 people live within the watershed, 43 per cent located in Honduras and 57 per cent in El Salvador, with a higher population density in El Salvador.<sup>4</sup> The Lenca, an indigenous people of southwestern Honduras and eastern El Salvador, are now found only in Honduras, with some representation in the watershed. The Opatoro, Santa Ana and Guajiquiro municipalities are the most representative of Lenca culture. In the lower and middle watershed some Lenca physiognomic features can be found but in general the inhabitants are typically *mestizo*, no longer retaining Lenca traditions and worldview.

<sup>4</sup> El Centro Agronómico Tropical de Investigación y Enseñanza (CATIE), 2007, *Plan de manejo de la cuenca binacional del río Goascorán*

Eighty-five per cent of the watershed population lives in rural areas. Their dependence on livestock and rainfed agriculture renders them more vulnerable to climate variability and shocks. On both the Honduran and El Salvadorean sides of the watershed the incidence of malnutrition ranges from moderate to high. Households depend on cultivation of maize, sorghum and beans, livestock raising, small-scale aviculture and remittances. Most farmers do not own the land they cultivate. Sixty per cent of the population on the Honduran side of the watershed lives in extreme poverty while among the El Salvadorean inhabitants of the watershed the percentage ranges from 24.8 per cent to 65.1 per cent.<sup>5</sup>

Due to the international political trend, the area is also expecting a high number of returning migrants. This will increase existing pressures on natural resources, reduce the amount of remittances and consequently contribute to increased levels of poverty.<sup>6</sup>

Fig. 1 Seasonal calendar for Goascorán watershed, including agricultural practices and periods of food insecurity. Due to consecutive droughts since 2012, farmers have begun to only plant once a year, skipping the *primera* planting period.



Agriculture represents an important source of livelihoods for both men and women but only 12% of producers are women. In rural and indigenous areas of Honduras, 40 per cent of women are economically dependent on men. Rural women in both countries face fundamental challenges. The national illiteracy rate in El Salvador is 12.2 for women while for men is 8.5<sup>7</sup> and in Honduras is 11.07 for women and 11.01 for men<sup>8</sup>. Sixty per cent of the illiterate population in rural areas are women<sup>9</sup>. Only 12 per cent of women in Honduras and 13 per cent in El Salvador own land and, typically, their parcels are smaller and less fertile.<sup>10</sup> Less than five per cent of women have access to credit and technical assistance.<sup>11</sup> Women generally lack awareness of their personal rights and empowerment opportunities. Women and girls face disadvantages in access to health, education, political representation and formal employment, with many involved in non-remunerated care and domestic work. These factors lead to negative consequences for development of women's capabilities and their autonomy. In the 2018 Gender Inequality Index (GII), El Salvadorean women are ranked 121<sup>st</sup> out of 189 countries and Honduran woman are ranked 133<sup>rd</sup>.<sup>12</sup>

Table 1. 2018 Gender Inequality Index (GII)

<sup>5</sup> Information provided to WFP by MAG, El Salvador and MiAmbiente, Honduras

<sup>6</sup> Migration Policy Institute, 2019, *Effective Reception & Reintegration Services for Returning Mexican, Central American Migrants Reduce Re-Migration Pressures, Improve Outcomes* <https://www.migrationpolicy.org/news/effective-reception-reintegration-services-returning-mexican-central-american-migrants-reduce>

<sup>7</sup> Multiple Purpose Household Survey, 2017, Department of Statistics and Censuses (DIGESTYC), El Salvador

<sup>8</sup> Permanent Multiple Purpose Households Survey, 2016, National Statistics Institute (INE), Honduras

<sup>9</sup> *Encuesta de Hogares de Propósitos Múltiples (EHPM)*, 2014 [www.digestyc.gob.sv/index.php/temas/des/ehpm/publicaciones-ehpm.html?download=559%3Apublicacion-ehpm-2014014](http://www.digestyc.gob.sv/index.php/temas/des/ehpm/publicaciones-ehpm.html?download=559%3Apublicacion-ehpm-2014014).

<sup>10</sup> Red Centroamericana de Mujeres Rurales, Indígenas y Campesinas (RECMURIC), [https://www-cdn.oxfam.org/s3fs-public/file\\_attachments/desterrados-full-es-29nov-web\\_0.pdf](https://www-cdn.oxfam.org/s3fs-public/file_attachments/desterrados-full-es-29nov-web_0.pdf)

<sup>11</sup> *Desterrados: tierra, poder y desigualdad en América Latina* Oxfam Internacional <https://www.oxfam.org/en/peru-brazil-nicaragua-cuba-mexico-bolivia-el-salvador-dominican-republic/how-rural-women-are>

<sup>12</sup> <http://hdr.undp.org/en/composite/GII>

Gender Inequality Index										
HDI rank	Country	Gender Inequality Index		SDG3.1	SDG3.7	SDG5.5	SDG4.6		Labour force participation rate	
				Maternal mortality ratio	Adolescent birth rate	Share of seats in parliament	Population with at least some secondary			
		Value	Rank	(deaths per 100,000 live births)	(births per 1,000 women ages 15–19)	(% held by women)	(% ages 25 and older)		(% ages 15 and older)	
		2017	2017	2015	2015-2020	2017	Female	Male	Female	Male
							2010–2017	2010–2017	2017	2017
121	El Salvador	0.392	91	54	69.5	32.1	42.2	47.9	47	78.8
133	Honduras	0.461	109	129	70.8	25.8	36.8	33.5	50.9	85.8

### Climate change vulnerabilities and impacts

The watershed, like other areas within the Central American Dry Corridor, is highly vulnerable to climate change due to high climate variability, exposure to extreme weather events and poverty.<sup>13</sup> The main climate change effects in the region are delayed onset of the rainy season, increasing frequency and intensity of droughts during the growing season, excessive rains and severe flooding. Extreme events exacerbate the fragility of vulnerable communities' lives and livelihoods in the transboundary watershed of Goascorán, especially in environmentally degraded areas. This leads to high levels of poverty, food insecurity, malnutrition and out-migration. The El Niño/Southern Oscillation (ENSO) phenomenon has contributed to these challenges. During the 2014 to 2016 El Niño significant drought was experienced throughout the Dry Corridor.

Due to recurrent droughts since 2012 the majority of communities have reduced their planting cycle from twice to once a year, skipping the *primera* planting, lowering production and thus suffering significant income losses. Having only one harvest per year creates food and income shortages, compromises food security and aggravates poverty.

From 2014 to 2016, continuing drought caused a river flow reduction of up to 90 per cent. In Honduras, it led to a loss of 96 per cent of maize yields and 87 per cent of beans, while in El Salvador it led to an estimated agricultural economic loss of over \$200 million.<sup>14</sup> The prolonged drought, one of the longest in history, has also affected sugar cane, coffee, fish farming, aviculture and livestock and raised prices by up to 20 per cent. Given this, families, especially from rural areas, have been forced to reduce both their number of meals and their quality, thus increasing rates of malnutrition in the countries as well as in the watershed.<sup>15</sup>

In the second half of 2018 the Dry Corridor suffered a 40-day severe and a 20-day moderate drought during the rainy season. This affected the food security of thousands of households, caused a loss of around \$100 million in grain production and reduced water flow in the Goascorán River by 70-75 per cent.<sup>16</sup> Given the severe impacts of El Niño, Dry Corridor countries are closely monitoring the possibility of a new event, with the World Meteorological Organisation having recently sent out a communication estimating the chance of an El Niño event occurring during March to May 2019 to be about 50- 60 per cent, albeit with less impact than the previous El Niño. The outlook for the second half of 2019 is currently uncertain.<sup>17</sup>

Looking at longer-term climate change trends, climate projections indicate increasing temperature. The temperature could rise above current levels from between 0.7°C and 1.5 C during the 2020s and 2030s, and between 1.5°C and 2°C in the 2040s (with the highest rise above current values in the east of El Salvador and in central and south-western Honduras). By the end of the century the rise is estimated to be between 1.5°C to 4.5°C.<sup>18</sup>

As regards rainfall, projections show a decreasing trend in both countries. In El Salvador there could be a decrease between 15 - 25 per cent during the 2020s in levels of rain experienced between 1981 and 2010. The 2030s shows a rainfall decrease between 10 and 20 per cent, with the biggest changes in the east of El Salvador. During the 2040s

<sup>13</sup> Global Climate Risk Index 2018, <https://germanwatch.org/en/14638>

<sup>14</sup> Information provided to WFP by MAG, El Salvador and SAG, Honduras.

<sup>15</sup> Emergency Food Security Assessment (EFSA) 2018

<sup>16</sup> Information provided to WFP by MAG and MARN, El Salvador and SAG and MiAmbiente, Honduras

<sup>17</sup> WMO, 2019, "WMO El Niño/La Niña Update, 26 February 2019", [http://www.wmo.int/pages/prog/wcp/wcasp/enso\\_update\\_latest.html](http://www.wmo.int/pages/prog/wcp/wcasp/enso_update_latest.html)

<sup>18</sup> El Salvador, Third National Communication to the Conference of Parties under UNFCCC, 2018, <https://unfccc.int/documents/182973>

rainfall could decrease between ten and 20 per cent, while in the 2070s the decrease could be 15 - 25 per cent. During the 2080s rainfall could decrease between 20 per cent and 30 per cent with a projected further decrease in the 2090s of between 20 per cent and 35 per cent.<sup>19</sup> In Honduras, the entire country is expected to experience, in the short, medium and long term, increasing precipitation deficits during the most humid quarter of the year. During the second quarter of the year there will be increased precipitation, suggesting that future rains could commence earlier in the year. Rainfall projections suggest a fall of between ten and 20 per cent below 1981- 2010 levels, with an increase in central and southern Honduras and deficits towards the Caribbean Coast.<sup>20</sup>

The impacts of climate change on agriculture were examined by the Economic Commission for Latin America and the Caribbean (ECLAC). Based on the Decision Support System for Agro-Technology Transfer model (DSSAT), the ECLAC study<sup>21</sup> foresees in El Salvador, Nicaragua, Honduras and Guatemala a severe production decrease in various agriculture sectors. For example, it foresees a decrease in bean production of 12 per cent by 2020 and 19 per cent by 2050. Corn production is predicted to drop between four per cent and 21 per cent by 2050. It also foresees that the increase in temperature will decrease the production capacity and varieties of Arabica coffee.

### **Key factors of vulnerability and barriers to adaptation**

Interventions to facilitate climate change adaptation need to identify and address key barriers and vulnerability factors to ensure that societies are resilient in the face of a changing climate. The following are the main factors of vulnerability and barriers identified in the watershed:

#### **1. Environmental degradation**

Already extensive environmental degradation in El Salvador and Honduras is being aggravated by climate change. A major factor contributing to degradation is erosion which is primarily driven by inappropriate uses and management of land and forest for agricultural and livestock practices. Human activity has promoted drastic changes in the vegetation coverage. Households mainly use land for low-yielding subsistence agriculture and overgrazing which leads to compaction of soils. This results in soil surface impermeability, further reducing the capacity of soils to receive and store water.

In the higher part of the watershed in both countries there are mountainous areas with little forest cover, high surface runoff and low infiltration. This increases the erosive potential of rain. In the lower part of the watershed, runoff is relatively low. This combines with tidal forces in the Fonseca Gulf and eroded material deposits at higher elevations to increase the likelihood of flooding. A soil erosion map produced by the International Food Policy Research Institute (IFPRI) shows that more than 66 per cent of soils of the Goascorán basin are eroded.<sup>22</sup>

The Goascorán watershed has suffered floods, in particular in 2011 due to the 12-E Tropical Depression, in 2010 due to the Agatha Tropical Storm and in 2009 due to Hurricane Ida.

The impact of the irregularity of rainfall is intensified by environmental deterioration, generated by the removal of vegetative cover, erosion and soil degradation, which reduces soil fertility, infiltration and water retention capacity.

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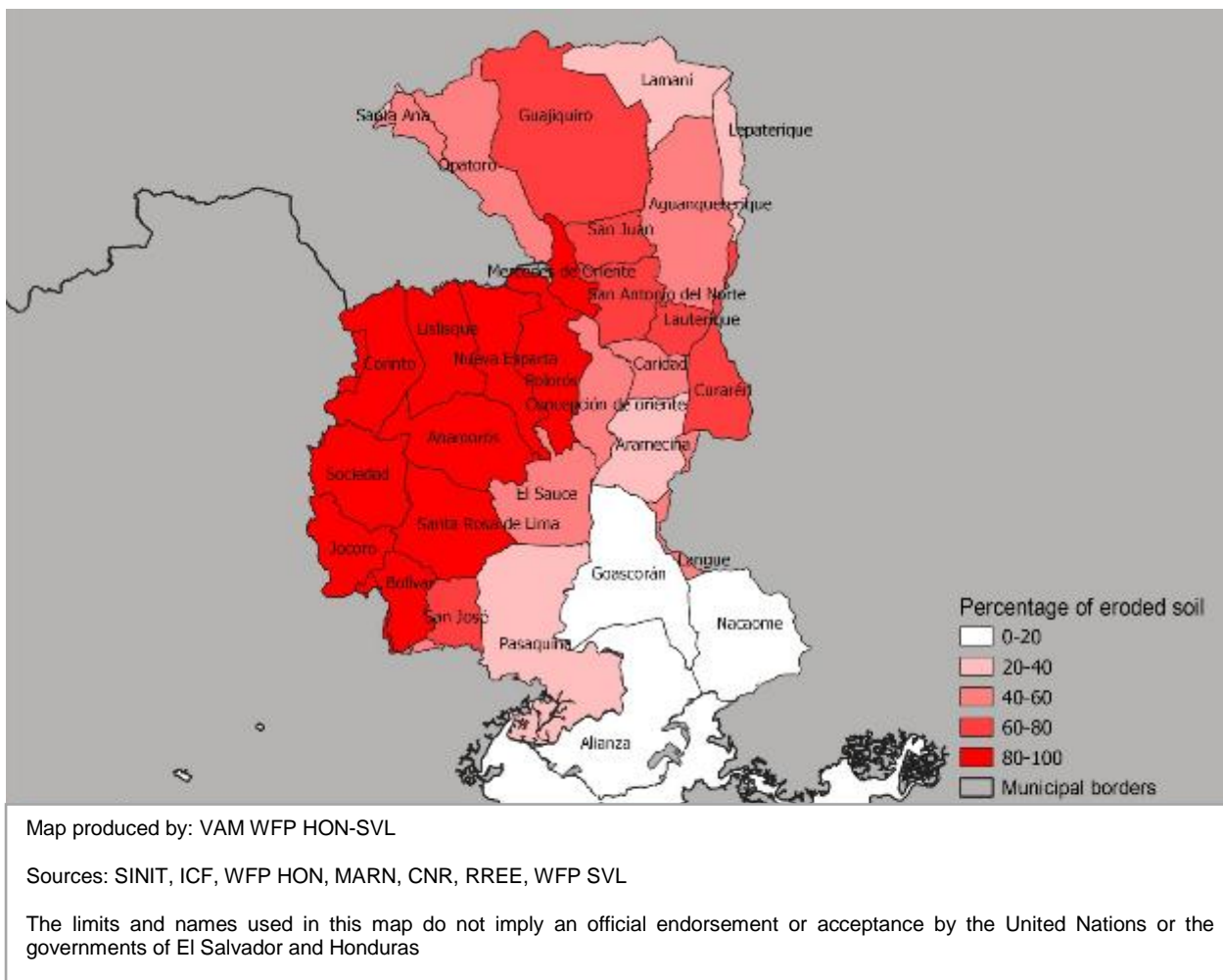
<sup>19</sup> Third Communication on Climate Change, 2018, MARN, El Salvador.

<sup>20</sup> National Climate Change Strategy, 2018, National Directorate of Climate Change, Honduras

<sup>21</sup> ECLAC, 2018, *Climate Change in Central America. Potential Impacts and Public Policy Options*  
[https://repositorio.cepal.org/bitstream/handle/11362/39150/7/S1800827\\_en.pdf](https://repositorio.cepal.org/bitstream/handle/11362/39150/7/S1800827_en.pdf)

<sup>22</sup> International Food Policy Research Institute (IFPRI), 2016, *Agricultural Typology Report, Market Trade and Institution Division*, June 2016.

Map 2. Erosion map of the Goascorán watershed and its municipalities. Data from the two national WFP’s Integrated Context Analysis (ICA)



## 2. Barriers at household/community level

Communities in the Goascorán watershed are challenged by low adaptive capacities, including a lack of access to knowledge, skills, tools, assets and services, all of which further increase their vulnerability to climate change. Women tend to be more vulnerable to the effects of climate change. Traditional agriculture practices combined with insufficient technical assistance, inefficient or absent irrigation systems, and poor soil and water conservation practices, reduce people’s abilities to adapt to climate impacts. Depletion of natural resources have further had negative environmental impacts on soil erosion and fertility, deforestation, increased frequency of mudslides and landslides, and river sedimentation. Some of the most common negative practices are slash-and-burn agriculture or fire-fallow cultivation, as a traditional practice prior to sowing. Others are unregulated deforestation, abandonment of parcels of still productive land due to lack of resources and poor management of solid and liquid wastes due to the lack of regulations. Also, the common use of chemical inputs in agricultural and livestock production affects biodiversity.

As a consequence of climate variability and shocks of the last few years, rural communities’ livelihoods are increasingly challenged to meet basic food and nutritional needs, further exacerbating poverty and capacities to adapt. In 2015, WFP’s Cost of the Diet analysis in the Dry Corridor showed that 40 per cent of the population cannot afford all the necessary nutrients for a healthy diet due to low incomes. The percentage drops to 21 per cent at the national level. Coping strategies include sale of key assets such as livestock, migration (with further reduction of family workforces) and withdrawing children from school. Households which lose their harvest and have their food reserves depleted have to increase the proportion of resources spent on food to the detriment of other investments including agricultural inputs before the next farming season. All these factors increase household vulnerability and reduce community resilience.

In order to gain a deeper understanding of current communities’ constraints, in October 2018 WFP carried out a scoping exercise with communities’ representatives in the Goascorán watershed areas. The exercise highlighted that communities in the watershed lack timely and locally-accurate climatic and weather information which would help them make well-informed decisions to protect their livelihoods and boost their resilience. In addition, agricultural producers typically do not access formal savings or credit to finance purchases of agricultural inputs. Low financial inclusion is due

to inadequate access to information and negative perceptions of financial tools. Most cultivators do not protect the investments made in productive activities through either conventional indemnity-based agricultural insurance or innovative weather or vegetation index-based insurance products. Insurance is also often required by financial institutions or input-providers for farmers to access loans for inputs, which is an additional barrier for rural smallholder farmers to access loans or high-quality inputs due to its high costs.

There are specific further impacts of climate change for children, adolescents and women. Reduced agricultural production and thus household incomes has affected ability to afford school fees, triggering a rise in school dropout rates in recent years. Children are having lower food intake quality and quantity, affecting their nutritious needs and consequent development. Women, charged with family health and food security, are experiencing a heavier and more difficult work load, but are now expected to provide the same outcomes but with less resources. Commonly women are now forced to walk longer distances or pay higher prices to get water.

In recent years, migration has been on the increase. Climate-related environmental vulnerability and low agricultural productivity, together with the lack of access to land and basic services and scarce employment opportunities outside the agriculture sector, are among the main factors that are causing high levels of emigration in and out of the countries. In the watershed, migrations affect both men and women, although the communities in the area claim to perceive an increase among women who decide to migrate temporarily. Families resort to temporary migrations because current crop production barely guarantees their food subsistence and need extra income to cover other needs such as health and education. The temporary migration allows a family member to supply the rest of the family with remittances, but a pattern is emerging where over time families end up migrating completely and permanently.

### 3. Barriers at the governance level

Both countries have adopted policies and regulatory frameworks to collect and produce information to enable adaptation. Honduras presented its National Adaptation Plan in 2018. El Salvador's National Adaptation Plan is expected to be finalised by the end of 2019. While both countries promote the inclusion of a climate change adaptation focus in municipal planning, linkages between implementation mechanisms from national to local level remain weak. On both sides of the Goascorán watershed, local planning instruments fail to include climate change concerns due to limited awareness, knowledge and capacity.

Preliminary consultations with climate and weather information producers and communities in the Goascorán watershed have indicated that there are institutional capacities to produce accurate weather and climate information. However, a lack of financial resources, technical capacities and mechanisms prevent such information being tailored and shared with end-users in communities in the basin. Community representatives highlighted that the only available information are national weather forecasts. These are neither easily accessible nor always trusted since they are not tailored to the specificity of different areas. Agricultural and other advisories are also often lacking. In addition, the information currently produced and disseminated comes from national institutions (either as climate information producers<sup>23</sup> or as communication intermediaries<sup>24</sup>) without close collaboration to ensure efforts are complementary and address information gaps. Within institutions there is some recognition of the importance of co-producing climate information, however, creating feedback mechanisms between communities and information producers (to ensure the information meets community needs) has not happened.

Consultations with financial institutions (insurance companies, banks, credit unions and NGOs involved in risk finance) have confirmed that vulnerable populations in El Salvador and Honduras lack adequate access to financial products such as savings and insurance to support their resilience to climate shocks. The financial sector lacks incentive to extend financial services to these populations, many of whom are remotely located, largely as the markets are not at scale and thus provide less lucrative returns than traditional and higher income market segments, unless reached at scale. Index (or parametric) insurance products<sup>27</sup> have emerged to help overcome some of these challenges with administrative costs and coverage, providing an affordable risk solution to vulnerable farmers. However, as index insurance is relatively new to Central American markets, it takes time for insurance regulators to review and approve these novel products for commercial distribution, and which creates a barrier for commercial insurers to invest in offering index insurance in their product portfolios. The highly volatile nature of climate events and their ability to affect large populations have also meant insurance companies require international reinsurance support, but this also requires

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<sup>23</sup> Climate information producers are institutions (typically public) whom analyse weather and climatic data and convert it into climate information products; typically they include meteorological organisations but can also involve institutions that produce advisories such as ministries of agriculture.

<sup>24</sup> Communication intermediaries are organisations (public or private) whom disseminate climate information through communications channels they manage, such as agricultural extension workers, mobile phone or radio companies.

<sup>27</sup> Index (or parametric based) insurance is a contract that provides a payout when a climate (or other) index reaches a pre-defined level, or trigger, irrespective of the actual loss incurred. The insurance cover is triggered if pre-defined event parameters are met or exceeded, measured by an objective parameter or index that is related to an insured's particular risk exposure.

require capacity building of insurance regulators within the Central American countries to better understand how to oversee and regulate such products.

At a wider governance level, both governments recognise that climate change challenges in the bi-national Goascorán watershed are across boundaries and require a regional response to encompass the totality of the watershed area. These challenges so far have been mainly addressed separately at the national level, even though in the last two decades there have been efforts to create a binational governance mechanism.

The Binational Management Group of the Goascorán River Basin (GGBCG, Spanish acronym) was established in November 2006, in Nacaome's municipality, department of Valle in Honduras, integrated by local representatives of both countries. It was a multi-sectoral group created to integrate and coordinate the administration of the sustainable management of the binational watershed, with the purpose of improving the conditions of the inhabitants' lives. Their objective has been to coordinate actions of binational character and to promote funding initiatives for national and international organisations, through the articulation and participation of diverse actors and the development of binational processes<sup>25</sup>. However, the GGBCG's initial makeup was restricted only to some associations, municipalities and government institutions resulting in a narrow scope and legitimacy and in the need to revitalize and expand the level of participation across locations and sectors. In response to these needs, the BRIDGE programme (2011-2015) promoted and facilitated changes through a comprehensive approach of hydro-diplomacy in different levels and territorial sectors. It facilitated the GGBCG's revitalization from a limited and highly sectoral stakeholder base (two associations of municipalities in Honduras and one in El Salvador), to a broader group of key organizations and institutions, including local, municipal, national and binational levels<sup>26</sup>.

Despite the previous efforts to establish and enhance a binational body, challenges persist in consolidating long-term governance. During this concept note preparation, an initial analysis was carried out with stakeholders involved in the previous efforts to better understand the challenges to date. The main issues identified are: 1) there was no participant selection process, community consultation nor gender analysis carried out and consequently there was no community involvement in and appropriation of the body; 2) only actors from the upper and middle parts of the watershed were involved, rather than the entire watershed; 3) there was no ability to produce a consolidated vision and management plan; and 4) the lack of legal recognition due to the fact that the governments were only involved at the townhall level and not at national levels.

As a result of a lack of coordinated planning at the watershed level, the ability for institutions and governments to have adaptive capacities that are transformative in addressing the impacts of climate change (and long-term sustainable development), remain out of reach.

## Project Objectives:

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<sup>25</sup> Transboundary: Trans-Border Management Group for the conservation of the environment of the Goascoran River, Honduras and El Salvador, 2008, Fundacion Vida, <https://www.gwp.org/globalassets/global/toolbox/case-studies/americas-and-caribbean/transboundary.-trans-border-management-group-for-the-conservation-of-the-environment-of-the-goascoran-river-honduras-and-el-salvador-320-english.pdf>

<sup>26</sup> The Goascorán River Basin: Honduras and El Salvador, 2016, International Union for Conservation of Nature and Natural Resources (IUCN), [https://www.iucn.org/sites/dev/files/content/documents/bridge\\_goascoran\\_english.pdf](https://www.iucn.org/sites/dev/files/content/documents/bridge_goascoran_english.pdf)

The project's main goal is to strengthen the climate change adaptive capacity of vulnerable households in the degraded transboundary watershed of Goascorán across El Salvador and Honduras by providing communities with integrated climate risk management tools and services that enhance their resilience to climate risks.

The Project will promote climate change adaptation strategies in the transboundary watershed by:

- 1) Enabling environment for the implementation of climate change adaptation mechanisms in the Goascorán watershed; and
- 2) Providing an Integrated climate change adaptation strategy to vulnerable women, men, boys and girls and wider communities in the Goascorán watershed.

## Project Components and Financing:

Project Components	Expected Outcomes	Expected Outputs	Countries	Amount (US\$)
1 Enabling environment for the implementation of climate change adaptation mechanisms in the Goascorán watershed	1.1 Strengthened binational, national and local governance capacities on climate change adaptation measures implementation in the Goascorán Watershed	1.1.1 Sustainable bi-national governance mechanism for the Goascorán watershed established	El Salvador Honduras	900,000
		1.1.2 Strengthened binational and local governance capacities in supporting community-level integrated climate change adaptation planning	El Salvador Honduras	1,200,000
		1.1.3 Strengthened key stakeholders' capacities in climate services and risk financing in the Goascorán watershed	El Salvador Honduras	900,000
2 Provide an Integrated climate change adaptation strategy to vulnerable households and communities in the Goascorán watershed	2.1 Improved the adaptive capacity of vulnerable households and communities, through the introduction of climate change adaptation best practices, climate services and climate risks financing strategies	2.1.1 climate adaptation practices introduced and applied by vulnerable households in the project area	El Salvador Honduras	3,000,000
		2.1.2 Enhanced sustainable land use, conservation and restoration and integrated water management at different watershed levels.	El Salvador Honduras	2,500,000

		<b>2.1.3</b> Improved access to timely, tailored and co-produced climate and weather information for smallholder farmers and communities	El Salvador Honduras	1,700,000
		<b>2.1.4</b> Improved access to risk reserve and transfer mechanisms (saving, credit and micro-insurance)	El Salvador Honduras	1,500,000
1. Project Execution cost (9.5%)				1,111,500
2. Total Project Cost				12,811,500
3. Project Cycle Management Fee charged by the Implementing Entity (8.5%)				1,088,978
<b>Amount of Financing Requested</b>				13,900,478

## Projected Calendar:

Milestones	Expected Dates
Start of Project Implementation	06/2020
Mid-term Review (if planned)	2022
Project Closing	06/2024
Terminal Evaluation	2024/2025

## PART II: PROJECT JUSTIFICATION

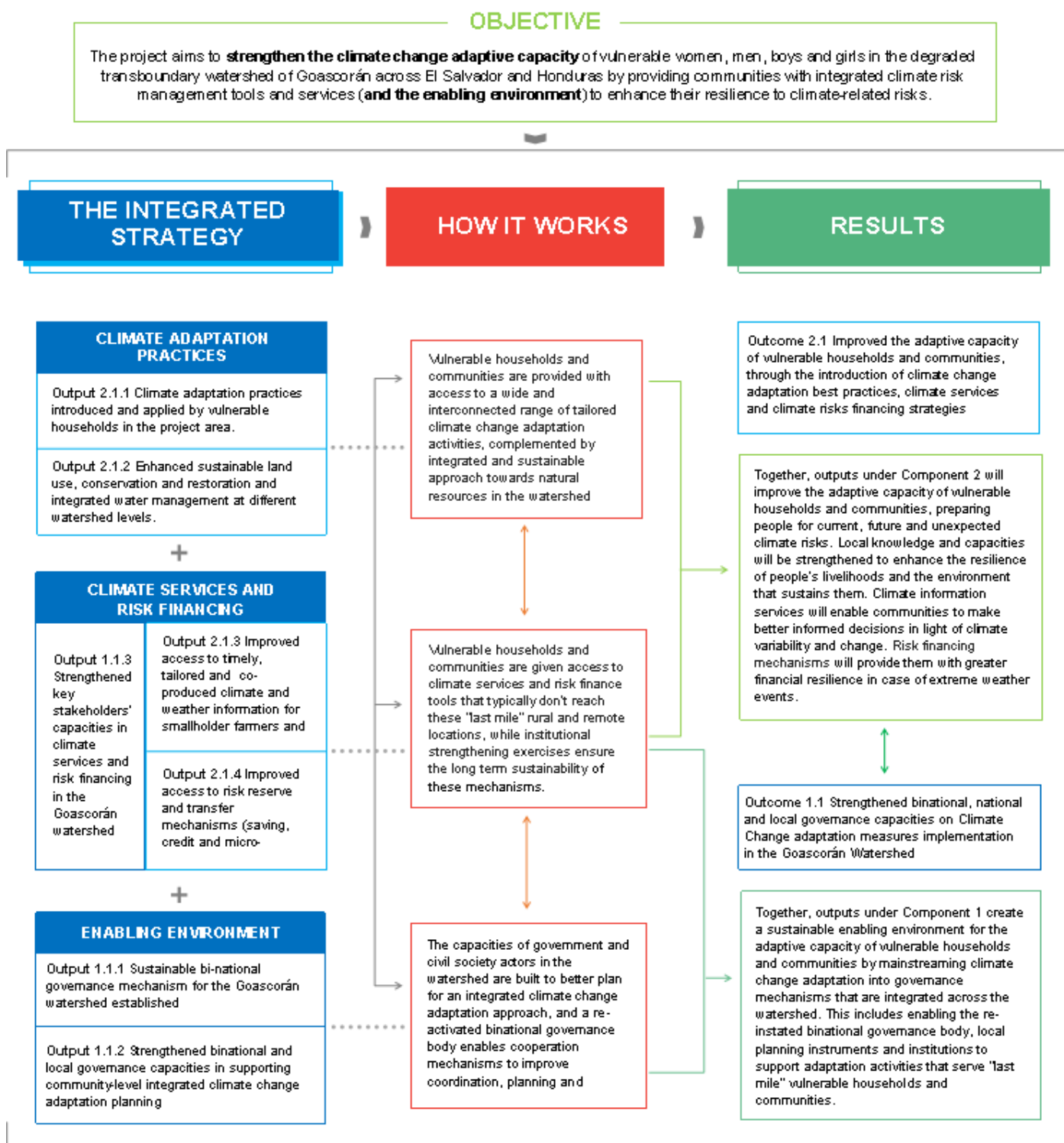
### A. Describe the project components, particularly focusing on the concrete adaptation activities of the project, and how these activities contribute to climate resilience,

The project will strengthen the adaptive capacity of the watershed and its people by implementing an integrated strategy. The initiative will apply a regional approach to solve a complex set of interrelated problems shared by communities on both sides of the binational watershed. Key to success will be the promotion of integrated binational activities adapted to specific environmental and socio-economic conditions found in the high, middle and low watershed. This project is being developed with representatives of the two countries and community consultations are taking place through all project design phases to ensure appropriation of the integrated strategy and that people's real needs are incorporated. Adaptation Fund resources will be invested to enhance effective resilience and sustainable adaptive capacities, addressing key technical, financial and information-based barriers through the implementation of effective climate change adaptation strategies, at binational, national and local levels.

The project is being designed so that its two components are complementary, and while each contributes to specific outcomes, only together will they help achieve the overall objective in an effective and sustainable manner. The entire population of the watershed (215,000 people) will indirectly benefit from the activities under Component 1, to establish a sustainable binational mechanism (Output 1.1.1). Strengthening of binational and local capacities to integrate climate

change adaptation into local planning (Output 1.1.2) should be of benefit across the watershed. Institutional strengthening in climate information services and risk financing mechanisms (Output 1.1.3) will benefit the majority of the population. Efforts to improve what are known as “last-mile” climate services to communities (Output 2.1.3) are anticipated to have a large outreach to be estimated once baselines have been completed (but targeted at approximately 75 per cent of the total watershed). In addition, the project will directly target 4,000 households (approximately 20,000 people) with improved access to a range of adaptation practices, environmental restoration and conservation activities as well as access to savings, credit and micro-insurance (Outputs 2.1.1, 2.1.2 and 2.1.4).

The diagram below describes the proposed integrated strategy, how each part work, how they link and the expected results:



## **Component 1. Enabling environment for the implementation of climate change adaptation mechanisms in the Goascorán watershed.**

This Component will address three main institutional-level barriers:

- The inability of the existing, but currently effectively inactive, binational body to develop holistic, long-term and sustainable climate change adaptive capacities;
- Local governments' limited resources, technical expertise and mechanisms for integrated adaptation planning;
- The low capacity of institutional stakeholders (public and private) to provide timely climate-related services to vulnerable populations in the forms of locally-accurate climate information and risk finance instruments.

The component includes one outcome, achievable through three outputs.

### **Outcome 1.1 Strengthen binational, national and local governance capacities to implement climate change adaptation measures in the Goascorán Basin.**

Activities under this outcome will see a project which has built the capacities of all relevant stakeholders within the Goascorán Basin - at the local, national and regional levels - to ensure they have the knowledge and tools in place to implement climate change adaptation measures in an integrated way across the watershed. The outcome emphasizes the necessity for inclusive governance by enabling a collaborative approach among these stakeholders through existing structures, including in injecting new technical knowledge, expertise and tools into local government mechanisms, institutions and the re-vitalised Binational Body.

#### **Output 1.1.1 Sustainable bi-national governance mechanism for the Goascorán watershed established.**

There is general recognition among policymakers that the Goascorán is a shared transboundary watershed whose neighbouring countries face identical challenges related to the impacts of climate change and variability and environmental degradation on people and livelihoods. Over the years Honduras and El Salvador have addressed climate change issues separately and differently within their territories, developing capacities in early-warning systems, provision of weather forecasting, legal frameworks for micro-insurance, adaptation strategies, natural resources management, watershed management planning and related legal frameworks. Unfortunately, good practices developed in one country have not necessarily had an opportunity to be shared with the other neighbour. A regional approach is thus fundamental in order to encompass the entire watershed and work to develop efficient long-term and sustainable climate change adaptive capacities. Cross-border cooperation has potential to avoid duplication, generate cost savings and allow more communities to be reached more effectively.

The project aims to enable an integrated watershed management approach through the re-activation of a Binational Governance Body and the implementation of its cooperation mechanisms. The project will not create a new binational body, instead is working with stakeholders and actors from previous experiences to reactivate, unify and strengthen the old efforts. The bination body will build on previous efforts carried out in the region (the 2006-2009 Binational Management Group of the Goascorán River Basin and the Bridge project) and will also take into account and incorporate lessons learned and good practices of previous governance experiences such as the Trifinio Commission for the Trifinio Plan<sup>27</sup>, a regional entity between El Salvador, Honduras and Guatemala established in 1997.

The binational approach will be coordinated at different levels: national, municipal, community-based organisations and indigenous organisations. All levels will be strengthened through specific and tailored approaches. Cooperation mechanisms are being designed through consultation with representatives of the two Governments and local actors. At the highest level there is political willingness in both nations to advance towards integrated basin management. Ensuring the active participation of local actors and the inclusion of strategies designed by them is crucial to gaining the support and endorsement necessary for long-term functionality and sustainability. This includes ensuring that all key local stakeholders are included in the Binational Body, particularly of those who represent such different groups as women, indigenous communities, youth, the elderly and those living with disabilities.

The project will support the set-up of a cooperation mechanism ensuring knowledge-sharing and replication of good practices on both sides of the watershed. The binational body will work on the exchange mechanisms between different tiers of government, it will facilitate knowledge sharing, experience exchange and cooperation with a particular focus on binational exchanges and on creating a lasting mechanism. It will also promote and strengthen mechanisms for the communities to identify good practices and replicate them. The proposed project will apply the community participatory approach to strengthen communities' capacity to identify, develop and sustain solutions, and will ensure equitable

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<sup>27</sup> GTZ, *Tropical forest protection and watershed management in the Trifinio region*, GTZ, <https://www.giz.de/en/worldwide/13474.html>

involvement of youth, community elders, women and members of indigenous communities. It will apply the training of trainers (ToT) approach to maximise the number of people benefitting from capacity development activities.

Such knowledge transfer includes replicating the El Salvador Early Warning System in Honduras and Honduras supporting El Salvador to establish a Watershed Management Body based in its successful experience. On the Honduran side of the watershed there are functioning self-governed community organisations that operate and maintain systems for the quality and sustainability of water services (the Goascorán Watershed Council and micro-watershed councils). In line with these efforts, the Binational Body will also aim to institutionalise adaptation planning tools into the integrated watershed management approach the Body promotes. This especially relates to efforts under Output 1.1.2 to develop the *Methodological Guide to Incorporate Adaptation to Climate Change in Development Planning - CdT 4H*, as well the *Handbook on Adaptation Options*. Enshrining these two tools into the Binational Body's institutional operations will ensure they have more likelihood of being sustainably enforced in the decades to come.

### **Output 1.1.2 Strengthened binational and local governance capacities in supporting community-level integrated climate change adaptation planning**

This output addresses challenges in the understanding of climate change impacts in the watershed. It focuses on building the capacities of local governments in the basin to be able to better plan an integrated climate change adaptation approach. This involves mainstreaming a climate focus into local planning instruments so as to strengthen the enabling environment for vulnerable households.

The project will build on an initiative that the Honduran Ministry of Natural Resources and Environment with the support of UNDP started in 2015 to design a *Methodological Guide to Incorporate Adaptation to Climate Change in Development Planning - CdT 4H*. This informs local governments how to plan and develop climate change and climate risk management interventions. Lack of resources meant that the guide was initially introduced only in five municipalities designated for inclusion. However, subsequently the Honduran Secretariat of Agriculture and Livestock and the Institute of Forest Conservation and Development, Protected Areas and Wildlife have used the guide as a planning tool, adapting it to their specific needs.

The project will work with the Honduran Government to ensure the guide is aligned with the country's National Adaptation Plan. Through the Binational Governance Body the guide will be introduced in El Salvador and aligned with its National Adaptation Plan. The guide will be adapted to the reality and needs of watershed communities. Key actors from those Honduran municipalities in which the guide is already being used will also be asked to share experience and lessons learnt and to suggest how to further develop the guide.

WFP intends to work with a range of national and local institutions and communities to develop a *Handbook on Adaptation Options*. This will take into account the range of climatic variability and climate change concerns for the watershed, people's livelihoods and available resources. The co-production of this handbook by diverse stakeholders will help to define adaptation options that communities will understand. It will also support governmental and non-governmental organisations to better determine where technical and financial support is likely required and who can provide it. It is planned to train members of local institutions in how to disseminate and discuss the handbook with communities during community and household consultations. This will support attainment of Output 2.1.1).

The project will support the introduction and application of the Guide and Handbook in all municipalities included in the project through local and binational capacity strengthening exercises. It is expected that as a result, municipal planning instruments and relevant budgets will integrate and mainstream climate change adaptation considerations to make the implementation of adaptation strategies more financially sustainable in the longer-term. It is also expected that the Guide and Handbook will be key tools, supporting advocacy for a revived and reinvigorated binational governance mechanism under Output 1.1.1.

### **Output 1.1.3 Strengthened key stakeholders' capacities in climate services and risk financing in the Goascorán watershed.**

This output focuses on the necessary institutional strengthening of key stakeholders working in and beyond the watershed (nationally and binationally) in climate and weather information production and dissemination, as well as risk financing mechanisms. Such work seeks to systemically improve vulnerable people's access to these services (under Outputs 2.2.3 and 2.2.4).

The output addresses institutional barriers in relation to the production and communication of climate and weather information that are complemented by agricultural and other relevant advisories. It focuses on strengthening the capacities of national institutions, as well as communication intermediaries, to co-produce and disseminate, in consultation with end-users, tailored climate and weather information, complemented by agricultural advisories, to meet the needs of communities in the Goascorán watershed. The co-production approach involves creating feedback mechanisms to ensure the weather and climate information meets community needs, and will thus involve bringing

together government institutions, communication intermediaries and end-users to design the climate information products.

At the outset, this would involve convening a binational consultation workshop for climate services stakeholders and representatives of communities within the watershed. This would begin a conversation around how to systematise a two-way dialogue system between the key actors to ensure populations (especially vulnerable groups) within the watershed can access tailored climate and weather information.

The co-production model will ensure:

- Different national entities managing and producing climate and weather information can exchange and agree on an appropriate design of climate services products to efficiently reach communities with tailored information.
- Communication intermediaries are actively involved in supporting efficient translation and dissemination of climate and weather information through the communications channels most appropriate for the communities.
- Representatives from end-user communities such as farmers, village leaders and community-based organisations are able to continuously improve timely and accurate climate and weather information which clearly communicates their challenges, needs and opportunities.

Climate information producers include national meteorological services (DGOA<sup>28</sup> in El Salvador and DICTA-SAG<sup>29</sup>, MiAmbiente and COPECO<sup>30</sup> in Honduras) and the agricultural departments (MAG and CENTA<sup>31</sup> in El Salvador and SAG and ICF<sup>32</sup> in Honduras). Climate information intermediaries involved in disseminating information will be defined through community consultations and household surveys to better understand how people want information to be communicated to them. There will be specific focus on how diverse groups – men, women, indigenous populations, and those from different age-groups, levels of education etc – have different levels of access to communication channels, and their preferences and trust in climate and weather information sources; such intermediaries potentially include mobile networks, social media, radio, television and extension workers from the state or civil society. All stakeholder engagement will be done in coordination with partners with climate service expertise, including Zamorano University.<sup>33</sup>

Institutional strengthening will also be a key component of the project's focus on finding risk financing solutions to provide financial protection to vulnerable populations when a large climatic event occurs. To increase access for the communities in the Goascorán watershed to these services, the project will strengthen capacities for key stakeholders in government as well as the private sector. Index insurance has been identified as a key financial instrument in risk management for smallholder farmers, providing rapid payouts after climate events. Differing from traditional insurance, index insurance payouts are based on climate indices reaching pre-determined levels (or triggers, for example the rainfall recorded over a certain period is below the value set in the index for drought coverage), rather than on-site assessments of actual damage incurred to crops due to insured risks. For smallholder farmers who are heavily exposed to climate risks, index insurance offers the opportunity to manage their climate-related shocks, whilst encouraging investment in productive activities. When integrated with other risk management strategies such as natural resource management, solutions such as insurance in the context of agriculture production, can offer protection against deterioration of livelihoods or production loss due to increasing climatic risks.

Being complex in design, the capacity of insurance companies to model, design and implement index insurance products based on extreme climate events must be developed. Equally important is to boost the capacity of microfinance institutions, cooperatives and other distribution channels that sell and explain products to end-users. These Index insurance products are new to Central America and require willing and able partners to offer them as well as conducive financial sector regulation and regulatory bodies.

Given the complex and technical nature of modeling climate risks for insurance, expansion of index insurance in El Salvador and Central America has been limited. In 2018, the Microinsurance Catastrophe Risk Organisation (MiCRO), a social enterprise specialised in the design and implementation of index microinsurance, launched the first index insurance in the El Salvador market. Working closely with government and insurance sector stakeholders, MiCRO worked with El Salvador's insurance regulator, the Superintendencia del Sistema Financiero (SSF), to have the product approved and brought to market. The design of this current product, however, is not accessible for the profile of smallholder farmers in the Goascorán watershed.

In Honduras, index insurance has yet to be offered commercially, although research institutions recently completed a donor-funded project on the viability and design of a weather-index based insurance product for Honduran farmers, and which was reviewed and approved by the regulator, the National Committee for Banking and Insurance (CNBS). To

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<sup>28</sup> The Environmental Observatory General Directorate

<sup>29</sup> The Agricultural Science and Technology Directorate with the Agriculture and Livestock Secretariat

<sup>30</sup> The Permanent Contingency Commission of Honduras

<sup>31</sup> The Ministry of Agriculture National and the Center for Agricultural and Forestry Technology

<sup>32</sup> The Ministry of Agriculture and Livestock and the Institute of Forest Conservation and Development, Protected Areas and Wildlife

<sup>33</sup> Zamorano's Escuela Agrícola Panamericana has long been a centre of expertise in Central American botany, agronomy and environment. <http://www.zamorano.edu/>

date no local insurance provider has developed and commercialized such a product, and private sector insurance providers in Honduras do not have awareness of the value or potential of index insurance for providing affordable protective cover for vulnerable farmers, and therefore are not investing in bringing these products to market.

In order to strengthen the capacities of risk finance institutions across the watershed to sustainably reach vulnerable populations, an activity under this output will be to facilitate dialogue between regulators in Central America on international learning on index insurance regulation. Further, the project will work with national insurance companies and distribution channels to create and/or strengthen (as necessary) financial products that will both be accessible for households in the watershed region and protect against the financial consequences of climate-related events. The majority of insurance products currently available in El Salvador and Honduras only provide coverage for the value of credit and loans, and therefore are only accessible to those integrated into the formal economy. Through supporting the development and distribution of index insurance products tailored for vulnerable communities with local insurers, this output will promote the creation of a sustainable commercial market for index insurance products for lower-income households.

## **Component 2. Provide an Integrated climate change adaptation strategy to vulnerable households and communities in the Goascorán watershed**

The second component focuses on strengthening household and community adaptive capacities through the implementation of a range of interconnected climate change adaptation measures. These include the introduction of climate adaptation practices for more resilient livelihoods; conservation and restoration practices to make the surrounding environment more resilient to climate-related shocks; tailoring of climate services to help communities make better informed decisions; and the introduction of risk finance mechanisms (microinsurance and community saving and loans schemes) to bring more smallholder farmers into the financial system and thus to better protect them in the event of weather-related shocks.

The project will actively be monitored with a lens to being responsive to needs based on gender and indigenous ancestry. It will collect lessons to improve design and reach of climate adaptation activities to different sub-populations. This approach will also enable a better understanding of success factors that can help scale up and replicate climate adaptation activities across the two countries.

### **Outcome 2.1 Improve the adaptive capacity of vulnerable households and communities, through the introduction of climate change adaptation best practices, climate services and climate risks financing strategies**

Activities under this outcome aim to enable vulnerable households and communities to have the knowledge, skills, assets and services that integrated together provide them with the capacities to be able to withstand by themselves current climate risks and slow-onset climate change. These assets include building the resilience of the natural environment in which they live, and services extend to technical expertise provided in climate smart agriculture, in translating climate information to support decision-making, and risk finance instruments provide them with greater financial resilience in case of extreme weather events.

#### **Output 2.1.1 Climate adaptation practices introduced and applied by vulnerable households in the project area.**

This output is a critical pillar for ensuring that vulnerable households, communities and the environments in which they are situated become more resilient to climate-related shocks. It will be achieved through providing these vulnerable populations with access to a wide and interconnected range of tailored climate change adaptation activities. Initial consultations with communities and institutions in the Goascorán watershed have begun to broaden the understanding of key climate-related vulnerabilities and likely impacts, as well as gaps and needs facing households, along with an initial identification of possible adaptation measures that can be introduced.

Aligned with the institutional work undertaken under Output 1.1.2, this output will apply the *Handbook on Adaptation Options* to help individuals and communities identify the best practices and resources needed to implement specific adaptation practices. This is considered important both to build ownership of activities to be implemented and also to help avoid any maladaptation to climate change by ensuring people have options that have been carefully considered based on climate science and technical expertise in different adaptation options.

Livelihoods in the watershed are primarily agricultural. Climate-related risks especially impact people's food insecurity and income status. Drawing on lessons from practices that have been previously adopted, the project anticipates that these adaptation options will include a range of climate-smart agricultural practices. Water harvesting and livelihood diversification activities will be necessary to help improve the adaptive capacities of smallholder farmers and community members. The following techniques are anticipated to represent key climate-smart agriculture and water harvesting adaptation measures under this output: implementation of agro-ecological techniques; agroforestry; crop diversification;

promotion of biofortified seeds such as for drought-resistant crops; organic fertilizer production and use; post-harvest management; avoiding stubble burning; contour sowing; rainwater collection and storage and irrigation systems powered by renewable energies.

The project will provide smallholders with training and inputs, ensuring the participation of vulnerable groups, through the training of trainers (ToT) modality to ensure long-term sustainability. The adoption of these practices and those in Output 2.1.2, will be incentivised by the project, through the introduction of a microinsurance product that will be conditionally transferred to community members upon completion of pre-specified climate adaptation activities (Output 2.1.4), thus providing the beneficiaries with a safety net against unpredictable large-scale shocks; all beneficiaries under this Output also aim to be targeted with 'last mile' climate services (Output 2.1.3).

Specific climate change adaptation activities will be based on the specificities and needs of the high, middle and low watershed ecosystems and their residents. At the beginning of the project, WFP's Community-based Participatory Planning (CBPP)<sup>34</sup> will be used to tailor asset creation activities to local contexts and refine project activities. It will build upon practical and technological adaptation measures already identified and implemented by both countries as well as the main type of asset creation activities identified through consultations with communities and experts. Activities will be tailored to the specific needs of different and potentially more highly vulnerable groups, such as women, indigenous populations, youth and elders. It will also take into consideration land tenure issues that affect people's decisions and investments.

### **Output 2.1.2 Enhanced sustainable land use, conservation and restoration and integrated water management at different watershed levels.**

This output complements work with smallholders under Output 2.1.1 by ensuring an integrated and sustainable approach towards natural resources in the watershed. Such activities are needed given the environmental degradation of the landscape in which vulnerable communities are living, one in which extreme climatic events such as intense precipitation after long dry periods can increase risks of flash flooding and landslides due to the poor saturation profile of soil, loss of foliage and blockages in natural drainage outlets.

The output seeks to implement protective and preventative natural resource management actions by introducing household and community-based conservation and restorative practices within the landscape in which these people live. These natural resource management actions will form part of the menu of practices within the *Handbook of Adaptation Options* produced under Output 1.1.2. Realisation of this output will require communities to incorporate measures to conserve micro-basins, generating environmental, economic and socio-cultural benefits, improving water supply, reducing erosion, improving incomes and, consequently, food security.

Appropriate activities will be identified and tailored based on the specific needs of the high, middle and low watershed, through the investigations with communities and experts and taking into account the practical and technological adaptation measures already identified and implemented by both countries, This entails using Community Based Participatory Planning – a methodology and which enables inclusivity of different groups in the decision-making of activities (including men, women, youth, indigenous and any specific vulnerable groups). It should enable the identification of local community resources and time to thus encourage local ownership and sustainability

A series of cooperative, iterative steps will be taken to characterise existing conditions, identify and prioritise problems, define management objectives, develop conservation, restoration and management strategies and implement and adapt selected actions. Promoting integrated development programmes through the effective participation of local people is intended to prevent further ecological imbalance and create long term sustainability.

### **Output 2.1.3 Improved access to timely, tailored and co-produced climate services for smallholder farmers and communities.**

This output is centered on helping communities make better informed decisions in the face of climate variability and change. It will focus on ensuring populations within the watershed have access to "last-mile" climate and weather information that is tailored to be understandable, easily accessible and acted upon. Smallholder farmers targeted with these climate services especially require information that is relevant and timely to enable them to take informed agricultural decisions on different seasons, such as the choice of crops to plant, when to plant, their investment in agricultural inputs, and if to harvest early or to wait for improved weather conditions. The information includes both rapid-onset and slower-onset events, as well as year-to-year climate variability and longer-term climate trends. This information will be an important complement to Outputs 2.1.1, 2.1.2 and 2.1.4 by enabling people to have a range of integrated risk management tools that jointly support their adaptive capacities.

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<sup>34</sup> <https://www.preventionweb.net/publications/view/47204>

A first step under this output will involve undertaking a comprehensive baseline assessment (including household survey and focus group discussions) that seeks to develop a detailed understanding of the needs of all residents in a community. Experience has demonstrated that it is essential to properly take into account the differences in how people access climate information, including elements of trust, preferences and resources that certain groups have. For example, trust in institutions, access to radio/phone/social media, as well as literacy levels are often quite different among women, men, the elderly, indigenous populations, youth, landowners and the landless.

Based on this analysis, a second step involves the selection of the most suitable communication channels for each community, and means of co-production and customisation of climate information to different target groups. The preliminary scoping exercise carried out by WFP in October 2018 identified various options including radio, local TV, cell phones (including SMS and internet-based applications such as Whatsapp and BOT-assistant system), as well as bulletins and community centres. Consideration is being given to using ROLA (Red de Observación Local Ambiental),<sup>35</sup> an already functioning network working in El Salvador, and which consists of community leaders providing climate and weather observations to the national Met Service (DGOA) as part of the Early Warning System through Whatsapp messages. ROLA could be strengthened expanding the scope of the tool to include adaptation considerations and replicated in Honduras through the work of the re-established Binational Body.

In communities without internet access, ROLA could be able to provide the same services through SMSs. ChatMas is a BOT-assistant system being developed and tested by WFP El Salvador and MARN. It is based on artificial, interactive and predictive intelligence through which information from different local, national and international data sources, community members (as local source) and climatological information are analysed. Automated predictions based on the indicators analysed by the system should be then provided to the population. If the pilot proves to be efficient and accurate, the system can be scaled up and replicated in Honduras.

Outreach is also anticipated to include face-to-face support to smallholder farmers, involving training of trainers workshops for institutions to help them understand how to translate weather forecasts and climate change projections into readily-understood information. It also involves ensuring agricultural advisory services to farmers to know how to use climate and weather information received, and which will help these end-users make informed decisions on cropping and livestock management based on immediate, seasonal and longer-term forecasts.

#### **Output 2.1.4 Improve access to risk reserve and transfer mechanisms (saving, credit and microinsurance)**

This output builds on resilience-building tools for smallholders included in Outputs 2.1.1, 2.1.2 and 2.1.3 and will develop risk financing instruments that households can access in the event of a weather-related shock. Such risk financing mechanisms include savings, credit and insurance. Through establishing small-scale saving and loans groups, beneficiaries should improve prospects of building a stronger financial-base, being able to invest in improved agricultural inputs while having a buffer against such idiosyncratic shocks<sup>36</sup> as illness or risks not covered through conventional insurance mechanisms. Innovative insurance products have the potential to contribute to stronger resilience by providing timely financial payouts in the event of large-scale weather events, supporting farmers to avoid negative coping strategies, while stimulating faster recovery.

In the watershed, savings habits and the use of formal financial services are currently not widespread. Community members will be organised into informal savings groups with a governance structure that establishes the fixed amount to be contributed to the savings pool per month. From this, small loans can then be distributed between members at minimal interest rates, thus supporting modest investments in agricultural inputs or other business enterprises. Loans are reviewed and approved by the members, to ensure adherence to the group's guidelines. The project will roll out a series of awareness building, education and training in saving techniques for these groups. Lessons can be shared from *Caja Rurales*<sup>37</sup>, community savings and loans groups that are well-established in Honduras in order to help inform and form similar groups in El Salvador.

Training will also include capacity building of people's understanding of the basic principles of financial education and on business development topics such as market access, business development and negotiation of collective agricultural input purchases. As the capacity for financial management increases, these groups can be connected to formal financial institutions, which can facilitate access to formal credit for members that will also be protected by the insurance products developed.

Introduction of index insurance products for farmers in the target area has scope to both protect and help diversify livelihoods. The insurance protection and compensation can help households maintain their level of wellbeing even when severe shocks occur. In addition, insurance can stimulate increased investments in productive activities by

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<sup>35</sup> Red de Observación Local Ambiental (ROLA), <http://www.marn.gob.sv/400-voluntarios-conforman-la-red-de-observacion-local-ambiental-rola/>

<sup>36</sup> Idiosyncratic risk refers to the particular experience where one household's experience is typically unrelated to neighboring households' (i.e. household-level shocks, such as death, injury or unemployment)

<sup>37</sup> <http://www.funder.hn/centros/cajas-rurales>

enabling access to credit and provide the security of compensation in case a shock occurs. The project will promote weather-index insurance (WII), an insurance product that makes payouts based on a weather index (such as rainfall) reaching a pre-specified threshold, or trigger. The index, which is monitored using satellite data, lowers the cost of an insurance premium given loss assessment processes are avoided, also allowing payouts to be made as soon as the weather index reaches the pre-defined payout level.

The project will support the development and tailoring of a weather-index insurance product for the watershed population. A participatory index design approach will enable tailoring the product with farmers and establishing triggers for the insurance and windows of protection. It will raise awareness and enable access to insurance for vulnerable farmers. The poorest farmers will be able to access the insurance by investing their time in the actions set out in Outputs 2.1.1 and 2.1.2, steadily reducing their vulnerability to climate-related shocks over time, with WFP paying the insurance premiums. To ensure long-term sustainability and the phase-out of the subsidy of the premium, the output will strengthen local and national capacity. It will be designed to gradually transition farmers to pay for insurance themselves, or to identify mechanisms (under Output 1.1.3) to enable governmental subsidies if the premium remains unaffordable for these farmers. Specific details will be decided through analysis and consultation with the communities and identified partners during the product design phase.

One of the potential partners for the design of a product applicable to WFP beneficiaries in Central America is MiCRO<sup>38</sup> (see above).

## **B. How the project would promote new and innovative solutions to climate change adaptation, such as new approaches, technologies and mechanisms**

WFP is collaborating with partners to test and scale up innovative ways of providing rapid assistance to the poorest and most vulnerable farmers after a shock, helping them become more climate resilient and food-secure. WFP recognises that in order to achieve sustainable food security, it is essential to rely on a comprehensive set of integrated risk management strategies and tools that provide an early response after a shock, while reinforcing the ability of food insecure communities to cope with future climate change impacts. The project will introduce an innovative climate risk management approach which combines different components that mutually reinforce each other into one integrated strategy. This integrated approach will strengthen household and community adaptive capacities through the implementation of a range of interconnected risk strategies, including risk reduction (improving resource management through the climate adaptation practices); prudent risk taking (providing capacity building on livelihoods diversification, climate change adaptation planning and microcredit); risk reserves (enabling savings); risk transfer (introducing microinsurance to compensate farmers in the event of weather-related shocks); and risk information (providing timely, tailored and co-produced climate services for smallholder farmers and communities). This combination of activities aims to build the adaptive capacities of these communities by protecting them from climate-related shocks, reducing their use of negative coping strategies, and stimulating faster recovery.

As part of the integrated climate risk management approach, some of the tools and services that will be introduced are particularly innovative in the regional context. Microinsurance is a powerful tool for smallholders to manage climate risks and achieve resilient livelihoods, while also enabling investments and growth in the agricultural sector. The potential for index insurance to build resilience for rural smallholder farmers to climate-related risk has only recently begun to be realised and is a relatively new concept in El Salvador and Honduras. Index insurance as a solution to transfer risks from communities to capital markets to support quick recovery after a climate-related disaster is an increasingly utilised mechanism. The project will also introduce “last mile” climate services that haven’t been made available to these vulnerable populations in Central America to date. By systematising these practices and focusing on institutional strengthening, the project aims to support transformative adaptation in the two countries.

The project’s focus on binational cooperation in the watershed is also considered to be an opportunity to encourage binational sharing of knowledge and expertise - and replication of successful innovations - on both sides of the border. Further, the project’s emphasis on enhancing cooperation among government stakeholders is considered to be innovative (and cost-effective) in creating synergies between integrated watershed management and climate change adaptation approaches and hopes to provide an example to other countries considering cross-border collaboration in addressing climate change concerns across a catchment area.

## **C. Describe how the project would provide 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 would**

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<sup>38</sup> <https://www.microrisk.org/countries-regions/central-america/>

## **avoid or mitigate negative impacts, in compliance with the Environmental and Social Policy of the Adaptation Fund**

This project proposal provides the following environmental, economic and social co-benefits:

### **Environmental benefits**

Integrated watershed management of natural resources will be central to promote enhanced climate change adaptation and food security to the targeted communities and households, and to achieve long-term environmental benefits in the project areas. Such an approach entails the rational utilisation of land and water resources for optimal production, but with minimum impact on natural and human resources. It will result in a lower rate of land erosion, reduction of sediment in the watershed, increased water retention, increase forest coverage, crop diversification and reduced vulnerability to climate-related shocks. Activities related to water harvesting, tree planting and water infiltration practices will contribute to increased soil fertility and overall ecosystem health. Soil conservation practices will also offer the opportunity to both preserve land and infiltrate water, improve water quality to the surrounding environment. The integration of these efforts across the watershed as a binational intervention will further promote a geographical approach that is defined by nature rather than the limits set by political administrative divisions.

### **Social benefits**

#### *Adaptive capacity*

In order to build the adaptive capacity of households and communities to adapt their lives and livelihoods to the impacts of climate variability and change, the project recognizes that an important emphasis is needed to be placed on analysis of information needs so that people - and governments supporting these actions - can understand the climate impacts, possible adaptation options, and to plan accordingly. The project has been especially designed to ensure that its components, outcomes and outputs are interconnected and all necessary to sustainably improve the targeted populations' adaptive capacity and enable lasting impacts.

In order to improve the understanding of appropriate climate actions, a core focus for Output 1.1.2 is to undertake the necessary analysis and consultation with different experts and communities across the watershed in both countries, to improve and expand the Guide, as well as develop the Handbook of Adaptation Options, and which will then inform all activities undertaken under Component 2. Special emphasis is placed on vulnerable and marginalized populations to guarantee these groups will be able to access the process design and implementation.

These actions will further facilitate overall capacity strengthening of local governments and communities in climate change adaptation planning and implementing integrated climate risk management strategies under Component 1, including through the binational governance body (Output 1.1.1) and local planning groups (Output 1.1.2) to encourage cooperation and knowledge-sharing.

#### *Enhanced food security and nutrition and improved incomes*

Experience shows that all activities under Component 2 can enhance food security and incomes while building climate resilience. Farmers should be able to produce during the lean season and moderate drought episodes and plan for shocks or a changing climate. Tailored climate information and risk finance instruments will assist households meet their food needs. In addition, through more disposable income, participants will be better able to invest in farming, further improving their livelihoods and wellbeing while enabling diversification and increased adaptive capacities. Insurance products will help protect their investments and instil confidence in capacity to diversify livelihoods and grow household wealth.

Given that climate-sensitivity of the most vulnerable populations in the watershed are agriculturally-based, and that any climate shock shows a clear link to increasing their food insecurity, malnutrition and continued cycle of poverty, the project places a strong emphasis on ensuring that adaptive practices targeted at smallholder farmers and communities have the dual outcome to also reduce poverty and improve their food security and nutrition. This includes integrating a climate change adaptation lens to Community Based Participatory Planning exercises that are used to help communities to identify actions to build their food security and resilience.

Further, all activities selected under Component 2 have dual-benefits for food security and climate resilience. Thanks to the co-benefits of the climate adaptation activities, farmers will be able to improve production and incomes during the lean season and to moderate drought episodes, while also improve their resilience to future climate shocks. Combining livelihood diversification and climate smart agricultural practices, tailored climate information and risk finance instruments, households can also ensure their basic food needs can be met, resulting in improvements in food security and nutrition, and guarantee an income, which they can rely on and continue to grow. In addition, through more disposable income, participants will be better able to invest in their own farming activities that further improve their

livelihoods and wellbeing while enabling diversification and increased adaptive capacities. The insurance also helps protect their investments and helps promote confidence in their livelihoods diversification and growth.

#### *Gender empowerment and vulnerable groups*

Analyses and field experience highlight that women have lower access to resources and lower decision-making power than men in the watershed area. Women carry out a large portion of the farm work together with household and family care work. The impacts of climate change are increasing the burden on women and communities that were already vulnerable. Frequent droughts and crop failure are seriously affecting families' livelihoods and women and children are forced to contribute even more to household income, without being released from their domestic responsibilities. Education and health outcomes for children are also affected negatively. Assistance is therefore clearly needed to build women's resilience to the impacts of climate variability and change while attempting to change prevailing gender inequalities.

The project will contribute to gender equality and women's empowerment through a gender mainstreaming approach shaped by determination to ensure equal rights, access and opportunities for participation and leadership in the project and in community decision-making. Civil society – national NGOs as well as community-based organisations – will be involved in all decision-making so that the project integrates vulnerable groups (such as women and indigenous people) concerns. The project will adopt Free, Prior and Informed Consent (FPIC)<sup>39</sup> principles during all engagement with indigenous communities and their representatives. The project will ensure that communities are part of the climate change adaptation solutions and that any activity is adapted to their needs, culture and traditions.

#### **Avoiding or mitigating negative impacts**

The following measures will ensure that project activities are designed and implemented in a way that does not cause negative social or environmental impacts:

- There will be genuine, not just tokenistic, inclusion of community representatives in project design, implementation and monitoring.
- Government collaboration and alignment will be enhanced through the integration of project goals with local development plans.
- Technical support will be sought especially in relation to sensitive or specialised services. Examples include gender issues as well as microinsurance, irrigation and integrated resource management.
- The binational body, the CdT 4H Guide and the Handbook on Adaptation Options will ensure Implementation will be in accordance with national standards and safeguards articulated in various strategies and guidance documents.
- Grievance and feedback mechanisms will be developed and communities encouraged to understand and use them.
- During full project formulation stage, an environmental and social risk assessment will be performed, in accordance with the Adaptation Fund's 15 principles.
- There will be activity-level environmental and social screening for the components' activities at project implementation stage.
- Environmental and social risk management plans, commensurate with the risks assessed, will be developed at project formulation stage.
- Planning, implementation and monitoring of necessary mitigation measures will be identified by means of activity-level environmental and social screening.

#### **D. Describe or provide an analysis of the cost-effectiveness of the proposed project and explain how the regional approach would support cost-effectiveness.**

A central rationale for the binational approach of this project is to leverage opportunities across the watershed that can generate cost-effective and efficiency benefits. From the most basic implementation perspective, the regional approach allows cost sharing among the two countries, especially in relation to the hiring of coordination and technical expertise for specific activity areas.

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<sup>39</sup> FPIC is a methodology now frequently deployed by development actors to establish bottom up participation and consultation of indigenous communities prior to the beginning of a project within their ancestral land or using resources within it. It conforms with aspirations set out in the *United Nations Declaration on the Rights of Indigenous Peoples*.

Furthermore, under Component 1, the project is designed to complement and enhance the efficacy of ongoing initiatives in the watershed by adding value to current national, sub-national and regional efforts and draw on lessons learned from previous binational cooperation. Thus, the project will not have to begin with testing and developing new tools, systems, and approaches that can be costly and timely to adjust into successful models. The lessons learned, best practices, and achievements under previous initiatives will help ensure savings in this regard.

The reinvigoration of the binational governance body also allows the project to enable a mechanism for the exchange of best practices, experiences and lessons learned. In this way, old and new successes can be promoted, enabling an easier replication across and beyond the watershed – and importantly beyond the length of the project itself. The project will further benefit from an extensive network of partners, allowing existing capacities and partnerships to be easily mobilized and enabling external investments in both time and financial resources.

Each of the Outputs 1.1.1, 1.1.2 and 1.1.3 aim to bring these partners and institutions together to facilitate collaboration and forge a self-sustaining model that can continue beyond the project cycle. The investment of mainstreaming climate change adaptation into local planning and related budgets further makes the project approach more cost-effective by avoiding long-term dependence on a continuous injection of external investments for the continuity of activities.

Under Component 2, the project will ensure that the activities are needs-based by using household surveys and Community Based Participatory Planning activities. Concrete interventions will be carefully costed with communities to determine resources that communities can contribute and before decisions are taken on implementation. Ensuring households and communities can adopt an integrated set of risk management practices (Outputs 1.1.1 through to 1.1.4) heightens the project's desired outcomes towards building people's climate resilience. Furthermore, the logistical cost of outreach to beneficiaries can be reduced when channelling multiple adaptation services to beneficiaries through the same facilitating organization.

Making climate information services (Output 1.1.3) available to rural communities is also seen to be cost-effective, as once the information dissemination channels have been established (such as radio or television) the outreach to a wider population can be quite significant at little additional cost. Improving the financial landscape (Output 1.1.4) is also known to produce significant cost-benefits because farmers and other rural actors begin to be able to invest their own resources into savings, credit and insurance, reducing the burden on government funds. There are also distinct advantages to index insurance over traditional indemnity-based agricultural insurance products due to lower administrative costs and reduce cost of premiums.

**E. Describe how the project 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. If applicable, please refer to relevant regional plans and strategies where they exist.**

El Salvador and Honduras have adopted policies, strategies and plans and made international commitments which facilitate actions to promote adaptation and tackle climate change. The project directly aligns, contributes to and supports their implementation.

Among the most relevant, in El Salvador the project fits readily with the Government's Five-Year Development Plan (PQD 2014-2019)<sup>40</sup>, which clearly states the intention to promote conservation, biodiversity, valuation and sustainable use of natural heritage. The country's 2012 National Environmental Policy<sup>41</sup> aims to "reverse environmental degradation and reduce vulnerability to climate change". El Salvador's National Climate Change Strategy<sup>42</sup>, launched in 2013 aims to implement mechanisms and principles coherent with this project as does the 2015 National Climate Change Plan<sup>43</sup> which has an objective "to build a society and an economy that is resilient to climate change and low in carbon,".

In Honduras, the project aligns with and supports the Country Vision 2010-2038<sup>44</sup> of "a productive Honduras, generator of opportunities and decent employment, that takes advantage of its resources in a sustainable way and reduces environmental vulnerability", and the National Plan 2010-2022<sup>45</sup> that contains 11 strategic guidelines for achieving the Country Vision, one of which relates to climate change adaptation and mitigation. Honduras' National Adaptation Plan,

<sup>40</sup> <https://observatorioplanificacion.cepal.org/es/planes/plan-quinquenal-de-desarrollo-2014-2019-el-salvador-productivo-educado-y-seguro>

<sup>41</sup> <http://www.marn.gob.sv/descarga/politica-nacional-del-medio-ambiente-2012/>

<sup>42</sup> <https://www.preventionweb.net/english/professional/policies/v.php?id=59779>

<sup>43</sup> <http://www.marn.gob.sv/download/Plan%20Nacional%20de%20Cambio%20Clim%C3%A1tico.pdf>

<sup>44</sup> [https://eeas.europa.eu/sites/eeas/files/lc\\_10.pdf](https://eeas.europa.eu/sites/eeas/files/lc_10.pdf)

<sup>45</sup> <https://observatorioplanificacion.cepal.org/es/planes/vision-de-pais-2010-2038-y-plan-de-nacion-2010-2022-de-honduras>

presented in 2018, has as a general objective “to guide adaptation actions focused on the integration of sustainable development strategies in order to reduce the adverse impacts of climate change and variability in the country”, and the Master Plan for Water, Forest and Soil<sup>46</sup>, whose main objective is for water, forest and soil resources to be managed sustainably through broad local participation. A thorough breakdown of the specific instruments to which the project aligns can be found in Table 2, with alignment identified at the component level. A list of other relevant policies and strategies is provided in Annex 2.

Table 2. Selected Relevant Policies and Links with Project Components

Policy	Key priorities	Alignment
<b>EI Salvador</b>		
El Salvador Five-Year Development Plan 2014-2019	<p>The Government will promote the conservation, valuation and sustainable use of ecosystem’s services and biodiversity</p> <p><b>Goal 7:</b> Move towards an economy and society which are environmentally sustainable and resilient against climate change effects.</p> <p><b>Number 11.</b> Sustainable cities and communities</p> <p><b>Number 12.</b> Responsible production and consumption.</p> <p><b>Number 13.</b> Climate action</p> <p><b>Number 14.</b> Life of terrestrial ecosystems</p>	<b>Component 2</b>
Environmental Policy 2012	<p><b>General Objective:</b> Reverse environmental degradation and climate change vulnerability in the face of climate change.</p> <p><b>Specific Objectives:</b></p> <ol style="list-style-type: none"> <li>1. Reverse environmental degradation</li> <li>2. Sustainable management of water resources</li> <li>3. Environmental organisation of land use</li> <li>4. Promote a responsible environmental culture.</li> <li>5. Reverse ecosystems and landscape degradation.</li> <li>6. Reduce climate risk</li> </ol>	<b>Component 1 and 2</b>
National Climate Change Strategy 2013	<p><b>Strategic axis 2:</b> Climate change adaptation</p> <p><b>Priorities:</b></p> <ul style="list-style-type: none"> <li>• Adaptation strategies with emphases on agriculture, water resources, infrastructure and health</li> <li>• Restoration of critical ecosystems and rural landscapes</li> <li>• Urban and coastal planning</li> </ul>	<b>Component 2</b>
National Climate Change Plan (NPCC) 2015	<p><b>Component 1-</b> Programme to incorporate climate change and disaster risk reduction into development plans, policies and modernising of public institutions.</p> <p><b>Action 1.</b> Incorporation of strategic climate change and risk reduction incorporation into policies, national budgets, and national development plans at local and sectorial levels.</p> <p><b>Component 3 –</b> Biodiversity and ecosystems management programme for climate change adaptation and mitigation.</p> <p><b>Action 1.</b> Protect, rehabilitate and preserve existing ecosystems and improve their ecological functions</p> <p><b>Action 2.</b> Re-establish ecological connectivity and restore ecologically diverse rural landscapes</p> <p><b>Action 3.</b> Address pressures on biodiversity and reduce ecosystems pollution</p> <p><b>Action 4.</b> Research and innovation, knowledge development and management about biodiversity and ecosystems for climate change adaptation</p> <p><b>Action. 5.</b> Control of land use changes for agricultural, tourism and urban activities</p> <p><b>Component 4.</b> Transformation and diversification programme of agricultural, forestry and agroforestry practices and activities</p>	<b>Component 1 and 2</b>

<sup>46</sup> Agua, Bosque y Suelo (ABS) <https://cuencasgolfodefonseca.org/wp.../Plan-Maestro-Agua-Bosque-y-Suelo-UV.pdf>

	<p><b>Action 1.</b> Transformation of agricultural practices and production diversification with climate resilient alternatives and sustainable development of fisheries</p> <p><b>Action 2. Develop</b> Research, technologies and capacities on climate-resilient crop and agricultural production</p> <p><b>Action 3. Programme to promote development of</b> resilient coffee plantations</p> <p><b>Action 4.</b> Design and implement mitigation actions based on forest and agroforestry adaptation.</p> <p><b>Component 5:</b> Water resources climate change integral adaptation programme</p> <p><b>Action 2.</b> Full integration of the National Water Resources Integrated Management Plan (PNGIRH) as a key instrument for climate change adaptation.</p>	
<b>Honduras</b>		
Country Vision 2010 – 2038	<p><b>Objective 1:</b> A Honduras without extreme poverty, educated and healthy, with consolidated social security systems</p> <p><b>Goal 1.2.</b> Reduce to less than 15 per cent the number of households in poverty</p> <p><b>Objective 3:</b> A productive Honduras, generator of opportunities and decent employment, which takes advantage of its resources in a sustainable manner and reduces environmental vulnerability</p> <p><b>Goal 3.1.</b> Reduce the open unemployment rate to two per cent and the visible underemployment rate to five per cent</p>	<b>Component 1 and 2</b>
National Plan 2010 – 2022: Strategic Guidelines	<p><b>Strategic guideline 1:</b> Sustainable development of the population</p> <p><b>Strategic guideline 5:</b> Health as a foundation for the improvement of living conditions</p> <p><b>Strategic guideline 7:</b> Regional development, natural and environmental resource.</p> <p><b>Strategic guideline 8:</b> Productive infrastructure as a motor of economic activity</p> <p><b>Strategic guideline 11:</b> Climate change adaptation and mitigation</p>	<b>Component 1 and 2</b>
National Adaptation Plan 2018	<p>The general objective of NAP is to guide adaptation actions focused on the integration of sustainable development strategies in order to reduce the adverse effects of climate change and climate variability</p> <p><b>Specific objectives:</b></p> <ol style="list-style-type: none"> <li>1. Generate institutional capability on knowledge management related to climate change adaptation.</li> <li>2. Strengthen multisectoral (inter-institutional and intersectoral) and multilevel coordination (at multiple levels of government from local to national levels) for the formulation and implementation of adequate climate change adaptation at city and community levels</li> <li>3. Promote ecosystems protection, good management and restoration as a fundamental axis of adaptation in rural and urban communities, as well as achievement of environmental and socioeconomic benefits</li> <li>4. Promote the transference and appropriation of adaptation technologies, considering synergies with climate change mitigation</li> </ol>	<b>Component 1 and 2</b>
Master Plan for Water, Forest and Soil 2017.	<p><b>Vision:</b> Honduras is a highly productive country that manages and takes full advantage of water, forest and soil resources with community participation, promoting sustainable human and economic development which is capable of facing climate change risks for the benefit of the entire Honduran population.</p> <p><b>Main objective:</b> Water, forest and soil resources are sustainably managed with broad local participation.</p> <p><b>Objectives:</b> i) Institutions and local organisations with technical and financial capacity to implement integrated land, water and forest management. ii) Strengthened public and private institutions; financial mechanisms and incentives are implemented for the integral management of natural resources and the wellbeing of the population. iii) Knowledge for capacity building and decision making generated and managed. iv) Sustainable practices are implemented for the conservation, protection, restoration and usage of water, forest and soil resources.</p>	<b>Component 1</b>

## **F. Describe how the project 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.**

The proposed interventions will adhere to all national technical standards in both El Salvador and Honduras, particularly those relating to concrete adaptation measures. These include:

- El Salvador's 1998 Environment Law<sup>47</sup>, whose objective is to establish provisions for the protection, conservation and recovery of the environment and the sustainable use of natural resources.
- El Salvador's 2005 Protected Areas Law<sup>48</sup>, whose objective is to regulate the establishment of the legal regime, administration, management and increase of protected natural areas in order to conserve biological diversity, ensure the functioning of essential ecological processes and guarantee the stability of the natural system.
- El Salvador's 2002 Forestry Law, the objective of which is to establish provisions that allow for the increase, management and sustainable use of forest resources and development of the timber industry.
- El Salvador's 1994 Wildlife Conservation Law, which seeks to protect, restore, sustainably use and conserve biological species.
- Honduras's 1993 General Environment Law, whose objective is to ensure the protection, conservation, restoration and sustainable management of the environment and natural resources.
- Honduras's 2013 Climate Change Law<sup>49</sup> whose aim is to establish the principles and regulations necessary to plan, prevent and respond in an appropriate, coordinated and sustained manner to the impacts generated by climate change.
- Honduras's 2007 Forestry, Protected Areas and Wildlife Law<sup>50</sup>, which establishes the legal framework for administration and management of forest resources, protected areas and wildlife, including its protection, restoration, exploitation, conservation and promotion, fostering sustainable development, according to the social, economic, environmental and cultural of the country.
- Honduras's 2009 General Water Law<sup>51</sup>, which aims to establish the principles and regulations applicable to the proper management of water resource for protection, conservation, valorisation and use of water resources to promote the integrated management of this resource.

Ongoing consultations with the following entities will take place at all stages of project design and implementation to ensure that all project activities comply with relevant national technical standards:

1. Ministry of Environment and Natural Resources (MARN) – El Salvador
2. National Center for Agricultural and Forestry Technology (CENTA) – El Salvador
3. Ministries of Foreign Affairs (RREE and SRECI) – El Salvador and Honduras
4. Ministry of Natural Resources and Environment (MiAmbiente) - Honduras
5. Institute of Forest Conservation and Development, Protected Areas and Wildlife (ICF) – Honduras
6. Presidential Office for Climate Change (Clima+) - Honduras

Necessary safeguards will be incorporated into project design through environmental and social assessments and during implementation through monitoring and evaluation. The project will fully comply with the Environmental and Social Policy of the Adaptation Fund and WFP's environmental policy. Controls will be put in place to ensure that the project will not exacerbate inequalities, negatively impact marginalised populations nor harm the environment.

## **G. Describe if there is duplication of project with other funding sources, if any.**

For the preparation of this concept note, key stakeholders were consulted and a complete mapping of potential overlapping activities was carried out in order to avoid any potential duplication of efforts or resources. The proposed project will not create duplications with other multinational, trans-boundary or national organisations, but will create synergies with, strengthen and build on current and former initiatives and activities implemented in the area.

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<sup>47</sup> Ley de Medio Ambiente [www.oas.org/osde/fida/laws/legislation/el\\_salvador/el\\_salvador\\_233.doc](http://www.oas.org/osde/fida/laws/legislation/el_salvador/el_salvador_233.doc)

<sup>48</sup> Ley de Áreas Naturales Protegidas <https://www.asamblea.gob.sv/decretos/details/411>

<sup>49</sup> Ley de Cambio Climático <https://observatoriop10.cepal.org/es/instrumentos/ley-cambio-climatico-decreto-297-2013>

<sup>50</sup> Ley Forestal, Áreas Protegidas y Vida Silvestre (LFAPVS)

<sup>51</sup> [www.poderjudicial.gob.hn/CEDIJ/Leyes/Documents/LeyGeneralAguas.pdf](http://www.poderjudicial.gob.hn/CEDIJ/Leyes/Documents/LeyGeneralAguas.pdf)

There are a number of initiatives being implemented in the watershed area and in the wider region which the proposed project will complement.

The Improved Coastal Watershed and Livelihoods Project<sup>52</sup> 2016 – 2019, a binational initiative implemented by the International Union for Nature Conservation (IUCN) which aims to improve the management of the Goascorán lower watershed and coastal zone natural resources. The proposed project will build on the work done by this initiative on binational governance in the lower watershed. It will take into consideration lessons learned and best practices and it will ensure the incorporation of their governance efforts into the broader framework of watershed bi-national governance.

Nuestra Cuenca Goascorán<sup>53</sup> (NCG) Phase II. Funded by the Swiss Agency for Development and Cooperation (COSUDE), the project has been implemented in the Honduran side of the watershed. Phase I (2015-2018) was executed by an institutional consortium led by IUCN. Phase II will be implemented by a consortium integrated by GFA Consulting Group and the Swiss Red Cross and is expected to start in May 2019 and end December 2020. The project prioritises the upper and middle watershed and seeks to strengthen community management of the Río Goascorán watershed and improve the quality of life of its inhabitants in face of the challenges posed by climate change and risks for disasters. The project will be implemented in close coordination with this initiative, in order to create synergies and maximise impacts. The coordination will allow this project to extend NCG's expertise in implementing adaptation and restoration interventions to more beneficiaries and locations under this Adaptation Fund project. In addition, the Adaptation Fund project will enhance NCG's project with providing its beneficiaries with innovative climate-resilience tools and services, including last-mile climate services and risk financing instruments such as microinsurance. Consultations with the project team are ongoing and will continue during full project preparation to ensure the two initiatives complement each other, including in the choice of specific target sites, partners and activities.

In El Salvador there is a recently approved Green Climate Fund initiative, *Upscaling climate resilience measures in the dry corridor agroecosystems of El Salvador* (RECLIMA)<sup>54</sup>, which aims to improve the resilience of vulnerable farmers to the impacts of climate change. Implementation will be led by the Food and Agriculture Organisation (FAO) with whom project planners will have a close liaison.

The project will also build on past experiences by different actors to scale up approaches that have proven effective. The project is different for its holistic and comprehensive approach to climate change adaptation and integrated watershed management across the whole watershed, including a focus on binational governance and government capacity strengthening. The project offers a vehicle for bringing together the other existing initiatives under a common approach.

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

The project will emphasize the collection, analysis and dissemination of lessons learnt and best practices at binational, national and local levels. The two project components include actions of capacities strengthening as well as knowledge and information generation and dissemination.

The binational governance body establishment will play a fundamental role for knowledge management. An effective mechanism will be developed for the binational body to be able to systematically analyse lessons learnt and identify and replicate best practices in and outside of the watershed, even after the project end-date. A strong emphasis will be placed on ensuring vertical and horizontal communication, so that the sharing mechanism works between the communities and the different stakeholders of the Binational Body. There will be annual convening events to disseminate lessons learnt and to work on strengthening the mechanism. The improved "CdT 4H" Guide and the Handbook on Adaptation Options produced through the project (Output 1.1.2) will remain with the governments and communities. The Binational Body will also encourage the dissemination and further development of these products to support best practices to be replicated by government social programmes and communities beyond the project cycle.

As part of the investment in a binational knowledge-sharing mechanism, the project will develop a Monitoring, Evaluation and Learning (MEL) system which focuses on collection and analysis of evidence-based lessons for improving or influencing implementation. Capacity strengthening actions will also be provided under the training of trainers (ToT) modality to ensure long-term sustainability and to enable the beneficiaries to transfer knowledge and capacities to other actors in and outside the watershed.

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<sup>52</sup> <https://www.iucn.org/regions/mexico-central-america-and-caribbean/improved-coastal-watershed-and-livelihoods-project-%E2%80%9Csource-sea%E2%80%9D>

<sup>53</sup> <https://www.iucn.org/es/regions/meso-am%C3%A9rica/nuestro-trabajo/agua-cuencas-y-costas/proyectos-en-curso/gesti%C3%B3n-de-cuenca-en>

<sup>54</sup> <http://www.fao.org/news/story/es/item/1158648/icode/>

**I. 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.**

Between June 2017 and April 2019, WFP conducted stakeholder consultations with Governments entities, communities, development partners and NGOs, to understand the existing challenges and needs, ongoing and planned projects, experience and lessons learnt by various organizations in addressing the impact of climate change and variability in the country.

WFP has worked in close coordination with MARN, CENTA and RREE in El Salvador and with MiAmbiente, ICF, Clima+ and SRECI in Honduras to develop the project pre-concept and concept notes. Four binational meetings were held with government counterparts and civil society stakeholders to identify priorities for the project design and jointly develop the strategy and documents, ensuring the alignment with national policies, strategies and standards. Consultations with the various government entities highlighted the following:

- the desire to put the priority on adaptation activities and the need for a binational approach;
- the need to work at both household and community levels to create a more extensive impact in the watershed;
- the need to strengthen climate services in both countries;
- the need for an innovative integrated strategy and the interest in including index micro insurance;
- the desire to allocate the majority of the budget to component 2, in order to work more with the people.

Through meetings and communication with development partners and NGOs, such as IUCN, COSUDE and FAO, previous and existing projects have been mapped to avoid any duplication and identify complementarities and possible synergies with the proposed project. The exchanges with NGOs made it possible to identify the skills already present in the watershed and to agreeing on working together to create a complementarity between the different actions.

The process was complemented by a series of specific analyses, investigations and meetings with institutional and community stakeholders at national, municipal and local level to identify impacts of climate change on food security and livelihoods and wider poverty-reduction needs.

In October 2018, a mission was conducted to assess the context for the integration of risk financing strategies and climate services. The assessment looked at governments, institutions, possible partners and community capacities, needs and strengths on those topics. Community consultations were held through focus group interviews with key actors in both sides of the watershed. Meetings were also held with government entities (DGOA, MARN, MAG and CENTA in El Salvador and MiAmbiente, SAG, DICTA-SAG, ICF and COPECO in Honduras) and possible partners (MICRO, Oxfam, Seguro Furturo).

Between October 2018 and January 2019 different communities' consultation were conducted with local communities to understand the vulnerabilities, needs and capacities at local level. The exercises aimed at collecting information on livelihoods; vulnerabilities, risks and impacts of climate change; gender roles; and needs and capacities. The methodology used was focus group discussions and interviews with community leaders. A specific consultation was carried out with the Lenca indigenous population. The findings of the communities' consultations are summarized in Annex 1.

During full proposal preparation, WFP will continue to engage in a range of consultations including with institutional stakeholders, communities, civil society and the private sector. Community-level consultations will include participatory exercises (using the Community-Based Participatory Planning methodology) to capture the views of elders, adolescents, women, men and community leaders to further identify climate-related threats and vulnerabilities and identify the most appropriate adaptation measures.

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

**Component 1. Enabling environment for the implementation of climate change adaptation mechanisms in the Goascorán watershed.**

*Baseline scenario*

The Governments of El Salvador and Honduras have advanced in adopting policies and in establishing regulatory frameworks to address climate change. Both countries also promote the inclusion of a climate change adaptation focus into local planning – the Municipal Development Plans in Honduras, and the Municipal Land Use Plan and Land Development in El Salvador. However, the transmission mechanisms from national to local level to implement the

policies remain weak. Local planning instruments on both sides of the Goascorán watershed fail to include climate change concerns due to limited awareness, knowledge and capacity at the local level. Local populations also lack access to accurate climate information upon which to make livelihood decisions as well as access to risk financing mechanisms such as index microinsurance. National institutions have the capacities to compile and publicise information to enable adaptation but lack resources, capacities and mechanisms to tailor and share accurate, understandable and useful information to the communities. Index microinsurance is new to Central America and the products available at the moment are not accessible for the vulnerable population.

#### *Additionality*

The project will address the necessity for a regional approach to encompass the watershed area and be able to address the challenges in their totality, developing long term and sustainable climate change adaptive capacities and increasing efficiency. Adaptation Fund resources will support the re-activation of a Binational Governance Body and the implementation of its cooperation mechanisms (Output 1.1.1). The Body will be built upon lessons learnt and good practices of previous governance experiences rather than creating a new body, with stakeholders and actors from previous experiences used to reactivate, unify and strengthen the old investments in governance mechanisms.

Adaptation Fund resources will further be used to support the mainstreaming of a climate change adaptation (CCA) focus into the local planning instruments to strengthen the foundation for an enabling environment for vulnerable households (Output 1.1.2). Specifically, the project's activities will support the replication of the Honduran CdT 4H Guide through the alignment with the NAPs, the adaptation to the reality and needs of the watershed population and the implementation in the entire watershed area. In addition to the guide, WFP would work with a range of national and local institutions and communities to develop a Handbook on Adaptation Options, taking into account the range of climatic variability and climate change concerns for the watershed.

The project will also apply Adaptation Fund resources to work with national institutions (Output 1.1.3) and build upon existing capacities to generate mechanisms to deliver accurate and tailored climate and weather information (climate services) that meets the needs of the populations in the watershed. Given index insurance a new product in the Central America region, resources will also focus on creating an enabling environment of willing and able partners to offer such products, as well as conducive financial sector regulation and regulatory bodies. The project will work to strengthen these institutions, facilitating dialogue between regulators in the Central America region on international learning on index insurance regulation, and will work with national insurance companies and distribution channels to strengthen, or build, their offering of financial products to protect against the financial consequences of climate events.

## **Component 2. Improved the adaptive capacity of vulnerable households and communities, through the introduction of climate change adaptation best practices, climate services and climate risks financing strategies**

#### *Baseline scenario*

Without the integrated climate change adaptation strategy proposed in this project, the baseline scenario would see continued negative impacts of climate variability and change, including continued shortage of water as rain fails and deterioration in livelihood resilience (especially for smallholder farmers), in environmental degradation and in food security. These trends will worsen in the long term as climate change effects advance. Unless concrete adaptation measures are developed, lack of income, land degradation and water shortage will continue to exacerbate. People will also remain without access to timely, understandable climate information that they can trust and use to make well-informed decisions. They will also remain without access to risk financing instruments such as savings, credit and insurance, limiting their capacities to take well-informed risks that increase their productivity and incomes due to reduced household capacities to absorb climate-related shocks

#### *Additionality*

Adaptation Fund resources will be used to introduce an innovative climate risk management approach which combines different activities to mutually reinforce each other into an integrated strategy. This integrated approach will strengthen household and community adaptive capacities and resilience. The project will implement climate change adaptation practices at household level to strengthen people's livelihoods and adaptive capacities (Output 1.1.1) and at community level to strengthen the watershed natural resources against future climate risks (Output 1.1.2). The specific climate change adaptation activities will be tailored based on the specificities and needs of the high, middle and low watershed ecosystems and the residing populations. Moreover, the project will work with the communities to identify which type of climate and weather information and advisories they need and deliver this information through the most effective, trusted and preferred dissemination channels (Output 1.1.3). It will also provide training to ensure that the information is understood and effectively used by the household and communities to adapt to climate variability and change. Lastly, the project will improve access to savings and credit and provide index microinsurance to vulnerable smallholder farmers (Output 1.1.4). Through this, when a sever-shock occurs, farmers will receive compensation for weather-related losses, preventing them from selling their assets and stimulating faster recovery.

## **K. Describe how the sustainability of the project outcomes has been taken into account when designing the project.**

During the entire project design process, much emphasis is placed on ensuring sustainability. Accordingly, the project has determined a sustainability strategy underpinned by the binational mechanism and two integrated elements: 1) promoting the countries ownership; and 2) simultaneously strengthening capacities at multiple levels.

The first fundamental factor for the strategy is the re-activation of the binational governance body and the establishment of its mechanisms. These will enable coordination processes so that once the project is over, all the involved stakeholders will be able to carry on and replicate the adaptation work across and outside the watershed. The binational body will also emphasise the creation of a strong knowledge management and systematisation to ensure cooperation and replication beyond the project end-date.

Secondly, an important element is building processes to guarantee ownership by the countries' institutions and populations who will be involved in the project. Ensuring that the binational body and mechanisms and the project approaches are designed by these stakeholders, derived from consensus, and aligned with the countries policies and strategies, will determine the success of the project. To ensure this, the project is being designed through extensive consultations and involvement of relevant governments as well as local communities' stakeholders. Moreover, political willingness (at the highest level) is crucial for advancing toward a lasting integrated management, and active local actors' participation is fundamental to guarantee functionality and sustainability of coordination between multiple countries.

Another important sustainability element is the capacity strengthening actions in both components. The project will work at regional, national, local and community levels to ensure that all key stakeholders have adequate knowledge and skill to maintain and replicate the integrated project strategy and benefits. Through component one, the project will strengthen institutional capacities to provide communities with effective climate services and risk financing mechanisms, and in supporting the integration of climate change adaptation into the community-level planning. In component two, the project will focus on enhancing the vulnerable population capacity in a variety of climate adaptation practices and to effectively act on climate information and risk financing mechanisms.

To ensure that project actions continue after the project end-date, all adaptation planning and activities will be designed and implemented jointly between technical experts, governments and communities, leaving the technical expertise within the communities, the watershed and the countries. The work with local stakeholders to strengthen their ability to integrate climate change adaptation into local planning will enable a constant and organised effort to improve adaptation in the watershed in the long term. The use of training of trainers (ToT) modalities, and investment in coordination at the territorial and binational levels, will provide a number of benefits after the project end-date, including the ability for all the beneficiaries to transfer the knowledge and capacities to other actors in and outside of the binational watershed territories.

## **L. Provide an overview of the environmental and social impacts and risks identified as being relevant to the project.**

Project activities will be designed, planned and implemented in order to minimise any risk for negative social and environmental impacts. Activities will be designed in close consultation with beneficiaries – including the most vulnerable groups – and stakeholders will take into account the different needs and constraints of these groups.

A preliminary social and environmental risk assessment was performed based on the Adaptation Fund's 15 environmental and social principles outlined in the Adaptation Fund Environmental and Social Policy. Component 1, which mainly includes capacity development, strengthening of governance and dissemination of information, is not expected to have a negative effect on the environment. Activities under component 2 might have potential negative environmental impacts if not implemented properly. However, these activities are not yet fully defined at this early stage and will be further developed with the communities during full proposal preparation and project implementation. The project is therefore categorised to be "medium risk", or category B. The below table shows the results of the preliminary social and environmental risk assessment carried out during the development of this project concept note. All future activities will be screened against the Adaptation Fund's 15 principles. An environmental and social risk assessment will be carried out during full project preparation, when concrete activities will be defined, and an environmental and social risk management plan will be developed to mitigate risks identified.

Checklist of environmental and social principles	No further assessment required for compliance	Potential impacts and risks – further assessment and management required for compliance
<i>Compliance with the Law</i>	x	<b>No risk.</b> Relevant national and local authorities will be consulted during the proposal development process to ensure compliance with all relevant laws.
<i>Access and Equity</i>		<b>Low to no risk.</b> In-depth consultations with communities and stakeholders during the proposal development process and throughout project implementation will ensure that no activity will interfere with access to basic services or exacerbate existing inequalities. The project will promote the equitable access to activities and assets by youth, elders and women in targeted communities as well as equal and inclusive participation and leadership from both men and women in decision making spaces. The project will ensure that any activity includes marginalised and vulnerable groups such as elderly, youth, indigenous people and disabled.
<i>Marginalised and Vulnerable Groups</i>		<b>Low to no risk:</b> Marginalised and vulnerable groups – especially women and indigenous people - will be consulted during the development of the full proposal to ensure that project design responds to threats, priorities and mitigation measures they identify. This project will empower vulnerable groups to make decisions on concrete adaptation actions, valuing their traditional and local knowledge. In order to ensure appropriate design of activities to meet marginalised and vulnerable groups' needs, the project will seek to understand and analyse challenges experienced by these groups in accessing specific services (such as climate information and financial products). Means to determine this information include a mix of household surveys, focus group discussions and community consultations.
<i>Human Rights</i>	x	<b>Low to no risk:</b> This project affirms the rights of all people and does not violate any pillar of human rights.
<i>Gender Equity and Women's Empowerment</i>		<b>Low risk:</b> The project will be implemented in a context where gender inequality is prevalent, therefore greater efforts should be made to ensure that project activities contribute to gender empowerment. This project will promote women's leadership in governance processes and decision-making power for climate change adaptation and food security and nutrition. Through targeted consultations with women, project design and implementation will ensure that gender considerations are integrated. Both women and men will equally participate and lead inclusive participation and decision making spaces. During project formulation, a gender assessment will be carried out to ensure that the project effectively responds to the unique needs of women and girls and promotes gender equity.
<i>Core Labour Rights</i>	x	<b>Low to no risk:</b> The project will ensure respect for international and national labour laws and codes, as stated in WFP's policies.
<i>Indigenous Peoples</i>		<b>Low risk.</b> Lenca communities are settled in the project implementation area, especially in the upper watershed. Representatives of the Lenca communities have been consulted during the preparation of this concept note. Extensive consultation will be carried out during full proposal preparation, including a full Free Prior and Informed Consent (FPIC) process, to ensure that the project appropriately incorporates indigenous peoples priorities and needs in all activities.
<i>Involuntary Resettlement</i>	x	<b>No risk:</b> The project will not lead to involuntary resettlement.
<i>Protection of Natural Habitats</i>		<b>Low risk.</b> By implementing sustainable land use, conservation and restoration and integrated water management activities, the project will ensure the protection of natural habitats. In addition, consultations with government stakeholders, community leaders and communities will ensure that conversion or degradation of critical natural habitats (including those that are legally protected, officially proposed for protection, recognised for their high conservation value, or recognised as protected by traditional or indigenous local communities) is avoided.
<i>Conservation of Biological Diversity</i>		<b>Low to moderate risk</b> Crop diversification and reforestation activities could lead to a deterioration of biological diversity if seed, crop types and tree species are not correctly selected, for example resulting in inadvertent introduction of invasive

		species. To ensure this risk is addressed, this project will prioritise local species and avoid the use of non-native and invasive species.
<i>Climate Change</i>	<b>X</b>	<b>Low to no risk:</b> The project will not generate any significant emissions of greenhouse gases and will not contribute to climate change in any other way. All project components and activities contribute to increasing local capacities to sustainably face climate change in the long-term and climate variability in the short and medium terms.
<i>Pollution Prevention and Resource Efficiency</i>	<b>X</b>	<b>No risk:</b> The project will not release pollutants. Energy efficiency, minimisation of material resource use, and minimisation of the production of wastes will be embedded in project design.
<i>Public Health</i>		<b>Low risk:</b> The project will be designed and implemented in a way that avoids any negative impact on public health. Attention will be given to activities related to water harvesting and storage and communities will be sensitised on how to use and store the water in a safe and efficient way.
<i>Physical and Cultural Heritage</i>		<b>Low to no risk.</b> Consultations and engagement with stakeholders and communities will ensure that any physical cultural heritage present on the project site is identified and potential negative impacts are avoided through project design.
<i>Lands and Soil Conservation</i>		<b>Low to moderate risk</b> The adaptation activities in component 2 could have negative impacts on land and soils conservation, if not designed properly. In addition, increased agricultural production and livelihoods may lead to increased investment in livestock which may have an unintended effect on the environment, mostly on soils and water resources. Sensitisation and training in component 2 will ensure these issues are well understood. The project will identify mitigation and monitoring measures to ensure that unintended negative impacts resulting from its activities are avoided or minimised.

## **PART III: IMPLEMENTATION ARRANGEMENTS**

As confirmed in consultation with the Adaptation Fund Secretariat, Part III will be submitted as part of the Project Proposal stage. Various implementation arrangements are already being discussed among the implementing and executing entities as well as other partners. These will be further developed during consultative exercises for the project proposal.


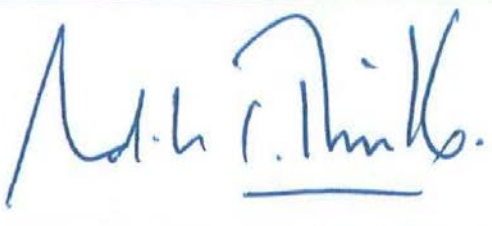
- A. Describe the arrangements for project management at the regional and national level, including coordination arrangements within countries and among them. Describe how the potential to partner with national institutions, and when possible, national implementing entities (NIEs), has been considered, and included in the management arrangements.**
- B. Describe the measures for financial and project risk management.**
- C. Describe the measures for environmental and social risk management, in line with the Environmental and Social Policy of the Adaptation Fund.**
- D. Describe the monitoring and evaluation arrangements and provide a budgeted M&E plan.**
- E. Include a results framework for the project proposal, including milestones, targets and indicators.**
- F. Demonstrate how the project aligns with the Results Framework of the Adaptation Fund**
- G. Include a detailed budget with budget notes, broken down by country as applicable, a budget on the Implementing Entity management fee use, and an explanation and a breakdown of the execution costs.**

## PART IV: ENDORSEMENT BY GOVERNMENTS AND CERTIFICATION BY THE IMPLEMENTING ENTITY

### A. Record of endorsement on behalf of the government

<i>Lina Dolores Pohl, Minister, Ministry of Environment and Natural Resources</i>	Date: 04/2019  See next page
<i>Jose Antonio Galdames, Secretary of State, Secretariat of National Resources and Environment</i>	Date: 04/2019  See next page

### B. Implementing Entity certification

<p>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 of El Salvador and Honduras and subject to the approval by the Adaptation Fund Board, <u>commit to implementing the project/programme in compliance with the Environmental and Social Policy of the Adaptation Fund</u> and on the understanding that the Implementing Entity will be fully (legally and financially) responsible for the implementation of this project/programme.</p>	
<p><i>Andrew Stanhope</i> Representative &amp; Country Director, WFP El Salvador Implementing Entity Coordinator</p>	
Date: April 11 <sup>th</sup> , 2019	Tel. and email: +503 7856 4061/ <a href="mailto:andrew.stanhope@wfp.org">andrew.stanhope@wfp.org</a>
Project Contact Person: <i>Marco Selva, Deputy Country Director</i>	
Tel. And Email: +503 7919 1118/ <a href="mailto:marco.selva@wfp.org">marco.selva@wfp.org</a>	
<p><i>Judith Thimke</i> Representative &amp; Country Director, WFP Honduras Implementing Entity Coordinator</p>	
Date: April 11 <sup>th</sup> , 2019	Tel. and email: +504 2236 9002/ <a href="mailto:judith.thimke@wfp.org">judith.thimke@wfp.org</a>
Project Contact Person: <i>Etienne Labande, Deputy Country Director</i>	
Tel. And Email: +504 3190-7452/ <a href="mailto:etienne.labande@wfp.org">etienne.labande@wfp.org</a>	

## Endorsement letter – El Salvador



MINISTERIO DE MEDIO AMBIENTE Y RECURSOS NATURALES  
UNÁMONOS PARA CRECER

MARN-GAT-02-035/2019

San Salvador, April 4th, 2019

Subject: Endorsement for the project “Improve Livelihood Resilience Through Community-Based Climate Change Adaptation in the Transboundary Watershed of Goascorán in El Salvador and Honduras”.

Mr. Mikko Ollikainen  
Manager of the Adaptation Fund Board Secretariat  
Adaptation Fund Board  
Washington DC, U.S.A

Dear Ms. Ollikainen,

As National Designated Authority (NDA) to the Adaptation Fund, I would like to express our endorsement to the concept note of the regional project between Honduras and El Salvador, entitled “Improve Livelihood Resilience Through Community-Based Climate Change Adaptation in the Transboundary Watershed of Goascorán in El Salvador and Honduras”, to be submitted with the support of the United Nations World Food Programme (WFP).

I confirm that the project (a) is in accordance with my government’s national priorities and our commitment to the relevant global environmental conventions; and (b) that it has, and will engage, other national entities and relevant stakeholders to ensure a holistic and participatory approach.

This project seeks to benefit the communities bordering both countries within the Goascorán watershed, which has historically been shaped by environmental and socio-economic concerns with direct effects in their ecosystem and its water-supply management conditions, hampering into their food and nutrition security.

Sincerely,



  
Lina Pohl  
Minister

## Endorsement letter - Honduras



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

Subject: Endorsement for the project **“Improve Livelihood Resilience through Community-Based Climate Change Adaptation in the Transboundary watershed of Goascoran in El Salvador and Honduras”**

I am pleased to confirm the commitment of the Secretary of Natural Resources and Environment of Honduras, to participate actively in the process to finalize this proposal and to engage other national entities to accompany this process until the approval.

In my capacity as official Designated Authority and Focal Point for the Adaptation Fund, I would like to express our “no objection to the project” and submit this regional project between Honduras and El Salvador.

This project is a great opportunity for the communities bordering both countries within the River “Goascoran” watershed, which has been historically shaped by environmental and socio-economic concerns with direct effects on the ecosystem and its water-supply management conditions, hampering the food and nutrition security in that bordering area. Therefore, we endorse this regional project proposal to be submitted to the Adaptation Fund with the support of the United Nations World Food Programme (WFP). If this Concept Note is approved, I also want to reaffirm our commitment as Secretary of Natural Resources and Environment of Honduras, as well as of the other national entities, to do what is needed to complete this process until its approval, thus ensuring a holistic and participatory approach with all project stakeholders in order to strengthen the adaptive capability and social scheme of the most-in-need communities and families of this bordering area.

Sincerely yours

  
Jose Antonio Gardames  
Secretary of the State



# Annex 1

## Integrated analysis of the Goascorán Watershed

Due to the limited number of pages allowed in the Concept Note, this Annex summarises the three main analysis carried out during the concept note design: community consultations, climate vulnerability and risk analysis, and municipalities prioritisation.

Complete documents for each analysis are available upon request in Spanish.

### PART I – Community Consultations

#### Purpose

The purpose of the community consultations was to generate a better understand of the perceptions, challenges, needs and existing adaptive practices and capacities in the Goascoran watershed, so as to better inform the design of the project components, outcomes and outputs articulated in this concept note.

#### Methodology

Community consultations were carried out through focus group discussions and interviews. Meetings were held in both sides of the watershed with representatives from all the municipalities, to be able to represent the totality of the area.

In El Salvador, consultations saw the participation of municipalities staff, community leaders and key stakeholders, 81 in total (55 men and 26 women). In Honduras, the consultations were held with 32 community leaders and micro-watershed council representatives (19 men and 13 women) and with 35 Lenca indigenous representatives. These were completed during the period 10/2018-01/2019.

Consultations were designed to gather primary information on the watershed, local perceptions on climate change and their impacts on lives and livelihoods. Focus group discussions were also held with women and indigenous populations separately in order to provide a safer environment for minorities to share their perspectives without influence from other peers.

The consultations followed a semi-structured interview process to allow for different participants to share in an open-ended and qualitative way their experiences and perceptions on climate variability and change. Questions asked included the following topics, among others: weather and climate reality and perceived changes; livelihoods and how are affected by the changes; social vulnerabilities and risks; division of labour between men and women.

#### Main findings

- **Climate awareness:** The watershed populations demonstrated awareness that it is living in one of the areas within both countries with the lowest annual rainfall average, proneness to disasters and large food insecurity. When talking about climate change and variability, the key actors reported a strong perception of change in the precipitation patterns and temperature, with consequent difficulties in understanding the start and cycle of current sowing seasons. The main changes identified by the participants are:
  - a light and intermittent rain in the beginning of winter which before was constant;
  - the July *canicula* extends from 1 to up to 5 weeks, followed by irregular and light rain in August;
  - since September irregular rain stronger and intermittent, which continues until October.In many cases, this has led to the loss of seeds and crops, causing high food insecurity in the territory.
- **Threats:** The participants identified that the main threats faced by the communities are recurrent droughts, high temperatures, torrential rains and strong winds, soil erosion, destruction of basic infrastructure, food shortages, pollution and pests and diseases in crops and forests which cause significant impacts on crop loss. They emphasized that scarce water availability in the dry season, floods in the lower watershed related to rains of greater intensity during the rainy season, and a perceived drastic variability in temperature which have strong impacts on the crops. *Caniculas* (heat wave), and drought periods are becoming more recurrent and longer, which causes loss of crops, seeds and animals, directly affecting the decrease in economic income associated with harvests, reduction of job opportunities and migration of rural populations. Informants are also aware that land degradation due to deforestation, indiscriminate burning and other negative agricultural practices is contributing to the occurrence of adverse climatic impacts, but do not have the knowledge or means to adjust these practices.

- **Coping strategies:** The key actors reported that in the last years, the area has lacked livelihood investment projects, compared to other areas in the countries, and in response rural families have increased negative coping strategies to meet their food needs. Often these have been irreversible, because families have had to resort to selling their productive assets, reproducing livestock and even the land where they cultivated their crops. Moreover, small holder farmers are decreasing or eliminating the first basic grains spring sowing in May, because it is most negatively affected by prolonged *caniculas*, and are increasing the second sowing in August-September.
- **Adaptation practices:** When talking about the urgent actions needed in the watershed, the key actors identified the installation of rainwater harvesting and storage systems, supplemented by efficient irrigation systems; diversification of crops and the use of drought-resistant seeds; and protection, reforestation and restoration of water-producing areas. An interesting element was the proposal to implement greenhouses and to establish agroforestry systems (wind-breaking barriers, silvopastoral systems, silage, etc).
- **Systems and governance:** From a socio-economic point of view, they identified the need for capacity building actions on value chains, savings habits, financial mechanisms and micro-enterprises with consequent promotion and possible low interest financing. They also talk about creating and strengthening watershed councils to manage potential conflicts over water in the territory and about strengthening the local governments capacities in the design and application of actions for the natural resources recovery and conservation. Lastly, they identified the need to increase the water harvesting and storage for human consumption and to receive technical assistance on soil conservation practices.

The following are other important points identified by the key stakeholders during the consultations:

**1. Activities align to the livelihoods seasonality to maximise households support.**

Training families in the use and management of microcredits or having strategic savings at the beginning of the harvest, can help households to make their own investments. Programmes that support people to increase their food reserves and cash savings ahead of the food insecurity season will help families to overcome seasonal challenges more easily.

**2. Focus programmes based on the vulnerabilities of households and their requirements.**

The project should take into account people time availability and particular characteristics of each vulnerable group in the community. For example, the provision of basic services such as health, social protection, training and education are universal, regardless of the vulnerability level, but the creation of assets, through the mechanisms of food assistance, is not appropriate for groups with adequate levels of food security and resilience, which surely have enough assets to move forward. This means that the programmes must adjust to the needs and capacities of each group so that they can strengthen their capacities and improve their reality.

**3. Complementarities and links between programmes and partners.**

Individual entities cannot cover the full spectrum of needed activities due to restrictions in their capacity, resources and technical expertise. Establishing links between programmes/projects generates greater complementarity to support people, for example, integrating health and nutrition programmes during food insecure periods can reduce the costs of medicines and treatments. This saving can be invested in the creation of assets during the harvest season, when the conditions are propitious.



Photos 3 and 4. Communities consultation in El Salvador



## **PART II - Climate Vulnerability and Climate Risk Analyses in Goascorán Watershed.**

### **Purpose**

The purpose of undertaking the climate vulnerability and climate risk analysis in the Goascorán watershed was to develop a comprehensive picture of current vulnerabilities and future climate change risks. The assessment of vulnerability to existing climate variability and extremes is a necessary starting point for defining adaptation options. Assessments of past weather events, for example heavy rain or extreme temperatures, and analysis of consequent responses can help to provide insights into successful or ineffective initiatives and to avoid duplications.

### **Methodology**

Information gathered to undertake these analyses are based on primary sources of a qualitative nature as well as secondary sources. Secondary sources involved the El Salvador Second and Third National Communication on Climate Change and the Honduras Second National Communication of Climate Change. Information for this analysis are based mainly on national level secondary sources due to the lack of climate vulnerability data specific for the Goascorán watershed. Interviews were undertaken with municipalities stakeholders and community leaders, thirty-nine in total (28 men and 11 women) and in Honduras with thirty-two community leaders and micro-watershed council representative (19 men and 13 women) and thirty-five Lenca representatives.

### **Main findings**

The watershed gathers 29 municipalities, 13 in El Salvador and 16 in Honduras. The elevation of watershed territory allows classifying it into three categories, high, middle and lower-watershed. Most elevated areas are part of high-watershed in this zone; pastoral activities, agroforestry and ecological tourism are the main livelihoods of the population. In middle-watershed, agriculture and raising of livestock are the main livelihoods. Finally, in lower-watershed, livelihoods include fishing, aquaculture, tourism and commerce as the most important.

According to the community consultations, increasingly frequent droughts, climatic variability, and high environmental deterioration have caused a reduction of productive areas, increase in production costs, decrease in productivity and disincentives in agricultural production.

Frequent droughts have decreased agricultural production quantity and quality, as well as negatively influenced biodiversity (reduction or extinction of a variety of flora and fauna species). Recurrent droughts have increased the number of people in the watershed who are now in a situation of greater vulnerability especially in their food security. Some farmers have had to change their annual crops for perennial crops as a means of adapting to climate variability.

Regarding migration, the interviewees stated that both men and women migrated temporarily to get incomes to cover the expenses of basic needs in health, education, clothing and others. Employment opportunities and local labor in the area are limited. This is related to the effects of climate change on production (previously there were profits in production and now only subsistence production is guaranteed). Interviewed people said that now whole families are migrating and they did it in a permanent way. This has seen a reduction in the amount of remittances injecting into the local economy. One of the main social impacts is family disintegration (Municipality of San Jose La Fuente, La Union, El Salvador), related to the increase in school dropouts, leaving their children vulnerable to the presence of criminal groups in the zone.

As part of the consultations, an exhaustive listing of climatic vulnerability and risks found in the watershed, as well as adaptation actions, are presented in the next table.

Table 1. Climate Vulnerability, Risks and Actions

Impact	Causes	Current Effects	Future Effects	Affected Areas	Actions performed	Proposals for adaptation actions
<p>Impacts associated with El Niño phenomenon</p>	<ul style="list-style-type: none"> <li>• More recurrent and prolonged droughts</li> <li>• The most recurrent and prolonged El Niño Phenomenon</li> <li>• Temperature Increase</li> <li>• Deforestation and forest fires.</li> <li>• Overexploitation of water flows.</li> <li>• Loss of moisture in the soil due to inadequate management of cultivation areas.</li> <li>• Little cultivation of Drought-resistant species</li> </ul>	<ul style="list-style-type: none"> <li>• Decreased agricultural productivity</li> <li>• Food Shortages</li> <li>• Increased levels of malnutrition</li> <li>• Crop loss</li> <li>• Drinking water rationing</li> <li>• Reduction of surface water sources and underground aquifers</li> <li>• Loss of river and ravine streams.</li> <li>• Increase of pests and diseases in crops and coniferous forests</li> <li>• Food price volatility</li> <li>• Soil degradation</li> <li>• Increased forest fires</li> <li>• Loss of forest cover</li> <li>• Extension of the agricultural frontier</li> <li>• Agricultural migration</li> <li>• Land use changes</li> <li>• Extinction of flora and fauna</li> <li>• Income reduction</li> <li>• Unemployment in the agricultural sector.</li> <li>• Conflicts between water users.</li> <li>• Increased migration to USA and elsewhere.</li> <li>• Reduction in sowing periods during the</li> </ul>	<p><b>El Salvador</b> Under the horizon of 2021-2030, the Precipitation reductions could be in the order of between a 15-25 %</p> <p><b>HONDURAS</b> Under the horizon of 2021-2030, precipitation reduction is expected to be 30 per cent in the Dry Corridor. Erratic distribution of rains expected to affect primary livelihoods of the area. Rise in sea level expected to cause salinization of freshwater aquifers by over-exploitation of water resources.</p>	<p>All the municipalities in the basin were affected, some with greater severity than others.</p> <p>The municipalities most affected are its</p> <p><b>EL SALVADOR</b></p> <ul style="list-style-type: none"> <li>• Concepción de Oriente</li> <li>• Jocoro</li> <li>• Sociedad</li> <li>• Corinto</li> <li>• Pasaquina</li> <li>• Santa Rosa de Lima</li> <li>• San José</li> <li>• Bolívar</li> </ul> <p><b>HONDURAS</b></p> <ul style="list-style-type: none"> <li>• Santa Ana</li> <li>• Opatoro</li> <li>• Guajiquiro</li> <li>• San Antonio del Norte</li> <li>• Caridad</li> <li>• Aramecina</li> <li>• Langue</li> </ul>	<ul style="list-style-type: none"> <li>• Government declares state of emergency</li> <li>• Delivery of agricultural packages to affected producers</li> <li>• Food delivery</li> <li>• Deepening of private underground wells for the irrigation of sugar cane and other crops</li> <li>• Fire brigade interventions to tackle forest fires</li> <li>• Opening of wells for drinking water extraction</li> <li>• In a few places, establishment of micro-irrigation projects and rainwater collection reservoirs</li> </ul>	<ul style="list-style-type: none"> <li>• Increase the Water collection infrastructure in the rainy season.</li> <li>• Increase the water supply of natural springs through reforestation, infrastructure and good practices in soil and forest</li> <li>• Improving the scope of climate services for small producers to improve their resilience to the drought impact</li> <li>• Identification of needs and strengths of the territories and the promotion of them with measures by climate change adaptation and Disaster Risk Reduction</li> <li>• Capacity building of watershed agencies</li> <li>• Design of municipal risk management plans</li> <li>• Design of municipal planning and territorial development plans</li> <li>• Capacity-building of watershed agencies.</li> </ul>

Impact	Causes	Current Effects	Future Effects	Affected Areas	Actions performed	Proposals for adaptation actions
		year mainly in small producers.				
Impacts by decrease and change and seasonality of the average rainfall and by increase in intensity in the extreme events	<ul style="list-style-type: none"> <li>• Extreme weather Events more frequent and intense (hurricanes, storms and tropical waves, torrential rains, etc.)</li> <li>• Nina Phenomenon</li> <li>• Deforestation of watersheds</li> <li>• Sedimentation of rivers and streams</li> <li>• Lack of drainage systems or in poor condition</li> <li>• Presence of solid waste in river beds and mouths.</li> <li>• Change of land use and urban development without control or environmental planning.</li> </ul>	<ul style="list-style-type: none"> <li>• Partial or total damage to arable land and pastures</li> <li>• Increase of pests and diseases in crops</li> <li>• Animals death</li> <li>• Food shortages</li> <li>• Increased levels of malnutrition</li> <li>• Increased migration and number of people affected by floods</li> <li>• Loss and damage to roads and bridges</li> <li>• Damage to potable water systems and sewers</li> <li>• Losses and contamination of surface water sources</li> <li>• Increase of gastrointestinal and dermatological illnesses</li> <li>• Loss and negative effects on the houses</li> <li>• Contamination of Water sources</li> <li>• Increase of pests and vectors of human diseases</li> <li>• Increased mortality rates</li> <li>• Impoverishment of the affected population</li> </ul>	<p><b>El Salvador</b> Year-on-year changes show a behaviour towards increases in precipitation, with a high probability of extreme events increase. During the dry season (December to April), Increases in precipitation above 10% are expected.</p> <p><b>HONDURAS</b>  Increased flooding in the middle and lower area of the basin, loss of natural barriers to infiltration, resulting in runoff that degrades soils and sharp flow increases in the main rivers and their tributaries.</p>	<p>Delta and low plains as areas susceptible to flooding.</p> <p>The municipalities most affected are</p> <p><b>EL SALVADOR</b></p> <ul style="list-style-type: none"> <li>• Pasaquina</li> <li>• Lislique</li> </ul> <p><b>HONDURAS</b></p> <ul style="list-style-type: none"> <li>• Alianza</li> <li>• Valle</li> <li>• Opatoro</li> <li>• Guajiquiro</li> </ul>	<ul style="list-style-type: none"> <li>• Emergency declaration at the level of central government and local governments</li> <li>• Establishment of Hostels</li> <li>• Delivery of food, clothing, sheets and other items for flood victims</li> <li>• Delivery of construction materials for housing repair.</li> <li>• Delivery of seeds and fertilizers</li> <li>• Early Warning Systems</li> <li>• Radio communication Systems of civil protection in some municipalities</li> <li>• There are departmental, municipal and communal Civil Protection Commissions</li> <li>• There are Departmental Emergency Committees</li> </ul>	<ul style="list-style-type: none"> <li>• Strengthen communication mechanisms for early warning</li> <li>• Reforestation</li> <li>• Soil and water conservation</li> <li>• Integral management of solid waste.</li> <li>• Design of municipal risk management plans</li> <li>• Design of municipal planning and local development plans.</li> <li>• Capacity building of watershed agencies</li> <li>• Design of municipal risk management plans.</li> </ul>

Impact	Causes	Current Effects	Future Effects	Affected Areas	Actions performed	Proposals for adaptation actions
Impacts by annual average temperature increase	<ul style="list-style-type: none"> <li>• Accumulation of greenhouse gases in the atmosphere that causes global warming</li> <li>• Deforestation</li> <li>• Change in rainfall patterns</li> </ul>	<ul style="list-style-type: none"> <li>• Decreased productivity of crops due to water and caloric stress.</li> <li>• On the exploitation of the soils.</li> <li>• Precipitation reduction.</li> <li>• More wildfires from burning stubble or garbage.</li> <li>• Migration of terrestrial and aquatic species (fish)</li> <li>• Change of ecosystems and biomes</li> <li>• Increased pests and diseases in crops</li> <li>• More frequent and intense heat waves</li> <li>• Health impacts health especially for such vulnerable groups as elders, children and pregnant women.</li> <li>• Reduction of water flows in sources and rivers.</li> </ul>	<p><b>El Salvador</b> During the 2020s and 2030s term temperatures could rise between 0.7 °C and 1.5 °C over historic baseline.</p> <p><b>HONDURAS</b> By 2050 temperature increase of 2-4 degrees above historic levels is anticipated.</p>	<p>All the municipalities of the basin, especially those in the middle and low area.</p> <p>Most affected municipalities are</p> <p><b>EL SALVADOR</b></p> <ul style="list-style-type: none"> <li>• Pasaquina</li> <li>• Santa Rosa de Lima San José</li> <li>• Bolívar.</li> </ul> <p><b>HONDURAS</b></p> <ul style="list-style-type: none"> <li>• Alianza</li> <li>• Aramecina</li> <li>• Goascorán,</li> </ul>	<ul style="list-style-type: none"> <li>• Micro-irrigation systems in some areas of the basin.</li> <li>• Pest and crop disease combat by farmers</li> <li>• Fire Brigade Action in case of fire</li> </ul>	<ul style="list-style-type: none"> <li>• Reforestation</li> <li>• Use crop rotation</li> <li>• Design of municipal risk management plans</li> <li>• Design of municipal planning and development plans</li> <li>• Capacity building of watershed agencies.</li> </ul>
Landslides	<ul style="list-style-type: none"> <li>• Torrential rains during extreme weather events</li> <li>• Soil erosion in hillsides and</li> </ul>	<ul style="list-style-type: none"> <li>• Crop loss and areas for agriculture</li> <li>• Obstruction of transport infrastructure –</li> </ul>	El Salvador The increase in extreme rainfall impacts directly on the amount of landslides	Communities prone to landslides and landslides.  Agricultural land on slopes	<ul style="list-style-type: none"> <li>• Construction of mitigation works such as retaining walls and gabions</li> <li>• Improve the management of</li> </ul>	<ul style="list-style-type: none"> <li>• Capacity building of watershed agencies</li> <li>• Improve the management of watersheds</li> </ul>

Impact	Causes	Current Effects	Future Effects	Affected Areas	Actions performed	Proposals for adaptation actions
	lack of protection works <ul style="list-style-type: none"> <li>• Deforestation of the basin in high and low areas</li> <li>• Inadequate agricultural Practices without soil conservation works</li> <li>• Forest fires</li> <li>• Overgrazing in mountainous areas</li> <li>• Lack of land planning plans</li> </ul>	streets, highways, bridges) <ul style="list-style-type: none"> <li>• Damage to homes located in hazardous areas</li> <li>• Loss of human life</li> <li>• Loss of natural soil fertility</li> </ul>	HONDURAS The increase in extreme rainfall impacts directly on the amount of landslides	Municipalities of the upper and middle basin of the river Goascorán	watersheds through projects <ul style="list-style-type: none"> <li>• Activation of emergency systems by means of civil protection</li> </ul>	<ul style="list-style-type: none"> <li>• Activation of emergency systems through the Permanent Contingency Commission of Honduras (COPEPO)</li> <li>• Design of municipal risk management plans</li> <li>• Design of municipal planning and local development plans</li> <li>• Capacity-Building of watershed agencies.</li> </ul>

## **Part III - Prioritisation process at municipal level of Goascorán Watershed.**

### **Purpose**

The purpose of the prioritisation exercise was to determine which areas of the Goascorán watershed should be targeted with the climate change adaptation activities, especially at the community level under Component 2.

### **Methodology**

The process of prioritising municipalities in the Goascorán watershed was developed through the combination of WFP's Integrated Context Analysis (ICA)<sup>55</sup> and the widely-used analysis of livelihoods methodology developed by the UK Department for International Development (DFID).

This required consultation with local authorities and community leaders to identify strengths and weaknesses in the entire watershed area. The combination of these two analyses allowed prioritisation of the project intervention areas, taking into consideration different vulnerability factors. The combination of social, cultural and climate elements provided a holistic overview. Factors analysed were historical trends (ten years in the case of ICA), livelihoods, land degradation, food security and social, financial, natural, physical and human capital.

### **Findings from the Integrated Context Analysis (ICA)**

The ICA is based on the analysis of the of food insecurity historical trends and the main natural risks, such as droughts, floods and landslides, which are superimposed to identify areas of overlap. Taking into consideration food insecurity and recurrence of disasters allows identification not only of past and present changes, but also what could happen in the future in each different vulnerability category. It enables to identify where and what kind of short, medium and long term actions are necessary to reduce such vulnerability.

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<sup>55</sup> The ICA is a process a process used to identify and discuss the most appropriate programmatic strategies in specific geographical areas - including resilience building, disaster risk reduction, and social protection - between WFP, government and partners. See: <https://documents.wfp.org/stellent/groups/public/.../wfp264472.pdf>

As a result of ICA analysis, the municipalities within Goascorán watershed are classified into five areas of priority, based on their levels of recurrence of food insecurity and exposure to hazards.

Figure 1. Explanation of ICA prioritisation categories

Combined level of natural hazards	Recurrence of vulnerability to food insecurity above threshold		
	Low	Medium	High
Low	<b>Area 5</b> <b>Category 5</b> Absence of long-term vulnerability to food insecurity suggest that programme themes should concentrate on DRR. This includes early warning and disaster preparedness, as well as mitigating land degradation and other risk reduction measures.	<b>Area 3 B</b> <b>Area 3 A</b> <b>Category 3</b> Districts identified as Area 3A show persistent vulnerability to food insecurity that can justify safety nets; Area 3B districts are more likely linked to seasonal factors where safety nets may also be applicable, or shocks where recovery is more of a focus. Whilst natural shock risk is lower, local contexts may benefit from early warning/ preparedness to reduce risk from possible events.	
	<b>Area 4 B</b> <b>Category 4</b> In the absence of a clear long-term vulnerability to food insecurity entry point (noting that pockets of food insecurity may exist), DRR including early warning / preparedness is a priority. Further, attention should be paid to land degradation given that this could worsen future shocks, potentially impacting food security.	<b>Area 2 B</b> <b>Category 2</b> Intermittent vulnerability to food insecurity patterns may be related to either shocks (natural or man-made) or seasonal factors. If seasonal, safety nets can reduce predictable food insecurity; if shocks are a cause, a recovery focus may be suitable. At the same time, high shock risk argues for DRR including early warning and preparedness.	<b>Area 1 B</b> <b>Category 1</b> Persistent vulnerability to food insecurity suggests that safety nets providing predictable support to vulnerable populations may be appropriate, whilst high shock risk justifies including DRR, including early warning and preparedness themes.
Medium			
High	<b>Area 4 A</b>	<b>Area 2 A</b>	<b>Area 1 A</b>

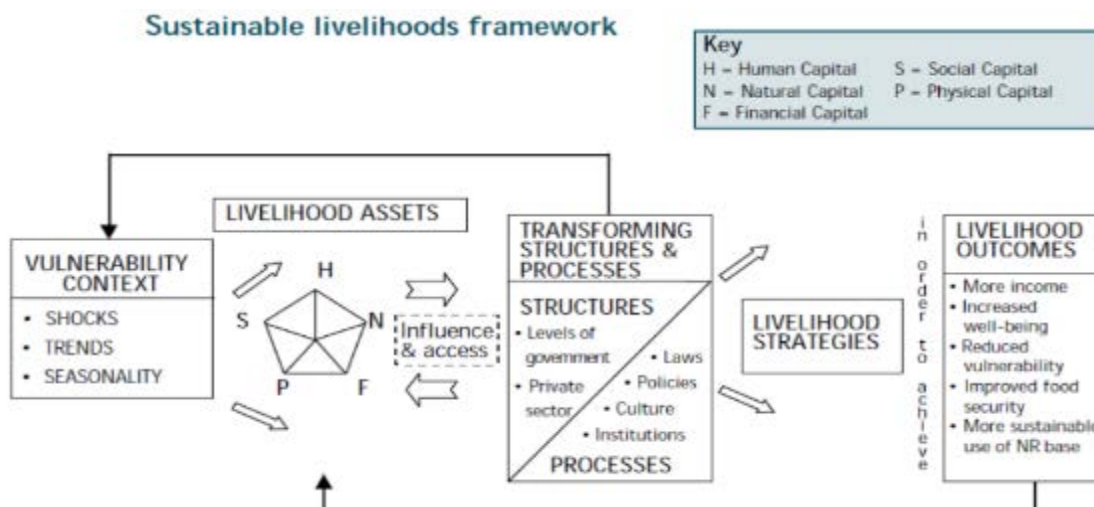
Table 2. Goascorán Watershed ICA classification:

Country	Department	Municipality	ICA CLASSIFICATION
El Salvador	La Unión	Anamorós	5
El Salvador	La Unión	Bolívar	4
El Salvador	La Unión	Concepción de Oriente	5
El Salvador	La Unión	El Sauce	4
El Salvador	La Unión	Lislique	3
El Salvador	La Unión	Nueva Esparta	3
El Salvador	La Unión	Pasaquina	4
El Salvador	La Unión	Polorós	3
El Salvador	La Unión	San Jose	2
El Salvador	La Unión	Santa Rosa de Lima	4
El Salvador	Morazán	Corinto	3
El Salvador	Morazán	Jocoro	2
El Salvador	Morazán	Sociedad	3
Honduras	Comayagua	Lamaní	5
Honduras	Francisco Morazán	Curarén	1
Honduras	Francisco Morazán	Lepaterique	2
Honduras	La Paz	Aguanqueterique	2
Honduras	La Paz	Guajiquiro	2
Honduras	La Paz	Lauterique	1
Honduras	La Paz	Mercedes de Oriente	2
Honduras	La Paz	Opatoro	2
Honduras	La Paz	San Antonio del Norte	1
Honduras	La Paz	San Juan	3
Honduras	La Paz	Santa Ana	2
Honduras	Valle	Alianza	5
Honduras	Valle	Aramecina	3
Honduras	Valle	Caridad	3
Honduras	Valle	Goascorán	5

## Findings from the Livelihood Analysis

To complement the ICA Analysis, a second assessment was combined in order to tune the prioritisation process at municipal level. The second assessment was based on the Sustainable Livelihood Framework (SLF) developed by DFID.<sup>56</sup> Through consultation with key local informants, it was possible to identify strengths and weaknesses of the territories and populations. The methodology explored the five kinds of capital comprising sustainable livelihoods – human, natural, financial, social and physical.

The way in which these contribute to the adaptation to the effects of climate change can be seen in the following graph:



This exercise was completed through focus groups interviews with the participation of women and men from the communities in order to derive a better understanding of what the population consider as a strength and what as their main problems. To calculate the weight of each interview question, capitals were given equal weighting in order to have a comparative measure between municipalities.

After the definition and calculation of each livelihood capital questions and score, the watershed municipalities poverty indicators were identified. This allows general comparative exercise between targeted municipalities financial, natural, physical, social and human capacities and with the municipalities poverty percentage to identify food security and stunting in the area.

Once all the information is analysed, each municipality is inserted into one of four categories, where 4 refers to higher prioritisation level and 1 lower prioritisation level:

1. Areas with a high level of skills and low prevalence of stunting.
2. Areas with a high level of skills and a higher level of stunting.
3. Cantons with low level of capabilities and low prevalence of stunting.
4. Cantons with low level of skills and higher level of stunting.

Table 3. Goascorán Watershed Municipalities Livelihood analysis classification:

Country	Department	Municipality	LIVELIHOOD CLASSIFICATION
El Salvador	La Unión	Anamorós	1
El Salvador	La Unión	Bolivar	3
El Salvador	La Unión	Concepcion de Oriente	3
El Salvador	La Unión	El Sauce	4
El Salvador	La Unión	Lislisque	3

<sup>56</sup> See [www.livelihoodscentre.org/...livelihoods.../8f35b59f-8207-43fc-8b99-df75d3000e86](http://www.livelihoodscentre.org/...livelihoods.../8f35b59f-8207-43fc-8b99-df75d3000e86) and [www.glopp.ch/B7/en/multimedia/B7\\_1\\_pdf2.pdf](http://www.glopp.ch/B7/en/multimedia/B7_1_pdf2.pdf)

El Salvador	La Unión	Nueva Esparta	2
El Salvador	La Unión	Pasaquina	2
El Salvador	La Unión	Polorós	2
El Salvador	La Unión	San José	2
El Salvador	La Unión	Santa Rosa de Lima	2
El Salvador	Morazán	Corinto	2
El Salvador	Morazán	Jocoro	4
El Salvador	Morazán	Sociedad	1
Honduras	Comayagua	Lamaní	3
Honduras	Francisco Morazán	Curarén	3
Honduras	Francisco Morazán	Lepaterique	3
Honduras	La Paz	Aguanqueterique	4
Honduras	La Paz	Guajiquiro	3
Honduras	La Paz	Lauterique	4
Honduras	La Paz	Mercedes de Oriente	1
Honduras	La Paz	Opatoro	3
Honduras	La Paz	San Antonio del Norte	2
Honduras	La Paz	San Juan	3
Honduras	La Paz	Santa Ana	1
Honduras	Valle	Alianza	2
Honduras	Valle	Aramecina	2
Honduras	Valle	Caridad	2
Honduras	Valle	Goascorán	1
Honduras	Valle	Langue	2

### Prioritisation conclusions from the combination of the ICA and Livelihood Analyses

Table 4. Prioritization. The combination of the information from the Integrated Context Analysis and the Livelihood Analysis resulted in a 1-5 prioritization scale, in which one represent the highest priority and five the lowest.

Country	Department	Municipality	Priority
Honduras	Francisco Morazán	Curarén	1
Honduras	La Paz	Lauterique	1
Honduras	La Paz	San Antonio del Norte	1
El Salvador	La Unión	San Jose	2
El Salvador	Morazán	Jocoro	2
Honduras	Francisco Morazán	Lepaterique	2
Honduras	La Paz	Aguanqueterique	2
Honduras	La Paz	Guajiquiro	2
Honduras	La Paz	Mercedes de Oriente	2
Honduras	La Paz	Opatoro	2
Honduras	La Paz	Santa Ana	2
El Salvador	La Unión	Lislisque	3
El Salvador	La Unión	Nueva Esparta	3
El Salvador	La Unión	Polorós	3
El Salvador	Morazán	Corinto	3
El Salvador	Morazán	Sociedad	3

Honduras	La Paz	San Juan	3
Honduras	Valle	Aramecina	3
Honduras	Valle	Caridad	3
Honduras	Valle	Language	3
El Salvador	La Unión	Bolívar	4
El Salvador	La Unión	El Sauce	4
El Salvador	La Unión	Pasaquina	4
El Salvador	La Unión	Santa Rosa de Lima	4
El Salvador	La Unión	Anamorós	5
El Salvador	La Unión	Concepción de Oriente	5
Honduras	Comayagua	Lamaní	5
Honduras	Valle	Alianza	5
Honduras	Valle	Goascorán	5

## Annex 2

### Other relevant policies and strategies

In addition to the policies listed within Part II E, the below are related policies and strategies that the project will also ensure are considered.

Policy	Key priorities	Alignment
<b>El Salvador</b>		
El Salvador Sustainable Plan 2018-2030	<p>Commitments agenda and guidelines around four axes to promote country's sustainable development</p> <p><b>Strategic axis 1:</b> Comprehensive risk management for disaster reduction and climate change.</p> <p><b>Strategic axis 2:</b> Knowledge management and culture of sustainability</p>	<b>Component 1 and 2</b>
Forestry Policy 2016-2036	<b>Strategic axis 4:</b> Reduce the vulnerability of ecosystems and productive systems against climate change impacts	<b>Component 2</b>
Environmental strategy for climate change adaptation and mitigation of the agricultural, forest and aquatic sectors	<p><b>Numeral 3.</b> The agricultural sector and climate change</p> <p><b>Numeral 3.1.</b> climate change and food and nutrition Security.</p> <p><b>Numeral 3.2.</b> Relationship between risk management and climate change.</p> <p><b>Numeral 4.</b> Context of agriculture in El Salvador and natural resources</p> <p><b>Numeral 4.2.</b> Degradation processes of natural resources.</p> <p><b>Numeral 4.3.</b> Soil strategic management.</p> <p><b>Numeral 4.4.</b> Transition from conventional to sustainable agriculture.</p>	<b>Component 2</b>
El Salvador's National watershed management strategy	<p><b>Strategic axis 1:</b> Promote inter-institutional and intersectoral coordination and cooperation for sustainable and adaptive management of the watersheds</p> <p><b>Strategic axis 2:</b> A sustainable and resilient agriculture against climate change.</p> <p><b>Strategic axis 3:</b> Agro-climatic risks management.</p> <p><b>Strategic axis 4:</b> Strengthening of institutional and key actors' capacities</p>	<b>Component 1 and 2</b>
Spatial planning and territorial development National Plan	<p><b>General objective:</b> achieve the full incorporation of the territory and its natural and human resources in the process of modernising and sustainably developing the country to improve the population's quality of life.</p> <p><b>Specific Objective 6:</b> Fully develop the productive potential of the rural environment and the entire national territory, in order to create balance in the living conditions and in the activities' distribution at national level.</p> <p><b>Specific Objective 7:</b> To develop integral water resource management plan through watershed plans and a regulatory system that ensures total coverage of water demands, as well as full development of intensive irrigated agricultural systems.</p>	<b>Component 1 and 2</b>

	<p><b>Specific Objective 11:</b> To carry out transnational projects important for Central American integration and integral management of shared territorial systems.</p> <p><b>Specific Objective 12:</b> Incorporate risk management in order to increase people’s safety and avoid or reduce the harmful effects caused by natural events.</p>	
<b>Honduras</b>		
National Strategy against climate change (ENCC)	<p><b>Purpose:</b> [...] strengthening of the current framework of public policies, incorporating appropriate and timely strategies and measures; aimed to reduce socio-environmental and economic vulnerability; and improve the adaptation capacity; particularly of the populations, sectors and territories more exposed to climatic threats.</p> <p><b>Policy Framework:</b> The ENCC is consistent with the Country Vision of Honduras, and is oriented to adapt the current public policy framework to appropriately address the challenges posed by global climate change and to prevent its adverse effects.</p> <p>Strategic objectives for adaptation:</p> <p><b>Line of Action 1:</b> Creation and strengthening of institutional and human capacities</p> <p><b>Line of Action 2:</b> Strengthening of planning and coordination spaces (inter-institutional and territorial)</p> <p><b>Line of Action 3:</b> Strengthening of intersectoral consultation spaces</p> <p><b>Line of Action 4:</b> Synergistic planning of adaptation and mitigation</p> <p><b>Line of Action 5:</b> Planning and integrated action of socio-environmental issues in the national and regional level of the Central American Integration System (SICA).</p> <p><b>Line of Action 6:</b> International cooperation and financial mechanisms.</p>	<b>Component 1</b>



## Project Formulation Grant (PFG) – Phase II

Submission Date: 12<sup>th</sup> of April 2019

### Adaptation Fund Project ID:

**Countries:** El Salvador, Honduras (Central America)

**Title of Project/Programme:** Improve livelihood resilience through community-based climate change adaptation in the transboundary watershed of Goascorán in El Salvador and Honduras

**Type of IE (NIE/MIE):** Multilateral Implementing Entity (MIE)

**Implementing Entity:** United Nations World Food Programme (WFP)

**Executing Entities:** El Salvador: Ministry of Environment and Natural Resources (MARN) and National Center for Agricultural and Forestry Technology (CENTA), Ministry of Agriculture (MAG). Honduras: Ministry of Natural Resources and Environment (MiAmbiente), Ministry of Agriculture and Livestock (SAG), the Institute of Forest Conservation and Development, Protected Areas and Wildlife (ICF), Presidential Office for Climate Change (Clima+)

### A. Project Preparation Timeframe

Start date of PFG	<b>1 February 2019</b>
Completion date of PFG	<b>1 February 2020</b>

### B. Proposed Project Preparation Activities (\$)


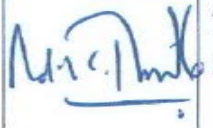
Describe the PFG activities and justifications:

List of Proposed Project Preparation Activities	Output of the PFG Activities	USD Amount
<p>Development of the full project proposal, including the following activities:</p> <ul style="list-style-type: none"> <li>- Coordinate inputs from technical teams in El Salvador and Honduras.</li> <li>- In coordination with project stakeholders and based on results of consultations, refine the project design, including project outcomes and outputs, and define project activities</li> <li>- Design of the project logical framework, with relevant indicators</li> <li>- Definition of implementation arrangements</li> <li>- Development of a detailed budget</li> </ul> <p>To perform these activities, a Climate Change Adaptation specialist will be hired.</p>	<p>Final project proposal developed incorporating technical climate change adaptation inputs as well as all stakeholders' considerations</p>	<p>32,000</p>

<p>Carry out a gender analysis and assessment to inform project design.</p> <p>A gender and age specialist will be hired to carry out the following activities: i) elaborate the gender-specific cultural and legal context in which the project will operate; ii) identify differentiated climate change impacts on men and women and their different capabilities to adapt to these; iii) Gathering and Collecting Gender-Disaggregated Data; iv) support project design to ensure gender consideration are taken into consideration; v) select gender-responsive indicators and to design gender-responsive implementation and monitoring arrangements</p>	<p>A gender assessment developed and included in the full proposal</p>	<p>6,000</p>
<p>Environmental and social risk assessment.</p> <p>Environmental and social specialists will be hired to develop and undertake the ES assessment and support the development of an Environmental and Social Risk management Plan (ESMP)</p>	<p>Environmental and Social Risk assessment and management plan developed and included in the full proposal</p>	<p>4,000</p>
<p>Consultations with communities and key stakeholders:</p> <ol style="list-style-type: none"> <li>1. Binational consultation meetings with national government, local actors and relevant stakeholders</li> <li>2. Community consultations</li> <li>3. Free, Prior and Informed Consent (FPIC) Process</li> <li>4. Validation of full proposal with national and territorial entities and targeted communities</li> </ol>	<p>Reports produced on the binational consultative process</p>	<p>30,000</p>
<p>Identification and targeting of communities and micro-watersheds in the binational territories based on climate vulnerability and food security</p>	<p>Report produced on community targeting</p>	<p>8,000</p>
<p><b>Total Project Formulation Grant</b></p>		<p>80,000</p>

### C. Implementing Entity

This request has been prepared in accordance with the Adaptation Fund Board's procedures and meets the Adaptation Fund's criteria for project identification and formulation

Implementing Entity Coordinator, IE Name	Signature	Date	Project Contact Person	Telephone	Email Address
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<i>Judith Thimke, Representative &amp; Country Director, WFP Honduras</i>		April 11 <sup>th</sup> , 2019	<i>Etienne Labande, Deputy Country Director</i>	+504 3190-7452	<a href="mailto:etienne.labande@wfp.org">etienne.labande@wfp.org</a>