Dear Adaptation Fund Reviewers,

Thank you for the time and dedication to review our proposal again. We are pleased to return the proposal to you with the requested adjustments from the third review. To facilitate the next review, we are delivering this draft as a document with track changes, as a clean document with all changes integrated, and together with this letter clarifying the changes made in response to each of the comments provided. The following table shows the last remaining comment from the third technical review and we have provided responses to the comments.

Review Criteria	Questions	Comments Second Technical Review 10 December 2024	Feedback and Adjustments made
Implementation Arrangements	Does the project/programme's results framework align with the AF's results framework? Does it include at least one core outcome indicator from the Fund's results framework?	**CAR15: Not cleared.** 1. Please amend Table 10 to reflect the project goal; the indicator associated with the overall project goal (as per the AF core indicators e.g. overall number of beneficiaries [direct, indirect; male; female, youth]); baseline; target; means of verification and assumptions each in its own column immediately under the header row of the table. 2. Please further amend table 10 to remove "number of beneficiaries" throughout the indicator column related to the various project components. 3. Please insert core indicator tables for the core indicators identified in the proposal. Must include number of beneficiaries and at least one other. Please utilize the prescribed tables. The table for number of beneficiaries is available at page 10 of the methodology and the other template formats follow. These can be found at Methodologies for reporting Adaptation Fund core impact indicators (78 kB, DOC)	**CAR15:** 1. The table now has a top section that shows the overall project goal. We have separated the info to have a separate column for each: baseline, target, means of verification, and assumptions. 2. It is not clear to us why # of beneficiaries cannot be used as an indicator for certain project outputs and outcomes, as it is the best fit indicator to measure certain impacts. We changed the format so it is clear which indicator corresponds to each output and outcomes. The overall project target for # of beneficiaries is a sum or aggregate from the measurements of the indicator in the components. Hopefully this will be clear and understandable when reading the table. 3. We added a footnote from the table to refer to the annex 6 where you will see the indicator reporting tables for core indicators. The available information has been filled in and the rest will be filled in for reporting.

Thank you again for the valuable feedback. We hope you find the responses satisfactory. If you have any other questions or comments, please do not hesitate to contact us.

Sincerely,
Nelson Garcia Lobo
Executive Director, CASM

FULLY DEVELOPED PROPOSAL FOR SINGLE COUNTRY

PART I: PROJECT/PROGRAMME INFORMATION

Title of Project/Programme:	Constructing Resilience Together to Face Climate Change and Variability in Western Honduras
Country:	Honduras
Thematic Focal Area:	Multisector
Type of Implementing Entity:	National Implementing Entity
Implementing Entity:	CASM – Comisión de Acción Social Menonita
Executing Entities:	Center for Tropical Agriculture (CIAT), Oficina de Coordinación de Proyectos (OCP-SERNA).
Amount of Financing Requested:	4,000,000 (in U.S Dollars Equivalent)
Letter of Endorsement (LOE) signed:	Yes ☒ No ☐

NOTE: The LOE should be signed by the Designated Authority (DA). The signatory DA must be on file with the Adaptation Fund. To find the DA currently on file check this page: https://www.adaptation-fund.org/apply-funding/designated-authorities

Stage of Submission:

☒ This proposal has been submitted before including at a different stage (concept, fully-developed proposal)

☐ This is the first submission ever of the proposal at any stage

In case of a resubmission, please indicate the last submission date: January 14, 2025

Please note that fully-developed proposal documents should not exceed 100 pages for the main document, and 100 pages for the annexes.

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Acronyms

Acronym	Definition
AF	Adaptation Fund
AHPROCAFE	Honduran Coffee Producers Association
BCIE	Central American Bank for Economic Integration
CASA	Climate-Adapted Sustainable Agriculture
CASM	Comisión De Acción Social Menonita – Mennonite Social Action Commission
CBA	Cost-Benefit Analysis
CEDAW	Convention on the Elimination of All Forms of Discrimination against Women
CEDRA	Climate Change and Environmental Degradation Risk and Adaptation Assessment
CENAOS	Center for Atmospheric Studies, Oceanography, and Earthquakes
CEPREDENAC	Center for the Coordination of Preventing Natural Disasters in Central America
CIAT	International Center for Tropical Agriculture
CODEMS	Community and Municipal Emergency Committees
COPECO	Office Of Risk Management and National Contingencies
COVID-19	Coronavirus disease of 2019
CSA	Climate-Smart Agriculture
DNCC	Directorate of Climate Change
ECLAC/CEPAL	Economic Commission for Latin America and the Caribbean
ENCC	National Climate Change Strategy of Honduras
ENEE	National Electric Energy Company
EWS	Early Warning Systems
GBV	Gender-Based Violence
GDP	Gross Domestic Product
GEF	Global Environment Facility
GHG	Greenhouse Gas Emissions
Ha	Hectare
ICF	Forest Conservation Institute
IDB/BID	Inter-American Development Bank
IHCT-UNAH	Institute of Earth Sciences of the National Autonomous University of Honduras
INE	National Statistics Institute
INGEI	Inventory of Greenhouse Gases
Km	Kilometer
MAP	Participatory Agroclimatic Roundtables
MEL	Monitoring, Evaluation, and Learning
MNIGR	National Roundtable le for Incidence on Risk Management
NCCAP	National Climate Change Adaptation Plan
NCCS	National Climate Change Strategy
NDC	Nationally Determined Contribution to Greenhouse Gas Emissions
NGOs	Non-Profit Organizations

OCDIH	Christian Organization for the Integral Development of Honduras
OCP	Office of Climate Change Policy
ONCC-DS	National Climate Change Observatory for Sustainable Development
PANACAC	Cerro Azul Copan National Park
PANAMOSAB	Montaña De Santa Barbara National Park
PDMs	Municipal Development Plans
PICSA	Participatory Integrated Climate Services for Agriculture
PMACC	Municipal Climate Change Adaptation Plans
PRDS	Reconstruction Plan for Sustainable Development
RCP	Representative Concentration Pathways
SAG	Honduran Secretary of Agriculture and Livestock
SERNA	Secretary Of Natural Resources and The Environment
SGJD	Secretary of Governance, Justice, and Decentralization
SINAGER	National Risk Management System
SINEIA	National System of Environmental Impact Assessment
SMEs	Small and Medium-Sized Enterprises
SMN	National Meteorological Service
ToT	Training of Trainers
UMAs	Municipal Environmental Units
UNAH	National Autonomous University of Honduras.
UNFCCC	United Nations Framework Convention for Climate Change

A. Project/Programme Background and Context:

Honduras ranks high on the climate risk index and is among the ten most vulnerable countries to climate change in the world. It was the second most impacted country by extreme weather events from 1998 to 2017. The project areas are highly vulnerable, with limited governance and weak community capacity to adapt to climate change and variability. The project intends to address this problem, fostering ownership among communities, local governments, and vulnerable sectors, enabling better access to climate information, decision-making, and planning for climate-related challenges. Additionally, the project will strengthen strategies for food security and livelihoods by promoting agri-food systems tailored to the changing climate. Moreover, enhancing knowledge and understanding among the population and relevant actors will be crucial for effective adaptation to climate change and variability. Finally, considering the context of intersectional gender inequality, a gender approach will be considered from design through implementation and monitoring.

Geographical Context

Honduras, located in Central America with a latitude between 12° and 16° N and 83° and 89° W longitude (Map 1), spans an area of 112,490 km^2 and is divided into 18 departments. The country features a diverse landscape with 63,600 km of forests and 10.9% of the territory designated as protected terrestrial and marine areas. Honduras borders the Caribbean Sea to the north with 880 km of coastline, the Pacific Ocean to the Southeast with 153 km of coastline, El Salvador to the southwest, and Guatemala to the northwest.

Map 1: Political map of Honduras.

Source: Hermes, 2014

Economic, Social and Development Context

According to the latest estimates, Honduras has a population of 9,656,299 inhabitants[1]. The country's Human Development Index reached 0.634 in 2020, placing Honduras 132nd out of 182 countries in the Index. From 2003 to 2005, 1.7 million undernourished people lived in Honduras, and the number increased to 1.9 million from 2020 to 2022[2], accounting for 12 percent of its population. In 2020, life expectancy was 73 years for men and 77.6 for women, with expected schooling at 10.1 years. The infant mortality rate in 2021 was 14 per 1000 live births[3]. Additionally, in 2019, the illiteracy rate was 13%[4]. Honduras faces high levels of poverty (55%[5]) and inequality and has the second-highest poverty rate in Latin America. In addition, Honduras has high levels of violence, with more than 38 homicides per 100,000 inhabitants[6]. However, this rate has decreased in recent years from a peak of 83 homicides per 100,000 inhabitants in 2011[7].

More than half of Honduras' population resides in rural areas, where approximately 70% live below the poverty line, relying heavily on rainfed agriculture as their primary source of income. The precarious nature of rural livelihoods has led to significant migration from rural to urban areas in Honduras, contributing to the expansion of urban populations, particularly in high-risk zones lacking adequate water and waste management infrastructure. Of the households surveyed in the field research, 75% reported that their income is insufficient to cover their basic needs, and 81% do not have enough income to save for future needs or emergencies. Household survey participants were asked about the income range, and 66% reported earning less than 5000 lempiras, or $200 per month. Most people surveyed have a primary education or less (66%) and have limited access to higher education. Only 11% of the people surveyed completed high school, and 3% had access to a university or technical school.

Food insecurity in Honduras is a challenge, as 23% of children face stunting due to chronic malnutrition[8], and in 2023, approximately 24% of the total population faced level 3 food insecurity or worse[9]. Survey participants were asked a variety of questions regarding their households to gain a better understanding of food insecurity in the project area. Of the 88 surveyed, 35% reported they have no food reserve and live day to day. Additionally, 15% of households reported that they sometimes run out of food. Of the households reporting insufficient food, multiple people go without food. Additionally, 39% of the group reported that they go without food numerous times a year, 31% go without food various times per month, and 23% reported that this occurs weekly.

Of people reporting that their household engages in agricultural production (43 of the 88), 67% reported that their family's food security depends on agricultural production. Key crops for income and food security include coffee, corn, beans, and bananas. However, 23% of agricultural households surveyed do not own the land they farm, relying instead on borrowed or rented land. These results highlight household vulnerability in the project area, as climate change significantly impacts agricultural production.

[1] INE. (2022). Documentation Category: Population.
[2] FAO. (2024). FAOSTAT Country Profiles: Honduras.
[3] The World Bank (2024). Mortality Rate, infant (per 1,000 live births) - Honduras
[4] The World Bank (2024). Literacy rate, adult total (% of people ages 15 and above) - Honduras
[5] The World Bank. (2023). Honduras Poverty Assessment.
[6] The World Bank. (2021). Intentional homicides (per 100,000 people)
[7] The World Bank. (2024). Honduras Overview.
[8] USAID 2019. Food Assistance Fact Sheet.
[9] Relief Web. 2023. Honduras: Integrated Food Security Phase Classification Snapshot | December 2022 - August 2023.

Honduras has a US$52.9 billion[10] gross domestic product (GDP), with agriculture, forestry, and fisheries accounting for 12%. Honduras registered Central America's second-highest economic growth rate, second only to Panama. Honduras' GDP growth was 4.8% in 2017, 3.7% in 2018, and 2.7% in 2019, above the average for Central America, Latin America, and the Caribbean. According to 2021 World Bank estimates, 14.8% of the Honduran population lived on less than US$1.90 per day, and almost half (4.8 million people) lived on less than US$5.50 per day.

Environmental Context

Honduras has well-defined seasons in most regions, particularly in the inter-mountain and coastal areas of the Gulf of Fonseca: defined rainy and dry seasons. The country's mountainous terrain influences its diverse climatic patterns. The general circulation of the atmosphere and pressure systems, combined with surface troughs, variable elevations, cold fronts, cyclones, and tropical waves, produce different rainfall regimes across the Caribbean slope, the Pacific slope, and the Central intermontane zone. The rainy season is from May to November and altitudes above >1600 MASL experience heavier precipitation than lowland areas. During the rainy season, particularly in the southern and central regions, including mountainous areas and the Pacific coast, there is a temporary decrease in precipitation in a period known as *canícula* or *veranillo*, typically occurring in July and August[11]. Conversely, the dry season begins in November, followed by a decline in rainfall. From December to February, most parts of the country experience seasonal drought.

Due to Honduras's latitudinal position, the amount of sun and the temperature are relatively consistent throughout the year, though the proximity to the sea and altitude cause climatic variations. From December to March, cold fronts from the north reach Honduras throughout the dry season. Consequently, the temperature is lower this quarter.

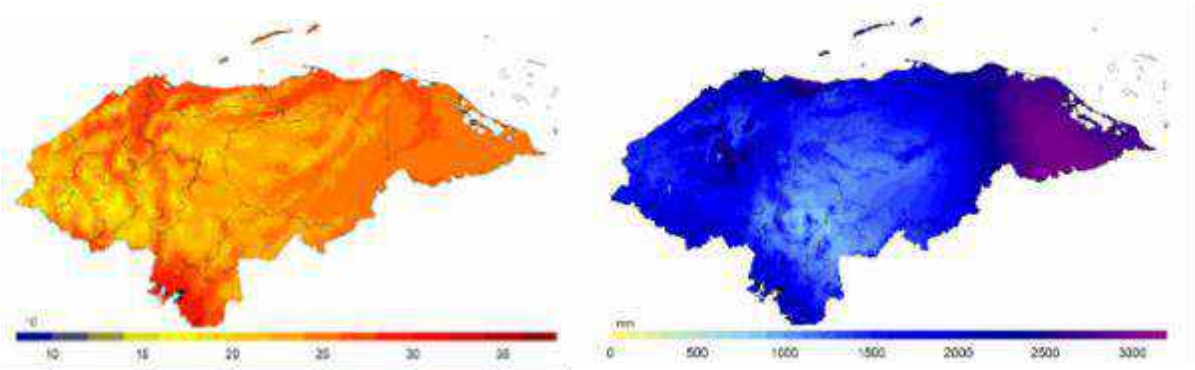
The lowest median temperatures occur in December, ranging from 8°C in the upper parts of the Sierra de Celaque and up to 28°C in the southern plains. In the warmest month of April, median temperatures range from 10°C in the Sierra de Celaque to 31°C in the southern plains; June marks the onset of the rainy season in the northwest region, with the highest temperatures in the Sula Valley[12]. The following figure illustrates the accumulated annual precipitation and the average annual temperature of the Honduran territory (Map 2).

[10] Feenstra et al. (2015), Penn World Table (2021) – with major processing by Our World in Data

[11] UNDP and SERNA. (2010). Climate variability and Climate Change in Honduras.

[12] CIAT, SERNA, UNDP. (2018). Development of the Climate Scenarios of Honduras and Academic Training Module.

Map 2: Accumulated Annual Precipitation (left) and Median Annual Temperature (right).



Source: CIAT, SERNA, UNDP, 2018.

Honduras is significantly exposed to natural hazards such as floods, hurricanes, and droughts, which are projected to be more frequent and intense due to climate change. Globally, Honduras is one of the countries most impacted by climate change. The Germanwatch Global Climate Risk Index 2021 ranks Honduras as the second most affected country by extreme climate events from 1998 to 2017[13]. This vulnerability was starkly evident when, in November 2020, within only two weeks, two extreme climate events - Tropical Storm Eta and Hurricane Iota - impacted Honduras[14]. These two events affected more than 437,000 people; 95 people lost their lives, and 92,646 homes were damaged. Damages and losses are estimated at 2.13 million USD. Additionally, 388 medical and health buildings and 534 educational buildings were damaged during these extreme climate events in 2020. One of the most affected departments was Santa Barbara, the proposed intervention area for this project.

In Honduras, forest systems face multiple threats, including deforestation, degradation from mining, firewood collection, forest fires, and the conversion of forests to agricultural land, particularly for crops such as coffee. Since families depend primarily on agriculture amidst ongoing climatic variability, collective efforts are required to safeguard the economy and their livelihoods. To promote adaptation measures, these efforts must start at the grassroots level, encompassing farms, communities, and territories. This involves implementing climate-smart agriculture practices on farms, advocating for adaptation-focused public policies, and establishing early warning systems (EWS) to support informed decision-making based on timely information. Beyond the elevated risks of storms, hurricanes, and floods, other consequences of climate change are landslides. Like droughts, landslides have provoked food insecurity, malnutrition, and mass migration to urban areas that are poorly prepared for these events.

According to Global Forest Watch, in 2010, Honduras was home to approximately 7.18 million hectares of natural forest, accounting for 67% of its total land area. By 2023, significant deforestation activities resulted in the loss of 81.5 thousand hectares of this natural forest. This loss represents a reduction in biodiversity and ecosystem services and contributes substantially to climate change, equating to approximately 46.4 million metric tons of CO_2 emissions.

[13] GERMANWATCH. (2019). Global Climate Risk Index 2019.

[14] BID and CEPAL. (2021). Assessment of storm effects and impacts Tropical Eta and Hurricane Iota in Honduras.

Between 2001 and 2023, Honduras experienced significant tree cover loss, totaling 1.23 million hectares lost to various causes, with an additional 171 thousand hectares lost to fires. In 2012, Honduras had 3.1 million ha of arable land, of which 1.475 million is cultivated. Of the cultivate land, 1.02 million hectares is cultivated with annual crops and 455,000 hectares has permanent or perennial crops[15].

Based on the latest climate change scenarios developed for Honduras' Third Country Communication to the United Nations Framework Convention on Climate Change, it is evident that by 2030, Honduras will experience significant impacts from climate change. These impacts are mainly due to temperature increases and rainfall pattern variations. Within the framework of the Third National Communication, climate change projections were conducted for short-, medium- and long-term time horizons, using 30-year averages for the 2020-2049 (2030s), 2040-2069 (2050s) and 2070-2099 (2080s). These projections incorporated the 4 Representative Concentration Pathways (RCPs) - 2.6, 4.5, 6.0, and 8.5 - to generate comprehensive insights into future climate scenarios [16].

Seasonal precipitation deficits are projected throughout Honduras during the wettest quarter of the year (June, July, August) when compared with the climatological averages of 1981-2010 in the short, medium, and long term. Conversely, an overall increase in rainfall is expected for other seasons, particularly in March, April, and May, suggesting an earlier onset of rains compared to historical norms. These precipitation changes range from -10% to +20%, with greater increases towards the country's center and south and deficits towards the Caribbean Coast. These trends continue across all future periods with greater changes towards the end of the century. Moreover, the trend is similar between scenarios, except for the RCP 8.5 scenario, which indicates a notable decrease in precipitation across all seasons and in the annual accumulated precipitation.

Monthly minimum and maximum temperatures are forecasted to increase for all scenarios and seasons. Under RCP 2.6, monthly temperatures are expected to increase by +1.5°C, while RCP 4.5 could see a rise of +2.0°C, and RCP 8.5 could see increases of up to 4.5°C towards the end of the century. The most significant temperature increases are accentuated in June, July, and August. Although the temperature distribution is homogeneous throughout the region, warming could intensify towards the center and southwest of the country. Additionally, projections indicate a faster increase in maximum and minimum temperatures. This discrepancy implies that days of higher degrees throughout the year lead to higher evapotranspiration rates and larger arid areas (CIAT, SERNA, PNUD, 2018[17]).

The project will focus on two regions in Honduras: the Santa Barbara Mountain region and the Yojoa Lake Sub-watershed region. It will be implemented in communities across five municipalities: Concepción Sur, Las Vegas, Gualala, and Santa Bárbara in the Santa Barbara Region, and Santa Cruz de Yojoa in the Yojoa Lake region, located in the department of Cortes (Map 3).

The Santa Barbara Mountain National Park (PANAMOSAB in Spanish) is the main tributary of Lake Yojoa; conservation in the core and intermediate zones directly impacts the lake's water levels. The municipalities of Gualala, Concepción Sur, and Santa Barbara in the Santa Barbara Department make up the upper zone of the Ulua River Basin, part of the Ulua Alta sub-basin. This area feeds into the Sula Valley. Implementing the climate change adaptation project in

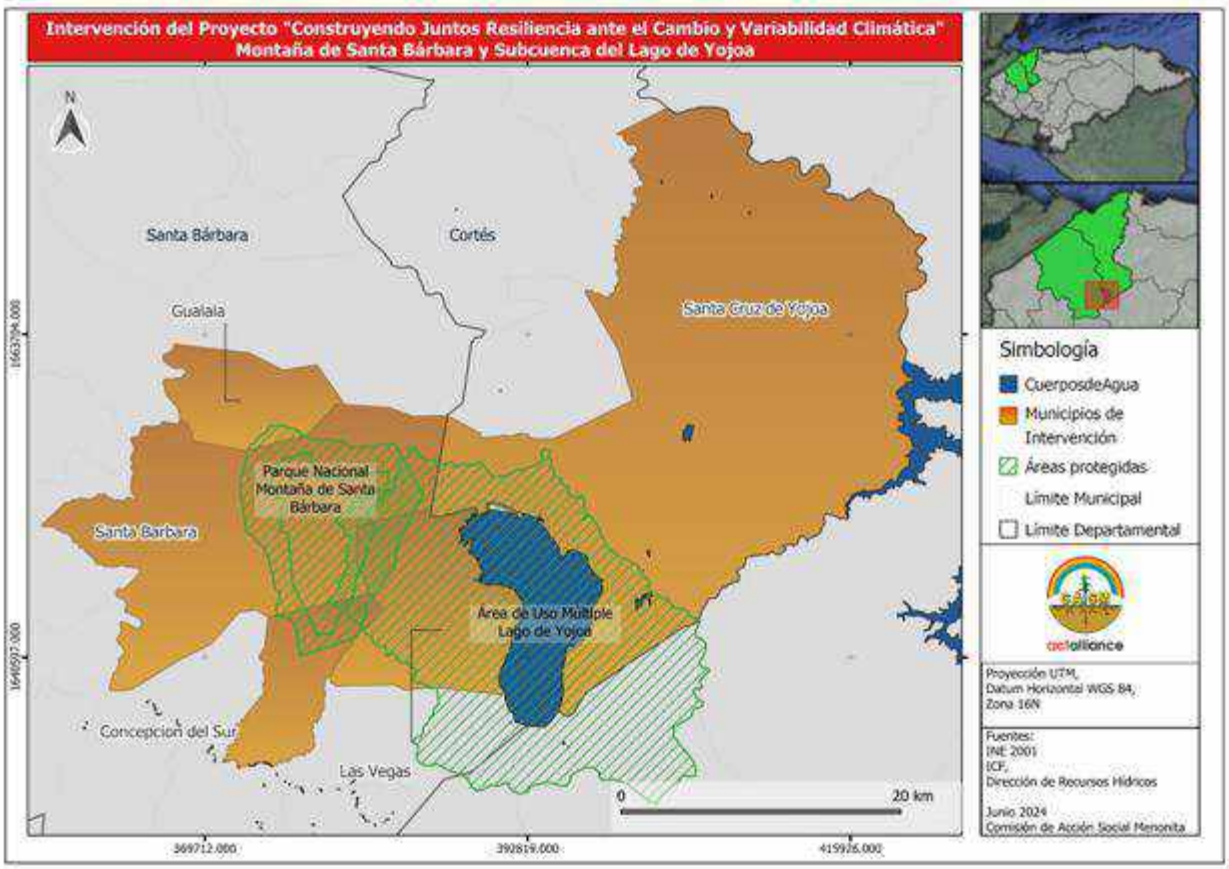
[15] FAO. (2024). FAOSTAT Country Profiles: Honduras.
[16] CIAT, SERNA, UNDP. (2018). Development of the Climate Scenarios of Honduras and Academic Training Module.
[17] CIAT, SERNA, UNDP. (2018). Development of the Climate Scenarios of Honduras and Academic Training Module.

these high-basin areas will also benefit the lower parts of the basins, principally Sula Valley, which is an important economic area of the country that is highly exposed to flooding.

The Santa Barbara Mountain region is predominantly mountainous. These mountains shape the area's hydrological dynamics, influencing precipitation patterns and water runoff. The highest precipitation levels are around Lake Yojoa and Santa Bárbara Mountain (2,500 mm) annually, while the minimum is 1,400 mm[18].

Due to its diverse topography, the climate in the Santa Barbara Mountain region exhibits variability. Santa Barbara experiences a wide range of median annual temperatures, with the highest temperatures in the east and north (26°C) and the lowest temperatures in Santa Bárbara Mountain (14°C). Annual precipitation levels vary across the region, increasing precipitation from west to east.

Map 3: Areas of implementation and protected areas.



Source: CASM, 2024

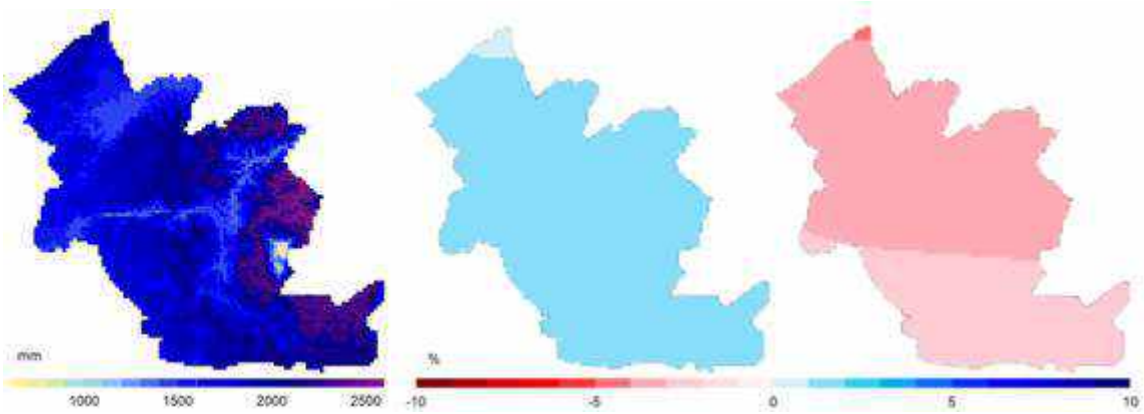
The Santa Barbara Mountain region is renowned for its high biodiversity, hosting a biodiverse array of flora and fauna. The humid broadleaf forest predominates in the Santa Barbara Mountain region, which is rich in biodiversity. Epiphytic plants of all kinds and ferns of various species stand out. Orchids also predominate this ecosystem, and at the top of the mountain, an endemic species of salamander called *Dendrotriton sanctibarbarus* and an endemic species of

[18] MI AMBIENTE+ and DNCC. (2019). Third National Communication on Climate Change.

lizard, *Norops rubribarbaris*, have been reported[19].

In Santa Barbara, precipitation trends indicate a modest slight increase across the area in the intermediate scenario, contrasting with a slight decrease, particularly in the northern regions, in the pessimistic scenario (Map 4). Projections suggest precipitation increases up to 7% by the 2050s, followed by decreases of up to 12% by the end of the century. Increases are projected at the beginning and end of the rainy season (May, October, and November) and decrease in the intermediate months (June to September) and the dry season.

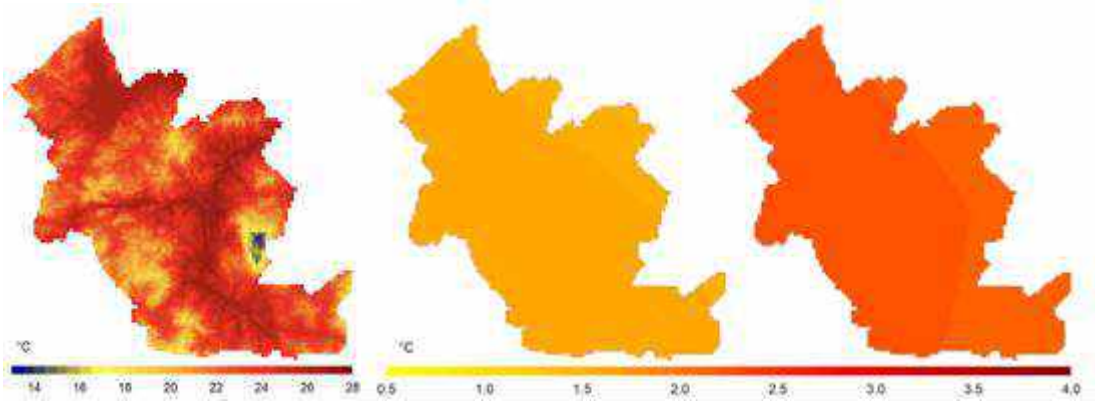
Map 4: Climate Scenarios of Total Precipitation.



Source: CIAT, SERNA, UNDP, 2018.

The scenarios show considerable temperature increases at a higher rate than other regions of the country. The median annual temperature will increase by 2.3°C by 2050 and almost four °C by the end of the century. The temperature change is homogeneous, accentuated towards the southwest of the region but extending to the area of the Santa Bárbara Mountain. The climatic scenarios for precipitation and median annual temperature are presented below (Map 5).

Map 5: Climatic Scenarios of the Median Annual Temperature in Santa Barbara.



Source: CIAT, SERNA, UNDP, 2018.

Rising temperatures and potential disruptions to the hydrological cycle will alter water availability, exacerbate arid conditions, and amplify the frequency and duration of droughts.

[19] AFE-COHDEFOR. (2008). Protected Areas of Honduras.

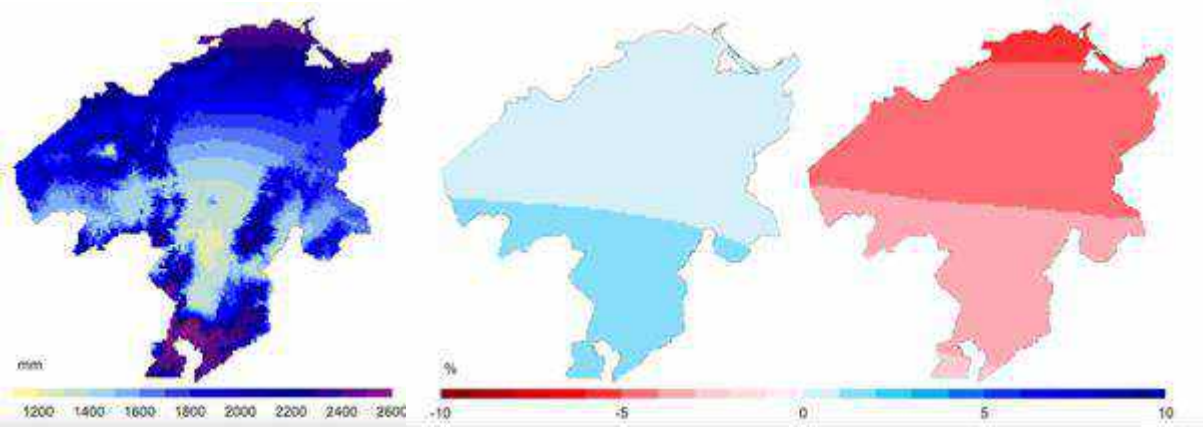
These changes are anticipated to elevate the occurrence of forest fires, diminish grain production, and impede agricultural operations such as planting, pest control, and harvesting. Moreover, rising temperatures coupled with precipitation deficits could generate higher costs for crop cultivation, leading to increased food prices.

The livestock sector faces potential challenges due to decreased water resources and increased temperatures, which will directly affect milk and meat production. Additionally, coffee production will be displaced from the lowlands to more mountainous areas. However, areas of greater future climatic suitability for coffee cultivation are protected areas. Furthermore, the sugarcane agroindustry may experience reduced productivity due to precipitation deficits[20].

In various scenarios, whether rainfall rises or falls coupled with temperature increases, implementing climate-smart agriculture (CSA) practices will prove advantageous for adapting, mitigating, and improving the region's productivity. CSA practices include harvesting rainwater, adjusting planting dates, cultivating improved crop varieties (beans, corn, coffee, forages, etc.), greenhouse production, and diversification of agriculture.

Precipitation trends in the Yojoa Lake Sub-watershed area do not exhibit representative changes in total precipitation. However, projections indicate slight increases. The precipitation trends are projected to increase by 5% by the 2050s, followed by decreases of up to 12% by the end of the century (Map 6). Decreases are projected during much of the rainy season (Jun-Sep), with increases occurring towards its end (Oct-Nov). The scenarios indicate annual average temperature increases of up to 2°C by 2050 and 3.5°C by the end of the century.

Map 6: Climatic Scenarios of Total Precipitation in the Yojoa Lake Sub-watershed.

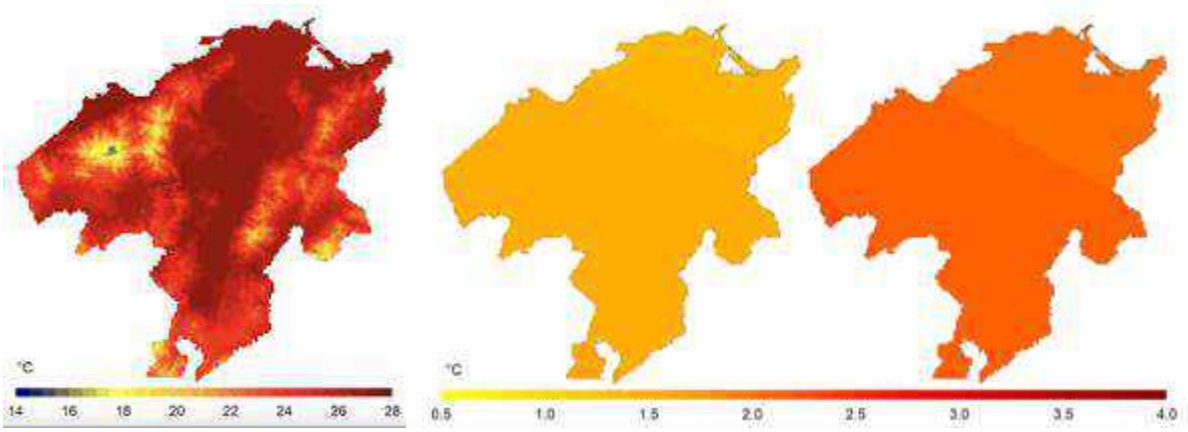


Source: CIAT, SERNA, UNDP, 2018.

The most significant temperature increases are concentrated in the southern part of the region, particularly around Lake Yojoa, which also experiences the highest rainfall (Map 7). Trends in temperature change indicate an increase extending transversely towards the southeast.

[20] CIAT, SERNA, UNDP. (2018). Development of the Climate Scenarios of Honduras and Academic Training Module.

Map 7: Climatic Scenarios of the Median Annual Temperature in the Yojoa Lake Sub-watershed.



Source: CIAT, SERNA, UNDP, 2018.

Large-scale family farming can be affected by temperature increases, mainly in coffee, banana, and palm systems. Due to variations in rainfall patterns, basic grains such as corn and beans and other crops, such as sugar cane and vegetables, would need adaptation strategies for sustainable production. Increasing temperature and precipitation, especially towards the end of the wet period and saturated soil, would increase evaporation, the intensity of short rainfall, and possibly the emergence and spread of pests and diseases in crops. Rainfall rises towards the end of the wet season (Sep-Oct) could increase the incidence of flooding, affecting the agro-industry of bananas, plantain, sugar cane, and cocoa, especially in low-lying areas. In addition, the decrease in rainfall, especially in July with higher temperatures, could increase irrigation requirements.

Temperature increases, especially in the months of most significant tourist influx (March-April and October), can decrease fishing stocks due to changes in metabolism, which are typical of water temperature increases, especially in Lake Yojoa and the Atlantic coast. Temperature increases would negatively influence river flows in hydroelectric production, but the projected increase in precipitation could positively impact the energy sector, especially in the long term[21].

B. Project/Programme Objectives:

The project aims to increase and improve the governance, adaptability, and resilience to climate variability and climate change in the mountain communities of Santa Barbara and the Yojoa Lake region. The specific objectives aligned with each project component are:

1. Promote participatory processes of territorial planning and decision-making to cope with the impacts of climate change and climate variability.
2. Support, strengthen, and promote the adoption of diversified and climate-smart agrifood

[21] CIAT, SERNA, UNDP. (2018). Development of the Climate Scenarios of Honduras and Academic Training Module.

systems.
3. Increase understanding and knowledge about climate variability and adaptation processes.

Theory of Change

The Theory of Change for the project is described in the following paragraphs and summarized in Figure 1.

- **IF** the project promotes participatory processes for territorial planning and decision-making to cope with the impacts of climate change and climate variability, **THEN** local actors will have increased ownership, leadership, capacity, and empowerment to integrate adaptation measures into local and subnational planning, **RESULTING IN** improved governance, resilience, and improved adaptive capacity to climate change in the Santa Barbara and Yojoa Lake region.

- **IF** early warning systems (EWS) are co-designed and implemented with local communities, institutions, and governments, **THEN** the communities will be empowered and capable to take timely action to prevent or mitigate the impacts of climate-related hazards, **RESULTING IN** reduced loss of life, property, and livelihoods during extreme climate events.

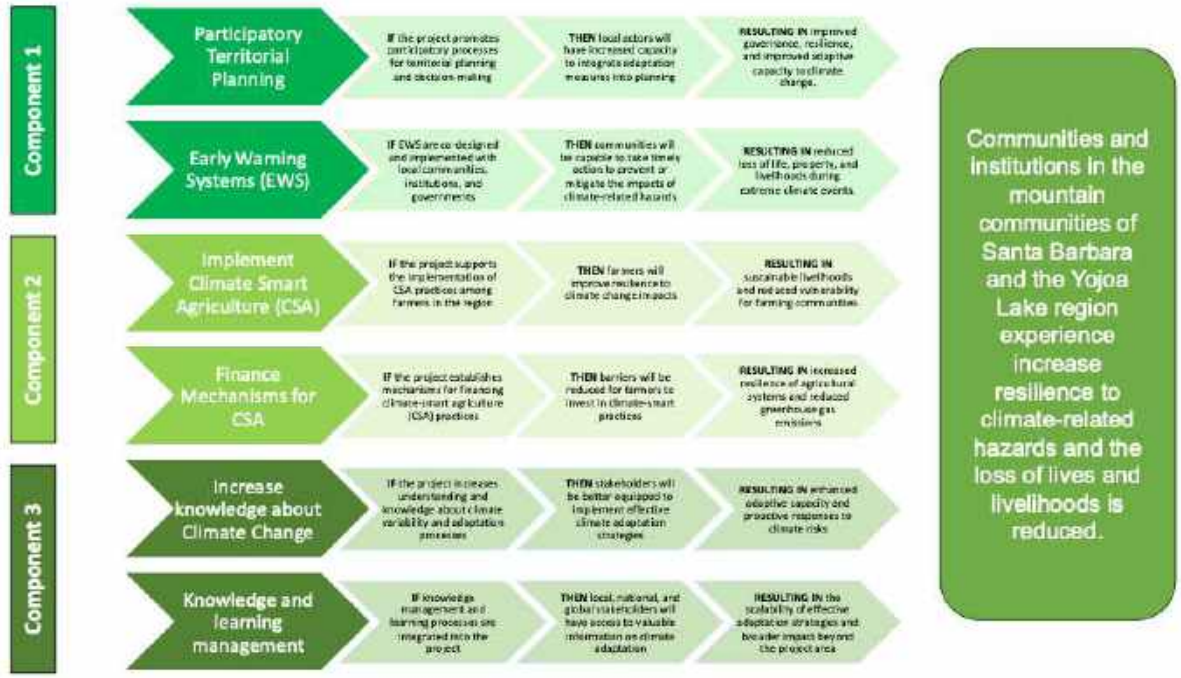
- **IF** the project supports the implementation of diversified and climate-smart agricultural practices among farmers in the region, **THEN** farmers will improve resilience to climate change impacts in agricultural production, **RESULTING IN** sustainable livelihoods and reduced vulnerability to extreme climate events for farming communities.

- **IF** the project establishes mechanisms for financing climate-smart agriculture (CSA) practices, **THEN** barriers will be reduced for farmers to invest in climate-smart practices, **RESULTING IN** increased resilience of agricultural systems and reduced greenhouse gas emissions.

- **IF** the project increases understanding and knowledge about climate variability and adaptation processes through education and training, **THEN** stakeholders, including communities and local governments, will be better equipped to implement effective climate adaptation strategies, **RESULTING IN** enhanced adaptive capacity and proactive responses to climate risks.

- **IF** knowledge management and learning processes are integrated into the project, **THEN** local, national, and global stakeholders will have access to valuable information and successful experiences on climate adaptation, **RESULTING IN** the scalability of effective adaptation strategies and broader impact beyond the project area.

Figure 1: Project Theory of Change



Adaptation Fund Strategic Objectives

The activities described in the project align with multiple objectives of the Adaptation Fund (AF). The project is well-positioned to enhance resilience, reduce vulnerability, and promote scalable adaptation practices, fully supporting the goal of the Adaptation Fund. Specifically, the project aligns to Outcome 1, 2, 3, and 6 of the Adaptation Fund Strategic Framework through the actions mentioned below for each outcome:

- Outcome 1: Reduced exposure to climate-related hazards and threats
    - Implementation of Early Warning Systems (EWS)
    - Integration of climate adaptation into municipal planning
    - Implementation of climate-smart agricultural practices
- Outcome 2: Strengthened institutional capacity to reduce risks associated with climate-induced socioeconomic and environmental losses
    - Capacity building for risk management, EWS, climate change planning
    - Integration of climate adaptation into municipal planning
    - Governance mechanisms for EWS
- Outcome 3: Strengthened awareness and ownership of adaptation and climate risk reduction processes at the local level
    - Participatory Agroclimatic Roundtables
    - Education and awareness about climate change and EWS
- Outcome 6: Diversified and strengthened livelihoods and sources of income for vulnerable people in targeted areas.

- o Climate-smart agriculture planning, training and implementation
- o Financing mechanisms for climate-smart agriculture

C. Project/Programme Components and Financing:

The project components and their associated outputs, outcomes, and budget are detailed in Table 1.

Table 1: Project components, outputs, and outcomes

Project Components	Expected Concrete Outputs	Expected Outcomes	Amount (US$)
Territorial Planning in the Face of Climate Change and Variability	Institutionalize the creation of spaces for participatory technical and thematic dialogues with representation from civil society, the private and public sectors, and academia.	Fostered/reinforced the decision-making and planning processes and ownership of activities by local actors regarding policies/strategies to cope with climate variability and climate change.	$600,875
	Municipalities have climate change adaptation plans aligned with the National Plan and country goals on climate change adaptation.		
	Capacities generated in local actors for the implementation of EWS.	Local and national actors have adequate information on threats, risks, and dangers in the territories of Montaña de Santa Barbara and Yojoa Lake Sub-watershed areas to respond to the effects of climate change and climate variability.	$368,262
	Local and national actors use the information from the EWS to take adaptation actions reduce risk and disseminate knowledge to the target population.		
		Sub-total Component 1	$969,137
Climate-Smart Agricultural Practices and Systems	Community capacities are generated to adopt diversified, climate-smart agricultural production practices and systems.	Strengthened strategies for food security and livelihoods of the communities of the Montaña de Santa Barbara and Yojoa Lake Sub-watershed area through the adoption of diversified and Climate-Smart agri-food systems.	$2,049,072
	Alternatives for financing climate-smart agriculture practices are promoted.		
Knowledge Management and Learning	Implemented training processes for communities and key leaders in the intervention areas on adaptation to climate change and climate variability.	Increased knowledge among relevant stakeholders and improved understanding among the Santa Barbara Mountain region population and Yojoa Lake Sub-watershed Area on the processes of adaptation to climate change and climate	$355,481
	Spaces for knowledge management and learning are created locally, nationally, and globally.		

		variability.	
6. Project/Programme Execution cost			$336,690
7. Total Project/Programme Cost			$3,710,380
8. Project/ Cycle Management Fee charged by the Implementing Entity			$289,620
Amount of Financing Requested			$4,000,000

D. Projected Calendar:

The dates of key project milestones are presented in Table 2.

Table 2: Project milestones calendar

Milestones	**Expected Dates**
Start of Project Implementation	April 1, 2025
Mid-term Review	October 31, 2026
Project Closing	March 30, 2028
Terminal Evaluation	June 30, 2028

PART II: PROJECT/PROGRAMME JUSTIFICATION

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

The project operates on the fundamental premise that achieving effective outcomes in climate change adaptation requires a comprehensive three-part strategy: participatory territorial planning, promoting climate-smart agricultural systems, and knowledge management and learning. By implementing these interconnected components, the project directly aligns with the Adaptation Fund's core objectives of reducing vulnerabilities and increasing communities' capacities to adapt to climate change and variability.

The project actively involves local actors in decision-making and planning processes through participatory territorial planning, ensuring that adaptation measures are well-integrated into local and national frameworks. This approach includes developing early warning systems and incorporating climate adaptation strategies into Municipal Development Plans, giving communities the tools and knowledge to effectively anticipate and mitigate climate risks.

Promoting resilient livelihoods by implementing Climate-smart agricultural practices enhances food security and improves the economic stability of smallholder farmers. These interventions help communities adapt to the challenges posed by climate variability. The project also encourages the adoption of environmentally sound and sustainable technologies, which minimize environmental impacts and contribute to long-term ecological health.

Knowledge management and learning are central to the project’s strategy, ensuring stakeholders at all levels have access to the information and skills needed to respond to climate impacts. By building the capacities of local actors and institutions, the project enhances adaptive capacity and ensures that adaptation efforts are sustained over time.

The proposed project directly links to the objectives of the AF, whose global framework aims to reduce vulnerabilities and increase communities' capacities for adaptation to climate change and climate variability.

Component 1. Territorial planning in the face of climate change and variability

Planning implies knowing, understanding, and incorporating planning results into local (municipal) and subnational planning into the national climate change legislation. Honduras has three fundamental legal instruments on climate change that must be better known, adopted, and operationalized. These legal instruments are the Climate Change Law (Decree 297-2013), the National Climate Change Strategy, and the National Climate Change Adaptation Plan. Despite the existence of these legal instruments, due to the fragility and the dispersion of government institutions and social structures in Honduras, the policies lack implementation. In addition, legal

enforcement instruments and policies need more financial resources and capacities to put them into practice. Therefore, without a minimum budget for effective governance, both from the perspective of local governments and social structures, it is likely that they will not materialize or have little sustainability over time.

One key aspect of territorial action, based on participatory territorial planning in Component 1 of the project, is the design of EWS. Below is a detailed account of the main activities associated with this component, organized by expected and specific outcomes.

Outcome 1.1. Fostered/reinforced ownership of local actors in decision-making and planning processes of policies and strategies to deal with climate variability and climate change

Output 1.1.1. Institutionalize the creation of spaces for participatory technical and thematic dialogues with representation from civil society, the private and public sectors, and academia

This block of strategic activities aims to strengthen the Participatory Agroclimatic Roundtables (MAP in Spanish). The MAPs are an innovative initiative seeking to integrate actors from the agricultural sector at the regional and local level to inform small and medium-sized producers about the expected changes in the climate of their region, how these changes can affect their crops, and what they can do to reduce the negative impacts[22]. The organizational structure of a Participatory Agroclimatic Roundtables is made up of representatives of all the key players in the regions: government, civil society, non-governmental organizations, international organizations, professional, business, farmer associations, academia, small, medium, and microenterprises, women's networks, youth networks, among others. The MAPs have a comprehensive and participatory vision; therefore, any interested actor can be part of this initiative.

The MAPs are an initiative that arises from a cooperative agreement between the Honduran Secretary of Agriculture and Livestock and the International Center for Tropical Agriculture (CIAT) to exchange experiences from Colombia in the Central American context. Currently, there are seven (7) MAPs established in Honduras, located in the regions of Comayagua, El Paraíso, Intibucá, Gulf of Fonseca Region, Western Region, Santa Bárbara, and Olancho, which were created under this cooperative agreement.

The MAPs have generated subnational bulletins for the productive cycles, which provide specific recommendations for each region's main crops. The bulletin describes the area of influence, the behavior of the El Niño/Nina phenomenon, the climatic conditions for the season, and the agroclimatic recommendations. Following the recommendations, an estimated ten thousand farmers throughout the country have been able to make decisions and guarantee their production and food security in the context of climate variability.

MAPs are key to provide participatory climate services for agricultural decision-making and territorial climate risk management. They are also spaces through which other adaptation measures at the territorial level can be promoted, such as promoting the Municipal Plans for Adaptation to Climate Change and monitoring their compliance.

In this project, the existing MAPs, of the West and Santa Barbara, which cover the departments

[22] CGIAR. (2017). Participatory Agroclimatic Roundtables (MTA).

of Lempira, Copan, and Santa Barbara, will be promoted. There will be a commitment to forming two supporting territorial roundtables for each intervention department, one in Santa Barbara and one in Cortes. From this, a more specific articulation of actors will be carried out to provide climate services and revitalize policies on adaptation to climate change in the identified areas.

Activity 1.1.1.1 Diagnostics of the participatory agroclimatic roundtables.

A diagnostic study will be conducted to gather information from community-based organizations, municipalities, water boards, civil society, NGOs, international organizations, State Institutions, boards of trustees, the private sector, academia, SMEs, MSMEs, networks of women, youth, families, and communities involved, considering the needs and opinions of the members to understand the current operation of the agroclimatic roundtables. By gathering information and insights from diverse perspectives, including those of marginalized groups such as women, youth, and small-scale farmers, the diagnostics will provide a comprehensive understanding of the current functioning of agroclimatic roundtables. The study facilitates the identification of gaps, challenges, and opportunities in existing mechanisms for addressing climate risks in agriculture, enabling the development of tailored and effective adaptation measures. To ensure a gender perspective is integrated into the diagnostics, a gender specialist will be consulted to adjust and add to the diagnostic tools to include an intersectional gender approach. The diagnostic study strengthens the capacity of communities and institutions to build resilience and adapt to the impacts of climate change in the agricultural sector.

Activity 1.1.1.2. Integration of actors into the participatory agroclimatic roundtables.

The project's coordinator and technical team will convene workshops and work meetings by municipality according to the project's scope through a work plan. These workshops strengthen MAPs by incorporating actors from the agricultural and local sectors, including community leaders, women's groups, youth, and farming families, across the five project municipalities. The project team will ensure the integration of women in the participatory agroclimatic roundtables by making specific and intentional connections with women’s associations and the municipal women’s office.

Informing small and medium-scale producers about the expected climate changes in their regions and their effect on crops and exploring alternatives to reduce and mitigate negative impacts. Furthermore, two territorial support roundtables will be established in each intervention department, Santa Bárbara and Cortés. The process includes mapping actors, creating a comprehensive database, identifying diverse participants, and managing meetings to develop a work plan to enhance and integrate the Participatory Agroclimatic Roundtables (MAPs). The territorial roundtables will include gender-specific plans within the work plan, including discussions, activities, and actions addressing gender inequality.

Strengthening the MAPs by including actors from the agricultural and local sectors ensures that adaptation strategies consider diverse perspectives. Additionally, informing small—and medium-scale producers about climate change and its impacts on crops enables them to implement adaptive practices. Establishing territorial support roundtables further enhances information dissemination and adaptation measures.

Activity 1.1.1.3. Identifying and adopting mechanisms for providing climate services (early warning systems) to increase the capacities of participatory agroclimatic roundtables.

Climate vulnerability studies will be conducted in five project municipalities by SERNA, in

collaboration with consultants, and complemented by USAID's ongoing work in climate vulnerability and risk. The aim is to identify viable EWS mechanisms by establishing baselines and mechanisms for providing climate services, involving interdisciplinary groups with support and technical advice from DNCC. The validation process will also engage the Chortí Commonwealth, led by the Department of Santa Bárbara. Concurrently, the Monitoring, Evaluation, and Learning (MEL) team, along with the Project Manager, and SERNA, will develop planning tools and MEL frameworks for periodic monitoring of the impact of EWS on the resilience and well-being of the agricultural community. This approach enhances climate change resilience and adaptation by providing timely and valuable insights for decision-making about critical climate information in communities.

Activity 1.1.1.4. Map key actors who work on climate change issues and promote their active participation in the participatory agroclimatic roundtables.

Led by SERNA and CIAT, the mapping will identify key actors and establish strategic approaches through meetings and workshops across five project municipalities to address objectives, gaps, and needs of the Participatory Agroclimatic Roundtables (MAPs). To facilitate this, SERNA will hire a consultant to present a technical and financial proposal for visualizing the mapped actors through a database. Additionally, workshops will be conducted to strengthen and actively promote MAPs, enhancing climate change resilience and adaptation through collaborative engagement and knowledge exchange among stakeholders.

Output 1.1.2. Municipal Development Plans have a strategic component for adaptation to climate change and are aligned with the National Plan and country goals regarding adaptation to climate change.

The Municipal Plans for Adaptation to Climate Change are derived from the National Plan for Adaptation to Climate Change, which has as its general objective to guide adaptation actions focused on integrating sustainable development strategies to reduce the adverse impacts of climate change and climate variability in the country.

By incorporating the adaptation component into the Municipal Development Plans, we seek to achieve the following objectives at the territorial level:

- Generate institutional (territorial) knowledge management capacities for climate change adaptation.
- Strengthen multi-sectoral coordination (interinstitutional and intersectoral) at the local level to formulate and implement adequate community—and citizen-led adaptation to climate change.
- Promote adaptation actions and measures that contribute to compliance with the progressiveness and universality of human rights, the effective participation of communities, the Sustainable Development Goals, and national policies for low-carbon and resilient development.
- Promote ecosystem protection, good management, and restoration as a fundamental strategy for adapting urban and rural communities and achieving environmental and socioeconomic co-benefits.
- Promote the transfer and appropriation of adaptation technologies, considering synergies with climate change mitigation.

The activities below are essential for incorporating the adaptation component into the Municipal

Development Plans (PDM). The National Directorate of Climate Change, part of SERNA's Project Execution Unit, will actively lead these activities.

Honduras created a National Climate Change Adaptation Plan in 2015 as part of the commitments made under the UNFCCC. However, this plan was created at the national level, making further territorial planning necessary, including municipal-level planning. These activities aim to design, update, and accompany Municipal Plans for Adaptation to Climate Change (PMACC) revitalization. In this sense, this set of activities aims to incorporate the component of adaptation to climate change into the Municipal Development Plans of five municipalities in Santa Barbara: Santa Bárbara, San Pedro de Zacapa, Concepción Sur, Gualala, and Las Vegas and one in the department of Cortes, Santa Cruz de Yojoa. We selected these territories through a technical analysis that includes the level of vulnerability, climate scenarios, and biodiversity conservation.

Activity 1.1.2.1. Accompany the incorporation of the Climate Change Adaptation strategic component into the Municipal Development Plans in the intervention municipalities.

With technical support from the Ministry of the Interior, Justice, and Decentralization, complemented by assistance from the National Directorate of Climate Change (DNCC), a review of Municipal Development Plans (PDMs) will be conducted. Work sessions will be conducted with the Municipal Environmental Units and other project stakeholders across the five municipalities to incorporate adaptation to climate change into the PDMs. The gender perspective will be integrated into incorporating the Climate Change Adaptation component of the Municipal Development Plans by considering gender specific data, concerns, and language. The gender assessment conducted for this proposal will be transformed into a brief shared with participants to support the gender-sensitive planning. Additionally, the planning will include the design of a protocol to reduce risks of gender-based violence (GBV) during emergencies from climate and a protocol for people to get support if they suffer from GBV during a climate-related emergency. This process, facilitated by a consultant, aims to ensure the integration of climate change resilience measures into local development planning, thereby enhancing the municipalities' capacity to adapt to climate change impacts and promote long-term climate resilience.

Activity 1.1.2.2. Guiding document for incorporating of the Adaptation to Climate Change component in development plans, a tool designed by the SERNA Climate Change Directorate in coordination with the Ministry of the Interior.

A structured work plan will be created to facilitate a participatory process involving local governments, agricultural communities, and other stakeholders. The guiding document will be created by conducting a comprehensive review of prevailing policies and regulations at the national level, analyzing commitments Honduras made to the UNFCCC to ascertain their binding aspects. The CDT6H booklet, which encompasses threat assessment, vulnerability analysis, and proposals for adaptation measures, will be used to formulate a robust proposal for the adaptation component of these plans. By customizing measures for sectors like agriculture and water resources, the initiative ensures comprehensive adaptation strategies. By promoting informed decision-making and fostering a participatory approach, this activity strengthens the capacity of communities to adapt to climate change and its impacts, ultimately enhancing their resilience.

Activity 1.1.1.3. Support the design of the monitoring and evaluation system of the adaptation component in the development plans.

Developing a monitoring and evaluation plan facilitated by a consultant coordinating with the project team, the National Directorate of Climate Change (DNCC), and the Office of Climate Change Policy (OCP) within SERNA. This plan aims to establish monitoring systems with tools to track project activities, impacts, and results across the five municipalities. By monitoring the adaptation component of development plans, stakeholders can make informed decisions and effectively monitor the progress of climate change resilience and adaptation initiatives.

Outcome 1.2. Local and national actors have adequate information on threats and dangers in the Santa Barbara Mountain region territories and the Yojoa Lake Sub-watershed Area to respond to climate change and variability effects

Output 1.2.1. Capacities generated in local actors for the implementation of early warning systems (EWS)

Early Warning Systems (EWS) are a climate change adaptation measure that uses integrated communication systems to help communities prepare for climate-related hazards. A properly designed EWS helps save lives, jobs, land, and infrastructure and contributes to long-term sustainability. EWS also helps public officials and administrators plan, save money in the long term, and protect economies[23]. In Honduras, implementing EWS is necessary to ensure communities are alert and take preventive measures to increase resilience and minimize the impacts of the hazards generated by extreme climate variations, including droughts and extreme rainfall.

This set of activities is designed to pinpoint each municipality's specific climate information needs, enabling targeted interventions to prevent, avoid, or mitigate the risks posed by climate variability to these communities. This will guide the collaborative design of an EWS operationally coordinated with the National Meteorological Service and locally integrated through participatory mechanisms. These mechanisms involve monitoring hydrometeorological variables, setting thresholds, and preparing and communicating alerts. An effective communication system managed by municipal bodies, civil society, private companies, government, and other local risk managers within the National Risk Management System (SINAGER) framework ensures the dissemination of these alerts. Various training programs will support efforts to prevent disasters and strengthen response capabilities. These programs are designed to enhance understanding of local risks and impacts, reduce vulnerabilities associated with livelihoods, and promote actions that mitigate climate risks.

Mechanisms will be established to validate and evaluate the information used in decision-making, involving both the producers and users of this information in a pilot project. This project will assess the EWS's performance and refine its operational aspects before full implementation. These steps ensure the EWS's sustainability beyond the project's duration.

[23] United Nations. (2022). Early Warning Systems.

Activity 1.2.1.1. Studies, diagnoses, and mapping of actors related to risk management in the area of influence of the project.

This activity focuses on understanding hydrometeorological risks and their impact on local livelihoods based on historical scenarios of damage and losses. It will include detailed assessments of the area's climatology, orography, hydrology, ecosystems, and land use patterns related to socio-economic activities in the area.

In addition, the activity will assess local sources of information, socio-economic coping capacities and their interaction with exposure and vulnerability determinants in the livelihoods of the population. This comprehensive analysis will facilitate a deep understanding of the risks, aiding the participatory co-design of the Early Warning System (EWS).

The process will include consultation workshops to determine training and capacity building needs, providing from this stage guidelines to orient the CSA investment prioritization framework. It will also provide the basic criteria for the co-design and scope of the local monitoring systems for hydrometeorological variables and derived effects, which will establish the roles of the EWS operators and their information needs. These elements are crucial for the effective operation and sustainability of the EWS.

As part of this activity, an extensive bibliographic review will be conducted to identify key factors linked to risk characterization and local response capabilities. This will ensure that subsequent studies are well-informed and effectively contribute to the tailored co-design of the EWS.

Activity 1.2.1.2. Co-design of the Early Warning Systems according to the identified climate risks.

The EWS co-design encompasses a series of actions aimed at learning, understanding, designing, and planning strategies that mitigate risks through robust territorial alert mechanisms. These mechanisms warn the population about potential hydrometeorological threats that could impact their livelihoods. A critical aspect of this process is addressing intersectionality and inequality in the local population, based on the elements that attribute greater sensitivity to such hazards. Recognizing and responding to the varied impacts on diverse population segments—including Indigenous Peoples, youth, women, and older adults—is essential. This approach integrates perspectives of gender and social inclusion to ensure that the EWS effectively serves the entire community.

Among the components that will integrate the EWS is the strengthening of the local connection with the national meteorological service, use and decision making based on climate and meteorological information products generated by COPECO-CENAOS, and developing a robust training component. This will lead to the establishment of a local mechanism for measuring hydrometeorological variables by local risk management bodies such as the Municipal and Local Emergency Committees (CODEMs and CODELs), in accordance with the law of the National Risk Management System (SINAGER) in coordination with local governments.

As part of socioeconomic development, there are chambers of commerce and industry in Santa Barbara and Cortes, as well as chambers of tourism, and from the civil representation, there are multiple producer organizations, boards and associations that together bring together most of the population and are supported by central government agencies and cooperation entities.

Thus, citizens will be involved in the local generation of information that, together with the information provided by the national meteorological service, will feed the participatory process for the generation and dissemination of warning bulletins.

At an intermediate level, this process will be articulated with the Participatory Agroclimatic Tables (MAPs) coordinated by the Secretariat of Agriculture and Livestock (SAG), whose function is to facilitate access to and use of seasonal agroclimatic information to support decision-making by actors in the agri-food sector, through the co-production and dissemination of agroclimatic bulletins for the first and second agricultural cycles. Instances that in terms of governance and local coordination will contribute to and be strengthened with the development of studies, diagnostics, co-design and operation of the EWS.

Engaging the community in generating local data is crucial. For instance, the use of conventional rain gauges[24] will enable residents to contribute to the creation of alert bulletins, helping them understand the operational protocols and outputs of the EWS, COPECO-CENAOS, and MAPs.

In terms of equipment, the installation of 200 conventional rain gauges and 3 meteorological stations is proposed. These will be located according to criteria related to the geographic and bioclimatic components of the project's intervention area. Considering, in turn, the existence of equipment previously installed by institutions related to the management of climate information and its connection to the national meteorological network, with the purpose of ensuring adequate coverage for the generation of information that supports the construction of early warning bulletins from local authorities according to criteria supported by the results obtained by activity 1.2.1.1.

The project's area of influence is characterized by two zones differentiated by biophysical and socioeconomic factors that are determining factors for the co-design of the EWS. The population and territory surrounding the lake and/or micro-basin of Lake Yojoa, support their livelihoods on a greater offer of economic activities linked to the provision of services to businesses, tourism and a diversified agriculture for crops such as coffee, corn, beans, malanga, bananas, rambutan, pineapple, cocoa, livestock, ornamentals, among others, for both commercial and family consumption. The population outside the micro-basin of Lake Yojoa concentrates its economic activities mainly on commercial and family-scale agriculture, related to the production of corn, beans, coffee, pineapple, livestock, commercial poultry production, among other areas.

This context offers guidelines for the co-design of the EWS, considering the interactions between the productive systems and economic activities with the landscape, the climate system, its hydrometeorological behavior and derived effects in terms of natural threats given the exposure, sensitivity and vulnerability of the livelihoods of the local population. Based on their own dynamics, response capacities, generation of mitigation measures and risk transfer will be strengthened, seeking a comprehensive approach from the generation of information, strengthening of capacities, decision-making and early response capacities for risk reduction, supported by the CSA investment portfolio. An example of EWS for agricultural have been

[24] Example on the use of rain gauges in agroclimatic risk management and adaptation in Honduras can be read in: https://revistaplaneo.cl/2024/08/05/la-red-de-pluviometros-comunitaria-de-honduras-y-su-rol-en-la-gestion-del-riesgo-agroclimatico-en-redes-de-innovacion-agricola/

applied in Honduras for bean cultivation[25]. Therefore, this project will consider the development of a similar agricultural EWS if required by the communities.

Furthermore, the evaluation includes a review of the current but non-public system of the National Electric Energy Company (ENEE), which is also part of the National Meteorological Network. This holistic strategy ensures that the implementation of the EWS is strategically aligned with the identified climate risks and tailored to meet the specific needs of the targeted communities. The diagnostic document will serve as a crucial guide for prioritizing equipment in collaboration with the implementation team, which includes representatives from COPECO-CENAOS and the Early Warning Directorate, thus enhancing climate resilience and adaptation efforts. The activity aims to identify and prioritize the equipment needed for effective EWS implementation through team meetings and engagement with state institutions associated with EWS. By leveraging the expertise and input of relevant stakeholders, including those directly involved in early warning systems, the activity ensures that EWS equipment selection is aligned with the project area's specific climate risks and needs, thereby enhancing climate change resilience and adaptation efforts.

Activity 1.2.1.3. Strengthening the capacities of actors and entities linked to risk management at the local level.

Training local actors involves designing a curriculum comprising at least five workshops to provide comprehensive training, facilitate feedback, and continuously improve the EWS system. Through these workshops, stakeholders, including leaders of Municipal Participatory Agroclimatic Roundtables (MAPs) and Community and Municipal Development Committees (CODEMS), will acquire the necessary knowledge and skills to utilize and maintain EWS equipment effectively. This will ultimately strengthen the community's resilience to climate change impacts. Led by CIAT in collaboration with COPECO-CENAOS and CASM's regional office, the training process will focus on key areas such as the legal framework and basic concepts of the National Emergency System (SINAGER), flood risk management, EWS installation, management, and monitoring, as well as flood alerts and alarms based on EWS data. By addressing these central issues, stakeholders will be equipped to enhance EWS implementation and contribute to effective climate change adaptation strategies.

Activity 1.2.1.4. EWS validation

A pilot for the EWS is necessary to validate the accuracy of the information generated, its interpretation and the timeliness of its communication to users. Employing a human-centered design, the pilot will involve validating the protocols and bulletins with community members and key stakeholders from CODEMS. During this pilot phase, it's also crucial to test the feedback mechanisms and timing of information dissemination by national institutions responsible for SINAGER, ensuring that alerts reach the population effectively. The pilot should adhere to the WMO 2018 multi-hazard EWS checklist and incorporate recommendations from both the WMO and UNISDR to optimize its effectiveness and reliability.

[25] https://www.upeg.sag.gob.hn/2021/09/18/boletin-de-sistema-de-alerta-temprana-para-el-cultivo-de-frijol-en-el-valle-de-jamastran/

Output 1.2.2. Local and national actors disseminate EWS information for decision-making and action for adaptation and risk reduction and disseminate knowledge to the population

Activity 1.2.2.1. EWS operation and sustainability plan

Led by CIAT in coordination with COPECO-CENAOS and the Early Warning Directorate, this activity focuses on defining the operation and sustainability plan for EWS, building on the findings of activity 1.2.1.4. The goal is to develop a document that identifies key stakeholders within the project area and lays the groundwork for the EWS's long-term sustainability. The strategy involves working with prioritized sites and actively engaging the identified actors throughout the project to ensure they take responsibility for maintaining the EWS. This may include transferring equipment to local stakeholders to guarantee its continuous operation within the national network. Moreover, these efforts will be integrated with municipal development plans (PDMs), ensuring sustainability of the EWS aligns with local development objectives and bolsters community resilience against climate-related risks.

Activity 1.2.2.2 Establish governance mechanisms at the EWS operator level

The activity involves disseminating information about the Early Warning Systems (EWS) to Municipal Participatory Agroclimatic Roundtables (MAPs) through training sessions led by CIAT in collaboration with SERNA, COPECO, Secretary of Governance, Justice, and Decentralization (SGJD), and the MAPs in project municipalities. Based on the results of the diagnostics and focus groups, design a mechanism to ensure EWS information arrives to the entire population This dissemination will utilize climate bulletins or early warning bulletins and leverage various media channels and community structures associated with the MAPs ensuring it reaches women, youth, older adults, people with disabilities, and Indigenous Peoples. By implementing this dissemination strategy outlined in the Municipal Development Plan (PDM), stakeholders will enhance their understanding of EWS information, thereby improving climate change resilience and adaptation efforts in the project municipalities.

Activity 1.2.2.3. EWS adoption and dissemination strategy among users

Establish a chain of information flow between local, municipal, and national levels, facilitated by key stakeholders, including CIAT, COPECO-CENAOS, SAG, CASM, MAPs, and CODEMs in project municipalities. Ensuring local and national actors have access to adequate information on threats and dangers in the Santa Barbara Mountain region territories and the Yojoa Lake Sub-watershed Area will enable them to respond effectively to the effects of climate change and variability.

Component 2. Climate-smart agricultural practices and systems.

This component will promote Climate-Smart Agriculture (CSA), aiming to generate resilient livelihoods to climate change and climate variability, especially productive agricultural livelihoods. Climate change and climate variability currently make it more difficult for communities to develop and supply themselves with food. Recurring extreme weather events, prolonged droughts, and erratic rainfall constantly threaten the intervention areas. Erratic rainfall refers to rains that are more than the historical normal in a day or a specific time of the year, causing significant damage to crops that are the basis of the economy and food for families, in this case, coffee, basic grains, and various horticultural crops.

In this context, an alternative is to promote climate-smart agriculture (CSA). CSA integrates the three dimensions of sustainable development (economic, social, and environmental), jointly addressing food security and climate challenges.

Three fundamental objectives form the basis of CSA:

- Sustainably increase agricultural productivity and income.
- Adapt and build resilience to climate change.
- Reduce and/or eliminate greenhouse gas (GHG) emissions when possible.

In addition, CSA considers these three objectives at different scales (from farm to landscape), at various levels (from local to global), and in short and long timelines, considering local and national characteristics and priorities.

The innovation of CSA lies in an express consideration of climate risks occurring faster and with greater intensity than in the past. New climate risks require changes in agricultural technologies and methods to improve the lives of the food insecure and poor and to prevent the loss of previous advances. CSA methodologies imply a more significant investment in

- Managing climate risks.
- Knowledge and planning of the necessary adaptive transitions, for example, new agricultural systems or livelihoods.
- Acting on opportunities to reduce or eliminate GHG emissions where feasible.

In addition to directly engaging farmers through the Participatory Integrated Climate Services for Agriculture (PICSA) approach and promoting CSA practices, we are implementing additional strategies. These strategies involve promoting the integration of these approaches into public territorial planning, specifically incorporating them into Municipal Climate Change Adaptation Plans. To further scale up CSA practices and enhance their contribution to the resilience of the intervention areas, we will conduct a study on the impact of CSA and promote the National Award for Best Practices in Adaptation to Climate Change.

Outcome 2.1. Strengthened strategies for food security and livelihoods of the communities of the Santa Barbara Mountain region and Yojoa Lake Sub-watershed Area through the adoption of diversified and Climate-Smart agri-food systems

Output 2.1.1. Community capacities are generated to adopt diversified and climate-smart agricultural production practices and systems.

Activity 2.1.1.1. Strengthening capacities in integrated participatory climate services for agriculture

This set of activities will promote the Participatory Integrated Climate Services for Agriculture (PICSA)[26] approach, which seeks to simplify informed decision processes for farmers based on precise and specific climate and meteorological information by location; relevant crops according to location; alternatives of livestock species and subsistence activities all using participatory tools. Therefore, to make informed decisions, it is essential to consider the options for agricultural and livestock production and subsistence activities within a climatic context.

[26] PICSA: https://www.cgiar.org/research/publication/participatory-integrated-climate-services-agriculture-picsa-climate-services-farmers-latin-america-caribbean/

CASM has promoted the PICSA methodology in the last four years by partnering with the Bioversity-CIAT alliance. This methodology improves the ability to analyze and interpret climate information and based on these analyses, improves farmers' decision-making to limit the adverse effects of climate change. Producers who receive PICSA training will actively promote the implementation of CSA practices/technologies, which involve understanding, prioritizing, and ultimately selecting strategies to prevent and mitigate the effects of climate change.

Implementation of the PICSA methodology with technicians and communities includes planning, calling, agreeing, and conducting at least six workshops per community, encompassing the 12 steps outlined in the PISCA method.

Developing a PICSA cycle requires training a group of producers prior to the spring productive seasons and second planting (*postrera* in Spanish) through the following workshops:

- **Workshop 1:** Current farmer practices: Is the climate changing?
- **Workshop 2:** What are the opportunities and risks? What options does the farmer have? Options by context.
- **Workshop 3:** Comparison of different options and planning. The farmer decides.
- **Workshop 4:** The seasonal forecast. Identify and select possible responses to the forecast.
- **Workshop 5:** Short-term forecast and alerts, Identification of potential responses to short-term forecasts and warnings.
- **Workshop 6:** Learn from experience and improve the process.

The PISCA methodology will incorporate a gender-sensitive approach in two ways, using the toolbox for incorporating gender and social inclusion in agricultural technical assistance[27]. First, when selecting participants, the participation of both men and women will be promoted, particularly in households with spouses or a man and woman living in a free union. As the PISCA focuses on planning for resilience, diverse perspectives include the needs of youth, women, older adults, and people with disabilities in households. Since women in the project are overwhelmingly responsible for cooking and caregiving responsibilities, adult women understand the food and financial needs of the household well. Working with a gender consultant, the PISCA methodology will be adapted to engage men's and women's perspectives in planning and decision-making.

Special invitations to participate will be made to women-headed households who work in agriculture. The second adjustment in the PISCA methodology will be designing workshop times, spaces, and topics to be accessible and inclusive for women. This includes considering times best suited to women's household and child-raising responsibilities and supporting participants with childcare.

This methodology enables stakeholders to understand better and respond to climate-related risks and challenges in agriculture, allowing them to make informed decisions about crop selection, land management, and resource allocation under climate change contexts. Combined with the EWS, knowledge management and developing capabilities to adapt in the short and medium term will be promoted.

[27] https://cgspace.cgiar.org/items/014e4e9f-096d-4117-86a1-ffb0fc220514

Activity 2.1.1.2. Accompany the development and implementation of investment plans for climate-adapted agricultural practices (CSA) and practices related to multi-hazard risk reduction

This activity aims to provide knowledge, testing, and adoption of contextualized and people-based CSA practices tailored to the context and needs of local communities. CSA is context-specific, with many approaches potentially being CSA in some places, but no single practice can be considered CSA everywhere. What is climate-smart also changes with time[28]. Moreover, CSA explicitly aims these three objectives: A) Increasing agricultural productivity, to support equitable increases in farm incomes, food security and development; B) Adapting and building resilience of agricultural and food security systems to climate change at multiple levels; and C) Reducing greenhouse gas emissions from agriculture (including crops, livestock and fisheries). This means that CSA interventions should be designed with a thorough understanding of the contextual reality and keeping in mind the three main objectives. Because of this, CSA will only be considered after the studies, diagnostics and mapping of actors related to risk management in the project's area of influence (Component 1) and the community training process (Activity 2.1.1.1) are done and documented.

By evaluating and prioritizing practices during the training process (Activity 2.1.1.1), providing co-financing, and offering ongoing support and monitoring, this initiative enables communities to enhance their resilience and adapt to climate change. Examples of practices that the communities can adopt and that will be prioritized according to PICSA planning (this is not exclusive to other practices according to the risks and contexts of the communities and their needs):

- Water management infrastructure:
    - Rainwater harvesting (using roofs of dwellings)
    - Roof garden with vegetables
    - Water reservoirs
- Irrigation systems
- Contour ditches or hillside ditches
- Living barriers (madreado, cacao, pineapple, izote)
- Minimum tillage
- Crop rotation
- Crop diversification
- Crop stubble management
- Management of shade in coffee plantations
- Terraces with living barriers
- Improved seed varieties
- Proper mechanization of crops

Various tools are available for the prioritization of CSA, such as the CIAT/CCAFS CSA Prioritization Framework, CCAFS' CSA Prioritization Toolkit, mitigation optimization tools (e.g. FAO's EX-Ante Carbon-balance Tool and CCAFS' Mitigation Optimization Tool), as well as CCAFS compendium of CSA practices. These tools generally aim to provide guidance on the following sub-questions[29]:

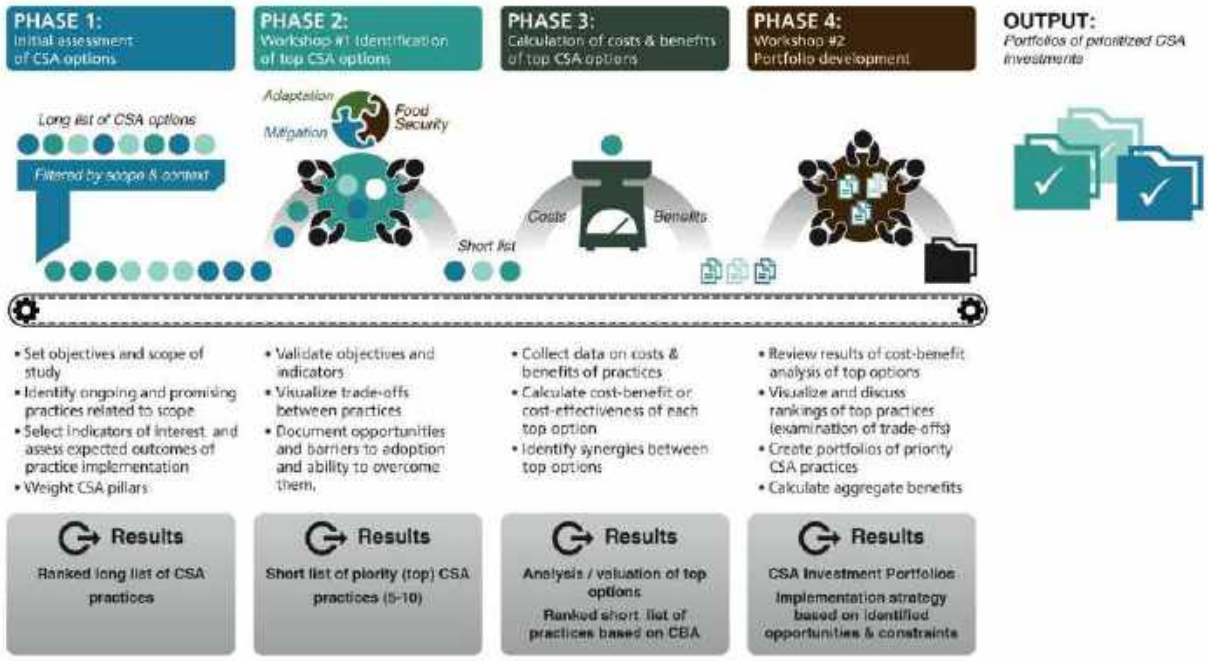
- What regions, production systems, and users should adaptation interventions be prioritized for?

[28] https://csaguide.cgiar.org/csa/situation-analysis
[29] https://csaguide.cgiar.org/csa/situation-analysis

- What existing and promising adaptation options should be assessed for investment?
- What criteria should be used to evaluate and prioritize options, e.g. ability to build resilience; achieve co-benefits such as mitigation; economic costs and benefits?
- What barriers to adoption exist, and how can these be overcome for investments to have impact at scale?
- What are the optimal policy options to support adaptation and transformation across spatial and temporal scales?

As example from tools to prioritize is the CCAFS-CIAT CSA Prioritization Framework (CSA-PF), designed for channeling CSA investments. An overview of this framework is shown in Figure 2. It has the objective to help decision makers identify best-bet CSA investment portfolios that achieve gains in food security, farmers' resilience to climate change, and low-emissions development of the agriculture sector. The framework is divided into four phases: (i) Initial assessment of CSA options; (ii) Identification of top CSA options (workshop); (iii) Calculation of cost and benefits of top CSA options; and (iv) portfolio development and evaluation of barriers (workshop). These workshops are contemplated as the last ones from Activity 2.1.

Figure 2: CSA development process



Through the mapping and diagnosis generated for the MAP, the co-design of the EWS, and the strengthening of community capacities, there will be a prioritization of local entities (civil society, private company, government, and producer associations, among others) that will be able to choose and be participate in investment plans in CSA practices. Hence, investment plans resilient to multi-threat management will link preventive and adaptation actions connected to the EWS and the MAPs to respond to the identified risks, contextualized to the territory and people-based practices tailored. These proposals will be prepared in a participatory manner with the project's technical team, monitoring the adequate execution of the plans.

Of the different possible CSAs that emerge from the participatory analyses, fifteen (15) investment plans will be developed in this project. For the development of the same, the support of a consultant is contemplated. The plans prioritized with the different stakeholders will subsequently pass to the evaluation of the Operations Committee (CIAT, CASM and SERNA), and the Grants Management Unit of CIAT, prior the approved. Grants with the support and monitoring of CIAT and CASM of up to $40,000 will be considered. These partially unidentified sub-projects (USPs,) will be located on the five municipalities. The above will be a requirement before they are approved, to ensure that the 15 environmental and social principles from the Adaptation Fund and, the Grant and Sub-grants Policy from CIAT[30] are achieved.

Each investment plan should have its own monitoring, evaluation, and learning (ME&L) component. The fundamental premises underlying CSA Plan's ME&L is that CSA is a gradient and not an endpoint and that CSA is context (place and time) specific. The triple win of productivity, resilience and mitigation may not be achievable or prioritized in all places. This means that the standards for performance and learning need to be specific to a societal aim and specific to a time and place. For this, the project will develop strategies and tools to track progress of implementation, evaluate impact, as well as facilitate iterative learning to improve CSA planning and implementation, can be used. The CSA Plan's ME&L delivers processes and products to support achieving and documenting program goals and adaptively managing implementation. This precondition of clear objectives will typically be informed by step 1 in CSA Plan ('situation analysis') and set in Step 2 ('targeting and prioritizing')[31].

Leveraging the CSA through other investments is possible through the synergies created in the MAPs, the stakeholders in the territories and linking to other initiatives from the partners of this project or others that can be identified during the execution (diagnosis) of the project.

The approach to climate-adapted sustainable agriculture through the implementation of an investment prioritization framework, which is locally supported in the socioeconomic and natural contexts, contributes directly to positive feedback that promotes the assurance of ecosystem goods and services that support the socioeconomic activities of the local population. Actions that, articulated to the operation of the EWS, increase the response capacities to significant hydrometeorological risk events and vulnerability reduction, through an adequate management of such resources and anticipated response to risk, since from its design elements have been identified that allow the implementation of adaptation actions based on ecosystems in synergy with the implementation of CSA practices.

Activity 2.1.1.3. Linking risk reduction actions in local planning

This activity is linked to the activities in output 1.1.2 to design Municipal Development Plans (PDMs). This activity seeks to include EWS and CSA practices in those PDMs. This activity engages the technical team, facilitators, and beneficiaries to work with local communities. Through participatory workshops based on existing instruments and the design of new local plans, communities can integrate CSA approaches into their planning processes. By mainstreaming CSA practices into local planning, communities can enhance their resilience to climate change and adapt agricultural systems to changing climate conditions.

Activity 2.1.1.4. National Award for Best Practices in Climate Change Adaptation

This initiative aims to design and promote an award recognizing local actors who implement

[30] https://alliancebioversityciat.org/sites/default/files/documents/po-05-re_grants-and-sub-grants-policy_12.06.2023_sp.pdf
[31] https://csaguide.cgiar.org/csa/situation-analysis

effective adaptation practices. With special representation from SERNA, the award will be open to a national audience. It will involve stages such as judge selection, defining evaluation criteria, promoting the award, receiving applications, determining the award amount, organizing the event, and communicating the results. During the project, an award category for women-led initiatives will be designed and promoted. By acknowledging and celebrating successful adaptation practices, this activity not only incentivizes further innovation but also raises awareness about climate change resilience efforts, inspiring others to adopt similar strategies. For this activity, six (6) awards are considered to be given to strengthen and promote best practices.

Output 2.1.2. Alternatives for financing climate-smart agriculture practices are promoted.

According to the CSA Practices Guide or Climate-Adapted Sustainable Agriculture (CASA) developed by CASM and the Bioverstity-CIAT Alliance, by implementing a CSA practice, a farmer can adapt to climate change, achieve greater productivity and economic benefits, in addition to social and environmental co-benefits.

As such, a local savings and credit mechanism to finance CSA practices with farming families will be promoted at the territorial level. This mechanism may be a rural bank or a community-managed savings group, depending on the priorities in each territory. Based on their savings, this mechanism works with farmers to access the necessary resources to self-finance CSA practices and technologies that allow them to cope with the effects of climate variability and climate change.

The design of the savings and credit mechanism must consider the gender dynamics and barriers women and men face to access credit. These barriers should be addressed by the design of the savings and credit mechanism.

In addition to promoting the community savings and credit mechanism, negotiation meetings will be held with officials from public and private financial entities present in the area to draw their attention to financing based on experience and previous results of the successful implementation of CSA practices in the field, presenting a cost-benefit and effectiveness analysis of these practices.

The project will allocate a fund to leverage the initial financing that private and/or public banks carry out. A management mechanism for this fund will be defined, which may be a trust fund with the interested financial entities that involve the active participation of the Participatory Agroclimatic Roundtables and the Local Governments of the municipalities for their joint management.

Activity 2.1.2.1. Promote a local savings and credit mechanism aimed at financing CSA practices.

Across the five municipalities, SERNA will lead the establishment of rural savings banks, cooperatives, or associations to promote community development and address financial needs. Existing financial mechanisms will be identified, capacity building will occur, and awareness will be raised. Awareness will be raised with women’s associations and the municipal women’s

office to ensure women can access local savings and credit. These institutions provide financial support for community-led projects and initiatives to mitigate and adapt to climate change impacts. Additionally, a financial literacy workshop will be provided to men and women who access the savings and credit mechanism to ensure participants are empowered and prepared to manage the financial process.

Activity 2.1.2.2. Stimulate the investment of the public and private financial system in implementing CSA practices

The activity will promote and create strategic alliances and networks between the public and private sectors. Fostering cooperation agreements, organizing training sessions, and raising awareness encourage investment in CSA practices. This investment helps communities adopt sustainable agricultural techniques that enhance climate change resilience and adaptation. Moreover, leveraging partnerships between different stakeholders promotes knowledge sharing, innovation, and the scaling up of CSA initiatives, contributing to long-term climate resilience.

Activity 2.1.2.3. Leverage financing from the public and private sectors for innovative initiatives in climate-smart agriculture.

SERNA will leverage strategic alliances with the public and private sectors financing for innovative climate-smart agriculture (CSA) initiatives, generating strategic alliances to promote synergies and networks that facilitate the mobilization of financial resources for CSA projects. Through this approach, the initiative will utilize various existing financing sources, including government funds specifically earmarked for climate change and food security. By securing funding for CSA initiatives, the activity enhances climate change resilience and adaptation in agriculture. It enables the implementation of innovative practices and technologies that improve agricultural productivity while mitigating climate-related risks, thereby bolstering the resilience of farming communities to climate change impacts.

This activity will align the funding leveraged with the work done in Activity 2.1.1.2. (see detailed explanation of the process here) to evaluate CSA projects within a prioritization framework. SERNA will work with CIAT and their inclusive and transparent prioritization framework to fund projects beyond the initial 15 sub-projects funded in Activity 2.1.1.2. All sub-projects will be selected using the framework defined, which aligns with the Adaptation Fund's requirements and includes detailed screening, consultation, and risk assessments that will be conducted to ensure compliance with environmental, social, and financial standards. This includes pre-approval measures such as stakeholder mapping, feasibility analyses, and alignment with national adaptation priorities.

Five initiatives in each of the five project municipalities will be selected (25 in total) to receive $29,500. In addition to the funding provided through the Adaptation Fund for this activity, SERNA will work with existing government funding at the national and local levels to expand beyond the project funding. The funding from the Adaptation will be used to fund the sub-projects but also as an incentive for other government programs and private sector entities to invest in climate smart agriculture initiatives. The activity will also establish a robust monitoring, evaluation, and learning (ME&L) framework to monitor the sub-projects funded by the leveraged funds. This ensures that the outcomes align with CSA's triple-win objectives of productivity, resilience, and mitigation and environmental and social will be measured through the sub-project implementation.

The CSA initiatives prioritized and selected for the leverage fund will subsequently pass to the evaluation of the Operations Committee (CIAT, CASM and SERNA), and the Grants

Management Unit of SERNA, to be approved. These partially unidentified sub-projects (USPs,) will be located on the five municipalities. The above will be a requirement before they are approved, to ensure that the 15 environmental and social principles from the Adaptation Fund and, the Grant and Sub-grants Policy from SERNA are achieved. Each initiative will be required to have its own monitoring, evaluation, and learning (ME&L) component.

Component 3. Knowledge Management and Learning

The scalability of actions and integration at a regional and national level is the fundamental purpose of this component. This component consists of improving communities', public actors', and social organizations' knowledge about climate hazards and effective adaptation measures. In climate variability, public actors and the population must have knowledge that translates into power for action and resilience. Thus, the project proposes implementing an educational program with a formal and non-formal approach, including the population, community leaders, public officials, and officials from civil society organizations. The activities to be carried out according to expected and Concrete outcomes are described below.

Outcome 3.1 - Increased knowledge among relevant stakeholders and improved understanding among the Santa Barbara Mountain region population and Yojoa Lake Sub-watershed Area on the processes of adaptation to climate change and climate variability.

Output 3.1.1 - Implemented training processes for communities and leading actors on adaptation to climate change and climate variability in the intervention areas.

This set of activities aims to transfer knowledge and learn about adaptation measures to climate change and climate variability from a perspective of local knowledge and public policy management. The training of municipal trainers who can carry out learning transfer and scaling tasks at the community level will be promoted. Additionally, public events will be held at the municipal and subnational level, which include forums, roundtables, discussion panels, and commemoration of emblematic dates on climate change (i.e., International Day Against Climate Change, World Water Day, among others). In a complementary way and as a measure of the sustainability of learning, the design and implementation of a guidance document on climate change and resilience will be promoted and incorporated into formal education in the intervention areas.

Activity 3.1.1.1. Training processes with relevant actors in the community leadership and ToT (training of trainers) training process in climate services, SAT, and adaptation practices.

This activity, jointly led by CIAT and SERNA, entails a certified training program for trainers focusing on climate change services, SAT, and adaptation practices. Trained technical facilitators will be involved in the design and implementation of the program, which will target a companion of universities and research institutes in Honduras. By providing certified training, the activity aims to build the capacity of trainers who will subsequently disseminate knowledge and skills in and out of the project area. Two cycles are considered in bimodal training. The project team will invite and encourage the participation of women both as trainers and people

trained through the ToT program. This capacity-building effort enhances climate change resilience and adaptation by empowering individuals with the expertise to address climate-related challenges effectively. The qualified trainers, communities, and stakeholders will gain valuable insights and tools to understand better, prepare for, and mitigate the impacts of climate change in their respective regions.

Seeking the sustainability and continuity of the actions, a systematization of the training will be developed to share with state institutions (universities, state secretariats, and others relevant to capacity building). In addition, we will support a National Meeting of MAPs to communicate and scale actions in other regions of the country. These meetings have been held since 2022 to connect, communicate, and scale among regional and local MAPs in the country. Hence, it is a good space to communicate over the second and third years of the project.

Activity 3.1.1.2. Development of public events on climate risks and resilience strategies (inside and outside the area of influence)

Public events aimed at raising awareness about climate resilience will be organized. These events may coincide with significant dates such as Risk Management Day, Meteorology Day, Earth Day, etc. Through these events, the broader community will be educated about climate risks and resilience strategies, such as the EWS linked to the National Forecast System and National EWS, fostering greater understanding and preparedness for climate-related challenges among local and national institutions by engaging the public in discussions and activities related to climate change resilience, this initiative contributes to building community resilience and adaptation capacities. CIAT, in conjunction with SERNA, COPECO, and the Secretary of Education, will implement this activity.

Activity 3.1.1.3. Training mechanism aimed at the educational sector (primary and secondary) on adaptation to climate change and climate resilience that includes the use of the SAT

A training mechanism will be developed to integrate learning about EWS, climate change adaptation, and resilience into the formal educational sector. First, a curriculum will be designed, and an implementation plan will be developed in coordination with the Secretary of Education and SERNA. CIAT and SERNA will link with key stakeholders to design and implement the plan for formal education in the project area. The curriculum design will include a gender perspective, specifically using positive messaging to address harmful gender norms. For example, if visual materials are developed for the curriculum, ensure that they include women and girls visualized in educational settings, leadership settings, pursuing careers, and men or boys engaging in caregiving and other roles traditionally assigned to women. Engaging with youth and children is essential for community-wide climate change adaptation and resilience as they can often suffer more adverse impacts from climate change.

This activity considers developing one workshop per year for two years in the main educational centers of the five municipalities. Due to the municipality's size, two workshops are considered in Santa Cruz de Yojoa. Additionally, printed and digital material that teaches young people about adaptation to climate change is linked to the EWS and agroclimatic bulletins generated and distributed by the MAPs.

Output 3.1.2: Spaces are created for knowledge management and learning at the local, national, and global levels.

This set of activities seeks to generate and systemize information and knowledge about adaptation to climate change, climate variability, and climate resilience based on previous successful experiences and experiences generated from this intervention. At least three (3) successful experiences in contexts of climate variability (droughts and extreme rainfall) will be identified and systematized, through which the design of a strategy can be scaled at the territorial level. Potential experiences for systematization are the implementation of climate-smart agriculture practices, the management of participatory agro-climatic roundtables, the use of climate information for decision-making, and the implementation of municipal climate change adaptation plans.

Activity 3.1.2.1. Generation and dissemination of communication products on lessons learned and successful experiences

CASM, CIAT, and SERNA collaborate to create various communication products tailored to each project component at national and local levels. These products disseminate information about project activities and outcomes related to climate change resilience and adaptation. By engaging stakeholders through effective communication, the initiative aims to enhance awareness, understanding, and participation in climate resilience efforts based on lessons learned from the project, ultimately contributing to strengthened resilience and adaptation to climate change impacts in and outside the project area. This knowledge will be disseminated through a communication campaign, including physical and digital materials.

Activity 3.1.2.2. Systematization of EWS experiences and implementation of CSA practices

CASM, CIAT, and SERNA collaborate to systematize communication products published about project activities at both national and local levels. This involves managing and organizing these products in the CGspace information repository and other relevant platforms. Systematizing communication products allows stakeholders to access and utilize valuable information about climate change resilience and adaptation efforts after the project ends and to stakeholders outside the project area. This initiative enhances knowledge dissemination, facilitates learning, and promotes best practices to strengthen climate resilience and adaptation strategies within communities and institutions.

Activity 3.1.2.3 Design a strategy to scale the good practices generated by the project at the national level

CASM, CIAT, and SERNA collaborate to design and develop a comprehensive communication strategy for the project, targeting audiences at both local and national levels. This strategy involves identifying key audiences, appropriate media channels, and tailored messages to effectively disseminate knowledge and practices related to climate change resilience and adaptation. By employing various communication channels such as digital platforms, social networks, radio, television, and press, this initiative aims to raise awareness, educate, and engage stakeholders in climate resilience efforts.

B. Describe how the project/programme provides economic, social and environmental benefits, with particular reference to the most

vulnerable communities, and vulnerable groups within communities, including gender considerations. Describe how the project/programme will avoid or mitigate negative impacts, in compliance with the Environmental and Social Policy and Gender Policy of the Adaptation Fund.

The Project will be carried out in two areas of Honduras, the Santa Barbara Mountain region and the Yojoa Lake Sub-watershed Area, in the communities of five municipalities: four from the Santa Barbara Region: Concepción Sur, Las Vegas, Gualala, and Santa Bárbara, and Santa Cruz de Yojoa, located in the department of Cortes.

Targeted Participants

Thirty-nine communities in the special use area of Santa Barbara Mountain National Park (PANAMOSAB) and Yojoa Lake Basin will be served. They have been selected because they are part of the micro-basins of Lake Yojoa and the Ulua River; they also have a greater risk of landslide, greater exposure to expansive agriculture, affected by excessive logging, and communities that have identified wildlife refuges areas such as the Quetzal refuge in the municipality of Las Vegas and the refuge of the Emerald Hummingbird, endemic to Honduras, in the municipality of Santa Barbara.

In the five project municipalities, there are 159,151 people, of which 60%, 96,168 people, live in rural areas (INE, 2013[32]). In the project municipalities, there are 45,235 housing establishments. The estimated number of families in the 39 selected communities is 18,000, which, according to data from the municipalities, comprise 20% of children under 15 years old and 30% of young people between 15 and 29 years old. These families have limited economic resources, and their main activities are subsistence agriculture, small-scale livestock, and forestry. These activities are primarily subsistence and carried out on small plots because there is no equitable land distribution. Most of the land is held by large ranchers.

From the 18,000 families in the prioritized communities, 3500 families will be selected, which means a population of approximately 14,000 people, under the following criteria:

- Socio-economic status and violation of rights: Single farming mothers or fathers, socially vulnerable and impoverished households belonging to indigenous groups, number of children and youth in the family.
- Productive Condition: Culture of planting vegetables, basic grains, or expansive agriculture, productive units with invasive agriculture near the micro-watersheds.
- Vulnerability condition: plot of land near the micro-basins, families affected by the impact of tropical storms in the last five years on homes, crops, and soils, families located in territories at risk of flooding, landslides, and geological faults.
- Environmental conditions: Plot of land with agricultural vocation, agroforestry, families located in areas of nature reserves protecting wildlife.

The groups identified who will benefit from the project for strengthening knowledge and capacities for planning and decision-making for adaptation to the impacts of climate change and variability are the following:

[32] INE. (2013). Total homes in Honduras (2012 – 2022).

- Productive groups: cooperatives and associations of producers, especially coffee, one of the area's most important crops.
- Environmental management groups: Santa Barbara Environmental Movement (MAS)
- Risk Management Organizations: Municipal Emergency Committees.
- Community Groups: Women's Networks, Youth Networks, and community committees.
- Government organizations: Municipal Governments, Municipal Women's Offices, Municipal Environment Units, representations in the areas of the Secretary of Agriculture (SAG), Secretary of the Environment, Forest Conservation Institute, COPECO (Office of Risk Management and National Contingencies), and the Secretary of Education.

These groups participated in the consultation workshops that were carried out in the project territories. The groups demonstrated little knowledge about how to cope with the impacts of climate change. Over 82% stated that they had little or no understanding of dealing with the effects of climate change. Likewise, regarding their participation in management or adaptation plans, over 59% had not participated or did not know if they existed. However, during the consultation, they expressed interest in participating in the project.

There are some non-governmental and academic organizations with whom the possibility of coordinating actions has been identified and can be included in the project execution. Some of these organizations are in the area, such as the Árbol de Misericordia Foundation, the Global Village Project, and the Christian Organization for the Integral Development of Honduras (OCDIH). Some academic institutions, such as the Institute of Earth Sciences of the National Autonomous University of Honduras, will cooperate with the Secretary of Environment and the country's Climate Change observatory.

The Project will generate the following environmental and socioeconomic benefits.

Environmental benefits

The project's central aspects are designed to benefit the environment directly through adaptation practices. The project will categorize the areas of intervention, prioritizing areas for the production and conservation of water, essential areas to maintain dynamic interactions within and between ecosystems with special biodiversity value, and degraded areas (soil and forest) to contribute significantly to a healthy and sustainable environment in the project areas. By working with farmers to use the best practices of Climate Smart Agriculture, there will be environmental benefits from a lower use of agrochemicals and a greater use of organic products, using adapted technology for a more precise use of inputs, leading to reduced environmental contamination.

The project will strengthen public and private institutions and community organizations at the local, municipal, and inter-municipal levels. This will lead to implementing and owning environmental regulations and climate change adaptation plans. At least four municipalities in the Santa Barbara Mountain region and one in the Yojoa Lake Sub-watershed area will perceive the environmental benefits.

The Santa Barbara Mountain region is the main water source for Lake Yojoa, which supports the livelihoods of approximately 18,000 families through fishing, hospitality, and tourism services. This makes it key to environmental sustainability and people's quality of life.

Another important environmental benefit of the project beyond the direct intervention area is that three municipalities in the Santa Barbara Mountain region (Concepción Sur, Gualala, and Santa Barbara) are part of the Ulúa River sub-basin, which is a river of great importance in the Sula

Valley. Therefore, improving agricultural practices with a CSA approach in the upper zone of these watersheds will reduce high flood damage in this watershed. The Sula Valley is an important economic and demographic region in Honduras, so these flood reductions provide important environmental benefits to a key region of the country.

CSA practices and EWS generate greater climate resilience by enabling farmers to anticipate and adapt to extreme weather events, which can improve the resilience of their agricultural systems. This translates into increased capacity to cope with droughts, floods, storms, or other adverse weather events. By adopting these sustainable practices and warning systems, farmers can optimize the use of resources such as water and nutrients, increasing crop productivity. Soil conservation, crop diversification, and water management can increase agricultural yields while not causing harm to the surrounding environment. CSA practices, such as soil conservation and conservation agriculture, also have significant environmental benefits. They can reduce soil erosion, improve water quality, promote biodiversity, and reduce greenhouse gas emissions.

Socioeconomic Benefits

As described in Part One, the project will be developed in a context of high poverty with weak livelihoods, so the project's CSA and diversified agricultural systems component will introduce improvements that will rapidly translate into higher incomes. By improving and introducing agroecological practices, productive diversification, improving water quality, and resilience to climate change, significant improvements in food security and nutrition can be expected. These changes will also likely generate income for families and improve their economic and social well-being.

One of the primary purposes of the project is to improve the capacities of communities and local governments to participate in climate change adaptation initiatives and enable them to make better and informed decisions regarding their environment and, in turn, improve their quality of life. In this sense, this development of capacities increases their states of resilience, being an enormous factor in providing sustainability and viability to adaptation plans and a better response to climatic phenomena.

Another project intervention is the implementation of EWS, which will benefit the population through risk reduction. An adequately designed EWS helps save lives, jobs, land, and infrastructure and contributes to long-term sustainability in the region. Early warning systems help public officials and administrators plan, save money, and protect economies. Therefore, with the implementation of the EWS, the local governments and the population of these municipalities, especially the most vulnerable, will benefit. The loss of lives, as well as their livelihoods, will be avoided.

The effective relationship between governance, improved agroecological capacities, and knowledge management represents an integrated strategy of the basic and interdependent elements to achieve adaptive viability to climate change by communities and local governments. Integrating diverse knowledge and practices, both ancestral and new technologies, creates an optimal scenario to develop new bases for resilience.

Vulnerable groups

In the consultations with vulnerable groups such as women, youth, and indigenous groups, the project team identified differences in the impact of climate change and climate variability on these groups. It is perceived that women, girls, and indigenous groups are the groups that are most impacted (highest impact) related to access to water, access to food, and overload of

work. Therefore, in accordance with the Environmental and Social Policy of the AF, these groups, especially women, will have a broad participation in the development of the project and the execution of the activities.

To guarantee the inclusion of these vulnerable actors in the project actions, elements of the approach will be included in a differentiated manner according to their differentiated barriers. The inclusion of knowledge of rural communities will be reinforced and strengthened, and at the same time, will be of enormous value to the rest of the community to better understand and conserve the environment, restore environmentally friendly agricultural practices, and establish inclusive and culturally relevant decision-making processes.

Gender considerations

According to data from the National Institute of Statistics (INE, 2022[33]), the female population in the country represents 52% of the general population; of this percentage, 43.8% is in rural areas. Women constitute 53.1% of the working-age population, yet only 48.7% of women are employed, and of this group, half are self-employed.

The estimated gross national income per capita in Honduras for women (constant 2017 prices) was US$4,173, and US$6,446 for men. Additionally, there is great inequality in land distribution: only 14% of land titles are held by women in rural areas[34]. Though women contribute individually or collectively to agricultural production and support the agricultural work of their husbands or partners, they have much lower living conditions than men, and their contribution to agricultural production is often invisible.

With the agrarian reform that began in 1962, women were only direct beneficiaries of land inheritance if they had a family to look after. Despite their work on the land, women were not considered farmers in the 1975 agrarian reform law. In 1992, the Law for the Modernization and Development of the Agrarian Sector recognized the possibility of granting land to peasant women who were married or in a common-law union with or without dependents. The law ended cooperative agrarian reform and created the land market, thus creating individual private ownership. Individual private ownership replaced the traditional and collective forms of land ownership. Joint titling is only possible if the couple requests it, with which the decision came to depend on cultural or patriarchal norms, leaving land titles primarily in the name of the male family members. From 1996 to 1997, 43% of women and 57% of men benefited from land transfers.

The Law of Equal Opportunities for Women in 2000 declared family patrimony real estate, urban or rural, financed by the State, must be registered in the name of both spouses and those living in a de facto union registered in the Civil Registry. In 2004, the Property Law established new procedures for acquiring, adjudicating, regularizing and transmitting, registering, and administrating real estate.

Related to education, women's illiteracy is higher in the rural areas at 19.2% compared to the urban area at 12.2%, as there are many challenges and barriers to girls' education, such as the long distances to travel to reach an educational center that exposes them to situations of violence in their communities[35].

[33] INE. (2022). Population by sex according to large age groups (2016-2022).

[34] PBI 2022. PBI-Honduras highlights the Nueva Esperanza farmers as they may receive land titles after four generations of working the land

[35] INE. (2021.) Multiple Purpose Household Survey.

One of the difficulties in addressing the situation of rural women in Honduras, and specifically in the project area, is the lack of up-to-date statistics on land tenure, access to credit, the relationship with natural resources, and their participation in climate change adaptation actions. However, in CASM's experience in fieldwork and through the interviews carried out with leaders in the areas, sexist and patriarchal culture has multiple expressions of masculinity that prevent the full enjoyment of the rights of women and girls to the development of their autonomy and self-realization. Some of these expressions are the exclusion of women from decision-making spaces, economic and psychological dependence, sexual abuse, early pregnancy, and domestic violence. Adolescent pregnancy in rural areas is 28%, while in urban areas, it is 16.5%[36].

The field research captured important dynamics about the sexism and patriarchal culture that is harmful to both men and women. In the focus groups, we asked men and women if their community has opinions or beliefs about women and girls and if these beliefs limit their activities or opportunities. Men reported that the beliefs are that girls and women should spend little time in the field and more time at home, that girls are future housewives, that they can do what they want as long as they agree with men, and that they have less freedom than men. These beliefs imply that women have fewer opportunities and less freedom. Women responded to the same question, that the beliefs are that women and girls are changing, that they used to think that they should not study or work. They mentioned that before, parents thought investing in a girl's education was a waste because she would only fall in love. In two communities, they noted that those who continue to limit women are the churches, that in some churches, they do not allow women to wear pants, and in others, women should depend on men. The difference between men's and women's responses highlights that women perceive that limitations are reducing, while men continue to hold strong beliefs that women should not do certain things. Also, the responses highlight the role of some churches in perpetuating sexist beliefs that are harmful to women.

In the discussion in separate groups for men and women, we asked the participants if, in their community, there are things that women are not allowed to do. In El Aguantal, Santa Barbara, women reported that there are men who do not allow their wives to participate in community spaces because they are insecure that the woman would be unfaithful. In the other communities, women did not identify activities they could not do. Men reported different opinions about whether there are activities that women cannot do. In Buenos Aires, Concepción Sur, they said that women could not handle money; In El Playón, Concepción Sur, they said that women could not practice debauchery; In La Guama, Santa Cruz de Yojoa, they said that women could not do hard work or make their own decisions. In El Sauce, they reported that women could do everything if they informed the men what they were doing. In Lomas del Aguila, they said that some men do not allow women to work. In other communities, they reported women could do what they wanted with equality. These results show men and women have different perspectives on women's freedom and equality.

Gender-based violence is high in Honduras[37]. In 2022, from January 1 to October 31, the National Emergency System 911 registered 19,552 complaints of domestic violence and 30,944 complaints of family abuse in the country[38]. In Honduras, an incident of sexual assault against women is registered every three hours. The most serious manifestation of gender-based violence is femicide, which, according to reports from women's organizations, is increasing in

[36] MICS. (2019). National Demographic and Health Survey / Multiple Indicator Cluster Survey (ENDESA/MICS 2019).

[37] World Bank. (2023). Gender-Based Violence Country Profile: Honduras

[38] (CDM Report 2022)

the country. Between January and June 2022, according to the Public Ministry, 244 deaths of women were registered, 48% more than in the same period of 2021. According to the Violence Observatory of the National Autonomous University of Honduras, from the total 244 deaths reported, 70.9% are considered femicides because they occurred with expressions of hatred and contempt due to gender. Of the total deaths of women, 40% take place in rural areas, among which Santa Barbara and Cortes are among the ten departments with the highest incidence.

In the focus groups, the research team explored the topic of gender-based violence, discussing the topic in separate groups of men and women. They asked men and women if they knew women who had suffered violence from their husbands or partners. Among women, in five of the ten communities, they said that they do know of cases of violence, and in the other five communities, they said that there is no violence, or no violence has been perpetrated. Among those who said yes, they mentioned a case in which an adult man tried to rape a girl, and an adult woman intervened to help the girl. Among the male respondents, in eight of the ten communities, they mentioned that they know of cases of violence against women.

In the same groups, they asked that if a woman were to suffer violence by her partner, what actions could the woman take to seek help. Among women, the answers varied widely. Some women said to report it to the police, others said to leave the situation, and others said to seek support from a women's organization or network. Several mentioned that there are no organizations nearby that support these cases. Men also responded in a mixed way; several said that nothing could be done and that it was necessary to remain silent. Others mentioned that one could denounce a leader, an authority, or the head of the organization. They noted that no one generally asks for help and that the cases remain secret.

The livelihoods of women depend, to a great extent, on the availability of natural resources, especially due to their situations of poverty and low food productivity. These activities can cause a depletion of natural resources, especially if sustainable practices are not used. Women are affected by the responsibility for the daily use and management of these resources in their role of meeting the basic needs of their families through food processing, gathering wild products, carrying water, and gathering firewood. Vast and growing deforestation, coupled with the depletion of water sources, forces women to travel longer distances. This requires women to spend more time and energy to obtain these much-needed resources, increasing their workload and reducing the time available for other activities.

These challenges were identified during consultations with participating groups, which identified a high impact of climate change and climate variability on women and girls, especially in access to water and food and increasing workloads. This was confirmed in the interviews with leaders in the area who raised the issue of the significant burden of women's work due to domestic chores and their involvement in agriculture and community life, which is undervalued and often invisible.

In some of the municipalities where the project is being implemented, there are emergency and risk management plans, municipal development plans, and climate change adaptation plans, which do not have any analysis or differentiated strategies by gender. The consultation and interviews with leaders reflect little participation and involvement of women in constructing these plans. Concerning risk management and EWS, it was observed that no gender analysis has been integrated to date. In an interview conducted during initial consultations, a municipal leader expressed, "There are no public policies according to differentiated needs, that is, in addition to suffering material damage, there are also emotional consequences, and the physical spaces of the shelters do not have safe conditions for this population. The damage assessment

reports do not identify differentiated needs.[39]"

The country has a regulatory and institutional framework for gender equality, such as the Gender Equality and Equity Plan 2010-2022, following international instruments. Even though this plan has expired, it contains several essential axes, including access, sustainable use, biodiversity control, natural resources, and risk management. The government has announced they have developed or are developing a new gender plan; however, such plan is not publically available. The challenge in this area is to adopt a gender equity approach in strategies related to climate change, protected areas, forest management areas, biodiversity, water, and risk management.

During the formulation and development of the complete proposal, an integrated effort was made to conduct field research to gain insights into gender and socioeconomic conditions and better understand project risk. A deeper analysis and diagnosis of gender were developed, which serves as a basis for developing a gender plan according to the FA Gender Policy. The complete gender assessment can be found in Annex 1.

This analysis informed the development of the gender action plan, a set of actions designed to be integrated into the existing activities to ensure gender is considered in each of the three project components. These actions are described in the activity description in section 2.B. and summarized in Table 3. The budget for these actions has been included in the project execution budget, described in more detail in Section 3.G.

Table 3: Gender Action Plan

Output 1.1.1 - Institutionalize the creation of spaces for participatory technical and thematic dialogue with representation from civil society, the public and private sectors, and academia.		
Objective	**Actions**	**Indicator**
Integrate a gender perspective and intersectional approach in the MAP diagnostics	Hire a gender consultant to integrate an intersectional and gender approach into the diagnostics tools.	Number of diagnostics that include a gender and intersectional perspective
Promote the inclusion of women in dialogue spaces.	Integration of women in the participatory agroclimatic roundtables by making specific and intentional connections with women's associations and the municipal women's office	Number of women who participated in the roundtables.
To carry out equitable actions to close the gap between women and men.	Integrate discussions, activities, and actions that address gender inequality to create a gender-specific plan in each MAP.	Number of events held for women. Number of women who participated in the women's roundtables.
Output 1.1.2 - The Municipal Development Plans have a climate change adaptation axis aligned with the National Plan and the country's climate change adaptation goals.		

[39] Vice mayor of the municipality of Cabañas, initial gender consultation, CASM, December 2022.

Objective	Actions	Indicator
Mainstreaming the gender perspective in Climate Change Adaptation policies.	Include the gender perspective in incorporating the Climate Change Adaptation component of the Municipal Development Plans in the intervention municipalities.	Number of documents with a gender perspective in the municipal plans on Climate Change Adaptation.
	Design a protocol to reduce the risks of GBV during climate emergencies and a protocol for people to get support if they suffer from GBV during a climate-related emergency.	Number of documents with action routes for attention to GBV in municipal Adaptation to Climate Change plans.
Output 1.2.1 - Capacities generated in local stakeholders for the implementation of early warning systems (EWS)		
Objective	**Actions**	**Indicator**
The EWS will be identified and implemented according to the climatic risks of the area and the needs of women in the community.	Hold participatory meetings with women to learn about their needs in the areas where the EWS will be implemented.	Number of women's participatory meetings held. Number of women who participated. Number of EWS implemented that address the specific needs of women.
Output 1.2.2 - Local and national actors disseminate decision-making, adaptation, risk-reduction actions, and knowledge to the population.		
Objective	**Actions**	**Indicator**
Promote the use of EWS and its information for women.	Design a mechanism to ensure EWS information arrives to women, youth, older adults, people with disabilities, and Indigenous Peoples.	Number of inclusive dissemination mechanisms.
Output 2.1.1 - Community capacities are generated for the adoption of diversified and climate-smart agricultural practices and production systems.		
Objective	**Actions**	**Indicator**
Promote gender equity through compensatory actions aimed at women.	Encourage the participation of men and women in PISCA workshops, especially in households with a married couple or a free union. Incorporate discussions or tools in the PISCA methodology that engage men’s and women’s perspectives in planning and decision-making. Additionally, women-headed households in	Percentage of women's participation. Percent of male participants who complete planning activities with their spouse, partner, or other female family member.

	agriculture should be invited to participate in PISCA.	
	Design workshop times, spaces, and topics to be inclusive and accessible for women.	# of trainings designed with a gender-sensitive approach
	Incorporate a category dedicated to women-led initiatives for the National Award for Best Practices in Climate Change Adaptation.	Number of women or groups of women participating in the prize
Specific result 2.1.2 - Alternatives for financing climate-smart agricultural practices are promoted.		
Objective	**Actions**	**Indicator**
Promote financial alternatives for women or groups of women.	The design of the savings and credit mechanism must consider the gender dynamics and barriers women and men face to access credit. These barriers should be addressed by the design of the savings and credit mechanism.	% of people who accessed credit by sex
Strengthen women's financial skills and knowledge.	Conduct financial training for women.	Number of trainings conducted. Number of women benefited.
Specific result 3.1.1 - Implement training processes for communities and leading actors on adaptation to climate change and climate variability in the areas of intervention.		
Objective	**Actions**	**Indicator**
Include women in disseminating knowledge on climate change adaptation and resilience.	Invite and encourage the participation of women both as trainers and people trained through the ToT program	Percentage of women's participation.
Promote the modification of traditional gender roles and the inclusion of women in productive activities related to climate change.	Train the project team on gender inequality and gender-sensitive leadership.	# and percent of project team members trained in gender-sensitive approaches
Promote gender equity in climate change adaptation at primary and basic education levels.	Include positive messaging in the curriculum design that addresses harmful gender norms.	Percentage of women's participation.
Specific result 3.1.2 - Knowledge management and learning spaces are created locally, nationally, and globally.		
Objective	**Actions**	**Indicator**
Visibilize women's participation in climate	Identify lessons learned from gender-sensitive approaches in	Lessons learned include gender considerations (yes or no)

change adaptation	climate change adaptation and include women's experiences in communication products.	% of communication efforts that highlight women.

Mitigation of negative impacts

A complete list of mitigation measures has been developed as a part of the Environmental and Social Risk Assessment and can be found in section 3.C. Detailed descriptions of the Project's Environmental and Social Impacts and financial and project management risk mitigation efforts are described in Section 3.B. Financial and Project Risk Management. Additionally, the project will include the following general measures to avoid or reduce its possible negative impacts.

1. The "CASM Transparency and Conflict of Interest Policies" will be employed throughout the design, implementation, monitoring, and evaluation process.
2. Applying CASM's "Procedures for the Management of Complaints, Suggestions, and Compliments" policy will serve as a Grievance Mechanism for the project. CASM will constantly monitor the inputs provided by the project's key actors and stakeholders, particularly community organizations and local governments.
3. Regarding particularly vulnerable groups affected by the project, such as women, children, and older people, CASM will be guided by its "Protection Policy for Vulnerable Adults" and "Child Protection Policy."
4. In addition to applying CASM policies, all AF policies, such as the Environmental and Social Policy and the Gender Policy, are followed, as are all the guidelines established in relation to inclusion and benefits for different actors, especially the most vulnerable.
5. The proposed project's objectives align directly with Honduras's National Climate Change Adaptation Plan." Consequently, we will be in permanent contact and collaborate with state institutions to align efforts and resources and avoid possible development delays.

Environmental and Social Policy Compliance

The project will guarantee compliance with the Adaptation Fund's Environmental and Social Policy by implementing the Environmental and Social Management Plan (ESMP), as found in Annex 5. The plan includes mitigation measures to address project risks, monitoring project risks, and implementing safeguards, such as a grievance mechanism. The project's Monitoring, Evaluation, and Learning coordinator will provide an annual report to the project's strategic and operations committees on monitoring the project risks. Each committee will review the report and provide recommendations on a strategic and operational level in case adjustments to mitigation measures or project activities need to be made.

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

Cost-benefit of CSA

The project's results framework describes increased communities' resilience, born from implementing actions to strengthen local capacities through governance, planning, knowledge management, and adopting climate-smart agriculture practices (CSA). Elements identified for the sustainability of adaptation actions under the CSA framework are related to the CSA's three main objectives: sustainable adaptation, sustainability of production or income, and reduction of

greenhouse gas emissions or mitigation. According to the Guide to CSA practices or Climate Adapted Sustainable Agriculture (CASA) developed by CASM and the Bioverstity-CIAT alliance, CSA practices have shown a critical cost-benefit result. Implementing CSA practices can result in greater adaptation, productivity, economic gain, and social and environmental co-benefits.

The IDB has developed a prioritization analysis of CSA practices in the project implementation territory, including cost-benefit criteria. Through an economic approach, the practices to be promoted can produce less or more profit and provide more or fewer externalities such as protection of biodiversity, reduction of air, water, and soil pollution, and employment. Actions such as water harvesting, irrigation systems, good agronomic practices, ditches, crop rotation, variety selection, pest control, and use of climate information, among others, can be prioritized based on location and production system and from the perspective of medium-scale producers and self-consumption focused farmers. CSA differs from 'business-as-usual' approaches by emphasizing the capacity to implement flexible, context-specific solutions supported by innovative policy and financing actions (Lipper et al., 2014[40]).

The prioritization of CSA practices will be carried out with farmers during the project. However, the list in Table 4 presents examples of prioritized practices in initiatives developed in Honduras, which are part of the list of possible practices to prioritize in the project territories. The list of practices provides a wide variety of options, with a range of costs and space needed to implement the practice.

Table 4: List of potential CSA practices to be prioritized in communities.

CSA Practice	Size of Practice[41]	Cost USD
Organic and diversified vegetable garden	28 m2	412
Terraces with living barriers with organic fertilizers	437m2	253
Improved variety of red beans "Honduras Nutritivo"	8 lbs	8
Bio-preparations insecticides/fungicides (madrifol, sulfo-calcium, mountain microorganisms, honeywater)	20-15 liters	48
Harvesting rainwater roof rains	1100 liters	138
Reservoir of water for irrigation	3600 liters	49
Reservoir for tilapia production and irrigation	3600 liters	51
Management of shade in coffee plantations	0.5 mz	49
Living barriers (cocoa, maguey, pineapple, izote)	4 x 20 m	65
Crop rotation	0.25 mz	32
Diversified vegetable garden	6m2	86
	Average cost	$108

Source: Lopez et al 2020.

According to (FAO, 2013[42]), in the publication "Climate Smart Agriculture Sourcebook," results

[40] Lipper et al. (2014). Climate-smart agriculture for food security.
[41] Size refers to the area of land or volume of space that will be occupied when the practice is implemented
[42] FAO. (2013). Climate Smart Agriculture Sourcebook.

of a cost-benefit analysis (CBA) in Central America showed that, although the implementation of most climate-smart agriculture practices imposes additional costs on producers, these costs are offset by several benefits associated with these practices. The main benefits include additional income generated by new products, greater resilience to negative economic impacts (for example, falling prices), and greater food availability for the family. Many practices also generate environmental co-benefits, such as protecting biodiversity, reducing soil erosion, and increasing carbon dioxide capture. CBA results indicated that all climate-smart agriculture practices had a cost-benefit ratio greater than 1 (i.e., benefits exceed costs).

Another CBA study conducted at CSA practices in Colombia in systems similar to those of the project area in coffee with shade under different scenarios showed positive profitability indicators. Socioeconomic surpluses translate into an external benefit for the community and improve their quality of life, such as externalities, reduction of GHG emissions, prevention and control of soil erosion, and water conservation. In Honduras, profitability analysis for fruit plantations using organic practices obtained a cost-benefit ratio of 1.78 (CIAT, 2022[43]).

Cost-effectiveness comparison with alternatives

Alternative options to increase the adaptive capacity of communities may include investments in response to disasters, construction of more significant infrastructure works for water collection, or a more substantial number of agricultural inputs for the intensification of production; however, each alternative to the proposed strategies has its particularities. Table 4 provides a review of the key project strategies and alternative options. Additionally, a qualitative analysis of costs compares the proposed strategy with the alternatives to assess the cost-effectiveness of the methods chosen. Finally, an analysis of the pros and cons of the strategy and alternatives is provided.

Table 5: Cost analysis

Proposed strategy	Cost	Alternative	Cost	Analysis
Time-sensitive information about climate and climate-related risks is shared with communities through Early Warning Systems.	$8/ person/ year	Farmers access climate information and alerts through a smartphone app	$10/ farmer/ per year	It is not viable as few households have smartphones with consistent internet access. This option is only available for farmers, not the whole population, which is a big limitation.
		Community-based monitoring and response systems	$25/ person /year	Creating a separate community-based monitoring and response system will be more costly than integrating it into existing structures for EWS. Both still require investment in climate monitoring equipment, considered for the EWS, but they require developing individual community systems, which will be expensive.
Climate-smart agriculture is	$108	Large-scale, commercial	$445	Investing in larger-scale, commercial agricultural production instead of working with small-scale

[43] Swisscontact, Alianza Bioversity - CIAT. (2022). Profitability Analysis of Climate Resilient Practices in Cashew production in the Gulf of Fonseca – Honduras.

Table 5: Cost analysis

Proposed strategy	Cost	Alternative	Cost	Analysis
promoted through PISCA and savings and credit mechanisms.		agriculture		producers implies high machinery and chemical input costs. This option also leads to higher greenhouse gas emissions.
		Promoting non-agricultural livelihoods for resilience	$1000	While livelihood diversification is important for resilience, it does not resolve the challenge of people's dependence on agriculture for food security. Additionally, building sufficient capacity and associated infrastructure to develop alternative livelihoods is expensive. $1000 is an estimate of the necessary startup capital and cost of training to start a microenterprise.
Integrate credit and savings mechanisms for climate change adaptation into existing financial institutions and mechanisms.	$1.2M	Developing stand-alone financial mechanisms to be managed directly by the project	$2.5M	The project team does not have the existing staff or a legal structure to manage financial mechanisms. However, the project improves sustainability and long-term impact by working with existing institutions and mechanisms. The cost would be at least two times higher to create new financial mechanisms, host project staff and create necessary protections if managed directly by the project.

When adaptation is not implemented effectively or sufficiently to cope with the severity of climate change, some of the costs may fall on the State, either directly through disaster relief funds and/or economic losses from extreme weather events. In its comprehensively articulated components, the current proposal will implement adaptation actions at the local and sub-national levels in an organized, cost-effective manner.

An essential aspect of implementing the CSAs is financing, which is why, within the actions, alternative funding, savings, and credit will be promoted by local mechanisms for implementing adaptation measures. This mechanism may be a rural bank or a community self-managed savings group, according to the prioritization of each territory. These mechanisms already exist in the territories, so their capacities will be used, and it is more effective to raise awareness and guide them to include CSA financing in their services than to organize other specific alternatives. Strengthening these local savings and credit mechanisms in the funding of sustainable agricultural practices adapted to the climate will generate in the near future, the families of these territories will be motivated to carry out the same since they will benefit from the financial services based on in savings and credit, which will improve access to the goods and assets necessary for climate-smart and sustainable production.

According to the IDB, knowledge management and EWS are among the most cost-effective measures for adaptation (IDB, 2014[44]). Regarding knowledge management, the project proposes implementing an educational program with a formal and non-formal approach, including the population, community leaders, public officials, and civil society organizations, through the Training of Trainers (ToT) methodology using virtual modalities when possible. The

[44] IDB. (2014). The 5 most cost-effective climate change adaptation measures.

use of virtual modalities will help reduce costs. There are many benefits of increasing knowledge in the context of climate with public stakeholders and residents, as they have a fuller comprehension, which can bring them power in action and lead to increased resilience.

The project proposes establishing EWS in the territories according to the guidelines of the country's governing bodies and with the participation and empowerment of different local actors, including government, communities, and vulnerable sectors. An adequately designed EWS helps save lives, jobs, land, and infrastructure and contributes to long-term sustainability.

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

The project proposed is part of two instruments that the State of Honduras, the Kyoto Protocol and the Paris Agreement, have ratified. The Kyoto Protocol was signed on February 25, 1999, and ratified in July 2002. The Paris Agreement was ratified by the National Congress of Honduras on July 20, 2016, which establishes in article 2, literal b) "relative to the commitment of the parties to increase the capacity to adapt to the adverse effects of climate change and promote climate resilience and development with low greenhouse gas emissions, in a way that does not compromise food production." The project is consistent with this international instrument that seeks to strengthen the adaptation capacities to climate change in communities and diverse actors, specifically working on CSA to protect food production.

In line with the Paris Agreement, Honduras presented its Nationally Determined Contribution to Greenhouse Gas Emissions (NDC), whose priority is adaptation. Thus, Honduras has submitted three communications, in which it announces the actions carried out by the country as a country that are related to climate change. The latest communication presented in 2019 presents national circumstances and how variability and climate change impact the country. In the last communication, institutional arrangements and public policies are proposed that allow for the implementation of climate measures. Also presented is the inventory of Greenhouse Gases (INGEI) and topics related to climate finance.

The Third National Communication establishes that the agriculture sector is the third leading sector in the distribution of gross emissions of greenhouse gasses. It is also one of the sectors most affected by climate variability and change. In the face of this, the country has established that its mechanism of action should be governed by the approach of climate-smart agriculture (CSA). The project is aligned with this approach as one of its main components is the implementation of climate-smart practices (CSA).

The project is nationally consistent with Honduras' 2022-2026 Government Plan, which proposes building a democratic state in Honduras based on participatory democracy and popular power. To achieve an equitable distribution of social benefits through social policies, create a supportive, inclusive, and violence-free Honduras where rights prevail over privileges and exclusions. The plan establishes an alternative economic model for Honduras that focuses

on strengthening and increasing the role of the State in the economy, especially in strategic areas and public services. The objective is to diversify the productive matrix with higher value-added activities and increase productivity, promoting equity between genders, ethnicities, generations, and territories to promote sustainable human development.

Within the different axes set out in the 2022-2026 government plan, the Environmental Protection and Agroforestry Development plan is proposed, which establishes the approach to the main problems such as the loss of forest, the advance of mining and hydroelectric generation in the hands of large companies, and the constant problem of the impact of disasters. The plan also establishes the need for a Climate Change Adaptation and Mitigation Programme. In line with regional agreements, ensure a) solid material recycling strategies, b) reduction of pollution in air, water, and soil, c) monitoring the carbon footprint of our industry, and d) prohibition of importing toxic waste. The project proposed is aligned with this plan, as the project promotes CSA practices to reduce the impacts of climate-related disasters on small-scale farmers.

Another instrument in the national framework that gains importance in this project, due to the impact of Tropical Storms Eta/Iota in the area, is the Reconstruction Plan for Sustainable Development (PRDS in Spanish) that was presented in 2021 by the Government of Honduras and the United Nations System. One main objective is to achieve social and productive recovery from the effects and impacts of storms Eta and Iota, seeking to strengthen institutional and social capacities for governance, sustainable development, and resilience. The proposed project is consistent with this objective since it also aims to strengthen the resilience capacities of the diverse local actors, especially those previously affected by Eta and Iota.

The PRDS also has an Environment, Risk Management, and Climate Change component with studies and projects that guarantee the safety of the population and the development of productive activities in the event of future natural disasters. In this component, work will be done on the definition and implementation of effective climate change adaptation programs that are inclusive and participatory (inclusive of women and youth), especially at the local and regional level, which is also aligned with the project since it seeks to generate participatory actions with governments, local actors, civil society, academia, and the private sector to implement climate change adaptation measures and build resilience to climate events.

The National Climate Change Strategy of Honduras (ENCC in Spanish) is a national instrument that proposes incorporating the approach to climate change in the different public policies, both socially, economically, and environmentally, as well as at the national, regional, sectoral, and municipal levels. The plan was published in 2010 and has not been replaced; it remains the active plan for the country.

Within this strategy, two components are particularly aligned with the proposed project – (1) Agriculture, Soils, and Food Security, and (2) Risk Management. The Agriculture, Soils, and Food Security component is linked to the guidelines for adopting systems, technology, and good practices for sustainable agriculture, and it is related to the project component on practices adapted to climate change and climate variability. The Risk Management component focuses on developing meteorological monitoring and early warning schemes in anticipation of hurricanes, tropical storms, and floods. This relates to the project's proposed actions for strengthening and implementing EWS in the intervention areas.

The proposed project is also linked to the Vision and Mandate of the National Climate Change Adaptation Plan of Honduras:

- **Vision:** A Honduras resilient to climate change, productive and inclusive, generating decent jobs, taking advantage of the benefits and services of its natural resources in a sustainable manner, and reducing its vulnerability to climate change with a focus on the well-being of people.
- **Mission:** Improve the national capacity to adapt to the effects of climate change in communities and cities to promote sustainable and low-carbon development by reducing socioeconomic vulnerabilities and environmental degradation.

The project proposal seeks to focus its efforts on strengthening the resilience of communities to climate change, increasing their productive capacity, reducing their vulnerability to provide sustainability and well-being to the beneficiaries, and strengthening local capacities to adapt to climate change by reducing their socioeconomic vulnerabilities. For this, it is essential to develop solid institutional and local governance for the creation and viability of adaptation plans, which the project addresses in component one. The project proposes the development of adaptation plans to climate change at the municipal level, which will be done according to the guidelines already established and in coordination with the National Directorate of Climate Change, the governing body of the National Plan.

The goal of the National Strategy for Adaptation to Climate Change for the Agri-food Sector of Honduras is that the country is made up of a society, an economy, and a territory whose climate vulnerability is low so that the negative impacts derived from climate change are also low; and to improve the adaptive capacity, particularly of the populations, sectors, and territories most exposed to climate threats. Additionally, the strategy seeks to build an agri-food sector with a greater capacity to respond to climate variability and greater adaptive capacity to climate change, responding with policies, strategies, and appropriate measures that reduce vulnerability in a multicultural environment, respectful of gender equity, supported by sustainable development. The project proposes the strengthening and involvement of local actors in the Participatory Agroclimatic Tables (MAPs in Spanish) that are derived from this national strategy and that are led by the Secretary of Agriculture and Livestock, together with the International Center for Tropical Agriculture (CIAT). Finally, the project proposes adopting agricultural practices adapted to climate variability and climate change.

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

The project is linked to and complies with the sustainable development strategies of actions/activities outlined in each of the norms, legislative policies, and national decrees of law established in the country. Honduras, being a signatory country of the United Nations Framework Convention for Climate Change (UNFCCC) with its approval via the National Congress in 1995, has contributed to the fact that there is currently a robust legal and strategic framework regarding climate change.

NATIONAL CLIMATE CHANGE LAW, approved in November 2014, establishes the principles and regulations necessary to plan, prevent, and respond in an adequate, coordinated, and sustainable manner to the impacts of climate change. The law establishes the creation of the Inter-Institutional Committee on Climate Change as a consultative and advisory body to formulate policies, monitoring, and social control to manage the impacts of climate change.

Likewise, the Secretary of State in the Office of Natural Resources and Environment created the National Directorate of Climate Change as a technical entity specialized in adaptation and mitigation. The project will have a close relationship with these bodies outlined in the law, especially the National Directorate, to implement various actions, especially developing municipal adaptation plans with the guidelines established in this law.

GENERAL ENVIRONMENTAL LAW (Decree No. 47-2010) establishes that the protection, conservation, restoration, and sustainable management of the environment and natural resources are of public utility and social interest. The central government and the municipalities will promote the rational use and sustainable management of these resources to allow their preservation and use. An important part is related to the environmental impact assessments and establishing a specific protocol in the law. The inhabitants of the local communities must participate directly in actions to defend and preserve the environment and the rational use of the country's natural resources. The participation of private organizations of any kind in conserving the environment and natural resources is of public interest. These organizations will be consulted to elaborate on the plans and measures adopted. The declaration of the protected natural areas, including their buffer zones, will be made in consultation with the municipalities of the corresponding jurisdiction before being made public.

The project will work and coordinate so that local governments and the inhabitants of the area strengthen their capacities to fulfill their responsibility for the sustainable management of natural resources with a focus on adaptation to climate change, as established by this law, especially with the responsibility of the municipalities with which the Project will work in a very coordinated manner.

REGULATION OF THE NATIONAL SYSTEM OF ENVIRONMENTAL IMPACT ASSESSMENT (SINEIA): The objectives of the law are as follows:

- Organize, coordinate, and regulate the National System for Environmental Impact Assessment (SINEIA in Spanish), establishing links between the Ministry of the Environment entities from the public, private, and international sectors.
- Ensure that plans, policies, programs, projects, industrial facilities, or any other public or private activity likely to contaminate or degrade the environment are subjected to an environmental impact assessment to prevent environmental damage.
- Identify and develop the procedures and mechanisms through which the SINEIA and the other sectoral laws and regulations on environmental matters complement each other.
- Promote, manage, and coordinate the processes for incorporating the public, NGOs, banks, private companies, and government, central, and local institutions into SINEIA.
- Apply the policies, norms, and procedures that update the SINEIA under the country's economic, political, social, legal, cultural, and environmental situation, always seeking the compatibility of development and the environment.

No new protected areas will be declared as a part of the project, no infrastructure development will take place, and no large-scale agricultural projects will be promoted or implemented, so the law does not require the project to perform an environmental impact assessment. However, the Adaptation Fund policy requires this assessment. Thus, though the Honduran law does not require an environmental and social impact assessment to be completed. Nonetheless an E&S assessment was completed to comply with the AF.

ENVIRONMENTAL CATEGORIZATION TABLE: Ministerial Agreement-705-2021: Its main objective is the categorization of projects that are categorized by sector, subsector, and activity, works or projects subject to the Environmental Impact Assessment process, as well as

classifying them according to their potential environmental impact. Likewise, it fulfills the function of serving as a technical base to establish the Environmental Risk Category of the activities, works, or projects that are in operation to guide the different authorities gathered in the National System of Environmental Impact Assessment (SINEIA) regarding the actions of administrative procedures of an environmental nature related to permits, authorizations, and control tasks, by the principle of proportionality.

This table establishes agricultural activities developed in the communities of intervention, so it will serve as a basis for reviewing whether they are items that the project will support and do what corresponds to environmental impact assessments according to the law.

FORESTRY, PROTECTED AREAS, AND WILDLIFE LAW (DECREE No. 156-2007) establishes the legal regime to which the administration and management of Forest Resources, Protected Areas, and Wildlife will be subject, including their protection, restoration, use, conservation, and promotion of sustainable development, in accordance with the social, economic, environmental, and cultural interest of the country. The project will consider this law since the project intervention area includes three protected areas, and we will work following this framework to avoid negative impacts on these protected areas.

TERRITORIAL ORDERING LAW (Decree No. 180-2003) promotes the integral, strategic, and efficient management of all the Nation's resources, human, natural, and technical, through the application of effective policies, strategies, and plans to ensure human development in done in a dynamic, homogeneous, equitable and sustainable manner. It also establishes the provisions for developing these policies, strategies, and plans. The project demonstrates an output that seeks, together with key stakeholders, to have municipal adaptation plans in the Santa Barbara Mountain region and Yojoa Lake Sub-watershed Area that are linked to the development processes of these municipalities; thus, these actions will be coordinated with the different technical units established by law for its elaboration and development following each of the established norms.

THE SINAGER LAW aims to create the National Risk Management System, constituting the Honduran legal framework which seeks to ensure that Honduras has and develops the capacity to prevent and reduce the risks of potential disasters, in addition to preparing, responding, and recovering from the actual damage caused by natural phenomena or by those generated by human activities. One of the principles of the system is decentralization, where it is established that the municipalities, within the scope of their respective competencies, must assume and execute the specific tasks and actions in the territory to comply, in an adequate and timely manner, with their responsibility for risk prevention and reduction, to prevent and mitigate disasters, adapt to climate change, respond to emergencies, and rehabilitate and rebuild areas. The project proposes the strengthening/establishment of EWS, so it must follow the guidelines of the SINAGER Law for this work. The project will work directly with local governments, helping them comply with these aspects of the law by following the steps for compliance with the risk management policy.

F. Describe if there is duplication of project/programme with other funding sources, if any.

CASM has a policy that includes inter-institutional coordination and collaborative relationships with other organizations and institutions to establish programs in the areas of intervention, which is why it is essential to know about the programs and projects that are developed in the same

area with government cooperation funds and other types of funds, to apply the lessons learned from projects related to the topics of interest to CASM and the communities served. CASM monitors other projects to ensure efforts are not duplicated. Some of the current projects identified in the area are:

IDB Program for the Restoration of Climate Resilient Forests and Forestry:

2020-2024; Ongoing, in final stages of completion

The objective is to improve the climate resilience of coniferous forests located in critical areas for water supply in the region. The objectives are to restore forest cover with resilient systems and strengthen governance and financial sustainability. This project's central theme is forest restoration, which differs from the proposed project, so there is no direct duplication. The proposed project will seek to discover the lessons from this project in building climate resilience, especially in lessons related to climate-resilient agroforestry that can contribute to sustainable water resources. The proposed project has synergy with this project as they both work with a watershed perspective and a gender perspective.

Productive Investment Initiative for Adaptation to Climate Change (CAMBiO II) of BCIE:

2021-Ongoing

The project objective is to increase the resilience to climate change of Micro, Small, and Medium Enterprises (MSMEs) in Guatemala, El Salvador, Honduras, Nicaragua, Costa Rica, Panama, and the Dominican Republic, through access to financial and non-financial resources to adopt and apply the best adaptation measures to climate change. According to the BCIE, the initiative will support MSMEs to access “credit, technical assistance and incentives for climate change adaptation investments in sectors related to agroforestry, organic agriculture, silvopastoral systems, sustainable tourism, productive activities in private/community protected areas, sustainable forest management, sustainable fisheries and aquaculture, among others.” The proposed project has extensive synergy with this project as the project seeks to fund CSA and other resilience and adaptation strategies. The proposed project will link to this program to learn about financing adaptation measures for climate change since the project has a specific output on financing alternatives. Additionally, the proposed project will seek to connect producer groups with this funding window with BCIE.

GEF Agroforestry landscapes and sustainable forest management that generate environmental and economic benefits at a global and local level CONECTA+:

2018-2024; Ongoing, expected to be extended

The objective of the project is to strengthen the connectivity between protected areas and productive landscapes to obtain social, environmental, and economic benefits in the humid arid biological corridor of southwestern Honduras, specifically in the departments of Comayagua, Copán, Intibucá, La Paz, Lempira, Santa Bárbara, Cortés and Ocotepeque. The proposed project will seek to maintain a close relationship with this project that also covers the two areas of intervention. Though CONECTA+ works more specifically on the issue of restoration and reforestation, it also seeks to promote initiatives in productive value chains to increase income and other benefits for communities and farmers related to coffee and cacao in agroforestry systems through an ecosystem approach.

For now, coordination with this project is identified in the component of Climate-Smart Agricultural Practices for the coffee production chain, which is the most important value chain in both areas of intervention and an important value chain for both projects. Before project implementation, the technical and strategic teams will meet with the leaders of GEF CONECTA+ to determine overlap in project communities and identify if certain project activities

can be shared to strengthen the impact for both projects. During this meeting, both parties will share implementation plans regarding territory and thematic areas to avoid duplication, especially when working with the same topics in the same communities. Throughout implementation, CASM will seek to coordinate annual meetings to prevent duplication and promote collaboration.

Key lessons learned from this project that are important to consider for the proposed project are: (1) it is essential to maintain coordination and explain the project to diverse actors, including all levels of government; (2) it is important to have clear roles documented for project team members for efficiency and efficacy; (3) diverse actors, not just the project team, should be involved in setting targets and monitoring; and (4) set targets and baselines early in the project implementation.

Binational project "Comprehensive Environmental Management of the Motagua River Basin" with financing from the Global Environment Fund:

2020-2025; Ongoing

The project will improve the management of the Motagua River basin, reduce land-based sources of pollution and emissions of non-organic pollutants, mitigate the impact on coastal marine ecosystems and the livelihoods of communities. This project is developed jointly between Guatemala and Honduras. It consists of four components that range from the diagnostic analysis of surface and groundwater resources, a strategic action program between Guatemala and Honduras for the integral management of the Motagua basin, the development of innovative initiatives for the integral management of the river, generating knowledge and lessons learned to be replicated and expanded.

Due to the overlap of activities in one of the proposed municipalities, a relationship will be developed with this project to coordinate efforts and avoid duplication. Before project implementation and annually after that, CASM will coordinate a meeting with this project's team to avoid duplication, especially in establishing Early Warning Systems. The proposed project will build off of the lessons learned from the important work done in this project to raise awareness about the conservation issues about the Motagua River, especially through diverse communications methods and using inclusive communications materials (i.e. radio, diverse languages, print, etc.).

Existing CASM Project in Santa Barbara

CASM currently operates seven projects in the Santa Barbara region, with a wide range of topics due to the integral approach CASM uses when working with communities. The projects include work with preventing violence and promoting human rights, identiying new partners to protect the Yojoa Lake watershed, co-management of the Santa Barbara Mountain, work with children, work with faith-based organizations, and quality management in projects. While none of the projects work directly with climate resilience and adaptation, CASM's presence through these projects and extensive work with communities, women, children, and diverse partners promotes synergies between the projects for diverse populations to be engaged and active in the proposed activities with the AF. Additionally, CASM's work through these projects promoting human rights, women's inclusion and empowerment, and community engagement will be essential to complementing the efforts of the AF project which seeks to promote human rights and women's equality.

G. If applicable, describe the learning and knowledge management

component to capture and disseminate lessons learned.

Following the guidelines and instructions for knowledge and learning management, the project focuses on knowledge management. The objectives to be achieved are oriented toward two results: (1) Certified training processes with relevant stakeholders and (2) Spaces for knowledge management and learning at a local, national, and global level.

The result of training processes is oriented towards transferring knowledge and learning about adaptation measures for climate change and climate variability through a lens of both local understanding and public policy management. The project will promote the training of municipal trainers who can carry out learning transfer/scaling tasks at the community level. Likewise, public events will be held at the municipal and sub-national level, including but not limited to forums, roundtables, discussion panels, and commemoration of symbolic dates about climate change (International Day Against Climate Change, World Water Day, among others). In a complementary way and as a measure of the sustainability of the learning, the design and implementation of a guidance document on climate change and resilience will be promoted and incorporated into basic formal education in the educational system in the intervention areas.

To develop these actions, it is necessary to design a knowledge management and communication strategy based on the context and problem, identifying academic partners and in conjunction with governing bodies such as SERNA's Climate Change Department. These strategies will include mapping knowledge, audiences, and messages, developing learning objectives and indicators, and the channels and tools used by CASM, CIAT, or other institutions in the country, such as the PICSA (Participatory Integrated Climate Services for Agriculture). Alliances will be made with academic institutions to design and implement training processes for adaptation and gender.

The second objective seeks to generate information and comprehension of adaptation to climate change, climate variability, and resilience from previous successful experiences and those generated from this intervention. At least three (3) successful experiences in contexts of climate variability (droughts and extreme rainfall) will be recorded and classified, which can then be scaled at the territorial level.

Experiences that are considered successful and that can be systematized and shared can be the following:

- Integrated participatory climate services for agriculture (PICSA) is a methodology that guides farmers to understand historical changes in climate patterns, especially rainfall, temperature, and relative humidity, and how these changes affect agricultural production. Communities that have already applied the methodology and communities of interest in scaling could share their experiences through exchanges of experiences.
- The practices of Climate-Adapted Sustainable Agriculture (CASA) can be systematized due to the pillars that make up the fusion of the contribution to agriculture at the municipal and community level in relation to the three pillars: a. Productivity and Food Security, b. Adaptation, and c. Mitigation can also be scaled through the generation of positive outcomes by those who have already implemented it.
- The experience generated through EWS can be systematized from the risk and adaptation approach, valuing the information they generate and the experience of farming families and the Municipal Emergency Committee in the use of climate information for decision-making in the context of climate variability and risks, this experience could be disseminated through exchanges between communities and organizations, case studies can also be developed that can be shared with different

national and international organizations.

During the execution of the project, there will be a flow of information for families, community leaders, local organizations, municipal governments, academia, and the private sector as follows:

- Meetings with project stakeholders will be held each quarter to discuss and analyze the results and information produced by each process.
- During all training events, sections will raise awareness about the effects of climate change.
- At the project team level, spaces for continuous and systematic analysis of the practices will be created to ensure the design of action plans that disseminate and enhance the processes and results generated.
- A quarterly newsletter will be created and shared, briefing those involved in the project and any other interested parties.
- When the project is carried out, the practices of other organizations and countries, especially those linked to climate change adaptation, that are implementing similar projects will be considered.
- Knowledge of climate adaptability, technological innovations, and sustainable practices will be disseminated through institutional portals and social media (Facebook, Instagram, Twitter, websites, etc.….).
  Communication products will be established to disseminate information on best practices, sustainability, and successful experiences carried out by the project. These products will target the population and local, national, and international organizations, including Adaptation Fund spaces.

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

Two phases of consultations were conducted with stakeholders and community members: before the concept note design and during the full proposal development.

Table 6 summarizes the consultation activities, dates, participants, key topics, and outcomes.

Table 6: Summary of consultations

Date	Activity	Location	Participants	Total participants, % women	Key topics and outcomes
8 Nov. 2022	Stakeholder consultation workshops	Trifinio Fraternidad Reserve	Municipal Women's Offices, Municipal Environmental Units, National Ancestral Coordinator of Maya Ch'orti 'Indigenous Rights of Honduras, Youth network representatives, women's networks, Women representatives of savings	NA – this region is no longer considered part of the proposal	
9 Nov. 2022		Santa Bárbara Mountain		66, 20%	Community members and diverse institutions confirmed their interest in the

Table 6: Summary of consultations					
Date	**Activity**	**Location**	**Participants**	**Total participants, % women**	**Key topics and outcomes**
			self-management groups, Office of Risk Management and National Contingency Plans, EROC, Institute of Forest Conservation and Development, Ahprocafe Representative, municipalities , Chorti Commonwealth		project. Data about climate change awareness confirmed the need for the project. Participants provided input on ideas, needs, and interests for the project (see results below.
16 Nov. 2022	Government representative meeting	At COP27	Deputy Minister for Secretary of Natural Resources and the Environment Malcolm Stufkens, The Minister of COPECO Ramon Soto, The representative of CEPREDENAC, Claudia Herrera, The Regional Manager of CASM Copan, Edy Mendez	4, 25%	The proposal was presented to acquire the commitments from these representatives and ensure well-coordinated inter-institutional work
21 Dec. 2022	Review of results of consultation	Tegucigalpa, Honduras	The National Director of Climate Change, Eng. Wendy Rodriguez	1, 100%	The consultation results and the project's results framework were socialized and the commitment to combine efforts to achieve the desired impacts was affirmed
4 March 2024	Focus groups and surveys	Buenos Aires, Concepción Sur	Women and men of diverse ages and livelihoods, with a focus on people with agricultural livelihoods	20, 35%	The results from these consultations provided a better understanding of the gender dynamics in the region, the needs of people in the target communities, and a socioeconomic baseline.
2 March 2024	Focus groups and surveys	El Playon, Concepción Sur		20, 45%	
29 Feb 2024	Focus groups and surveys	El Zapote, Gualala		19, 74%	
1 March 2024	Focus groups and surveys	Lomas del Aguila, Gualala		20, 60%	
7 March 2024	Focus groups and surveys	El Carreto, Las Vegas		20, 60%	
8 March 2024	Focus groups and surveys	El Novillo, Las Vegas		24, 79%	
27 Feb 2024	Focus groups and surveys	El Aguacatal, Santa Barbara		32, 63%	
28 Feb 2024	Focus groups and surveys	El Sauce, Santa Barbara		18, 33%	

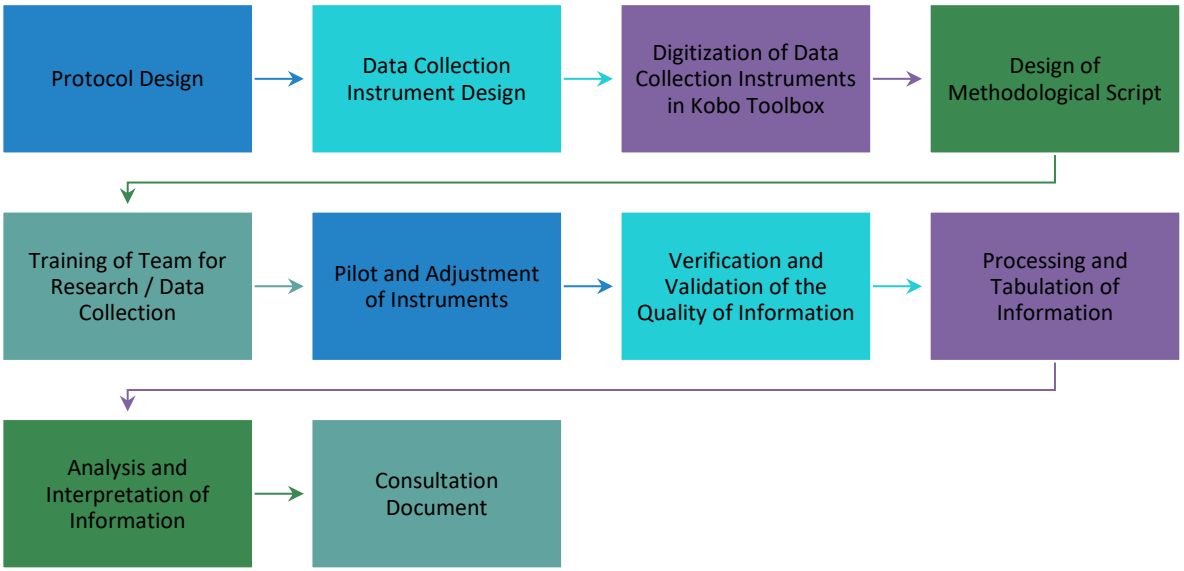
Table 6: Summary of consultations					
Date	**Activity**	**Location**	**Participants**	**Total participants, % women**	**Key topics and outcomes**
6 March 2024	Focus groups and surveys	La Guama, Santa Cruz de Yojoa		21, 62%	
5 March 2024	Focus groups and surveys	San Isidro, Santa Cruz de Yojoa		19, 58%	

First Consultation

The team conducted the first consultation using a systematic process that maximized the information from the interested groups. During these consultations, the project team supported several CASM regional teams with extensive knowledge of the proposed intervention areas. The project team worked closely with the International Center for Tropical Agriculture (CIAT), a partner specializing in field research methodologies and climate change adaptation. Multiple meetings were held before the consultations to ensure the process was orderly, including preparing protocols to obtain the consultation document.

The following image shows the process carried out (Figure 3):

Figure 3: Detailed process to design, implement, and create consultation. Source: CASM.



Stakeholder Consultation Methods - First consultation

The process from Figure 8 is explained in more detail below.

1. Protocol Design

The team designed a protocol to ensure the consultation was carried out in an orderly manner, outlining each step to be followed by Trifinio Fraternidad Reserve (R.T.F) and Parque Nacional Montaña de Santa Bárbara (M.S.B). This protocol facilitated the collection of necessary information from stakeholders, community members, regional and national leaders, and local governments and organizations in the municipalities, serving as a basis for developing the concept note and proposal. The team initially considered the Trifinio Fraternidad Reserve as a key area for the project, but through planning iterations, the municipalities in the Ocotepeque Department were removed. The protocol considered local customs and respect for the idiosyncrasies of the communities, to receive comments and opinions from stakeholders, and to respond to questions that arose during workshops and interviews.

Meetings were held with the management teams to publicize each of the aspects contained in the protocol and the need to follow each of the guidelines stipulated in an orderly manner. The points considered in the protocol design were as follows:

- Selection of interested parties.
- Place of consultations.
- Preparation and convening.
- Definition and aspects of the consultation.
- Methodology of the consultation.
- Dissemination of the results of the consultation.

2. Design of Collection Instruments

For the consultation, it was necessary to build information-gathering tools. Based on the design of questionnaires with a series of mostly closed questions, one aimed at community/local leadership and the other at key informants, the process of reviewing the content of the questions to be asked was also fundamental; the information to be obtained, the analysis of the validity of the variables to be analyzed, the availability of sources, the consensus of the criteria for consultation and the instruments of collection according to the necessary information to be obtained. These two questionnaires were uploaded to a Kobo Toolbox platform and piloted for understanding, detecting errors, and adjusting and improving them.

3. Methodological script design and training

A methodological script for information collection was designed, and teams were trained. The consultation was carried out through workshops, one in the Trifinio Fraternity Reserve and the other in the Santa Barbara Mountain, where young people, indigenous population, women, senior citizens, public officials belonging to community structures participated, local organizations; key actors, representatives of regional and national organizations such as the Forest Conservation Institute (ICF), COPECO, the Red Cross, the World Meteorological Organization (WMO), National Roundtable for Incidence on Risk Management (MNIGR), and the Secretary of Agriculture. Some actors, such as regional and national ones, were asked specific questions about the degree of knowledge they had.

4. Quality of the information collection:

Triangulation was used to ensure the validity of the information collected to avoid possible biases and to guarantee reliable results. The triangulations that were used were: (1) the triangulation of persons interviewed with the information gathered at the consultation workshops and the annotations made by each of the teams that facilitated the process in the field; (2) the

information provided by the different actors was reviewed, to capture multiple perspectives of the proposed intervention; (3) Interested groups were consulted in 10 municipalities belonging to the Trifinio Fraternity and Mountain Reserve of Santa Barbara. For the theoretical triangulation, use was made of the resulting framework on the themes of the intervention to be proposed, good practices identified, studies on the two proposed areas, and general knowledge of the population about their interests, concerns, and needs, etc.,

Two steps were followed to verify the quality of the information:

- Stage I: Once the information was collected, the questionnaire was revised to ensure all questions were answered from the workshops and individual interviews.
- Stage II: All interviews were validated by reviewing all questionnaires.

5. Processing and tabulation of information

The consultation was conducted systematically, gathering information through workshops and individual interviews. Once finished, the questionnaires were tabulated and graphed to obtain the answers from the population in the two mountains: Santa Barbara and Trifinio Fraternity.

6. Analysis and interpretation of information (quantitative and qualitative results)

The analysis and interpretation were performed based on the data generated in the KoboToolbox platform. Analysis and consensus meeting was held with the teams involved in the consultation. Subsequently, the results were discussed in various working meetings, and the outcome framework was adjusted according to the population's interests, priorities, and concerns.

This process rescued the interested group’s ideas, interests, concerns, and alternatives concerning the three components selected for the proposal (Territorial planning in the face of climate change, Climate-smart agricultural practices and systems, Knowledge management and learning) based on their experiences in the prioritized territories. To present this proposal, two consultation workshops were held, one in the Santa Bárbara Mountain region and the other in the Trifinio Fraternidad Reserve, where ten intervention municipalities converge:

Two workshops were held on November 8 and 9, 2022, one in the Trifinio Fraternidad Reserve and the other in the Santa Bárbara Mountain, where a diverse group of participants, including young people, women, older adults, and the Maya Chortí, an Indigenous Community who have leadership in the region, took part. The development of the consultation workshops resulted in the analysis of the three proposed components and alternatives, the definition of some proposed ideas was shared, and the proposal’s activities were specified. The necessary information to make the pertinent adjustments according to the needs and priorities of the participating populations was collected.

The participants were selected according to the following criteria:

1. Recognized leadership in their communities.
2. Belonging to a community or municipal structure.
3. Have worked on climate change or know the subject.
4. Knowing the study area.
5. The leadership of any dependency of the State of Honduras.

Participants - First Consultation

Representatives of the different entities participated in these workshops:

- Representatives of the Municipal Women's Offices
- Representatives of the Municipal Environmental Units
- Representatives of the National Ancestral Coordinator of Maya Ch'orti 'Indigenous Rights of Honduras
- Youth network representatives
- Representatives of women's networks
- Women representatives of savings self-management groups
- Representatives of the Office of Risk Management and National Contingency Plans (COPECO in Spanish)
- The direction of the Western Regional Space (EROC in Spanish)
- Representatives of the Institute of Forest Conservation and Development
- Ahprocafe Representative (Coffee Production Group)
- Representatives of the different municipalities
- Representative of the Chorti Commonwealth

Several interviews were carried out with people from different institutions at the regional and national levels, such as representatives of the Climate Change Unit of the Secretary of Agriculture, the National Advocacy Table for Risk Management, and the Head of Early Warning at COPECO. Different meetings were held to obtain the commitment and support of the actions by the governing entities. A meeting was held on November 16, 2022, taking advantage of COP27, where the proposal was presented with its different components to acquire the commitments from these representatives and ensure well-coordinated inter-institutional work. In this meeting, the following representatives participated:

- Deputy Minister for Secretary of Natural Resources and the Environment Malcolm Stufkens
- The Minister of COPECO Ramon Soto
- The representative of CEPREDENAC, Claudia Herrera
- The Executive Director of CASM, Nelson Garcia Lobo
- The Regional Manager of CASM Copan, Edy Mendez

On December 21, a meeting with the Minister of Secretary of Natural Resources and the Environment to socialize the consultation results and the project's results framework was carried out. The commitment to combine efforts to achieve the desired impacts was affirmed.

- The National Director of Climate Change, Eng. Wendy Rodriguez
- CASM Executive Director Nelson Garcia Lobo
- CASM National Program Manager, Suyapa Ucles
- Planning, Monitoring, and Evaluation Manager, CASM, Maria Amparo Peña Barahona.

The list of participants in these meetings and photographic evidence can be found in Annex 2.

Findings - First Consultation

Below are key findings from the first round of consultation. The details about the Trifinio Fraternidad Reserve area were removed as the region is no longer relevant to the current project proposal.

- The consultation workshops first discussed the recurring or frequent climate-related risks

in the Santa Bárbara Mountain areas, including landslides, forest fires, and floods, which affect the livelihoods of families living there.

- To face these climatic risks, 71% of the population of Santa Bárbara Mountain, including groups of women, youth, adults, and community structure leaders, stated that the most viable measure to confront the risks is to organize themselves into a prevention and emergency committee.
- The consulted population of the Santa Bárbara Mountain areas expressed concern about the factors influencing climatic risks, particularly extensive agriculture in the Santa Bárbara Mountain region. It is worth expressing the concern of the population regarding this key factor since multiple studies have shown that extensive agriculture is a trigger that increases climate risks, generating or releasing significant amounts of methane and nitrous oxide, two powerful greenhouse gasses, which in the long run are triggers for floods and desertification. Another concern frequently mentioned in the consultations and interviews was the extension of the urban/agricultural border extension.
- Another highlight from the consultation was that the most critical impact of climate change that does not allow communities to advance and develop is the loss of crops, which was mentioned in 25% of the Santa Barbara Mountain region interviews.
- The population was unaware of a management or master plan in the Santa Bárbara Mountain region.
- An important finding is that of all population groups, climate risks affect women and girls more, mainly in three aspects: access to water, food, and increased workload. These elements are essential for working on gender considerations in the face of climate change and variability.

Some proposals to integrate into the project development were expressed in the consultation workshops and interviews:

- Implementing water systems to avoid increased workloads for women and girls is essential.
- Create awareness and train the population on climate risks and adaptation to the impacts of climate change.
- Educate more about climate change and climate variability; in this sense, one of the actions proposed in the project, working with the national educational system to construct guidelines to develop the climate change contents established in the Basic National Curriculum, was valued.
- Implementation of environmentally friendly agricultural practices.
- Implementation of informative and awareness-raising spaces.
- Implementation of management and contingency plans.
- Work jointly with national and international organizations regarding the financing of climate-smart agricultural practices.
- Early warning systems already exist in the areas to be diagnosed and evaluated so that project activities are based on existing work, strengthening existing work, and working with the governing bodies on the topic.
- Retake aspects of work the governing bodies are doing on evaluating losses and damages.

Second Consultation

Stakeholder Consultation Methods - Second Consultation

The second consultation involved mixed methods to conduct a social and environmental risk assessment, better understand the socioeconomic situation in project communities, and conduct

a gender assessment. A survey was designed to collect household data, and focus groups were carried out to discuss specific topics in more depth.

For the household survey, ten communities were selected to be representative of the 39 project communities. CASM's regional team in Santa Barbara to identify participants for the survey. Unlike the first consultation, which focused on community and institutional leaders, this research aimed to speak with community members who are the target audience for engaging in certain project activities, like implementing CSA practices. Efforts were made to ensure equal participation of men and women in both cases. However, in some communities, there was more participation of women or men due to time factors of the participants, as people in the community stated that they were still cutting coffee or seasonal agricultural work. Despite this, in most cases, both men and women were represented.

Participants - Second Consultation

Forty-four men and 44 women from the ten communities participated in the survey. A total of 125 participants were distributed in 10 communities, meeting 100% of the target number of communities to be visited. Likewise, 79 women (63% of 100%) and 46 men (37% of 100%) participated overall. The list of participants and photographs are provided as evidence in Annex 3.

Findings - Second Consultation

The complete set of findings from the second consultation is included in the Gender Assessment (Annex 1), the Socioeconomic Study (Annex 4), and the Environmental and Social Management Plan (Annex 5).

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

The financing requested from the Adaptation Fund for the execution of the Project will fill a gap in the proposed implementation area since there are currently few projects executed in the project region. Additionally, the Project's principal aim is to adapt and increase resilience to the adverse effects of climate change and variability, as per the Adaptation Fund's requirements. There is a specific need for resources for implementing adaptation measures and productive activities, as well as supporting different organizations and local governments in generating helpful climate information for decision-making in livelihoods and reducing vulnerability to climate variability and climate change.

An essential aspect of the funding request is that the existing projects carried out in the proposed areas generally do not include vulnerable groups, not only women but also children, youth, and the indigenous population. This project will create positive impacts and avoid potential negative impacts. It is essential to incorporate adaptation measures for the livelihoods of this population, including vulnerable groups, which are being prioritized in the allocation of funds for this Project.

The Project has CSA practices and EWS among its main actions, both of which generate greater climate resilience that can improve the resilience of agricultural systems. Much of the actions of the Project aim at incorporating climate-smart practices and establishing and strengthening Warning Systems to avoid crop losses that impact livelihoods while improving

productivity and optimizing the use of resources such as water and nutrients.

Knowledge management is vital since other regional projects are weak in the generation and multidisciplinary management of local and regional knowledge and technological innovation. The project will also invest part of its financial resources to ensure that the population and the different actors strengthen their capacity to generate knowledge and raise awareness about the impacts of climate change in their territory and the adaptation measures that can be built.

The co-financing of this project has yet to be foreseen. Still, CASM will seek additional resources to continue with the activities initiated by this project after the financing of AF has concluded. Nonetheless, even without other funding sources, the Project with the proposed funding will deliver its outcomes and outputs. Additionally, it is essential to mention that CASM has an institutional presence with other projects in the proposed intervention areas, which will support the amplification of this project's impacts.

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

The project has been designed to allow the results to continue after the completion of the intervention since the project and its design arise from the needs and interests expressed by the communities. Likewise, a multiplier effect of the proposed actions is projected to be generated. It will be sustained with mechanisms and strategies to work with local institutions, government, and financial mechanisms over time.

To guarantee the sustainability of the project's actions in the future, the following strategic elements were considered in its formulation:

- The National Climate Change Strategy, the Sustainable Development Goals, and the National Plan align and complement the project.
- The project considers the institutionalization of spaces for dialogue and the social and economic organization of the populations of the Santa Bárbara Mountain region and Yojoa Lake Sub-watershed Area based on the knowledge and experience of CASM as an implementing organization. It also prioritizes the sustainable use of natural resources and the adaptation of people’s livelihoods to climate change following traditional and cultural practices, as well as uses that benefit such management.
- The project prioritizes the sustainable use of natural resources and the adaptation of people's livelihoods to climate change by following the practices and traditional and cultural uses of natural resources that benefit their sustainable management.
- The equitable and equal participation of young people, women, men, and Indigenous Peoples is considered throughout the project cycle, including decision-making. Women and young people are prioritized in all activities. According to the initial consultations, particular emphasis will be placed on considering women as beneficiaries since they are the most affected by climate variability and climate change.
- Since its formulation, the project has considered the interchange and transfer of knowledge and appropriate technology for the environments of the project areas. Additionally, considering the cultural and economic context the proposed technologies and practices are easily usable and adaptable by the beneficiary population considering the cultural and economic context, so they are anticipated to continue to use them once the intervention has finished.
- The project is integrated into the institutional strategies of CASM, in which promoting

climate justice and environmental sustainability are some of the principal axes of institutional work. This work, which has a regional presence in Santa Barbara, will continue after the project ends.
- Empowering actors is essential for their socio-organizational, livelihood, and political dimensions as part of the sustainability process. This empowerment is accompanied by community volunteers' willingness to participate in and lead project activities and community organizations' ability to replicate knowledge and experiences to more people.

To promote the scaling and replication of project impacts beyond the geographical and time constraints of the project, the following is considered:

- The project's lessons learned, and best practices will be shared with institutions and organizations in other parts of the country and world to promote the use of the knowledge generated by the project in designing and implementing different climate change adaptation activities.
- The project is integrated into the institutional strategies of CASM in promoting climate justice and environmental sustainability. This work, which has a regional presence in Santa Barbara, will continue after the project ends, scaling the impacts. Additionally, the lessons learned, and best practices will be shared with other CASM regional offices that work on the topic.
- The national prize for climate adaptation will promote innovation and best practices at a national level, scaling the impacts beyond the project region and generating dialogue and lessons learned between participants around the country.

The sustainability of the EWS infrastructure developed during the project has been considered to ensure the investment continues to benefit the communities targeted after the project, specifically:

- Continued logistical and institutional support: CASM has an ongoing presence in the region with a diverse portfolio of projects. With a regional office in Santa Barbara and plans to continue working into the future, CASM will provide the logistical and institutional support to monitor the EWS after project end and ensure the institutionalization process continues to be effective.

- Institutionalization of EWS: While the establishment of EWS will be led by the project, it will be done in conjunction with local, regional, and national government entities. Once they are established, the responsibilities for the management will be transitioned into institutional responsibilities. While CASM and CIAT will continue to monitor and support the process, the project will lobby to ensure the activities and funds necessary to continue the EWS are established within government institutions.

- Continued financial support: once the EWS are establish, which is the costliest part of the process, the ongoing management and monitoring of the EWS is considered through the institutionalization of the EWS through existing government mechanisms. In the case that further funds are necessary for upkeep or management, CASM will seek these funds through their network of private and public donors.

The sustainability of the governance mechanisms developed during the project has been considered to ensure the investment continues to benefit the communities targeted after the project, specifically:

- Continued logistical and institutional support: CASM has an ongoing presence in the

region with a diverse portfolio of projects. With a regional office in Santa Barbara and plans to continue working into the future, CASM, through their territorial vision for development, will provide the logistical and institutional support to participate, provide support to leadership, build capacity, and monitor the progress of governance mechanisms created during the project.

- Institutionalization of governance mechanism: The governance mechanisms established during the project will be done in conjunction with local, regional, and national government entities. Once they are established, the responsibilities for the ongoing leadership of the goverance entities be transitioned into institutional responsibilities. While CASM will continue to monitor, participate in, and support the process, the project will urge institutions to ensure the activities and funds necessary to continue the governance mechanisms are established within government institutions.

- Continued financial support: once the governance mechanisms are established and before the project eneds, the ongoing management is considered through the institutionalization in government mechanisms, which will include funding for the management and coordination of the governance mechanisms. In the case that further funds are necessary for upkeep or management, CASM will seek these funds through their network of private and public donors.

The project has a series of linking elements that start from social, economic, cultural, and environmental sustainability, described in more detail in the following paragraphs.

Social Sustainability

The project will establish the enabling conditions so that different actors, including men and women, can participate actively and inclusively in decision-making spaces through the knowledge acquired during the training processes in the project. The identification of relevant actors from civil society, the private sector, the public sector, and academia for participation in dialogue spaces oriented towards the acquisition of commitments and distribution of roles that allow structured responses to environmental problems and new climate scenarios in the proposed territories is key to the sustainability of these spaces.

The dialogue and decision-making processes will generate the basis for fluid communication with the interested parties in Santa Bárbara Mountain and Yojoa Lake Sub-watershed Area. An important element is a team of trainers for the Training of Trainers who will have the skills to continue replicating knowledge and training more people on the effects of climate variability and climate change in the proposed implementation areas.

The processes of socialization and awareness about the effects of climate variability and climate change with the different actors in the two territories will ensure the interest and ownership of the planned short-term activities and their medium—and long-term follow-up.

An activity that favors the project's sustainability is investing in training new leaders with a new conception of power based on knowledge, horizontal relationships, and citizen co-responsibility for following up on actions that can have a positive impact.

Economic Sustainability

It is expected that the diversification of economic activities and agricultural practices adapted to

the climate and the improvements in crop production will generate higher income for the participating families to maintain these productive practices beyond the project's duration. In addition, after training the producing families in sustainable agriculture practices and in the management of projects that guarantee the exchange of knowledge on different topics, the project ensures that Indigenous and non-Indigenous farmers initiate an open dialogue of sharing ideas and best practices among their peers, thus creating further income-generating opportunities for their families.

By encouraging the population to participate in the National Prize for Best Practices in Adaptation to Climate Change, the project will generate greater awareness and interest in continuing to develop innovative and adaptive practices after project completion.

Promoting local savings and credit mechanisms aimed at financing sustainable agricultural practices adapted to the climate will generate solutions for families in the project territories and motivate the implementation of the practices since they will benefit from the financial services based on savings and credit, which will improve access to goods and assets necessary for climate-smart and sustainable production. The savings and credit mechanisms are designed to continue operating after the project ends, ensuring sustained access to funding for CSA practices. The sustainability of the savings and credit mechanisms is an important component of scaling the project impacts, as the impacts will continue to grow after the project ends, and the financial mechanism will continue working and supporting new community members.

Agreements of understanding will be signed on managing funds in banking, local financial systems, or the private sector to encourage producers to continue implementing CSA practices, with financing available with established criteria and preferential loan rates. By adopting environmentally friendly practices and demonstrating resilience to climate change, farmers can access premium markets and obtain more favorable prices for their products. Consumers will be willing to pay more for sustainable products grown sustainably with climate change in mind. By differentiating themselves in the market and offering products with sustainable attributes, farmers can obtain higher prices and improve their profitability.

Both CSA practices and EWS are designed to promote agricultural sustainability. These approaches focus on soil conservation, efficient water use, crop diversification, adoption of agroecological practices, and information and communication technologies. By integrating these aspects, the long-term viability of agricultural systems will be ensured, minimizing environmental impacts and increasing resilience to climate change.

Environmental Sustainability.

Raising awareness about the climate crisis and the implications of climate change at the national level will lead to the generation of greater articulation of decision-makers in the territories with the Secretary of the Environment and others who work on these issues within the country and government. This will establish coordinated actions to benefit and protect the Santa Barbara Mountain and Yojoa Lake areas that will continue after the project ends.

The involvement and participation of interested parties in designing and updating climate change adaptation plans will empower and commit them to continuity in the actions. Empowering the Agroclimatic Roundtables and establishing mechanisms to provide services will allow them to continue their process even after the project has ended.

Establishing EWS and generating information will enable the population to anticipate and

minimize losses in agricultural production and infrastructure; therefore, mechanisms and agreements will be generated with local governments for institutionalization and continued management of the EWSs after the project ends.

Institutional Sustainability

The local appropriation and ownership of the results, to count on the involvement of the beneficiaries throughout the management process, is widely guaranteed since communities, non-governmental organizations, and regional and national actors have been involved in the design of this proposal. We are also aware that institutional sustainability is only consistent when working with local organizations since they open the important dialogue between the diverse but equally important groups in society, which is why local organizations are key to its consultation, design, and implementation strategy.

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

Following the Fund's Environmental and Social Policy and Gender Policy, all proposed projects or programs must identify potential environmental and social impacts and risks. The initial risk assessment completed during the concept note development phase guided the participatory social and environmental risk assessment design completed during full proposal development. The team evaluated social and environmental risks using mixed methods, including focus group activities in 10 representative communities, survey questions about social and environmental risks with community members in these communities, and desk research. The complete environmental and social assessment results are available in Annex 4.

Based on the assessment results, the Project is classified as medium risk, category B. Table 6 presents the updated assessment results for the 15 environmental and social principles established in the environmental and social policy.

Table 7: Checklist of environmental and social principles

Checklist of environmental and social principles	No further assessment required for compliance	Potential impacts and risks-further assessment and management required for compliance
1. *Compliance with the Law*	X	Low risk due to strong adherence to legal frameworks and regular stakeholder consultations. The project will comply with national laws and international treaties. Management: The legal framework will be updated annually with new or changed legislation. All Undefined Sub-Projects will be monitored for compliance with the law.
2. Access and Equity	X	The project ensures fair and equitable access to services and the empowerment of marginalized groups. The risk is low due to CASM's experience in participatory engagement and social inclusion. The design and selection of Undefined Sub-Projects will include a strategy to ensure

Table 7: Checklist of environmental and social principles		
Checklist of environmental and social principles	**No further assessment required for compliance**	**Potential impacts and risks-further assessment and management required for compliance**
		access and equity in fund distribution. Management: Mechanisms for fair and equitable access, training on code of conduct, policy for accountability. USP participants will also be trained on code of conduct.
3. Marginalized and Vulnerable Groups	X	CASM has a long history of working with marginalized and vulnerable groups and key participants from these groups were involved in project consults. The risk is low. Management: Consultations with vulnerable groups, policies for child protection, gender equity, and protection of vulnerable adults.
4. Human Rights	X	No human rights violations connected to the project area or project activities have been identified. Nonetheless, given the national context, human rights concerns could be raised. Thus, it is essential to monitor these issues. Management: Monitoring for human rights adherence, including in USPs.
5. Gender Equality and Women's Empowerment	X	There is a risk that project activities will increase women's burden of unpaid work. Women already perform more unpaid work in the household, particularly in caregiving and domestic tasks, which limits their participation in paid employment and project activities. Traditional gender roles persist among community members, limiting women's opportunities and reinforcing stereotypes about what men and women can and cannot do. These roles can hinder the project's ability to engage women effectively. Additionally, there is a risk that project staff may reinforce gender stereotypes and gender roles. Women have less decision-making authority about agricultural activities than men and are generally less involved in them, so there is a risk that they will be excluded from agriculture-related project activities. Nonetheless, they are highly vulnerable to climate change, and the impacts of agricultural production affect household dynamics and food security, so they should not be excluded from decision-making. Management: A gender action plan (GAP) has been developed and budgeted to implement to reduce the possibility of excluding women. The GAP considers gender-sensitive and gender-transformative Approaches to address risks of exclusion, GBV, and increased unpaid work burdens. The project should be sensitive to the time availability of women and design activities with women to minimize increasing their burden of unpaid work. Additionally, the project will work separately with families, not just men or women. The project team will be trained in gender issues in the region and gender-sensitive approaches to leadership and project management. Women and men will be invited to participate in agricultural workshops, and special efforts will be made to facilitate planning and decision-making between spouses or other key family members. Both men and women will be encouraged to participate in and supported for

Table 7: Checklist of environmental and social principles		
Checklist of environmental and social principles	**No further assessment required for compliance**	**Potential impacts and risks-further assessment and management required for compliance**
		USP development.
6. Core Labour Rights	Assessment necessary for Unidentified Sub-projects developed in Activities 2.1.1.2. and 2.1.2.3.	The risk of breaking the ILO fundamental labor rights is low. Nonetheless, due to the sensitivity of this matter and the possible harmful impacts of non-compliance, the project will take various mitigation measures to ensure compliance. There is a low risk that unidentified sub-projects could involve labor violations, thus each unidentified sub-project (USP) will be evaluated for possible risks related to labour rights violations. Management: CASM will train project team members from all organizations and USP participants on fundamental labor rights. The operations committee will monitor the rights among the project organizations and in the communities. During the training on climate-smart agriculture, a module will be developed and incorporated to familiarize farmers in the project with their labor rights and the harmful impacts of forced labor and child labor. USPs will be assessed and monitored for labor rights.
7. Indigenous Peoples	X	The Lenca People are Indigenous to the project area. They have been consulted about the project and have participated in the field research. There is a low or null risk of harming IPs or their access to livelihoods and natural resources. Though the project will work in the territory of Indigenous Peoples, it will not impact their lands, so FPIC is not planned. Management: The project will continue to engage with IPs, monitor them, and avoid any adverse impacts the project has on IPs. IPs will be encouraged to participate in and supported for USP development.
8. Involuntary Resettlement	X	There is no resettlement in this project; the principle does not apply.
9. Protection of Natural Habitats	Assessment necessary for Unidentified Sub-projects developed in Activities 2.1.1.2. and 2.1.2.3.	While the project is near natural habitats, the promoted practices will likely improve conservation. Nonetheless, suppose a selected participant has land next to a priority natural habitat before implementing CSA practices. In that case, a more in-depth analysis will be made to understand and avoid possible risks to that natural habitat. Thus, each unidentified sub-project (USP) will be evaluated for possible risks related to protection of natural habitats. Management: Additional environmental risk assessment if land selected for CSA practices or USPs is next to a priority natural habitat.
10. Conservation of Biological Diversity	Assessment necessary for Unidentified Sub-projects developed in Activities 2.1.1.2. and 2.1.2.3.	The project is expected to positively impact biodiversity through climate-smart practices. There is a low to null risk because no invasive species will be introduced, and no agrochemicals will be used in the project. Nonetheless, each USP will be evaluated for possible risks related to biodiversity and will not be approved if there are risks associated. Management: No introduction of new crop or livestock species. USPs will be monitored.
11. Climate Change	X	The project is expected to have a positive impact, as the CSA practices reduce GHG emissions from agriculture and promote soil carbon

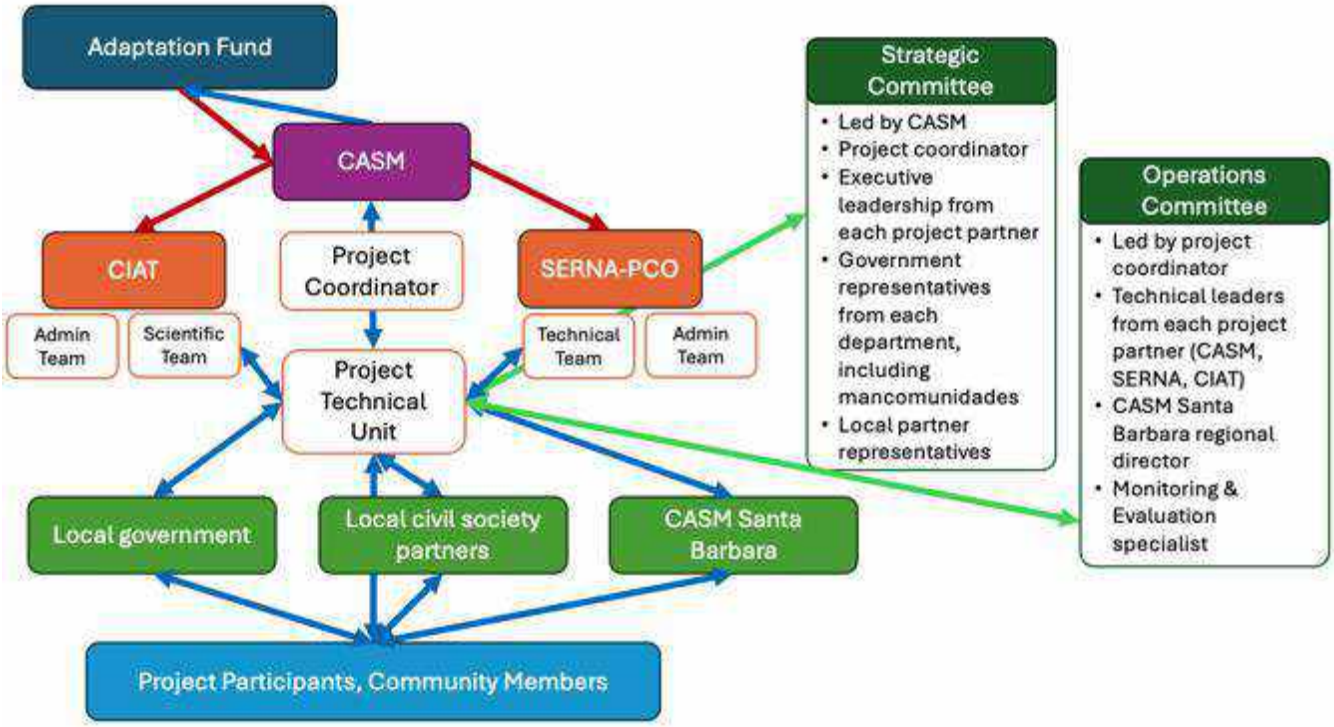
Table 7: Checklist of environmental and social principles		
Checklist of environmental and social principles	**No further assessment required for compliance**	**Potential impacts and risks-further assessment and management required for compliance**
		sequestration. Management: Monitor soil impacts, including in USPs, to ensure no unintentional negative impacts.
12. Pollution Prevention and Resource Efficiency	X	The project does not promote the use of agrochemicals. Instead, it promotes the use of organic inputs, focused on products made on the farm with locally available and recycled materials. This promotes nutrient cycling and, thus, resource efficiency. The operations committee will also seek to improve resource efficiency by coordinating field visits and reducing vehicle transport. Management: A waste and pollution prevention and management plan will be developed at project initiation. All USPs will be designed and reviewed to ensure they are in line with these criteria.
13. Public Health	Assessment necessary for USPs developed in Activities 2.1.1.2. and 2.1.2.3.	A public health screening was completed, and no risks were identified. Public health risks will also need to be assessed for USPs. Management: Public health concerns will be monitored, including in USPs.
14. Physical and Cultural Heritage	X	The project avoids impacting physical heritage sites and includes traditional Knowledge to promote the conservation of cultural heritage Management: In the unlikely case that project activity results in the discovery of important physical heritage elements, the project will coordinate with the Honduran Institute of Anthropology and History for chance finds.
15. Lands and Soil Conservation	Assessment necessary for USPs developed in Activities 2.1.1.2. and 2.1.2.3.	The soils in the project region are highly sloped and thus considered fragile, but they are the reality for small-scale farmers in Honduras. There is a minimal risk that CSA practices could cause further soil degradation; however, one of the goals of CSA practices is to improve soil conservation and soil quality, so this risk is unexpected. Nonetheless, each USP will be evaluated for possible soil conservation related risks. Management: Monitoring of CSA practices' impact on soil, mitigation if needed.

PART III: IMPLEMENTATION ARRANGEMENTS

A. Describe the arrangements for project/programme implementation.

CASM has worked closely with CIAT and SERNA to develop a governance and coordination mechanism for the project. The structure for this arrangement is found in Figure 9.

Figure 4: Project implementation arrangements



In this organizational structure for project implementation, the red arrows show the flow of funding, the blue arrows indicate the flow of information, and the green arrows indicate the communication of key decisions and strategies.

CASM, the Implementing Entity, and CIAT and SERNA, the Executing Entities, are shown within the structure. Each institution and its role are described below.

Implementing Entity

Comision de Accion Social Menonita (CASM) is the pivotal implementing entity leading the project proposal to the Adaptation Fund in its capacity as a National Implementing Entity accredited to the Adaptation Fund since 2021. CASM, a non-profit entity established in 1983, is entrusted with the mission to strengthen the self-management capacities of rights holders, such as families and social organizations, who seek to address economic, social, environmental, and political injustice.

CASM will be responsible for the general administration of the Adaptation Fund's resources for the Project's financing. Therefore, it will transfer the resources received to the project's executing entities (CIAT and SERNA), lead the project's strategic committee, provide follow-up to the technical and financial execution of all the project components, and prepare the technical and financial reports for the Adaptation Fund. CASM will lead the project's strategic committee and participate in the operations committee that will be established for project governance.

Executing entities

The Secretary of Natural Resources and Environment of Honduras (SERNA) is the focal point for various international agreements, including the Framework Convention on Climate Change, the Paris Agreement, the Kyoto Protocol, the Montreal Protocol on Substances that Deplete the Ozone Layer, the Stockholm Convention on Persistent Organic Pollutants, Convention to Combat Desertification, Biological Diversity Convention, Minamata Convention on Mercury. It is the national focal point in Honduras for various donors, including the Global Environment Facility, the Adaptation Fund, the Green Climate Fund, and the Forest Carbon Partnership Facility (FCPF).

SERNA will participate in the Strategic Committee, whose primary function is to provide strategic orientation to the program's execution, and the Operations Committee, which will guide the operational details of implementing the project on the ground. Additionally, SERNA will lead the implementation of activities in Component 1 and Component 2 of the work plan. SERNA is well-positioned to lead the project activities as it is well-connected with local institutions, which are key to its success.

The International Center for Tropical Agriculture, or CIAT, is an international agricultural research organization. It is a member of the CGIAR consortium and, as of 2017, exists jointly with Biodiversity as the Alliance of Bioversity International and the International Center for Tropical Agriculture. The Alliance works on topics related to Climate change, biodiversity loss, environmental degradation, and malnutrition. CIAT has been working in Honduras for over 30 years.

CIAT will lead the implementation of components 2 and 3 of the project, guided by its expertise in climate-smart agriculture and knowledge management. CIAT will host this project's coordinator, as it executes the most funds of the three organizations.

Shared Governance Structures

Three governance structures have been developed that will be engaged to ensure transparent project governance at a strategic, operational, and technical level.

Strategic Committee

The strategic committee ensures that the project remains focused on its overall goal, on track, and capable of achieving its climate resilience objectives efficiently and effectively. It provides timely feedback to the operations committee and project technical unit. The strategic committee will guide the project's strategy and alignment with the Adaptation Fund's goals. The strategic committee will meet twice a year and more often if there is a specific need for strategic review or insights into the project's operation.

The responsibilities of the strategic committee are:

1. Strategic Planning - review and update project strategy as necessary, adapting to the

realities of project implementation and changes in the national context.
2. Governance and Oversight - Ensure compliance with legal and regulatory requirements. Review and assess project outcomes. Provide support in project conflict management.
3. Oversee financial management and risk mitigation strategies.
4. Approve reports to the donor.
5. Facilitate engagement with high-level government stakeholders.

CASM will convene and lead meetings of the strategic committee. Each organization (CASM, SERNA, and CIAT) will have one high-level representative and one member of the project execution team. Additionally, a representative from each municipality will form part of the committee. Finally, a representative from two organizations that operate in the region of the project will form part of the committee. These organizations are the Municipal Council of Southern Santa Barbara (CODEMUSSBA) and the Association of Municipalities for the Protection of the Lake (AMUPROLAGO).

Operations Committee

The operations committee ensures the project's efficient and effective operational management between the three partner organizations, aligning daily activities with strategic goals and stakeholder expectations. The operations committee will guide operational decision-making and project implementation planning between the three partner organizations. The operations committee will meet quarterly and more often if there is a specific need.

The responsibilities of the operations committee are:

1. Ensure adherence to the project plan, timelines, and budgets.
2. Facilitate effective communication and coordination between CASM, CIAT, and SERNA.
3. Provide leadership and technical guidance to the execution of the program.
4. Approve at the technical level the technical and financial reports of the Program prepared by the executing entities before their submission for consideration by the SSC.
5. Oversee the project's monitoring and evaluation, ensuring the effective integration of data and insights from each project partner—track project progress and performance metrics.
6. Identify potential risks and implement mitigation strategies.

The project coordinator hired by CIAT will convene and lead the operations committee meetings. Each organization (CASM, SERNA, and CIAT) will have one technical team member and one administrative team member assigned to participate in the committee.

Project Technical Unit

The project technical unit is embedded in the organizational structure, as it houses the project team responsible for the day-to-day project implementation. The technical staff hired to manage and implement the project activities will form the technical unit. The project coordinator will oversee the technical unit. The principal members of the project technical unit are:

Project coordinator: This person manages the project's technical team and is responsible for the general coordination of the project and the execution of its activities. They must have experience and training in climate change and agriculture.

Project Monitoring and Evaluation Officer: The M&E officer will be responsible for establishing and monitoring the execution of the monitoring and evaluation system of the project in general

and of the projects in particular, ensuring the timely measurement of the results and coordinating the development of the midterm and final evaluations of the projects and the program. Must have training and experience in the design and execution of monitoring and evaluation systems for climate change or agricultural projects.

The responsibilities of the operations committee are:

1. Provide specialized knowledge and technical assistance in climate resilience practices and climate-smart agriculture.
2. Regularly engage with project stakeholders.
3. Organize the logistics of project activities, ensuring that project activities are effectively coordinated between partner organizations and community members.
4. Implement the monitoring and evaluation measurements.
5. Prepare technical reports and documentation for internal (operations and strategic committee) and external stakeholders (donor, government, community members).

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

CASM has extensive experience with project and financial management and has systems to reduce and mitigate financial and project management risks. Table 7 presents the project, identified financial risks, and proposed mitigation measures. The operations committee will oversee the monitoring of these risks.

Table 8: Financial and project risks

Risk type	Identified risk	Risk Level	Mitigation Measures
Project	Conflicts among executing and implementing partners	Low	CASM has worked closely with CIAT and SERNA on other projects, though this is the first time the three will work together. To mitigate potential conflicts in the project governance between the three entities, terms of reference will be established for each participating member of the strategic and operations committees and the project technical unit to ensure clarity in responsibility and roles, thus reducing the possibility of conflict.
	Community members will not be interested in participating in the project	Low	CASM, SERNA, and CIAT have long worked with community members. Nonetheless, the risk is mitigated through initial consultations to co-design the project with community members and ongoing dialogue to ensure community engagement. If community members disagree with certain project activities, adaptive management will be used to adapt to the changes from community members in the project implementation.
	Changes in project staff	Medium	By ensuring multiple representatives from each institution in the strategic and operations committees and the project technical unit, we will ensure that key information, data, or contacts are not lost, even if project staff changes.

Table 8: Financial and project risks			
Risk type	**Identified risk**	**Risk Level**	**Mitigation Measures**
	Changes in government	Medium	While this cannot be prevented, and we recognize that changes in government officials are common in the region, this risk will be transferred by ensuring we always maintain multiple government contacts and have strong relationships with government positions that are not likely to change with changes in government and/or political parties.
Financial	Exchange rate fluctuations	Low	The Honduran Lempira is relatively stable against the USD; however, unexpected changes, like those during the COVID-19 pandemic, could reduce its value. This will be mitigated by using an exchange rate to budget costs, considering the five-year average of the rate to plan for certain variability.
	Inflation	Medium	Honduras has a higher inflation rate than the Central America and Caribbean Average; globally, after the COVID-19 pandemic, high inflation rates have been a problem. The project will mitigate against this by budgeting with estimated inflation rates in each year of the project.

C. Describe the measures for environmental and social risk management, in line with the Environmental and Social Policy and Gender Policy of the Adaptation Fund.

The project will guarantee compliance with the Environmental and Social Policy (ESP) and the Gender Policy of the Adaptation Fund through the following actions:

- Implement an Environmental and Social Management Plan (Annex 5), including a grievance mechanism.
- The project will host trainings for the project team and key stakeholders on the ESP and Gender Policy, to be updated throughout the course of the project.
- Through the midterm and final evaluation, the project will be evaluated for compliance with the ESP and Gender Policy.
- The project will implement a Monitoring and Evaluation system to monitor and evaluate the execution of each activity and compliance with the ESP and the Gender Policy.

CASM has established a structured Grievance Mechanism to facilitate an open channel for both internal and external parties to voice complaints or provide feedback on CASM operations. This includes complaints or feedback on the actions of our board, management team, technical and support staff, consultants, project partners and team members, and all other individuals and entities associated with CASM activities. The details of this Grievance Mechanism are established in the in Annex 5.

D. Describe the monitoring and evaluation arrangements and provide a budgeted M&E plan, in compliance with the ESP and the Gender Policy of the Adaptation Fund.

The Monitoring and Evaluation (M&E) plan is designed to track project progress, evaluate impact, and ensure adaptive management. Each technical team from CASM, SERNA, and CIAT will be responsible for monitoring their assigned activities according to the M&E plan and CASM will be responsible for integrating the results. A project-wide unified monitoring system will be created under the guidance of the project coordinator and the Monitoring, Evaluation, and Learning (MEL) coordinator. The operations committee will oversee progress toward the predefined project indicators, as detailed in the Results Framework. The monitoring and evaluation system is based on the indicators and means of verification defined in the Results Framework (See Section 3.E).

Project indicators will monitor progress and measure the impact of the proposed interventions and can be independently evaluated. The monitoring of this project will follow a mixed methods approach that combines quantitative and qualitative methods to measure progress towards expected outcomes and produce learning for continuous adaptation and improvement of the project. The monitoring plan will include regular monitoring of program activities and results, tracking any changes in expected results, and tracking contextual factors beyond the project's control that could affect the project's ability to achieve expected results.

Monitoring Methods

The project technical unit team will develop data collection tools to assist in monitoring activities and tracking indicators, with a centralized database created to record progress and provide quality information for reporting. Guidance on core indicators for the AF will be used to guide the design of data collection methods for project monitoring indicators.

A mixed-methods approach, combining both quantitative and qualitative methods, will be used to monitor the project’s progress. This approach will enable a thorough assessment of the project’s outcomes while allowing for the adaptation and improvement of activities based on real-time data.

Sources of information and means of verification will include:

- Routine follow-up and beneficiary survey after provided services
- Participant registration, distribution lists, and attendance sheets
- Knowledge, Attitude, and Practice surveys
- Observational follow-up
- Post-distribution monitoring (for CSA activities)
- Photographs
- Qualitative methodologies, including focus group discussions (FGD) and key informant interviews (KII)

Regular monitoring will be conducted throughout the project lifecycle. This includes:

- **Routine checks** on indicator progress and beneficiary feedback after service delivery.
- **Post-distribution monitoring** for agricultural (CSA) activities to ensure the appropriate use of resources.

- **Observational follow-up** to track the practical application of project learnings in the field.

The MEL coordinator will compile all data into a centralized system and ensure timely and accurate reporting for internal reviews and donor requirements.

Data Management

A secure database of beneficiary information will be created to maintain up-to-date records of assistance provided (e.g., CSA kits received, referrals made, comments, and complaints handled). The database will be accessible only to key trained staff, and any data processed and used in project reporting or by other parties will be fully anonymized. Data sharing will only occur through pre-agreed protocols for data protection and confidentiality. Photos will only be taken with the express informed consent of the individuals, per CASM's policies, and will apply to partners.

Evaluations

A midterm and final evaluation of the project will be carried out.

- A mid-term evaluation of the project will be carried out, focusing on measuring the level advances towards project's outputs and outcomes, as well as evaluating the level of satisfaction of the final beneficiaries regarding the project's results, the level of adoption of adaptation measures, and how they are impacting their lives. The mid-term evaluation should focus on adapative management, or what changes should be made in the design and implementation of the project to best ensure the desired impact is generated in the remaining time of the project.
- A final evaluation of the project will be carried out, focusing on measuring the level of compliance with the project's products and goals, as well as evaluating the level of satisfaction of the final beneficiaries regarding the project's results, the level of adoption of adaptation measures, and how they are impacting their lives. The final evaluation report should identify the lessons learned and recommendations for the design and execution of future climate change adaptation projects.

Roles and Responsibilities

Support for monitoring and evaluation will be provided by CASM and both SERNA and CIAT will be responsible for monitoring their indicators and associated indicators. CASM will provide the necessary training to align the M&E efforts.

- **CASM:** Responsible for leading the integration of M&E activities between SERNA and CIAT, providing training and capacity building for the technical teams.
- **SERNA and CIAT:** Responsible for monitoring their assigned project activities and providing timely data to CASM.
- **Operations Committee:** Oversees indicator progress and ensures that the M&E plan is being followed effectively.

M&E Budget

Table 9: M&E budget		
M&E Line item	**Responsible Party**	**Budget Allocated**
Field Visits for M&E[45]	CIAT	$8,000
Research Support Services (a percent of which includes M&E support)	CIAT	$10,000
Field Visits for M&E[46]	SERNA	$8,000
M&E assistant	SERNA	$38,000
Monitoring and Evaluation (including ESMP monitoring)	CASM	$74,124
Midterm Evaluation	CASM	$31,000
Final Evaluation	CASM	$38,000
Field visits for M&E[47]	CASM	$8,000
	Total M&E Activities and Staff	**$215,124**

E. Include a results framework for the project proposal, including milestones, targets and indicators, including one or more core outcome indicators of the Adaptation Fund Results Framework, and in compliance with the Gender Policy of the Adaptation Fund.

Table 10: Project results framework					
Overall Project Goal					
Project Impact	**Indicator**	**Baseline**	**Target**	**Means of Verification**	**Risks and Assumptions**
The mountain communities of Santa Bárbara and Yojoa Lake Sub-watershed area increase their governance, adaptability, and resilience to climate variability and change.	Core indicator 1: Number of beneficiaries (Direct and Indirect)[48], [49]	**Direct: 0** Men: 0 Women: 0 Youth: 0 **Indirect:** 0 Men: 0 Women: 0 Youth: 0	Direct: 2,400 Men: 1,800 Women: 600 Youth: 100 Indirect: 16,400 Men: 9,000 Women: 7,400 Youth: 3,000	Participant list, training database, pre- and post-tests disaggregated by gender, youth, direct, and indirect beneficiaries.	Private sector and civil society will actively participate in dialogues; collaboration between institutions will allow for institutionalization.

[45] M&E field visit costs are considered a part of other budgeted field visit activities, so an estimate was made to what part of overall field visits will be considered for M&E visits
[46] M&E field visit costs are considered a part of other budgeted field visit activities, so an estimate was made to what part of overall field visits will be considered for M&E visits
[47] M&E field visit costs are a part of overall per diem and travel costs for CASM's field visit budget
[48] This core indicator is an aggregate of the indicator which is reported on in each component as well as one overall measurement.
[49] The indicator tables can be found in Annex 6.

Component 1: Territorial Planning and Decision-Making					
Output or Outcome	**Indicator**	**Baseline**	**Target**	**Means of Verification**	**Risks and Assumptions**
Outcome 1.1. Fostered/reinforced ownership of local actors in decision-making and planning processes of policies and strategies to deal with climate variability and climate change	No. and type of targeted institutions with increased capacity to minimize exposure to climate variability risks	0 institutions	20 institutions	Participant list, training database, pre and posttest disaggregated by indirect, direct, gender and youth	That the private sector and civil society will wish to participate in participatory dialogues and the collaboration between institutions will allow for institutionalization.
Output 1.1.1. Institutionalize the creation of spaces for participatory technical and thematic dialogues with representation from civil society, the private and public sectors, and academia					
Output 1.1.2. Municipal Development Plans have a strategic component for adaptation to climate change and are aligned with the National Plan and country goals regarding adaptation to climate change.					
Outcome 1.2. Local and national actors have adequate information on threats and dangers in the Santa Barbara Mountain region territories and the Yojoa Lake Sub-watershed Area to respond to climate change and variability effects	Core Indicator 2: Early Warning Systems	0 EWS	5 EWS at municipal level	Report with photographic and data evidence of functioning EWS EWS hazard targeted, geographical coverage	Local and national actors will translate trainings into learning and action to implement EWS
Output 1.2.1. Capacities generated in local actors for the implementation of early warning systems (EWS)	Capacity of staff to respond to and mitigate the impacts of climate-related events from targeted institutions increased	18% have capacity	75% have capacity	Participant list, training database, pre and posttest disaggregated by indirect, direct, gender and youth	Local and national actors will participate in trainings and translate trainings into learning and action
Output 1.2.2. Local and national actors disseminate EWS information for decision-making and action for adaptation and risk reduction and disseminate knowledge to the population	Number of beneficiaries (Direct and Indirect)	**Direct: 0** Men: 0 Women: 0 Youth: 0 **Indirect:** 0 Men: 0 Women: 0 Youth: 0	**Direct: 0** Men: 0 Women: 0 Youth: 0 Indirect: 12,400 Men: 7,000 Women: 5,400 Youth: 2,000	Database of EWS distribution; Baseline and monitoring survey.	Local and national actors will translate trainings into learning and action to implement EWS

Component 2: Climate-Smart Agricultural Practices					
Output or Outcome	**Indicator**	**Baseline**	**Target**	**Means of Verification**	**Risks and Assumptions**
Outcome 2.1. Strengthened strategies for food security and livelihoods of the communities of the Santa Barbara Mountain region and Yojoa Lake Sub-watershed Area through the adoption of diversified and Climate-Smart agri-food systems	Core Indicator 4: Increased income, or avoided decrease in income	0 farmers	1,600 farmers avoid decreased income from climate change	Baseline and monitoring survey.	Farmers and their families are interested and willing to adapt their current practices
Output 2.1.1. Community capacities are generated to adopt diversified and climate-smart agricultural production practices and systems. Output 2.1.2. Alternatives for financing climate-smart agriculture practices are promoted.	Core indicator 1: Number of beneficiaries (Direct and Indirect)	**Direct: 0** Men: 0 Women: 0 Youth: 0 **Indirect:** 0 Men: 0 Women: 0 Youth: 0	Direct: 2,400 Men: 1,800 Women: 600 Youth: 100 Indirect: 0 Men: 0 Women: 0 Youth: 0	Baseline and monitoring survey.	Farmers and their families will be willing to take on some risk for financial investments in climate-smart agriculture

Component 3: Knowledge Management and Learning					
Output or Outcome	**Indicator**	**Baseline**	**Target**	**Means of Verification**	**Risks and Assumptions**
Outcome 3.1 - Increased knowledge among relevant stakeholders and improved understanding among the Santa Barbara Mountain region population and Yojoa Lake Sub-watershed Area on the processes of adaptation to climate change and climate variability.	3.1. Percentage of population aware of climate change impacts and responses.	TBD in Year 1	50% increase from baseline.	Policy documents, surveys.	Trainings result in action and institutional change.
Output 3.1.1 - Implemented training processes for communities and leading actors on adaptation to climate change and climate variability in the intervention areas.	Core indicator 1: Number of beneficiaries (Direct and Indirect) (with access to information, knowledge, learning about CC and adaptation)	**Direct: 0** Men: 0 Women: 0 Youth: 0 **Indirect:** 0 Men: 0 Women: 0 Youth: 0	Direct: 0 Indirect: 4000 people Men: 2000 Women: 2000 Youth: 1000	Baseline and monitoring survey disaggregated by indirect, direct, gender and youth	Methods for socializing and sharing information are effective in reaching the target population
Output 3.1.2: Spaces are created for knowledge management and learning at the local, national, and global levels.	3.2. No. of knowledge-sharing spaces created.	0 spaces	Multiple spaces locally, nationally, and globally.	Reports with photographic and digital evidence.	Diverse stakeholders actively participate.

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

Table 11: Alignment with AF Results Framework

Project Component	Project Objective(s)[1]	Project Objective Indicator(s)	Fund Outcome	Fund Outcome Indicator	Grant Amount (USD)
Overall objective /project goal	The mountain communities of Santa Bárbara and the Yojoa Lake Sub-watershed area are increasing their governance, adaptability, and resilience to climate variability and change.	Number of people with reduced risk to extreme weather events due to increased knowledge or actions taken to reduce risk	Adaptation Fund impact goal: Increased resiliency at the community, national, and regional levels to climate variability and change.	**Core indicator 1: Number of beneficiaries (Direct and Indirect)**	Total budget: $4,000,000. $3,710,380 Project Cost
Project Component	**Project Objective(s)[1]**	**Project Objective Indicator(s)**	**Fund Outcome**	**Fund Outcome Indicator**	**Grant Amount (USD)**
Component 1 - Territorial Planning	Promote participatory processes of territorial planning and decision-making to cope with the impacts of climate change and climate variability	2.1. No. and type of targeted institutions with increased capacity to minimize exposure to climate variability risks	**Outcome 1:** Reduced exposure to climate-related hazards and threats **Outcome 2:** Strengthened institutional capacity to reduce risks associated with climate-induced socioeconomic and environmental losses **Outcome 3:** Strengthened awareness and ownership of adaptation and climate risk reduction processes at the local level	1. Relevant threat and hazard information generated and disseminated to stakeholders on a timely basis 2.1. No. and type of targeted institutions with increased capacity to minimize exposure to climate variability risks **Core indicator 1: Number of beneficiaries (Direct and Indirect)** **Core indicator 2: Early Warning Systems**	Outcome 1: $252,341 Outcome 2: $435,375 Outcome 3: $281,421
Component 2. Climate-Smart Agricultural Practices and Systems:	Support/strengthen/ promote the adoption of diversified and Climate-Smart Agrifood Systems	6.2. Percentage of the target population with sustained climate-resilient livelihoods	**Outcome 6:** Diversified and strengthened livelihoods and sources of income for vulnerable people in targeted areas	**Core Indicator 4: Increased income, or avoided decrease in income** **Core Indicator 5: Natural Assets Protected**	$2,054,251
Component3. Knowledge Management and Learning:	Increase understanding and knowledge about climate variability and adaptation processes	3.1. percentage of the target population aware of predicted adverse impacts of climate change and appropriate	**Outcome 3:** Strengthened awareness and ownership of adaptation and climate risk reduction processes at the local	**Core indicator 1: Number of beneficiaries (Direct and Indirect)**	$355,479

		responses	level		
Project Component	**Project Outcomes**	**Project Outcome Indicator(s)**	**Fund Output**	**Fund Output Indicator**	**Grant Amount (USD)**
Component 1 - Territorial Planning	Fostered/reinforced the decision-making and planning processes and ownership of activities by local actors regarding policies/strategies to cope with climate variability and climate change	2.1.1. No. of staff trained to respond to and mitigate the impacts of climate-related events 2.1.2. Capacity of staff to respond to and mitigate the impacts of climate-related events from targeted institutions increased	Output 2.1: Strengthened capacity of national and regional centers and networks to respond rapidly to extreme weather events	2.1.1. No. of staff trained to respond to and mitigate the impacts of climate-related events 2.1.2. The capacity of staff to respond to and mitigate the impacts of climate-related events from targeted institutions increased N **Core indicator 1: Number of beneficiaries (Direct and Indirect)**	$612,125
	Local and national actors have adequate information on threats, risks, and dangers in the territories of Montaña de Santa Barbara and Yojoa Lake Sub-watershed areas to respond to the effects of climate change and climate variability.	1.2 Development of EWS 3.1.2 No. of news outlets in the local press and media that have covered the topic	Output 3: Targeted population groups participating in adaptation and risk reduction awareness activities	**Core indicator 2: Early Warning Systems** 3.1.2 No. of news outlets in the local press and media that have covered the topic	$368,261
Component 2. Climate-Smart Agricultural Practices and Systems:	Strengthened strategies for food security and livelihoods of the communities of the Montaña de Santa Barbara and Yojoa Lake Sub-watershed area through the adoption of diversified and Climate-Smart agri-food systems.	6.1.2. Type of income sources for households generated under climate change scenario	Output 6: Targeted individual and community livelihood strategies strengthened in relation to climate change impacts, including variability	**Core Indicator 4: Increased income, or avoided decrease in income**	$2,054,251
Component 3. Knowledge Management and Learning:	Increased knowledge among relevant stakeholders and improved understanding among the Santa Barbara Mountain region population and Yojoa Lake Sub-watershed Area on the processes of adaptation to climate change.	3.1.2 No. of news outlets in the local press and media that have covered the topic	Output 3: Targeted population groups participating in adaptation and risk reduction awareness activities	3.1.2 No. of news outlets in the local press and media that have covered the topic	$355,479

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

Complete Project Budget

Table 12: Complete Detailed Project Budget

	Leader	Unit	# of units	Quantity	Unit cost	Sub-total
Component 1: Territorial planning in the face of climate change and variability				**Sub-total component**		**$969,137**
Output 1.1.1: Institutionalize the creation of spaces for participatory technical and thematic dialogues with representation from civil society, the private and public sectors, and academia.					**Sub-total output**	$435,375
Activity 1.1 Diagnosis of the functioning of the participatory agroclimatic roundtables						
Consulting service, technical assistance	SERNA	days	125	1	$325	$40,625
Workshops for strengthening tables	SERNA	people	10	10	$300	$30,000
Field trips, travel expenses	SERNA	people	10	10	$175	$17,500
Communication, guidelines, promotional materials	SERNA	materials	35	10	$125	$43,750
Activity 1.2 Integration of actors to participatory agroclimatic roundtables.						
Workshops strengthening agroclimatic roundtables	SERNA	people	26	10	$325	$84,500
Travel expenses	SERNA	people	10	10	$175	$17,500
Activity 1.3 Identification and adoption of climate service delivery mechanisms (early warning systems) to increase the capacities of participatory agroclimatic roundtables.						
Consulting service, technical assistance	SERNA	days	125	1	$325	$40,625
Workshops for the analysis of the baseline, integration and socialization	SERNA	people	25	10	$300	$75,000
Travel expenses	SERNA	people	10	10	$175	$17,500
Activity 1.4 Map key actors who work on climate change issues and promote their active participation in participatory agroclimatic roundtables.						
Workshops for the analysis outlines base, integration and socialization	SERNA	people	20	7	$300	$42,000
Technical staff travel expenses	SERNA	people	5	7	$175	$6,125
Gender specialist consulting to integrate gender perspective in the diagnosis and design of MAPs	SERNA	days	45	1	$450	$20,250
Output 1.1.2 - Municipal Development Plans have a strategic component of adaptation to climate change and are aligned with the National Plan and country goals regarding adaptation to climate change.					**Sub-total output**	$165,500
Activity 1.5 Accompany incorporating the Climate Change Adaptation strategic component into the Municipal Development Plans in the intervention municipalities.						
Consulting service, technical assistance	SERNA	days	125	1	$325	$40,625
Workshops for the analysis of incorporation of the Adaptation and CC component in PMD	SERNA	people	20	7	$300	$42,000
Activity 1.6 Governing document for the incorporation of the Adaptation to Climate Change axis in development plans						
Consulting service, technical assistance	SERNA	days	90	1	$250	$22,500
Work sessions and workshops, review and	SERNA	people	20	7	$200	$28,000

Table 12: Complete Detailed Project Budget

	Leader	Unit	# of units	Quantity	Unit cost	Sub-total
analysis processes						
Activity 1.7 Support the design of the monitoring and evaluation system of the adaptation component in development plans						
Consulting service, technical assistance	SERNA	days	75	1	$325	$24,375
Conferences and workshops, induction, review and analysis processes	SERNA	people	20	2	$200	$8,000
Output 1.2.1 - Capacities generated in local actors for the implementation of EWS					**Sub-total output**	$252,341
Activity 1.8 Studies, diagnoses and mapping of actors related to risk management in the area of influence of the project.	CIAT	Workshops	5	1	$615	$3,075
	CIAT	Consulting	2	1	$20,000	$40,000
	CIAT	Staff	5	6	$453	$13,590
	CIAT	Field visits	5	1	$1,159	$5,795
Activity 1.9 Co-design of the SAT according to the identified climate risks	CIAT	Measuring stations	3	1	$35,175	$105,525
	CIAT	Rain gauges	200	1	$21	$4,200
	CIAT	Workshops	7	1	$750	$5,250
	CIAT	Field visits	5	1	$657	$3,285
	CIAT	Staff lump sum (six people)	1	1	$27,195	$27,195
	CIAT	Field trips	20	1	$580	$11,600
Activity 1.10 Strengthening the capacities of actors and entities linked to risk management at the local level	CIAT	Workshops	10	1	$955	$9,550
	CIAT	Staff lump sum (six people)	1	1	$8,158	$8,158
	CIAT	Field visits	10	1	$348	$3,480
Activity 1.11 EWS Validation	CIAT	Staff lump sum (six people)	1	1	$8,158	$8,158
	CIAT	Field visits	60	1	$58	$3,480
Output 1.2.2 - Local and national actors disseminate EWS information for decision-making and action for adaptation and risk reduction and disseminate knowledge to the population					**Sub-total output**	$115,921
Activity 1.12 EWS operation and sustainability plan	CIAT	Consultancy	1	1	$10,000	$10,000
	CIAT	Staff lump sum (six people)	1	1	$13,597	$13,597
	CIAT	Field visits	1	1	$5,796	$5,796
Activity 1.13 Establish governance mechanisms at the level of EWS operators	CIAT	Staff lump sum (six people)	1	1	$10,878	$10,878
	CIAT	Field visits	1	1	$4,637	$4,637

Table 12: Complete Detailed Project Budget

	Leader	Unit	# of units	Quantity	Unit cost	Sub-total
Activity 1.14 EWS adoption and dissemination strategy among users	CIAT	Consulting for campaign	1	1	$15,000	$15,000
	CIAT	Workshops	1	1	$3,339	$3,339
	CIAT	Campaign implementation	1	1	$10,000	$10,000
	CIAT	Staff lump sum (six people)	1	1	$29,914	$29,914
	CIAT	Field visits	40	1	$319	$12,760
Component 2: Climate-smart agricultural practices and systems.				**Sub-total component**		**$2,049,072**
Output 2.1.1 - Community capacities are generated to adopt diversified and climate-smart agricultural production practices and systems.					**Sub-total output**	$833,672
Activity 2.1 Strengthening capacities in integrated participatory climate services for agriculture.	CIAT	Workshops	161	1	$569	$91,609
	CIAT	Staff lump sum (six people)	1	1	$21,756	$21,756
	CIAT	Field visits	40	1	$232	$9,280
Activity 2.2 Accompany the construction and implementation of investment plans for climate-adapted agricultural practices (CSA) and practices related to multi-hazard risk reduction	CIAT	Investment plans (consulting)	15	1	$2,000	$30,000
	CIAT	Development of investment plans	15	1	$40,000	$600,000
	CIAT	Staff lump sum (six people)	1	1	$21,756	$21,756
	CIAT	Field visits	40	1	$232	$9,280
Activity 2.3 Linking risk reduction actions in local planning	CIAT	Workshops	2	1	$609.00	$1,218
	CIAT	Staff lump sum (six people)	1	1	$10,878	$10,878
	CIAT	Field visits	2	1	$2,319	$4,638
Activity 2.4 National Award for Best Practices in Adaptation to Climate Change	SERNA	Event (logistics and material)	1	2	$5,250	$10,500
	SERNA	Awards	6	1	$2,500	$15,000
	CIAT	Staff lump sum (six people)	1	1	$5,439	$5,439
	CIAT	Field visits	2	1	$1,159	$2,318
Output 2.1.2 - Alternatives for financing climate-smart agriculture practices are promoted.					**Sub-total output**	$1,215,400
Activity 2.6 Promote a local savings and credit mechanism aimed at financing CSA practices						
Consulting service, technical assistance	SERNA	days	125	1	$325	$40,625

Table 12: Complete Detailed Project Budget

	Leader	Unit	# of units	Quantity	Unit cost	Sub-total
Workshops for strengthening tables	SERNA	people	10	10	$300	$30,000
Tours, travel expenses	SERNA	people	10	10	$175	$17,500
Communication, guidelines, promotional materials	SERNA	materials	35	10	$125	$43,750
Activity 2.7 Stimulate the investment of the public and private financial system in the implementation of the CSA practice						
Consulting service, technical assistance	SERNA	days	125	1	$325	$40,625
Workshops for strengthening tables	SERNA	people	10	10	$300	$30,000
Field visits, travel expenses	SERNA	people	10	10	$175	$17,500
Communication, guidelines, promotional materials	SERNA	materials	35	10	$200	$70,000
Activity 2.8 Leverage financing from the public and private sectors for innovative initiatives in climate-smart agriculture						
Consulting service, technical assistance	SERNA	days	120	1	$325	$39,000
Workshops for strengthening tables	SERNA	people	10	10	$300	$30,000
Field visits, travel expenses	SERNA	people	10	10	$175	$17,500
Leverage fund	SERNA	people	5	5	$29,500	$737,500
Institutional strengthening	SERNA	materials and equipment	1	1	$50,000	$50,000
Communication, guidelines, promotional materials	SERNA	materials	35	10	$124	$43,400
Monitoring and Evaluation of component 2	SERNA	visits (per diem, transportation)	10	4	$200	$8,000
Component 3: Knowledge Management and Learning				**Sub-total component**		**$355,481**
Output 3.1.1 - Implemented training processes for communities and leading actors on adaptation to climate change and climate variability in the intervention areas.					**Sub-total output**	$208,986
Activity 3.1 Training processes with relevant actors who are part of the community leadership and TOT training process (training of trainers) in climate services, EWS and adaptation practices.	CIAT	Training (bimodal)	2	1	$15,000	$30,000
	CIAT	Consulting training, systematization	1	1	$8,000	$8,000
	CIAT	Event (MTA National Meeting)	1	1	$8,000	$8,000
	CIAT	Staff lump sum (six people)	1	1	$24,475	$24,475
	CIAT	Field visits	4	1	$2,608	$10,432
Activity 3.2 Development of public events on climate risks and resilience strategies (within and outside the area of influence)	CIAT	Events	4	1	$2,793	$11,172
	CIAT	Staff lump sum (six people)	1	1	$5,439	$5,439
	CIAT	Tours	4	1	$580	$2,320
Activity 3.3 Training mechanism aimed at the educational sector (primary and secondary), on adaptation to climate	CIAT	Consultancy	1	1	$12,000	$12,000
	CIAT	Workshops (educational	12	1	$2,500	$30,000

Table 12: Complete Detailed Project Budget

	Leader	Unit	# of units	Quantity	Unit cost	Sub-total
change and climate resilience that includes the use of the EWS		centers)				
	CIAT	Printed and digital material	1	1	$40,000	$40,000
	CIAT	Staff lump sum (six people)	1	1	$19,036	$19,036
	CIAT	Field visits	12	1	$676	$8,112
Output 3.1.2: Spaces are created for knowledge management and learning at the local, national, and global levels.					**Sub-total output**	$146,495
Activity 3.4 Generation and dissemination of communication products on lessons learned and successful experiences	CIAT	Campaign (printed material	1	1	$40,000	$40,000
	CIAT	Staff lump sum (six people)	1	1	$19,036	$19,036
	CIAT	Field visits	12	1	$676	$8,112
Activity 3.5 Systematization of EWS experiences and implementation of CSA practices	CIAT	Systematization report (consulting)	1	1	$20,000	$20,000
	CIAT	Staff lump sum (six people)	1	1	$16,317	$16,317
	CIAT	Field visits	12	1	$580	$6,960
Activity 3.6 Design a strategy to scale the good practices generated by the project at the national level	CIAT	Consulting strategy design	1	1	$10,000	$10,000
	CIAT	Workshop	1	1	$2,793	$2,793
	CIAT	Staff lump sum (six people)	1	1	$16,317	$16,317
	CIAT	Field visits	12	1	$580	$6,960
			Sub-total Activities execution			**$3,373,690**
Execution Costs						**$336,690**
Administrative costs for project execution	CIAT	Months/rate	39	1	$1,681	$62,211
IT Services	CIAT	Months/rate	39	1	$680	$25,165
Facilities	CIAT	Months/rate	39	1	$886	$32,800
Research Support Services	CIAT	Months/rate	39	1	$714	$26,429
Technical Coordination	SERNA	months x person	38	1	$2,000	$72,000
Administrative assistant	SERNA	months x person	39	1	$1,500	$58,500
Office services	SERNA	services	39	1	$249	$8,956
M&E Assistant	SERNA	months x person	38	1	$1,000	$36,000

Table 12: Complete Detailed Project Budget

	Leader	Unit	# of units	Quantity	Unit cost	Sub-total
			Total Project Costs (Activities + Execution Costs)			$3,710,380
			Execution Fee (Execution Costs / Sub-total execution)			9.07%
Project Management / Implementing Entity Fee						**$289,620**
	Leader	**Unit**	**# of units**	**Quantity**	**Unit cost**	**Sub-total**
Technical assistance in project implementation	CASM	Months | percent	36	0.2	$4,200	$30,240
Project management cost	CASM	Months | percent	39	0.15	$4,200	$24,570
Monitoring and evaluation costs, safeguards monitoring	CASM	month year	12	3	$2,059	$74,124
ESMP monitoring training and gender action plan	CASM	lump sum	1	1	$8,000	$8,000
Project launch and induction events	CASM	lump sum	1	1	$10,000	$10,000
Strategic coordination committee meetings	CASM	Meetings	4	3	$1,150	$13,800
Per diem visit project site	CASM	visits months	39	4	$156	$24,336
Gasoline to visit communities/project sites	CASM	months | gallons	39	90	$5	$17,550
Final and annual audit	CASM	Years	3	1	$6,000	$18,000
Intermediate evaluation	CASM	lump sum	1	1	$31,000	$31,000
Final evaluation	CASM	lump sum	1	1	$38,000	$38,000
			PM Fee % (PM Costs / Project Costs)			7.81%
			Total (Project Cost + PM Fee)			$4,000,000

Activity Execution Budget

The budget for the project activities implementation is $3,373,690, detailed above in Table 11. This sub-total for project activities was used to calculate the percentages of the executing entities and implementing entity budgets. The activity budget is oriented around each output and the associated activities. For each activity, the lead institution detailed the necessary expenses to complete the activity.

Executing Entity Budget

A budget of $336,690, which is 9.1% of the activity execution budget, has been divided between

SERNA and CIAT for their execution. The budget includes the following categories:

- CIAT
    - Administrative costs for project execution
    - IT Services - Internet, computers, software, and IT support for project implementation.
    - Facilities - Contribution to CIAT office and office maintenance costs.
    - Research Support Services - Is a tiered fixed amount applicable to all regular research staff. Every year the tariff is reviewed and adjusted according to the changes of the RSS units and the number of research staff per BG level (In Honduras we are BG6 and BG7 our positions, according to the expertise, from a range that goes until BG12 -leaders-).
- SERNA
    - Technical Coordination - SERNA will contract a designated coordinator for the technical operations committee and SERNA-led project activities.
    - Administrative assistant - This person will provide administrative and financial support to the coordinator and the project in general.
    - Office services - Contribution to office, internet, and related services necessary for project execution.
    - M&E Assistant - This person will be responsible within SERNA for monitoring activities and indicators.

Implementing Entity Budget

The implementing entity fee (8.49% of the total Project/programme cost) will be used by CASM, the National Implementing Entity, to cover the costs of providing general management and financial support for guiding the project and the reporting process to the Fund. Adaptation on the technical and financial execution of the program. A total of $289,620 (7.8%) is budgeted for this work. This budget includes funds to provide support to the project and to CIAT and SERNA, for site visits, for hosting and organizing strategic committee meetings, and facilitating audits and evaluations. The budget details can be seen at the bottom of Table 12.

The budget includes the following categories:

- Project management cost - provide strategic and technical backstopping and participate in the project strategic committee.
- Monitoring and evaluation costs, safeguards monitoring - ensure the integration of monitoring data for SERNA and CIAT for unified reporting of progress toward goals.
- ESMP monitoring training and gender action plan - CASM will provide or hire a specialist to provide training on how to implement and monitor the ESMP and GAP.
- Project launch and induction events - Plan, facilitate, and implement induction events to launch the project and raise awareness about the project.
- Strategic coordination committee meetings - CASM will facilitate strategic committee between project stakeholders.
- Per diem visit project site - Cost to travel to stay in project area, and provide food and necessities during project site visits. CASM needs to visit for oversight, monitoring and evaluation, and strategic participation in project activities.
- Gasoline to visit communities/project sites
- Final and annual audit - CASM will facilitate financial audits for the project annually and at the end of the project.
- Intermediate & Final evaluation - CASM will facilitate contracts with consultants to

conduct an evaluation of the project.

Gender Budget

A separate budget for gender has not been made, instead gender-related actions have been integrated throughout the budget, corresponding to the needs of the gender action plan. Funds are designated for consultants to provide a gender-perspective in research, resilience planning, and activity design.

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

Table 11: Proposed disbursement schedule

	Upon signature of the Agreement	One Year after the Project Start	Year 2	Year 3	Total
Scheduled date	April 1, 2025	April 1, 2026	April 1, 2027	April 1, 2028	
Project Funds	$1,113,114~~653~~	$1,113,114~~653~~	$742,076~~435~~	$742,~~435~~076	$3,710,380~~2,178~~
Implementing Entity Fees (~~8.5~~7.8%)	$86,~~346~~886	$86,~~346~~886	$57,~~564~~924	$57,~~564~~924	$~~287,821~~289,620
Total	$1,200,000	$1,200,000	$800,000	$800,000	$4,000,000

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

A. Record of endorsement on behalf of the government[250]

The endorsement letter(s) are in Annex 4.

Mr. Lucky Halach Medina Estrada, Minister of Secretary of State of Energy, Natural Resources, Environment, and Mines	Date*: May 25, 2024*

B. Implementing Entity Certification *Provide the name and signature of the Implementing Entity Coordinator and the date of signature. Provide also the project/programme contact person's name, telephone number and email address*

I certify that this proposal has been prepared in accordance with guidelines provided by the Adaptation Fund Board, and prevailing National Development and Adaptation Plans

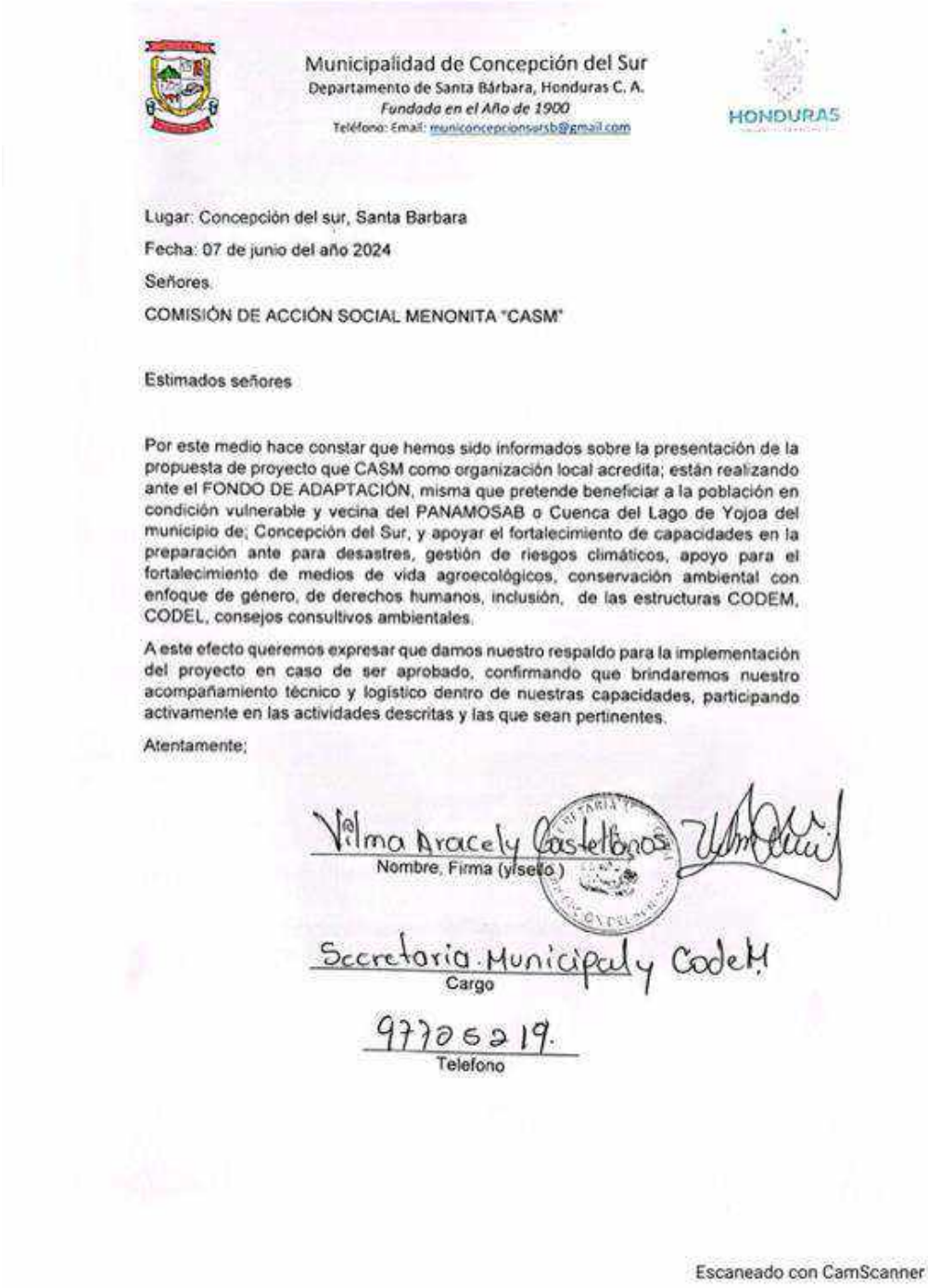
-Instructions for preparing a project/program financing application
- Guidance document for environmental and social policy
-Gender orientation document for executing entities on compliance with the gender policy of the Adaptation Fund
- Environmental and Social Policy of the Adaptation Fund
- Gender Policy of the Adaptation Fund
- Results Framework and Baseline Guidance

and subject to the approval by the Adaptation Fund Board, commit to implementing the project/programme in compliance with the Environmental and Social Policy and the Gender Policy of the Adaptation Fund and on the understanding that the Implementing Entity will be fully (legally and financially) responsible for the implementation of this project/programme.

Name & Signature - Implementing Entity Coordinator ***Nelson Davidson Garcia Lobo***	
Date: December 2, 2024	Tel. and email: +504 9995-0256, direccion@casm.hn
Project Contact Person: Suyapa Edith Ucles Salinas	
Tel. And Email: +504 9456-0623, programas@casm.hn	

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

Annex 7: Endorsement Letters



Municipalidad de Concepción del Sur
Departamento de Santa Bárbara, Honduras C. A.
Fundada en el Año de 1900
Teléfono: Email: municoncepcionsursb@gmail.com

HONDURAS

Lugar: Concepción del sur, Santa Barbara

Fecha: 07 de junio del año 2024

Señores

COMISIÓN DE ACCIÓN SOCIAL MENONITA "CASM"

Estimados señores

Por este medio hace constar que hemos sido informados sobre la presentación de la propuesta de proyecto que CASM como organización local acredita; están realizando ante el FONDO DE ADAPTACIÓN, misma que pretende beneficiar a la población en condición vulnerable y vecina del PANAMOSAB o Cuenca del Lago de Yojoa del municipio de; Concepción del Sur, y apoyar el fortalecimiento de capacidades en la preparación ante para desastres, gestión de riesgos climáticos, apoyo para el fortalecimiento de medios de vida agroecológicos, conservación ambiental con enfoque de género, de derechos humanos, inclusión, de las estructuras CODEM, CODEL, consejos consultivos ambientales.

A este efecto queremos expresar que damos nuestro respaldo para la implementación del proyecto en caso de ser aprobado, confirmando que brindaremos nuestro acompañamiento técnico y logístico dentro de nuestras capacidades, participando activamente en las actividades descritas y las que sean pertinentes.

Atentamente;

Vilma Aracely Castellanos
Nombre, Firma (y sello)

Secretaria Municipal y CodeM
Cargo

9770219.
Telefono

Escaneado con CamScanner

COMITÉ DE EMERGENCIA MUNICIPAL (CODEM)
MUNICIPIO DE LAS VEGAS, SANTA BARBARA
Correo: santabarbaralasvegas@municipalidadhn.info **Tel:** +504 2659-3180

Lugar: Las vegas Santa Barbara

Fecha: 10 de Junio del 2024

Señores: COMISIÓN DE ACCIÓN SOCIAL MENONITA "CASM"

Estimados señores

Por este medio hace constar que hemos sido informados sobre la presentación de la propuesta de proyecto que CASM como organización local acredita; están realizando ante el FONDO DE ADAPTACIÓN, misma que pretende beneficiar a la población en condición vulnerable y vecina del PANAMOSAB o Cuenca del Lago de Yojoa del municipio de **LAS VEGAS SANTA BARBARA** y apoyar el fortalecimiento de capacidades en la preparación ante para desastres, gestión de riesgos climáticos, apoyo para el fortalecimiento de medios de vida agroecológicos, conservación ambiental con enfoque de género, de derechos humanos, inclusión, de las estructuras CODEM, CODEL, consejos consultivos ambientales.

A este efecto queremos expresar que damos nuestro respaldo para la implementación del proyecto en caso de ser aprobado, confirmando que brindaremos nuestro acompañamiento técnico y logístico dentro de nuestras capacidades, participando activamente en las actividades descritas y las que sean pertinentes.

Atentamente;

CODEM

Nombre, Firma (y sello)

Coordinadora del CODEM MUNICIPAL LAS VEGAS
Cargo

+50495504729
Telefono

Instituto Nacional de Conservación Forestal
Gobierno de la República

HONDURAS

CONSTANCIA

Santa Bárbara, Santa Bárbara
4 de junio de 2024

Señores.
COMISIÓN DE ACCIÓN SOCIAL MENONITA "CASM"

Estimados señores:

La Oficina Local de Santa Bárbara del Instituto de Desarrollo y Conservación Forestal, Áreas Protegidas y Vida Silvestre HACE CONSTAR QUE hemos sido informados sobre la presentación de la propuesta de proyecto que CASM como organización local acredita; está realizando ante el FONDO DE ADAPTACIÓN, misma que pretende beneficiar a la población en condición vulnerable y vecina del PANAMOSAB o Cuenca del Lago de Yojoa del municipio de Santa Bárbara y apoyar el fortalecimiento de capacidades en la preparación ante para desastres, gestión de riesgos climáticos, apoyo para el fortalecimiento de medios de vida agroecológicos, conservación ambiental con enfoque de género, de derechos humanos, inclusión, de las estructuras CODEM, CODEL, consejos consultivos ambientales.

A este efecto queremos expresar que damos nuestro respaldo para la implementación del proyecto en caso de ser aprobado, confirmando que brindaremos nuestro acompañamiento técnico y logístico dentro de nuestras capacidades, participando activamente en las actividades descritas y las que sean pertinentes.

Atentamente;

Karol Lissett Rivera
Karol Lissett Rivera
Oficina Local Santa Bárbara

Mancomunidad Consejo de Municipios del Sur de Santa Bárbara
"CODEMUSSBA"

San Francisco de Ojuera, Ceguaca, Santa Rita, Santa Bárbara, San Pedro Zacapa, Las Vegas, Concepción del Sur, Ilama y San José de Colinas

RTN # 16019014667674

Lugar: Santa Bárbara, Santa Baárbara

Fecha: 3 de Junio del 2024

Señores.

COMISIÓN DE ACCIÓN SOCIAL MENONITA "CASM"

Estimados señores

Por este medio hace constar que hemos sido informados sobre la presentación de la propuesta de proyecto que CASM como organización local acredita; están realizando ante el FONDO DE ADAPTACIÓN, misma que pretende beneficiar a la población en condición vulnerable y vecina del PANAMOSAB o Cuenca del Lago de Yojoa del los municipios de Las Vegas, San Pedro de Zacapa, Concepcion del Sur, Ceguaca, San Francisco de Ojuera, Santa Barbara, Santa Rita, Ilama y San Jose de Colinas, y apoyar el fortalecimiento de capacidades en la preparación ante para desastres, gestión de riesgos climáticos, apoyo para el fortalecimiento de medios de vida agroecológicos, conservación ambiental con enfoque de género, de derechos humanos, inclusión, de las estructuras CODEM, CODEL, consejos consultivos ambientales.

A este efecto queremos expresar que damos nuestro respaldo para la implementación del proyecto en caso de ser aprobado, confirmando que brindaremos nuestro acompañamiento técnico y logístico dentro de nuestras capacidades, participando activamente en las actividades descritas y las que sean pertinentes.

Atentamente;

_____
Nombre, Firma (y sello)

Gerencia
Cargo

96073856
Telefono

Email: gerencia@codemussba.org codemussba@codemussba.org

Sede: Santa Bárbara, S.B. Honduras

Lugar: Santa Bárbara, Santa Bárbara

Fecha: 07 - Junio - 2024

Señores.

COMISIÓN DE ACCIÓN SOCIAL MENONITA "CASM"

Estimados señores

Por este medio hace constar que hemos sido informados sobre la presentación de la propuesta de proyecto que CASM como organización local acredita; están realizando ante el FONDO DE ADAPTACIÓN, misma que pretende beneficiar a la población en condición vulnerable y vecina del PANAMOSAB o Cuenca del Lago de Yojoa del municipio de Santa Bárbara, Santa Bárbara y apoyar el fortalecimiento de capacidades en la preparación ante para desastres, gestión de riesgos climáticos, apoyo para el fortalecimiento de medios de vida agroecológicos, conservación ambiental con enfoque de género, de derechos humanos, inclusión, de las estructuras CODEM, CODEL, consejos consultivos ambientales.

A este efecto queremos expresar que damos nuestro respaldo para la implementación del proyecto en caso de ser aprobado, confirmando que brindaremos nuestro acompañamiento técnico y logístico dentro de nuestras capacidades, participando activamente en las actividades descritas y las que sean pertinentes.

Atentamente;

Nombre, Firma (y sello)

Alcalde Municipal
Cargo

9945-3764
Telefono

PART 5: ANNEXES

Annex 1: Gender Assessment and Gender Action Plan

1. Introduction

The project "Building Resilience Together to Face Climate Change and Variability in Western Honduras," funded by the Adaptation Fund, focuses on strengthening governance, adaptability, and resilience to climate variability and change. Targeting the Santa Barbara region and the Lake Yojoa Sub-basin, the project covers five municipalities: Concepción Sur, Las Vegas, Gualala, and Santa Bárbara in Santa Barbara, and Santa Cruz de Yojoa in Cortés.

The project is structured around three key components, using a holistic approach to address the multifaceted challenges of climate change. The first component, territorial planning, focuses on a participatory process to create the conditions for improved governance and adaptive action. It encourages collaboration between public, private, and civil society actors and emphasizes the development of an early warning system to provide reliable local information for decision-making. Alignment with national climate change legislation is essential to effectively integrat planning results into local and subnational frameworks.

The second component focuses on climate-smart agricultural practices and systems, promoting the adoption of diversified, climate-resilient agrifood systems. Climate-smart agriculture (CSA) integrates economic, social, and environmental dimensions to tackle the challenges posed by climate change and variability. By sustainably increasing productivity, adapting to climate change, and reducing greenhouse gas emissions, this component aims to enhance the resilience of agricultural livelihoods. It emphasizes the importance of strategic investments in managing climate risks, planning for adaptive transitions, and seizing mitigation opportunities.

Knowledge management and learning is the third component, focused on enhancing understanding of climate variability and adaptation processes. Through a comprehensive educational program utilizing both formal and non-formal approaches, the project aims to equip communities, public actors, and social organizations with the knowledge needed for effective action and resilience. The target audiences include the general population, community leaders, public officials, and civil society organizations.

In alignment with the Adaptation Fund's objectives, the project acknowledges the fragility and dispersion of government institutions in Honduras. It highlights the need for the proper application of existing legal instruments. Additionally, the project emphasizes the fundamental role of financial resources in sustaining adaptation efforts at the local level over time. Through its multifaceted approach, the project aims to create lasting positive impacts, reduce vulnerabilities, and build a resilient foundation for these mountain communities.

The Adaptation Fund operates under a Gender Policy[51] that shapes its commitment to foster inclusiveness and gender equality. The Fund aims to provide equal opportunities for women and men to strengthen their agency, enhance resilience and address the unique vulnerabilities they face due to climate change and related challenge. This commitment goes beyond merely avoiding harm; the Fund actively works to address existing power imbalances and close gender gaps throughout the project/program cycle. The goal is to ensure that funded activities are gender-sensitive and contribute to broader, positive impacts.

[51] Gender policy of the Adaptation Fund.

The Adaptation Fund also operates under an environmental and social policy[52] designed to address and mitigate adverse impacts and risks of its projects and programs. The policy requires all projects to assess their environmental and social impacts. This policy is aligned with the Gender Policy, and the two mutually reinforce the organization's commitment to addressing and mitigating potential risks to women and girls, men and boys, and other gender subgroups concerning specific adaptation actions financed by the Fund.

Methodology

Focus groups were organized with women and men from the community. During the focus groups, we collected various types of data through interactive group activities, individual activities, and group discussions:

- A time-use activity compared the amount of time men and women spent on unpaid domestic, care, paid, and entrepreneurial work.

A group activity designed for full participation by community members of all ages—including youth, adults, older men, and women—where each person engages in sharing their experiences within their families, contributes to decision-making processes and accesses various aspects of financial management, livelihood opportunities, and natural resource utilization.

A group discussion focusing on various topics, including the distinct perceptions of male and female roles in livelihoods, the impact of these perceptions on gender-specific roles, and their link to Gender-Based Violence (GBV) within communities. Additionally, the discussions explored differences in access to information and communication styles between genders. Participants were divided into gender-specific groups to foster open and honest dialogue. The responses were later analyzed and compared between male and female groups to identify and understand differing perspectives.

Surveys were conducted with community members in critical areas of the city to find potential project-affected people. The surveys were collected digitally using KoboToolbox. During the survey, various types of data were collected using multiple-choice and open-ended questions:

- Demographic information disaggregated by sex of household members
- Information on vulnerability in general, vulnerability to climate change, and how men and women experience vulnerability differently
- Experiences of GBV in the home
- Information on living conditions, well-being and food security, and whether conditions or food security vary between women and men is needed.
- The livelihood shares of household members and associated income determine how livelihood activities and livelihood shares differ between men and women.
- From livelihoods responses, multiple choice questions on how particular project activities might affect men and women differently.
- Access to information, how best to communicate key project information, and how it differs by gender.

[52] Adaptation Fund Environmental and social policy.

2. Legal framework

Honduras is a party to the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW), one of the most important international treaties on women's rights. Its objective is to guarantee equal rights for women and men regarding political participation, education, employment, and health.

Honduras is also committed to the Beijing Platform for Action, adopted at the Fourth World Conference on Women in 1995. This document addresses gender equality, violence against women, and women's empowerment.

It is also a signatory to the Inter-American Convention on the Prevention, Punishment, and Eradication of Violence against Women, which aims to address and prevent violence against women in Latin America and the Caribbean.

At the national level, Honduras has several laws and regulations that seek to promote women's rights and equality. The most important is point 5, “Gender: nothing about us without us,” in the Government Plan to Refound Honduras[53]. The objective is to expose the critical situation of gender-based violence in Honduras and propose concrete measures to address inequality and mistreatment of women and LGBTI people. The proposals promote gender equity, such as equal political participation, access to family planning methods, comprehensive sexual education, decriminalization of abortion in certain circumstances, the creation of shelters for victims of violence, and the implementation of economic projects for women.

Another important law is the "National Women's Policy, II Plan for Gender Equality and Equity of Honduras 2010-2022", which contains women's main needs and demands as rights holders to reinforce the achievements made and move steadily towards full equality between men and women. This plan has several axes, including access, sustainable use and control of biodiversity, natural resources, and risk management. [54]

Also, the "Law Against Domestic Violence" aims to prevent, punish, and eradicate domestic violence, establish protection measures for victims, and define legal actions against aggressors[55]. The Law on Equal Opportunities for Women also promotes equal opportunities for women in different areas, such as political participation, employment, education, and health. It also prohibits discrimination based on gender. [56]

The Penal Code establishes penalties for multiple crimes and offenses. This Penal Code has several articles on gender issues: Article 118-A, which criminalizes femicide; Articles 179-A and 179-B for domestic violence; Article 147-A for sexual harassment; and Article 321-A, which imposes a penalty of 3 to 5 years in prison and a fine on anyone who incites discrimination or any form of violence. against someone or some group.[57]

In addition, in response to violence against women, Honduras has Decree 106, which creates the "Unit for the Investigation of Violent Deaths of Women and Femicides of the Public Prosecutor's Office"[58]. This Unit is in charge of investigating the crimes provided for in Article 118-A of the Penal Code and the crimes against women of Article 184 paragraphs 1, 2, and 3 of the Code of Criminal Procedure, which in these matters has the powers established in Article 44 of this Law[59]. This Decree also creates the Inter-

[53] Government Plan to Refound Honduras 2022- 2026.
[54] II Plan for Gender Equality and Equity of Honduras 2010-2022.
[55] Law Against Domestic Violence.
[56] Equal Opportunity for Women Act.
[57] Penal Code.
[58] Decree 106-2016.
[59] Decree 106-2016.

institutional Commission for the Follow-up of Investigations of Violent Deaths of Women and Femicides to improve the processes of accountability and inter-institutional coordination[60].

Lastly, the Multilateral Environmental Agreements to which Honduras is a signatory, contain gender action plans, such as the Convention on Biological Biodiversity[61], Minamata Mercury Convention[62], Montreal Protocol[63], and Climate Change[64].

3. Population Context

According to 2002 data from the National Statistics Institute (INE), 53.3% of the general population in the country was female, representing 5,112,114 people, and 43.8% lived in rural areas.[65] These statistics are approximate as they were projected, and a more recent census has yet to be conducted.

In 2024, the Department of Santa Barbara is projected to have a population of 496,965, with 251,023 men and 245,942 women. Of this total, 174,717 inhabitants will reside in rural areas, comprising 79,747 men and 94,970 women.

At the municipal level, 2022 projections by the National Autonomous University of Honduras indicate the municipality of Santa Bárbara has an estimated population of 48,967 people, comprising 24,075 men (49.17%) and 24,892 women (50.83%). Of the population, 39.34% reside in rural areas, and 60.66% in urban areas. It is estimated that Santa Barbara has 15,218 dwellings, with 11,810 occupied. The level of overcrowding is at least 4.15 people per dwelling.[66]

In the municipality of Concepción Sur, the projection for 2022 is approximately 5,493 people, of which 2,880 are men (52.43%) and 2,613 are women (47.57%). The population is 100% rural and has an estimated 1,666 houses, with 1,295 occupied, and the level of overcrowding is 4.24 persons per dwelling.[67]

The municipality of Las Vegas was projected to have 27,472 inhabitants in 2022, comprising 13,698 men (49.86%) and 13,774 women (50.14%). Of the population, 50.27% live in rural areas, and 49.73% in urban areas. It is estimated that there are 7,400 homes in Las Vegas, with 6,139 occupied. The level of overcrowding was 4.47 people per home.[68]

The projection for the municipality of Gualala for 2022 is 5,659 inhabitants, comprising 3,050 men (53.9%) and 2,609 women (46.1%). The population is 100% rural and has an estimated 1,851 dwellings, with 1,382 occupied. The level of overcrowding is 4.09 people per dwelling.[69]

According to INE projections, the department of Cortés will have a population of 1,920,701 people in 2024, with 919,126 men and 1,001,575 women. The rural population is projected to be 1,604,052, including 756,163 men and 847,889 women.[70]

Santa Cruz de Yojoa, a municipality within Cortés, will have an estimated 96,105 inhabitants, consisting of 47,201 men (49.11%) and 48,904 women (50.89%). Of this population, 62.09% will reside in rural areas, while 37.91% will live in urban areas. Santa Cruz de Yojoa is estimated to have 26,194 dwellings, with 21,687 occupied and an average overcrowding level of 4.43 people per dwelling.[71]

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[60] Decree 106-2016.
[61] Convention on Biological Biodiversity, Gender Action Plan.
[62] Minamata Mercury Convention, Gender.
[63] Gender mainstreaming in the Montreal Protocol.
[64] Gender and Climate Change.
[65] Situation of women, INE.
[66] Sociodemographic Profile of Santa Barbara, Santa Barbara 2022.
[67] Sociodemographic Profile of Concepción del Sur, Santa Bárbara 2022.
[68] Sociodemographic Profile of Las Vegas, Santa Barbara 2022.
[69] Sociodemographic Profile of Gualala, Santa Bárbara 2022.
[70] Sociodemographic Profile of Gualala, Santa Bárbara 2022.
[71] Sociodemographic Profile of Gualala, Santa Bárbara 2022.

4. Results

4.1. Education

According to the Educational Statistics Report of Honduras SACE 2020, published by the Secretariat of Education of the Government of the Republic of Honduras, female enrollment was estimated at 50.3% (966,265) and male enrollment at 49.7% (955,189). Total enrollment in pre-basic education reached 233,419, with 117,193 males and 116,226 females. Male enrollment in primary education (grades 1 to 6) was higher, with 549,240 males compared to 530,673 females. However, from the basic education level (7th to 9th grade), female enrollment was higher, with 194,340 females enrolled, compared to 185,409 males. This trend continued in middle education, where 125,026 females enrolled compared to 103,347.7 males[72].

The enrollment trend for 2019 and 2020 indicates a significant shift in the gender balance of the education system. The data shows a higher number of girls enrolled in the education system for both periods, with a slight increase in 2020. This trend is particularly notable at the middle school level, where more girls are enrolled than boys. Of the total enrollment, 50.9% occurs in urban areas and 49.1% in rural areas[73].

Our team's educational level survey revealed a more nuanced picture of gender disparities among participants. The data shows that 55% of men (23 out of 42) reported primary education, compared to 45% of women (19 out of 42). This trend continues in basic education, with 53% men (9 out of 17) and 47% women (8 out of 17). These findings highlight the need for further investigation into the factors contributing to these disparities.

Women are more represented at the secondary or diversified education level, with 80% (8 out of 10) compared to 20% of men (2 out of 10). Only women are represented at the higher or university level, with 100% (2 out of 2) indicating this level of education, while no men reported reaching this level.

Most of those with no formal education are men, with 63% (10 out of 16) compared to 38% of women (6 out of 16). For technical training, only one participant, a woman, indicated having this level of education (100% of 1).

Based on official data and our survey, more men have no or only primary education, whereas women are more represented at the middle and higher levels. Additionally, it is essential to note that most survey participants indicated they had to abandon their studies due to economic constraints, with many starting to work at a very early age.

According to SACE and INE projections for 2020, the Department of Santa Barbara shows a gross educational coverage of 36.2% (10,769 people) at the pre-basic level, 94.7% (57,090 people) at the primary level (1st to 6th grade), 60.8% (17,983 people) at the basic level (7th to 9th grade), and 32.3% (9,375 people) at the middle level.

In the municipality of Santa Barbara, the Sociodemographic Profile estimates that of the 30,153 people between 15 and 59 years of age, 50.22% have completed basic education. The overall illiteracy rate is 14.66%, with 16.4% for men and 16.6% for women. Additionally, 24.21% have completed secondary education, 6.03% have completed higher education, and only 0.22% of the population has a postgraduate degree. The average years of schooling in the municipality is six years. The gross enrollment rate is 88.3%, with a dropout rate of 2.7% and a repetition rate of 5.2%. The student-to-teacher ratio is 25:1.[74]

Based on our survey results, in the municipality of Santa Barbara, 45% of the participants were men (9 responses out of 20), and 55% were women (11 out of 20). Of these, only 38% of men had primary

[72] Educational Statistics Report of Honduras SACE 2020.
[73] Educational Statistics Report of Honduras SACE 2020.
[74] Sociodemographic Profile of Santa Barbara, Santa Barbara 2022.

education (3 out of 8), compared to 63% of women (5 out of 8). Of those with basic education, 50% were men (2 out of 4), and 50% were women (2 out of 4). In secondary or diversified education, only one woman reported having this level (100% of 1). No person reported having higher education (university) or technical education. In addition, seven people indicated that they had no studies, of which 57% were men (4 out of 7) and 43% were women (3 out of 7).

The education indicators of the Sociodemographic Profile of the municipality of Concepción del Sur show that out of 3,372 people between 15 and 59 years of age, 63.49% of the population has basic education, and the illiteracy rate is 25.7% at the municipal level, 24.6% for men and 26.8% for women. Twelve-point seven percent have secondary education, 1.04 percent have higher education, and only 0.07 percent have postgraduate studies. The average number of years of schooling in the municipality is four years, the gross enrollment rate is 87.7 with a dropout rate of 5.2 and a repetition rate of 5.2, and the student/teacher ratio is 24:1.[75]

In the municipality of Concepción Sur, in the survey conducted, of the total number of participants, 53% were men (8 out of 15) and 47% were women (7 out of 15). Of these, 71% of the men indicated they had primary schooling (5 out of 7) and 29% were women (2 out of 7). As for those who indicated having an intermediate or diversified level of education, 33% were men (1 out of 3), and 67% were women (2 out of 3). 100% of the people who reported having basic education were women (2 out of 2). No participant reported having a higher university or technical education. As for those who reported having no education, 67% were men (2 out of 3), and 33% were women (1 out of 3).

Regarding education in the municipality of Las Vegas, according to the Sociodemographic Profile, of the 16 212 people between 15 and 59 years of age, 57.88% of the population has basic education, and the illiteracy rate is 15.9% at the municipal level, 15.2% for men and 16.6% for women. 19.94% have secondary education, 3% have higher education, and only 0.08% have a graduate degree. The average number of years of schooling in the municipality is six, the gross schooling rate is 63.5 with a dropout rate of 3.1 and a repetition rate of 4.5, and the student/teacher ratio is 30:1.[76]

In the municipality of Las Vegas, of the total number of people surveyed, 44% were men (7 responses out of 16), and 56% were women (9 out of 16). Of these, only 38% of the men had primary schooling (3 out of 8), and 63% of the women (5 out of 8). In terms of basic education level, 100% of the men (4 out of 4) indicated that they had this level of education, and none of the women responded that they had it. In secondary or diversified education, 100% of the people who indicated having it were women (2 out of 2). Only one woman reported having it in higher or university and technical education (100% of 1). There were no reports of people with no education.

As stated in the Sociodemographic Profile of the municipality of Gualala, of the 3,425 people between the ages of 15 and 59, 63.77% have basic education, and the illiteracy rate is 24.7% at the municipal level, 22.9% in men and 26.7% in women. The average number of years of schooling in the municipality is 10.76% with secondary education, 1.73% with higher education, and only 0.13% with postgraduate studies. The average number of years of schooling in the municipality is four years. The gross enrollment rate is 72.2, with a dropout rate of 5 and a repetition rate of 5.2. The student/faculty ratio is 20:1[77].

In the municipality of Gualala, 47% of the survey respondents were men (8 out of 17) and 53% were women (9 out of 17). Among the men, 63% reported having primary education (5 out of 8), while 37% of the women did (3 out of 8). For basic education, 25% of the men (1 out of 4) and 75% of the women (3 out of 4) reported having this level of education. Only one woman (100% of 1) reported having a college or university education. None of the participants reported having secondary or diversified education or technical training. Among those without education, 50% were men (2 out of 4), and 50% were women (2 out of 4).

[75] Sociodemographic Profile of Concepción del Sur, Santa Bárbara 2022.
[76] Sociodemographic Profile of Las Vegas, Santa Barbara 2022.
[77] Sociodemographic Profile of Gualala, Santa Bárbara 2022.

2020 projections for the Department of Cortés[78] indicate that 33.4% (34,938 people) of the population completed pre-basic level, 88.6% (189,947 people) the primary level from 1st to 6th grade, 70.5% (78,969 people) from 7th to 9th grade and 43.5% (47,314 people) the middle level.

In Santa Cruz de Yojoa, a municipality of Cortés, the Sociodemographic Profile for 2022 shows that of the 58,209 people aged 15 to 59, more than half (61.4%) have completed basic education. The illiteracy rate at the municipal level is 13.5%, with 13.4% for men and 13.5% for women. Only 18.8% have completed secondary education, 2.97% have completed higher education, and just 0.09% have a graduate-level education. The average years of schooling in the municipality is six years. The gross enrollment rate is 72.5%, with a dropout rate of 5.9% and a repetition rate of 5.2%. The student-to-teacher ratio is 29:1.[26]

Among the Santa Cruz de Yojoa survey participants, 60% were men (12 out of 20), and 40% were women (8 out of 20). Of the male participants, 64% had completed primary school (7 out of 11), while 36% of the women had (4 out of 11). For basic education, 67% of the men (2 out of 3) and 33% of the women (1 out of 3) had completed this level, indicating a slightly higher percentage of men. At the secondary or diversified education level, 25% of the men (1 out of 4) and 75% of the women (3 out of 4) had completed this level. There were no reports of higher, university, or technical education participants. Of those who reported no education, 100% were men (2 out of 2).

4.2.1. Implications: Education

School enrollment in Honduras shows relative gender equity. However, inequalities persist in participation in higher levels of education and completion of studies. These inequalities between educational levels may be influenced by socioeconomic, cultural, and structural factors and may reinforce gender roles in society; therefore, it is necessary to raise awareness of gender issues to promote gender equity.

Since the survey indicated that several people had to abandon their studies due to economic constraints, it is important to consider increasing financial support to accommodate the work and family needs of individuals, especially considering the caregiving needs of women. Promoting technical education in project-related subjects may be a strategy that would improve the education of individuals and women and their employment opportunities and livelihoods.

The statistics found and collected highlight the lack of access to higher education and its general difficulties. However, as the educational level advances, women become the majority, particularly in middle, higher, and technical education, although they still represent a very small percentage of the total. This trend underscores the importance of studying women's barriers to continuing their education. It also emphasizes developing gender equity programs to achieve educational equality.

In the municipalities of Santa Bárbara, Concepción del Sur, Las Vegas, and Gualala, we found a significant gap in primary education, with a higher percentage of women achieving this level. This trend is consistent across all municipalities: Women tend to reach higher levels of education. In addition, the survey highlights that economic limitations may be a primary cause of school dropout, disproportionately affecting men.

4.2. Labor and Employment

According to the World Bank, the labor force participation rate of women aged 15 to 64 in 2023 was 51%, the second-highest rate in history after reaching 52% in 2018. However, in 2020, the World Bank reported that women are underrepresented in the labor market, with only 5.5 women working for every ten men. Despite this disparity, young working women earn 12% more than men of the same age.[79]

According to the Basic Guide to Gender Indicators in Honduras, which is based on data from the United Nations and CEPALSTAT, in 2019, the unemployment rate for women was 8.1% in contrast to that of

[78] Educational Statistics Report of Honduras SACE 2020.
[79] https://blogs.worldbank.org/es/jobs/por-que-no-hay-mas-mujeres-trabajando-en-honduras

men, which was just over half of that (4.2%).[80] In addition, there is an inequality in gross national income per capita, with women earning 4,173 USD compared to men earning 6,444 USD. [81] However, the rate of people employed in the informal sector of the labor market varies very little compared to other statistical data, representing 58.9% in women and 53.5% in men. [82]

In addition, according to the Labor Market Report 2020-2021 of the Ministry of Labor and Social Security, the economy and the labor market suffered an unprecedented contraction due to the compound effects of COVID-19 and hurricanes ETA and IOTA. As the economy gradually freed up, the labor market became saturated with a workforce desperately seeking employment, primarily in the private sector. During this period, the unemployment rate for men was 8.7% and 13.7% for women. [83]

In the survey conducted in the communities where the project will be developed, 88 people responded, providing 114 multiple-choice answers about the activities contributing to household income (either from respondents or someone in their household). Of those who responded, 34% (30 out of 88) were employed. Of these employed respondents, 60% (18 out of 30) were women, and 40% (12 out of 30) were men. However, it is important to note this does not mean that all female respondents were employed; often, their partner or another family member was the source of income.

Of those who responded that there was a job or work in the household, 29 responses were collected. Of these, 83% (24 out of 29) indicated that it was not a formal job, and only 17% stated it was a formal job. Of those with jobs, 28% (8 out of 29) indicated that they worked in the agricultural sector, 10% in a business venture, and 62% in other sectors. The only formal jobs mentioned (3 out of 29) were as a bricklayer, an operator in a chicken processing company, and an internet cable company employee.

Of the women who reported having a job, the occupations were mainly related to domestic work, such as washing and ironing clothes for other people and cleaning houses. Still, they also mentioned jobs such as teaching and working in a fried chicken shop.

Of the 10% (9 out of 88) who indicated they engaged in fishing activities in the survey, 33% (3 out of 9) responded that there are men who participate in fishing without being paid. This is because fishermen do not assign themselves a fixed salary. Instead, they sell the number of fish they manage to catch, and that income goes to the household economy.

Among the 28% engaged in agricultural work, 13% (11 out of 88) in banana farming, and 29% (25 out of 88) in coffee farming. Of the respondents working in banana farming, 67% were men (2 out of 3 responses), and 33% were women (1 out of 3) performing unpaid labor. Of those working in coffee farming, 67% were men, and 17% were women (1 out of 6 responses) performing unpaid labor. This trend extends to other sectors, including fishing, where the income from the catch contributes to the household economy. Generally, individuals involved in these activities do not assign themselves a salary but sell their produce or catch and allocate the income to cover household expenses; a similar pattern was observed in other activities, such as a woman who reported owning a business (1 response).

4.2.1. Unpaid work

There are profound inequalities between the number of hours men and women participate in unpaid work. According to ECLAC's Gender Equality Observatory, the average number of hours of unpaid work per week in the population over 15 years of age is women work 30.2 hours per week without pay, while men only work 7.8 hours per week without pay.[84]

[80] https://eurosocial.eu/wp-content/uploads/2021/04/guia_indicadores_genero_honduras.pdf
[81] https://eurosocial.eu/wp-content/uploads/2021/04/guia_indicadores_genero_honduras.pdf
[82] https://eurosocial.eu/wp-content/uploads/2021/04/guia_indicadores_genero_honduras.pdf
[83] Labor Market Report 2020-2021
[84] https://eurosocial.eu/wp-content/uploads/2021/04/guia_indicadores_genero_honduras.pdf

Our research confirmed that this trend is a reality in the project communities. Women participating in the study reported working 6.2 hours per day caring for a child or an older adult compared to 1.2 hours per day for men. Additionally, women reported cooking 5.5 hours per day, and men reported cooking for 0.5 hours on average.

4.2.2. Implications: Labor and Employment.

Data from various reports, municipal estimates, and survey data show that gender inequalities persist in the labor market. Despite women's participation, they still face barriers to employment, job instability, and unequal pay. This gender gap extends beyond wages, affecting all spheres of work, including formal, informal, and unpaid labor.

A significant concern is the disproportionate burden of unpaid work on women, which limits their participation in paid and formal jobs and jeopardizes their economic autonomy. This unequal distribution of domestic work perpetuates gender roles and stereotypes, hindering progress toward gender equality both at home and in society.

To combat these issues, it is crucial to promote women's access to formal jobs, ensure equal pay, and provide equal opportunities. When offering training to improve working conditions, it is important to consider women's disproportionate care responsibilities. Providing tools and services to facilitate their participation can help close gender gaps and promote a more equitable labor market.

4.3. Use of Time

In the focus groups, the participants' use of time was analyzed. On average, both men and women reported more than 24 hours, indicating that they are combining several activities simultaneously or multitasking (Table 1). There are notable differences between men's and women's use of time. As mentioned, women spend much more time on unpaid work, such as caregiving and cooking. On the contrary, men dedicate more time to paid work, such as jobs and fieldwork. We observed similar time use between women and men in time spent in trade activities, community activities, and rest.

Table 1: Average use of time in a typical day, hours

	Rest	Care	Field	Kitchen	Free	Job	Trade	Community	Other	Total
Man	9.0	1.2	5.9	0.5	4.1	5.5	0.9	1.9	0.8	29.8
Woman	9.0	6.2	0.9	5.5	2.9	3.8	0.6	1.7	1.8	32.4

4.3.1. Implications: Use of Time

Differentiated use of time between men and women is essential to consider when designing project activities and planning meetings and events as part of the project. Considering that women have a higher workload (more hours reported per day) and more unpaid work obligations, it can be challenging to have time to participate in new activities. It is essential to consider the times that women and men are available to participate in project activities, as their responsibilities are different, and it may be necessary to offer the same activity at various times to ensure that it is accessible to women and men, as childcare while the activities are taking place.

4.4. Migration

Gender affects the motives for migration, including social networks migrants use to travel, integration experiences, labor opportunities at the destination, and relations with the country of origin. Gender

expectations, relationships, and power dynamics may further affect this process. [85] In this context, according to World Bank reports, in 2020, of the 16.2 million migrants from Central America and Mexico, 48.7% were women and girls, who faced challenges at all stages of the journey, such as gender-based violence, discrimination, and vulnerability to trafficking, kidnapping, and murder. [86]

In addition, the 2009 coup d'état in Honduras exacerbated inequalities, leading to massive caravans of migrants. At the same time, U.S. immigration policies became more restrictive, leading to changes in migration patterns, such as the return of people who had previously emigrated from the country. [87] Likewise, and due to political relations with the U.S., Mexico has been implementing deportation strategies contrary to humanist approaches; on March 27, 2023, 40 incarcerated migrants died in a fire, and Mexican authorities left them to die.[88]

Changes in migration policies and the exacerbation of inequalities in the country have led to increased migration and a rise in violence against women during their transit and search for a better place to live. Furthermore, their irregular legal status becomes an additional risk factor, making it difficult for them to seek help in cases of violence, including sexual violence, and increasing their vulnerability to human trafficking networks.[89]

It is reported that 21% of Honduran returnees are women, including girls who may be accompanied or unaccompanied. Eighteen percent of returnees are girls aged 0 to 10, 17% aged 10 to 19, and 35% aged 20 to 29, indicating that 70% of women/girls migrating and returning are young. [90]

The leading causes of migration from Honduras in the general population are an increase in the working-age population and lack of employment, low wages, violence, insecurity, and the impacts of climate change.[91] However, Central American women recognize social violence, domestic violence, and gender-based violence as one of the leading causes of migration.[92]

In a survey conducted by our team, 41% (36 out of 88) of respondents indicated that someone in their family, or the respondent themselves, had migrated to the city or another country. This yielded 46 responses with multiple reasons for migration. The most frequently mentioned reason, cited by 67% (31 out of 46), was the lack of employment opportunities in the community. Of these, 58% were women (18 out of 31) and 42% were men (13 out of 31). The second most common reason, at 20% (9 out of 46), was the need for an additional source of family income. Within this group, 44% were women (4 out of 9), and 56% were men (5 out of 9). Other reasons for migration included the lack of educational opportunities, mentioned by one woman, and loss of livelihood due to climate variability, cited by one woman and one man.

These migration drivers have various roots, such as economic hardship, the need to set up small street businesses while facing gang extortion, and generalized violence in their home territories. Additionally, issues like harassment, irresponsible parenthood, domestic violence, sexual violence, and the impunity of the state that perpetuates inequality, insecurity, and lack of protection for women contribute to migration.

LGBTQ+ individuals also experience migration differently, facing their own unique set of challenges and advantages. According to non-institutional sources, in January 2021, over 8,000 people left San Pedro Sula for the United States, with approximately 300 belonging to the LGBTQ+ community, including 100

[85] IOM Central America
[86] Migrant women and girls in Central America take risks in search of a better future.
[87] Returned Honduran migrant women: an invisibilized violence (2017-2022).
[88] Returned Honduran migrant women: an invisibilized violence (2017-2022).
[89] https://oig.cepal.org/sites/default/files/mujeres_migrantes_centroamerica.pdf
[90] Returned Honduran migrant women: an invisibilized violence (2017-2022).
[91] https://lac.unwomen.org/sites/default/files/Field%20Office%20Americas/Imagenes/Paginas/MELTY/PILAR%201/P1%2004%20%20Estudio%20Empoderamiento%20Econmico%20de%20las%20mujeres%20territorios%20y%20migracin.pdf

[92] https://oig.cepal.org/sites/default/files/mujeres_migrantes_centroamerica.pdf

trans women. The main reasons for migration among the Honduran LGBTQ+ community are insecurity and exclusion due to sexual orientation or gender identity. [93]

4.4.1. Implications: Migration

During migration, women and LGBTI+ people experience gender-based violence, sexual abuse, and discrimination if they need care, in addition to the typical risks associated with migration. In addition to the lack of economic opportunities, the factors that make them migrate from their country of origin to another include social violence, gender-based violence, and domestic violence. Therefore, it is necessary to train the people who will be part of the project in these types of violence and the consequences of violence. It is also important to strengthen inter-institutional networks to refer women in this vulnerable situation.

Avoiding migration is critical to the project since women and LGBTI+ people can experience exacerbated violence during transit; training and technical reinforcement in agriculture and fishing should be considered, as well as the creation of job and educational opportunities. It is also necessary to have human and material resources for the prevention and attention of gender-based violence in the project communities.

The return of migrants has increased in recent years due to the various anti-migration policies implemented by countries such as the United States and Mexico. This return poses additional challenges for women and girls, as violence is often one of the primary reasons for their initial migration. Consequently, they face the risk of re-victimization or even femicide upon their return. Therefore, it is crucial to implement internal policies to understand this phenomenon and ensure that individuals are referred to appropriate care services. These policies should focus on providing comprehensive support to address the unique needs and vulnerabilities of returning migrants, particularly women and girls.

4.5. Governance and Leadership

4.5.1. Leadership in government

Globally, women account for only 22.8% of Cabinet members heading ministries. There are only 13 countries where women hold 50% or more of Cabinet ministerial positions. Only six countries have 50% or more women in parliament in single or lower houses[94]. Data from 141 countries show that women constitute more than 3 million (35.5 %) elected members in local deliberative bodies; only three countries reach 5%, and 22 others have more than 40% of women in local government.[95]

Article 81 of the Honduran Equal Opportunity Law, established to achieve the effective participation of women, requires the progressive establishment of a base of thirty percent (30%) until reaching equality between women and men, applicable to leadership positions in political parties, proprietary and alternate deputies to the National Congress, the Central American Parliament, mayors, and vice mayors, and aldermen.[96] However, these norms do not facilitate the representation of women because parity is required in the registration of candidacies for internal elections and not for general elections. [97]

[93] Forced to flee and return to Honduras.
[94] Women's leadership and political participation.
[95] Women's leadership and political participation.

[96] Women's Leadership, AECID.
[97] The low political participation of women in local government leadership.

During 1980-2020, 169 women were elected as legislators compared to 1,071 men. Currently, the number of female deputies only reaches 21.09%, ranking 91st of all countries in the world in female representation[98]. In 2022, women mayors represent only 6.37% of the country's municipal corporations.

In a study on women's leadership in the public space conducted in 2009 by the Center for Women's Rights and the Center for Women's Studies, the municipal leaders interviewed perceived strong resistance from political party leaders who deny women's participation in important decision-making positions. This is related to what they call "the rings" of the parties, referring to those leaders who have years in control of the party and who have become and are seen as the owners of the parties.[99]

4.5.2. Leadership in communities

During our focus groups in each community, we facilitated several mixed-gender activities before separating participants into women-only and men-only groups for more focused discussions. We asked both groups the same questions, including whether they believed it was important for women in their communities to take on leadership roles. In every community, all participants agreed it was important for women to be leaders. However, the reasons for this belief differed between the genders.

Women expressed that it is essential for them to be leaders because they are capable, have the right to make decisions, often take charge, and possess leadership qualities. This contributes to their sense of independence. On the other hand, some men stated that women should lead without men because they tend to be more organized. Others acknowledged that women are equal to men and, therefore, have the right to participate in leadership roles.

These differing perspectives highlight the motivations behind supporting women's leadership, underscoring the need for continued dialogue and efforts to promote gender equality in community leadership roles.

Due to the limited institutional space for women's participation, women have organized to create Municipal Women's Offices (OMM) to advocate in 142 municipalities and respond to local needs, such as violence. All these offices have a coordinator; however, they do not use the same resources because they have been created by different organizations, institutions, or, in some cases, public authorities interested in advancing equity in favor of women.[100]

Regarding the coordination and engagement in the communities for participation in focus groups and surveys, we observed active involvement from men and women, church and community leaders, and the CASM representative. This diversity in leadership demonstrates an inclusive and equitable approach to organizing and coordinating community activities. The active participation of various leaders highlights a collaborative effort and reinforces the importance of inclusive representation in community initiatives.

Table 2: Support in group coordination and interviews by community

Community	Coordination within the community
El Aguacatal	The coordinator was a shepherdess, a woman
El Sauce	The coordinator was a man who was a church member and a community committee member.
El Zapote	The coordinator was a young man, and he called the people together.
Lomas del águila	The coordinators were women and men leaders.
El Playón	The convener was a man, a community leader

98 Women's political representation in Honduras.

99 Strengthening women's leadership in the public sphere.

100 Strengthening women's leadership in the public sphere.

Table 2: Support in group coordination and interviews by community	
Community	Coordination within the community
Buenos Aires	The coordinator was a man
San Isidro	The coordinator was a woman
La Guama	Here, the coordinator was a woman and a church and community leader.
El Carreto	Coordinated by a teacher at the school
The steer	Coordinated by a teacher at the school

In addition, participation in supporting the coordination of household surveys and focus groups was equitable, with 50% men and 50% women.

Finally, other types of women's political leadership exist in Honduras, not from the institutional framework but from identity and community. In an interview with UN Women, the environmentalist and community feminist of the Lenca people in Honduras, Betty Vásquez, affirmed that through millenary, ancestral, spiritual, and cosmogonic practices, they make themselves visible and allow them to position their struggle in favor of the vindication of women's right to life. According to her, what keeps women in their territories are their roots while their children and partners migrate.[101]

4.5.3. Household leadership

Regarding the head of household at the national level, in Honduras, INE reports that in 2016, there were a total of 1,992,974 households. Women headed 33.6% of households, and men headed 66.4%. [102]

In the survey data on the distribution of head of household by sex, 73% (64 out of 88) of the households are headed by someone who identifies as head of household. Among these, 61% (39 of 64) identify as male, and 39% (25 of 64) identify as female. In contrast, in 24 households, the respondents do not identify as head or head of household, with 21% (5 of 24) identifying as male and 79 (19 of 24) identifying as female.

Of respondents who did not identify themselves as the head of the household, female respondents 84% (16 of 19) indicated that the head of the household was male, 11% (2 of 19) indicated that it was another female, and 5% (1 of 19) indicated that it was both members of the couple. In the case of male respondents, 60% (3 out of 5) indicated that it was both partners, 20% (1 out of 5) indicated that it was another man, and 20% (1 out of 5) indicated that it was a woman who assumed this role.

4.5.4. Implications: Governance and Leadership

There is a vast gender gap in leadership at the governmental and household levels. Regarding households, it is important to promote the distribution of household tasks, equal decision-making, and economic independence. For this, it is necessary to conduct training on gender issues such as roles, stereotypes, autonomy, and agency.

Parity measures at the governmental level must be implemented in all stages of the electoral process for them to work. The project can seek to support legal initiatives in favor of equality and train women in leadership.

In addition, to sustain and improve women's community leadership, it is advisable to strengthen and support an inter-institutional connection with the Municipal Women's Offices to promote change and

[101] Betty Vásquez: "The normality we had was not favorable for women".
[102] Characterization of Women in Honduras 2016 INE

implement programs and policies favoring women. These policies may include childcare and paid maternity and paternity leave.

4.6. Participation

In the survey conducted, 60% (53 responses out of 88) are involved in decision-making, of which 60% (32 responses out of 53) are men and 40% (21 responses out of 53) are women. On the other hand, 40% (35 responses out of 88) are not involved in decision-making, 34% (12 responses out of 35) are male, and 66% (23 responses out of 35) are female. These data suggest that men participate more in decision-making roles than women, although the difference is not very high. However, the percentage of women who do not participate in decision-making is considerably higher than that of men.

4.6.1. Participation in community activities

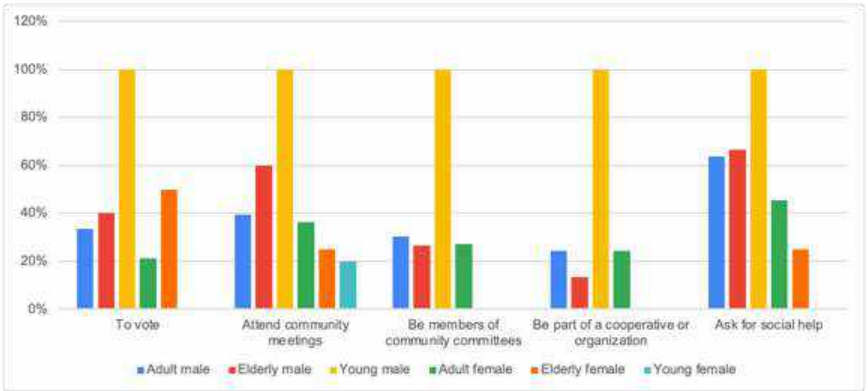
In addition, we asked about participation in community activities in the focus groups. The results (Figure 1) show intersectionalities between sexes and age differences. When it comes to voting, young men participate the most. There were notable participation differences, reaching 100% of the sample compared to other groups. Adult women reported voting less; however, older adult women are the second most active voters but the ones who choose to vote the least.

In terms of attendance at community meetings, once again, young men participate the most. Older men are the second highest group to attend community meetings, followed by adult men; however, these groups reverse positions in the decision-making process. The differentiation of sexes in attendance at community meetings is unequal: adult women, older adult women, and young women are the least represented in the same order. It is worth mentioning that young women, according to the sample, only participate in asking for social assistance; however, the percentage is very low in all cases.

Regarding community committee membership, young men participate at a rate of 100%, significantly outnumbering other groups by approximately 70%. The second highest participation rate is adult men, followed by older adult women and then older adult men, with no participation of young women or older adult women. This highlights a significant gender and age disparity in community committee involvement.

Young men are most likely to participate in a cooperative or association, followed by adult men and a few percentage points of adult women, with older women participating the least. Finally, when asking for social assistance, young men participate the most, followed by older adult men, adult men, adult women, and older adult women.

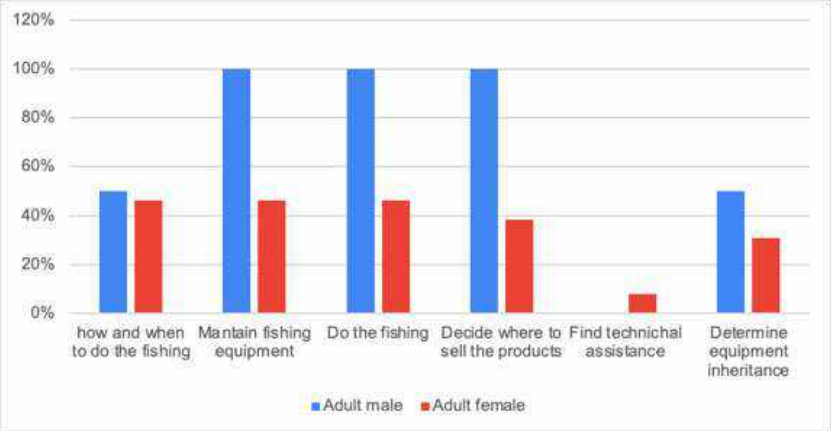
Figure 1: Participation in community activities disaggregated by sex.



4.6.2. Participation in productive activities

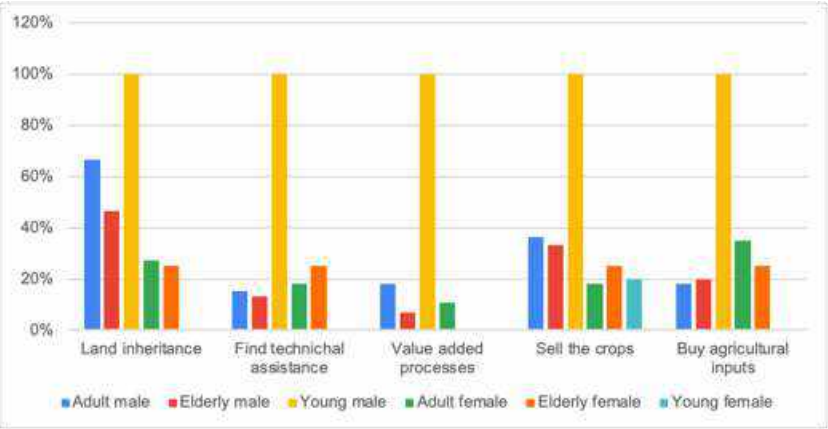
Concerning fishing participation (Figure 2), we observed that men always maintain equipment, fish, and decide on products. In the same activities, women participated less than men. The only activity that reported not having men involved in their participation was seeking technical assistance.

Figure 2: Participation in fishing activities disaggregated by gender



Regarding participation in agriculture (Figure 3), there was significant variation depending on the production time. Adult and older women often choose the crops to be planted but do not participate much in all other aspects of production or post-harvest. In contrast, young women do not select crops but participate more in planting and post-harvest. In general, among adult men and women of all ages except young men, there is little participation in seeking technical assistance, value-added processing, purchasing inputs, and pest management. This suggests that these are rare activities among participants. Young men reported involvement in all aspects of production, which shows they are a crucial group for integrating project activities.

Figure 3: Participation in agricultural activities disaggregated by gender

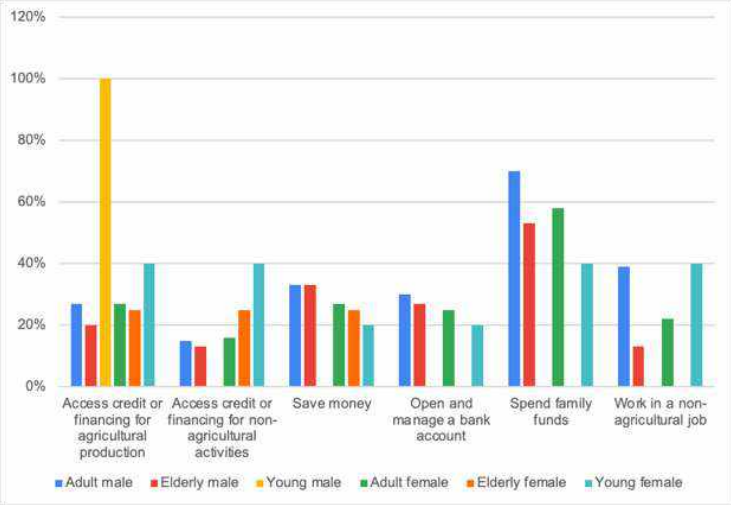


4.6.3. Participation in finance

Participation in financial activities shows notable differences from other categories (Figure 4). Young men are mainly absent from financial activities, except for accessing credit for agricultural purposes, which aligns with their high involvement in agricultural activities. Low participation in financial activities across the board indicates limited access to financial services within the communities.

Regarding gender differences, adult women participate less than adult men in saving money, opening and managing bank accounts, spending family funds, and engaging in non-agricultural work. Older women have no presence in opening and managing bank accounts or spending household funds, highlighting the intersectionality between gender and age in household financial participation. This underscores the need for targeted efforts to improve financial inclusion and literacy for women, particularly older women, in these communities.

Figure 4: Participation in finance, disaggregated by gender



4.6.4. Implications: Participation

Gender gaps exist in women's participation compared to men, so equitable measures, such as training aimed only at women, should strengthen their skills to pursue equity later.

To improve equality in community activities, gender equality must be promoted through workshops or awareness-raising activities for men and women, preferably separately, to ensure safe spaces where opinions are respected and supported. In addition, male and female citizen committees should be created equally to promote project activities and consultations.

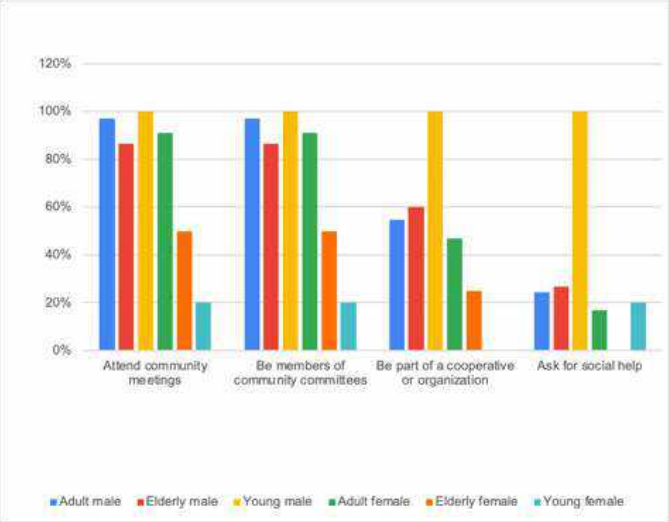
Gender roles and ageism are especially pronounced in productive activities. To pave the way for more egalitarian practices, it is crucial to implement gender equity measures, such as entrepreneurship, business, and technical training explicitly targeting women. Additionally, financial activities are heavily influenced by traditional gender roles, making it essential to strengthen women's financial skills and knowledge. This approach will help mitigate the disparities and promote greater financial independence and participation among women, ultimately contributing to more balanced and inclusive community development.

4.7. Decision-making

4.7.1. Decision-making in community activities

In focus groups, participants were asked about decision-making in community activities (Figure 5).

Figure 5: Decision-making in community activities disaggregated by sex.



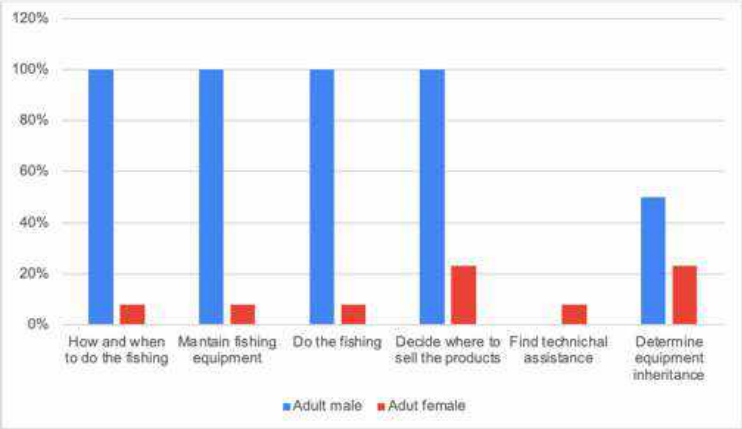
Adult men, senior men, young men, and adult women hold significant decision-making power in attending community meetings and being members of community committees. However, senior women, particularly young women, have much less influence. Young men are the primary decision-makers regarding joining cooperatives and requesting social assistance. Adult and senior men and adult women share similar levels of decision-making power in these areas.

The results clearly show that young women are not involved in decision-making activities related to cooperatives and associations. Highlighting a substantial gender and age disparity in community decision-making processes underscores the need for initiatives empowering young women to participate more actively in these areas.

4.7.2. Decision-making in productive activities

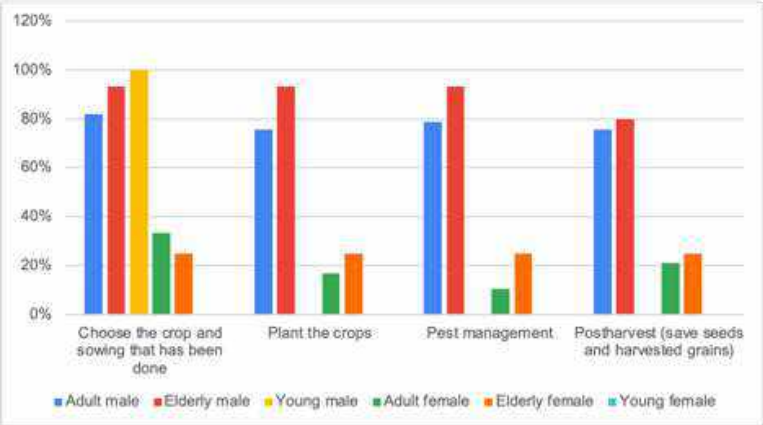
Regarding decision-making in fishing (Figure 6), men always make decisions about maintaining fishing equipment, fishing, and deciding where to sell the products. In the same activities, women showed less decision-making than men and a lower percentage of decision-making. The only activity that reported not having men involved in either decision-making or participation was seeking technical assistance, which is surprising and worrying since having this source of knowledge could improve how they carry out their activities and, therefore, have a better income.

Figure 6: Decision-making in fishing activities disaggregated by gender



Concerning agricultural decision-making (Figure 7), in all stages of production, adults, older adults, and young men tend to make more decisions than women of any age. Additionally, young women did not report any decision-making role. The reshow in Figure 7 shows very little female decision-making power in producing food and cash crops.

Figure 7: Gender-disaggregated decision-making in agricultural activities



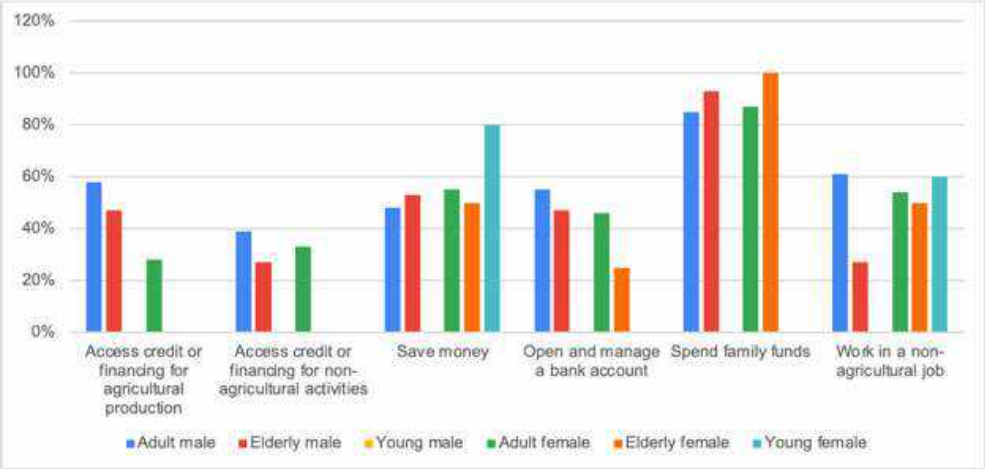
4.7.3. Decision-making in Finance

Decision-making in finance has a markedly different dynamic than other categories (Figure 8). Notably, young men are absent from financial decision-making, even in areas such as accessing credit for agricultural activities where they typically participate.

Regarding access to credit, both agricultural and non-agricultural, older women and young women are absent, and adult women are less involved in decision-making than adult men. Regarding saving and spending money, adult and older men and women have a similar presence in decision-making. However, in activities such as opening and managing bank accounts, women generally have a lesser role.

These findings indicate that while women have some influence in financial decision-making, it is not on par with men's. This underscores the need for targeted initiatives to enhance women's involvement and authority in financial matters and ensure equal opportunities to participate in and benefit from economic activities.

Figure 8: Decision-making in finance, disaggregated by gender



4.7.4. Implications: Decision-making

There is a significant gender gap in decision-making within community activities, with men generally holding more power than women. This gap is further widened by age, as young and adult women are the least likely to participate in these activities. To address this disparity, it is essential to focus on these two groups by creating specific programs to develop their leadership skills.

Additionally, it is crucial to establish safe spaces where women can actively contribute to creating measures for their inclusion in community decision-making. Promoting inclusive community environments will empower women and enhance community leadership's effectiveness and diversity.

Men have more power in decision-making in productive activities, and women have minimal participation, especially young women, who have no say in these matters. Therefore, it is advisable to create or strengthen leadership and business management programs to promote participation and provide women with their resources. Particular emphasis should be placed on young women interested in productive activities.

However, there are disparities; women have the least access to credit and bank accounts, so it would be essential to reinforce women's financial education and raise men's awareness of gender equality.

4.8. Land, infrastructure and natural resources

4.8.1. Access to land

Around the world, the land is being degraded by a brutal combination of drought and desertification, threatening food production and the lives of those who live off the land; one of the critical solutions is to create opportunities for women because they are effective in using their extensive knowledge and skills to protect land and restore degraded land[103]. Women's more substantial rights to land and productive assets are linked to a wide range of benefits, such as improved living conditions, better nutrition and food sovereignty, better health, higher incomes and individual savings, etc.[104]

However, women have been at the center of human rights violations around the world concerning their rights and access to land. Discriminatory laws and social norms undermine women's access to land. Women are hardest hit by insecure land tenure.[105] Fewer than one in five landowners today are women, despite making up nearly half of the global agricultural workforce and producing up to 80% of food in developing countries. And when women are widowed, they are still denied ownership in more than 100 countries[106].

Women with property rights tend to own smaller plots and less fertile land than male landowners. Yet they contribute to reversing, halting, and minimizing land degradation. At the same time, they continuously show leadership and innovative thinking to solve the difficulties and constraints imposed on their families and communities.

The survey asked about plans to pass down land to their daughters and sons. Among the 12 (39% of 31) female responses, 25% (3 of 12) plan to pass down the land to their daughters, 25% (3 of 12) to their sons, and 17% (2 of 12) to both sons and daughters. Eight percent (1 of 12) state that it is hers, 8% (1 of 12) to the father, 8% (1 of 12) do not know, and 8% (1 of 12) indicate that the husband decides. In inheritance trends between men and women, there is a higher proportion of men passing land down to their sons, while women have a more equal distribution between sons and daughters.

Of those who engage in fishing activities (9 out of 88), only 33% plan to pass down (3 out of 9) the fishing equipment or the boat they use to their offspring. However, these individuals intend to pass the inheritance to their sons without mentioning their daughters. Of the 35% (31 out of 88) who are involved in agricultural activities and have access to land, 61% (19 out of 31) of the responses were obtained from men. Among these men, 53% (10 out of 19) plan to pass the land down to their sons, 11% (2 out of 19) to their daughters, and 16% (3 out of 19) to both sons and daughters. Additionally, 5% (1 out of 19) claim ownership themselves, 11% (2 out of 19) are uncertain about who they will pass it down to, and 5% (1 out of 19) intend to leave it solely to their male children.

The focus group conducted across ten communities found that land inheritance practices vary significantly. In five communities, women reported that land is inherited equally between men and women. In four communities, women noted that they primarily inherit land from men. In El Zapote, Gualala, it was mentioned that women do not inherit land due to lack of ownership, but if they were to inherit, it would be on equal terms. Among men, three communities reported equal inheritance between genders, while in the remaining seven, a stark preference is given to male children. This gender disparity in land inheritance, a pressing issue, is further complicated by the conditions under which women may inherit, such as demonstrating trust in their fathers or expecting to receive land through marriage.

[103] United Nations: Securing women's land rights to increase gender equality, food security and economic empowerment.
[104] United Nations: The insecurity of land rights for women.
[105] Idem
[106] United Nations: Securing women's land rights to increase gender equality, food security and economic empowerment.

4.8.2. Infrastructure

Regarding access to water in the household, female heads of household reported in 2016 (33.6% of a total of 1992 974) only 56.3% have access to water by private service, 31.8% by public service, 3.7% have access to water with their neighbors, 2.2% from cistern, 2.0% from river, stream, or spring, and 1.6% from well with pump, among other accesses with lower percentages.

In our surveys concerning access to basic services, we collected 454 multiple-choice responses from 88 participants. Among these, 82% (72 out of 88) reported having access to potable water. Within this group, 56% of women (40 out of 72) expressed satisfaction with their access to safe drinking water, compared to 44% of men (32 out of 72).

Despite the majority reporting access to safe drinking water, not all respondents feel they have optimal access. Many cited the need to share their water supply, leading to cautious water use and limiting consumption.

Regarding sanitation service with female heads of household, in 2016, 43.3% had a toilet connected to a sewer, 23.4% had a toilet connected to a septic tank, and 8.9% had a latrine with a cesspit. Water-sealed latrines were recorded in 17.6% of households, and septic tank latrines in 2.5%. Toilets with drainage to a river, lagoon, or sea, and latrines with discharge to a lagoon or sea, among others, represent less significant values.[107]

In the survey, we collected 324 multiple-choice responses from 88 participants regarding access to basic household services.

Regarding access to drinking water, the responses were evenly distributed, with 49% (40 out of 81) from men and 51% (41 out of 81) from women. Similarly, the distribution was balanced for drainage, with 47% (15 out of 32) from men and 53% (17 out of 32) from women.

Regarding electricity, access men were slightly favored, with 52% (44 out of 85) of men reporting having access to electricity compared to 48% (41 out of 85) of women."

In Honduras, of the total number of female-headed households in 2016, 91.3% were supplied with electricity from the public system, followed by 2.2% with a candle or gas lamp, 2.1% with a candle, and 1.9% with ocote.[108]

The survey findings regarding internet access via wifi connection revealed that 15% of those surveyed have access to the internet; 46% (23 out of 50) of men and 54% (27 out of 50) of women have access via wifi connection. Four percent have access to the internet via cellular data, 69% (9 out of 13) correspond to men, and 31% (4 out of 13) to women. Regarding cell phone signals, 51% (32 out of 63) correspond to men and 49% (31 out of 63) to women. There is a general balance in access to internet services between genders. Women tend to have greater access to potable water, sewage, and wifi connections, while men have greater access to electricity and internet via cellular data and cell phone signals.

Table 3: Access to basic services in households, by gender identity, by municipality

	Concepción Sur		Gualala		Las Vegas		Santa Barbara		Santa Cruz de Yojoa		Total	Total (%)
Sex	H	M	H	M	H	M	H	M	H	M		
Services - Drinking water	7	6	7	9	6	8	9	11	11	7	81	25
Services - Drainage	2	1	1	2	4	3	2	7	6	4	32	10
Services - Electricity	8	7	8	9	7	9	9	8	12	8	85	26

[107] Characterization of Women in Honduras 2016 INE

[108] Characterization of Women in Honduras 2016 INE

Services - Internet (through wifi connection)	4	1	5	5	3	8	4	7	7	6	50	15
Services - internet (through cellular data)	0	0	2	1	0	1	2	2	5	0	13	4
Services - Mobile phone signal	3	4	8	7	5	7	4	5	12	8	63	19
Total	24	19	31	33	25	36	30	40	53	33	324	100
Percentage Total (%)	7	6	10	10	8	11	9	12	16	10	100	

N = 88

4.8.3. Natural Resources

The Department of Santa Bárbara has three protected areas with access to water. Santa Bárbara Mountain National Park (PANAMOSAB) is located 13 km from Santa Bárbara and under intense pressure from coffee cultivation. Lake Yojoa is the only natural freshwater lake in Honduras, located between Comayagua, Cortés, and Santa Bárbara; the population of the surrounding communities is dedicated to hotel services, restaurants, boat transportation, agriculture, and fish sales. Montaña Verde Wildlife Refuge, between Santa Bárbara, Intibucá, and Lempira. Vital areas for water production are Cantiles Mountain, Pecaliguie Mountain, Merendón Mountain, and Nevado Mountain, which, among other municipalities, produces water for Gualala, Santa Bárbara, and Santa Cruz in the Department of Cortés[109].

In the focus groups, we asked about participation and decision-making in natural resource conservation activities. The results (Figure 9) show that young men participate in all activities except for firewood and make 100% of their decisions. There is also a notable gap in participation compared to all groups. Young women only participate in three activities: ensuring water, firewood, and planting trees; however, they do not make decisions.

On the other hand, older women participate and decide in all activities except for participating in conservation works. There is an interesting tendency for adult women (represented in green in the graph) to make more decisions than they participate, which suggests that their ideas and opinions on natural resource issues are considered. Still, someone else is doing the work. However, men continue to have a higher rate of decision-making in all activities.

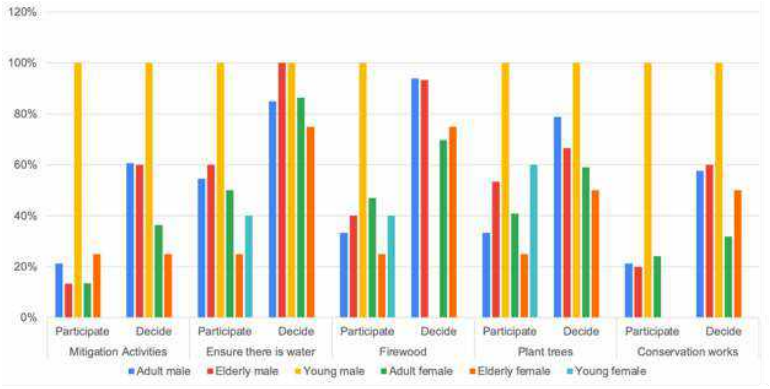
Examining adult men's participation and decision-making in various activities reveals a clear disparity. Across all areas, there's a consistent gap of approximately 20%, except for ensuring water availability, where the difference is slightly over 10%. These findings imply that adult men and women wield greater influence in decision-making processes, while young men take on a more substantial role in implementing activities.

Given these insights, designing activities involving young men and women in training and leadership roles is crucial to enhancing their contribution to implementation efforts.

In this activity, compared to the others in the study, adult and older women have a greater voice in decision-making, speaking to women's connection to the land and natural resources.

[109] Inventory of protected areas and watersheds in the department of Santa Barbara.

Figure 9: Participation and decision making in natural resource activities



4.8.4. Implications: Land, infrastructure, and natural resources.

Women face systemic legal barriers that curtail their rights to land, thereby restricting their access and autonomy. Men need to understand and champion the principles of gender equality and equitable resource distribution. Additionally, empowering women through training programs in land management is crucial to bolster their engagement and influence in addressing this pressing issue.

Men participate disproportionately in activities related to environmental conservation compared to women; therefore, women's participation in the planning and implementation of conservation projects should be sought.

CASM identified some challenges during consultations with participating groups, implying a high impact, such as climate change and climate variability on women and girls, especially regarding access to water and food and increased workload. Women's livelihoods are highly dependent on the availability of natural resources, mainly due to their situations of poverty and low food productivity. These activities can cause a depletion of natural resources, primarily if sustainable practices are not used.

Women bear the disproportionate burden of daily resource management, which is crucial for meeting their families' basic needs. From processing food to gathering wild products, fetching water, and collecting firewood, these responsibilities fall primarily on them. However, escalating deforestation and water source depletion necessitate longer travel distances, placing additional strain on women. Their workload escalates as they expend more time and energy securing these vital resources, leaving limited time for other essential activities.

Actions should be implemented considering the specific needs of women and girls due to climate change, starting with training on adaptation, resilience, sustainable practices, resource use, and workload reduction technologies. In addition, awareness-raising workshops should be conducted for men and women that address the sharing of natural resource responsibilities.

4.9. Violence and crime

4.9.1. Gender violence

According to CASM's experience in the project area, the sexist and patriarchal culture has multiple expressions of masculinity impeding the full enjoyment of women and girls' rights to develop their autonomy and self-realization. Some of these expressions are the exclusion of women from decision-making spaces, economic and psychological dependence, sexual abuse, early pregnancy, and domestic violence.

According to a 2022 UNDP analysis, women between the ages of 18 and 30 suffer the most from domestic violence. The most frequent types of violence are psychological (47%) and physical (35%). 8

out of 10 reports of sexual crimes come from women. Sixty-six percent of reported cases involve women under 18 years of age, and the 13-17 age group is the one with the highest number of complaints.[110]

Three hundred and fifty-seven women disappeared in Honduras in 2022; 37% of the missing women were under the age of 18. The average number of missing women since 2012 is 302 per year. [111]

In 2022, six out of every 100,000 women were murdered. There were 306 cases of violent deaths and femicides; 37% of violent deaths were between 18 and 30 years old. 6 out of 10 violent deaths occurred in urban areas, and 60% of violent deaths are concentrated in 20 municipalities, with the Central District and San Pedro Sula being the most violent municipalities in the country against women.[112] In 2023, the number of femicides increased to a total of 386 femicides.[113]

Honduras has one of the highest rates of hate crimes and trans-femicides in the world, with 388 violent deaths between 2009 and 2021, according to data from the Red Lésbica Catrachas. The situation is especially worrying for trans women: they have registered more than 120 murders in the last decade, and their life expectancy does not exceed 35 years.[114]

In the focus groups, our research team explored the topic of gender-based violence, conducting separate discussions with men and women. Participants were asked whether they were aware of instances where women had experienced violence at the hands of their husbands or partners.

Among women, responses varied across the ten communities. In five communities, participants acknowledged the existence of such cases, while in the remaining five, they reported either no instances of violence or a lack of awareness about such incidents. Among those who confirmed knowledge of violence, one particularly striking account involved an adult man attempting to assault a young girl, only to be thwarted by the intervention of an adult woman. Conversely, among male respondents, the majority in eight out of the ten communities were familiar with cases of violence against women.

In the same focus groups, participants were asked what actions a woman could take to seek help if she were to suffer violence from her partner. Responses from women varied significantly. Some suggested reporting the incident to the police, while others advocated for leaving the abusive situation. Another common suggestion was seeking support from women's organizations or networks, although some noted the absence of nearby support organizations for such cases.

Similarly, men's responses were diverse. While some expressed a sense of helplessness, believing nothing could be done and emphasizing the need for silence, others proposed denouncing the perpetrator, whether a leader, authority figure, or head of the organization. Additionally, there was a general observation that individuals affected by violence often refrain from seeking help, leading to cases remaining undisclosed and shrouded in secrecy.

4.9.2. Marriage and Child Pregnancy

Between 2010 and 2019, reportedly, 2,420 adolescents gave birth.[115] We could not collect field data on this; however, when asked about household members during the survey, one man would have provided information on the daughter; however, the mother told him that she was no longer part of the household (the daughter was 15 years old, as indicated by the father) because she was already pregnant and was already part of another household, the household she had decided to form. This suggests that the national statistics are consistent.

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[110] For the autonomy of Honduran women.
[111] Idem
[112] Idem
[113] Number of femicides in Honduras in 2023, by month.
[114] Forced to flee and return to Honduras.
[115] Sociodemographic Profile of Santa Barbara, Santa Barbara 2022.

4.9.3. Delinquency

In the municipality of Santa Bárbara, from 2014 to 2019, there were 119 homicides recorded, along with 128 reports of domestic and intra-family violence and 302 incidents of robbery and theft.

Similarly, the municipality of Concepción del Sur, from 2014 to 2019, identified 17 homicides, two reports of domestic and intra-family violence, and six reports of robbery and theft. During the survey, a male (1 out of 88 people) indicated that he intends to migrate due to violence in general and lack of employment opportunities in the community.

In the municipality of Las Vegas, between 2014 and 2019, 93 homicides occurred, as well as 11 reports of intra-family and domestic violence and 24 reports of robbery and theft. [116]

Findings for the municipality of Gualala from 2014 to 2019 revealed eight homicides, eight reports of domestic and intra-family violence, and 12 reports of robbery and theft.[117]

The municipality of Santa Cruz de Yojoa uncovered alarming statistics, revealing 360 homicides, 235 reports of intra-family and domestic violence, and 790 reports of robberies and thefts between 2014 and 2019.[118]

4.9.4. Implications: Violence and Crime

Women and girls in Honduras confront alarming rates of violence, often resulting in femicide, underscoring the urgent need for the project to incorporate strategies to prevent and address gender-based violence (GBV) alongside efforts to promote education on human rights and gender equality. Given disparities in resources across municipalities, prioritizing inter-institutional coordination is vital to refer to cases of violence when needed effectively. Moreover, providing training in psychological first aid and GBV to project personnel is essential for their capacity to respond effectively to incidents of violence.

The absence of comprehensive sex education and the pervasive influence of poverty hinder the development of children and adolescents in Honduras. These intertwined factors contribute to alarmingly high rates of child marriage and pregnancy, perpetuating a cycle that disrupts educational attainment and stifles personal and professional growth. Addressing this challenge necessitates a concerted effort to promote sexual education and reproductive rights, aiming to reduce the prevalence of informal employment among women, mitigate low education levels, and create pathways to opportunities.

Furthermore, combating crime requires multifaceted strategies rooted in economic parity and social inclusion. Such approaches must prioritize marginalized populations, particularly women and youth, by implementing targeted interventions that address their vulnerabilities.

4.10. Beliefs about men and women

4.10.1. Beliefs about women and girls

In the focus groups, we asked men and women if their community holds any opinions or beliefs about women and girls and whether these beliefs limit their activities or opportunities.

Men expressed beliefs reinforcing traditional gender roles, such as the expectation for girls and women to prioritize domestic duties over fieldwork, viewing girls primarily as future housewives, and enforcing patriarchal control where women's freedoms are contingent upon male approval. These entrenched beliefs imply a systemic lack of opportunities and freedom for women.

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116 Sociodemographic Profile of Las Vegas, Santa Barbara 2022.

117 Sociodemographic Profile of Gualala, Santa Bárbara 2022.

118 Sociodemographic Profile of Santa Cruz de Yojoa, Cortés 2022.

In contrast, women acknowledged a shifting narrative, noting progress in societal attitudes towards women's roles. They recalled past norms where investing in girls' education was deemed futile, as their primary role was expected to be confined to romantic relationships. However, they observed a change in these perceptions.

Interestingly, women highlighted the persistent influence of particular churches in perpetuating gender inequalities. Some churches enforce dress codes restricting women's attire, while others propagate the idea of women's dependence on men. This disparity between men's and women's responses underscores the ongoing struggle against ingrained gender biases, with certain institutions perpetuating harmful stereotypes detrimental to women's empowerment.

During separate group discussions with men and women, participants were asked whether there were any activities women were prohibited from doing within their community. In El Aguantal, Santa Barbara, women revealed that some men restrict their wives from participating in community spaces due to their insecurities about potential infidelity. However, in the other communities surveyed, women did not identify any specific activities they were prohibited from engaging in.

Men's responses varied across different communities. In Buenos Aires, Concepción Sur, it was suggested that women were not allowed to handle money, while in El Playón, Concepción Sur, it was mentioned that women could not engage in promiscuous behavior. In La Guama, Santa Cruz de Yojoa, it was noted that women were restricted from undertaking strenuous labor or making independent decisions. Conversely, in El Sauce, it was reported that women were permitted to do anything as long as they informed the men of their actions, while in Lomas del Aguila, some men were reported to prevent women from working. In contrast, in other communities, it was stated that women were free to pursue activities with equality.

These findings underscore the divergent perspectives of men and women regarding women's freedom and equality within their respective communities.

We also asked what they would like to be different for their daughters, nieces, or girls in the community in the future. Women from different communities responded that they would like them to have better opportunities in general, to go out without feeling threatened, to have more opportunities to study, to have access to better jobs, to be independent, and to have more security. Men mentioned that they would like to have more recreation time (less work), more access to education, more participation in community groups, to be involved in men's work, to remove the myth/custom of women being homemakers, to be able to make decisions on their own, more access to work, more security, access to health care, and to be taught in the way of God.

4.10.2. Beliefs about men and boys

In our focus groups, we queried both men and women about prevalent beliefs in their communities regarding men and boys and whether these beliefs constrained their activities or opportunities. Men articulated several entrenched beliefs, including the expectation for them to exhibit strength, avoid showing vulnerability by refraining from crying, commence work at a young age, assume authoritative roles, embody machismo ideals devoid of emotional expression, enjoy greater freedom and opportunities, hold significance for economic development, and shirk responsibility for childcare. These beliefs imply stunted personal growth, limited educational opportunities, upbringing marred by fear, emotional suppression, heightened societal respect, perceived superiority over women, constrained participation in community activities due to work commitments, and negative societal perceptions.

Conversely, women recounted societal beliefs that prohibit men and boys from engaging in housework, playing with dolls, carrying children, assisting with sibling care, playing with girls, and expressing vulnerability through tears. These beliefs lead to societal ridicule for men engaging in traditionally feminine activities, judgment for participating in household chores, marital dissatisfaction due to imposed gender roles, and the perpetuation of machismo culture.

Both men's and women's responses underscore the rigid assignment of gender roles to specific activities and the adverse societal treatment toward those challenging these norms.

In our focus groups, we queried men about aspirations they've harbored but felt unable to pursue due to their gender. Among the ten groups surveyed, four reported feeling unrestricted in their pursuits, having always enjoyed the freedom to act as they wished. However, four other groups longed to engage in caregiving roles, such as tending to children, maintaining household cleanliness, and cooking. One group desired a broader scope of activities beyond mere sustenance through work. Additionally, another group wished to embody gentler qualities, seeking to transcend the stereotype of rough masculinity by cultivating patience.

Notably, several men voiced aspirations to venture into livelihoods traditionally associated with women, including baking and initiating food-related businesses. These findings suggest that while men generally experience greater latitude in pursuing their desires, they also grapple with the constraints imposed by patriarchal gender norms. Moreover, the desire for change is palpable among some men despite feeling constrained by societal expectations within their homes, communities, or broader society.

4.10.3. Implications: Beliefs

The enduring prevalence of traditional gender roles poses a significant barrier to women's and girls' access to their fundamental rights. These entrenched roles have far-reaching consequences across various domains, exacerbating vulnerability and perpetuating cycles of violence and structural discrimination. To address these challenges, it is imperative to advocate for education that prioritizes a human rights framework and integrates a gender perspective. Additionally, fostering and championing initiatives to achieve gender equity is essential to bridging existing gaps and promoting inclusive societies.

These gender roles not only affect women and girls but also build social expectations around men and boys, with consequences such as limited or no emotional expression, economic pressure, and little or no participation in caregiving tasks. This can lead to high levels of violence in men; it is necessary to promote their education with a focus on human rights and a gender perspective, with an important and profound emphasis on masculinity.

Annex 2: Documentation of First Consultations

Líderes comunitarios (jóvenes, mujeres, adultos mayores)				
Nombre	Institución / Organización	Cargo	Genero	
			M	F
Raúl Antonio Hernandez Sabillon	Grupo Scout Santa Barbara N.1	Rober	X	
Junior Jafeth Cantarero Jiménez	Grupo Scout N°1 SB	Rober	X	
Roberto Jiménez	Municipalidad de Gualala	Técnico UMA	X	
Angel Josue Sabillon	Grupo Scout Santa Barbara #1	Rober	X	
Carlos Mancia.	Municipalidad Santa Bárbara	Director UMA	X	
Edy Jessenia Sabillon	Oficina Municipal de la Mujer, Gualala	Coordinadora de OMM	X	
Lazaro Erazo	Asociacion de Juntas de Agua PANAMOSAB	Presidente	X	
Rosa Castellanos	Municipalidad de Ilama	Secretaria		X
Nelly Asusena Rodriguez Cruz	Oficina Municipal de la Mujer	Coordinadora		X
Jose Mario Orellana Leiva	Ambientalista	Ambientalista independiente	X	
Pifanio Gomez	Junta de Agua	Secretario	X	
Nodas Leiva	Patronato	Tesorero	X	
Jose Santos Bardales	Junta Administradora de Agua	Presidente	X	
David Rios Mejia	Junta de Agua	Presidente	X	
Elier Sarmiento	Patronato	Pro Secretario	X	
Jose Alberto Hernandez	Grupo Scout, Santa Barbara 1	Tropa	X	
Marta Reyes	Asociación de Desarrollo del área de Santa Bárbara, ADASBA	Técnica		X
Isidro Fernández	Junta de Agua	Directivo	X	
Josué David Padilla	Unidad Municipal Ambiental de Concepción Sur	Técnico UMA	X	
Rene Lorenzo	Municipalidad de Santa Bárbara	Técnico Desarrollo Local	X	
Gladis Sagastume	Patronato, Peña Blanca, Santa Cruz de Yojoa	Presidenta		X
Cesar Mejia	Comité de Emergencia Municipal, Concepción Sur	Representante	X	

Líderes comunitarios (jóvenes, mujeres, adultos mayores)				
Nombre	Institución / Organización	Cargo	Genero	
			M	F
Raúl Antonio Hernandez Sabillon	Grupo Scout Santa Barbara N.1	Rober	X	
Junior Jafeth Cantarero Jiménez	Grupo Scout N°1 SB	Rober	X	
Roberto Jiménez	Municipalidad de Gualala	Técnico UMA	X	
Angel Josue Sabillon	Grupo Scout Santa Barbara #1	Rober	X	
Carlos Mancia.	Municipalidad Santa Bárbara	Director UMA	X	
Edy Jessenia Sabillon	Oficina Municipal de la Mujer, Gualala	Coordinadora de OMM	X	
Lazaro Erazo	Asociacion de Juntas de Agua PANAMOSAB	Presidente	X	
Rosa Castellanos	Municipalidad de Ilama	Secretaria		X
Nelly Asusena Rodriguez Cruz	Oficina Municipal de la Mujer	Coordinadora		X
Jose Mario Orellana Leiva	Ambientalista	Ambientalista independiente	X	
Pifanio Gomez	Junta de Agua	Secretario	X	
Nodas Leiva	Patronato	Tesorero	X	
Jose Santos Bardales	Junta Administradora de Agua	Presidente	X	
David Rios Mejia	Junta de Agua	Presidente	X	
Elier Sarmiento	Patronato	Pro Secretario	X	
Jose Alberto Hernandez	Grupo Scout, Santa Barbara 1	Tropa	X	
Marta Reyes	Asociación de Desarrollo del área de Santa Bárbara, ADASBA	Técnica		X
Isidro Fernández	Junta de Agua	Directivo	X	
Josué David Padilla	Unidad Municipal Ambiental de Concepción Sur	Técnico UMA	X	
Rene Lorenzo	Municipalidad de Santa Bárbara	Técnico Desarrollo Local	X	
Gladis Sagastume	Patronato, Peña Blanca, Santa Cruz de Yojoa	Presidenta		X
Cesar Mejia	Comité de Emergencia Municipal, Concepción Sur	Representante	X	

Actores claves (hombre y mujeres)				
Nombre	Institución / Organización	Cargo	Genero	
Jose Gregorio Rodriguez	Instituto de Conservación y Desarrollo Forestal (ICF)	Jefe de Operaciones Local	X	
Carlos Chinchilla	Espacio de EROC	Director del espacio	X	
Jose Alfredo Morales	AHPROCAFE	Presidente	X	
Ludin Mariela Ramos R	Comisión Permanente de Contingencias (COPECO PPH)	Técnico Auxiliar		X
Maria Roxana Valle Escobar	Comisión Permanente de Contingencias (COPECO PPH)	Técnico Auxiliar		X
Luis Enrique Amaya Garcia	Unidad Municipal Ambiental (UMA) de Florida Copan	Técnico UMA	X	
Rolando Mejia	Asociación de Desarrollo del área de Santa Bárbara (ADASBA)	Coordinador de base	X	
José Rodolfo Rivera Banegas	Municipalidad de Ilama	Jefe de Catastro	X	
Dorian Jeovany Rios Gomez	Cuerpo de Bomberos	Bombero	X	
Jorge Alberto Paz	Municipalidad de Ilama	Técnico Municipal	X	
Carlos Roberto Pineda	Equipo coordinado de montaña de Santa Barbara	Miembro	X	
Yeyson Hayaris Sagastume	Cruz Roja Hondureña	Director Departamental de socorrismo	X	
Jose Ramon Amaya Caballero	Equipo coordinador sector este Montaña Santa Barbara	Coordinador	X	
Ana mahory sagastume orellana	Cruz Roja	Logística		
Carol Rivera Rápalo	Instituto de Conservación y Desarrollo Forestal (ICF)	Jefa de Oficina Local		
Ulises Peña	Mesa Nacional de Incidencia para la Gestión de Riesgo (MNIGR)	Coordinador de la Unidad Técnica de la Mesa	X	
Varinia Trujillo	Mesa Nacional de Incidencia para la Gestión de Riesgo (MNIGR)	Oficial Humanitario		
Tirza Suyapa Espinosa	Secretaria de Agricultura y Ganadería	Coordinadora de la Unidad de Agro ambiente Cambio Climático		X
Malcolm Stufkens	Mi Ambiente	Viceministro	X	
Ramon Soto	Comisión Permanente de Contingencias (COPECO)	Ministro	X	
Claudia Herrera	Centro de Coordinación para la Prevención de los Desastres Naturales en América Central (CEPREDENAC)	Secretaria ejecutiva del CEPREDENAC		X
Wendy Rodriguez	Mi Ambiente	Directora de Cambio Climático		X


Socialization meetings and consultations
1
MEETING AT COP 27
2
MEETING WITH THE DIRECTORATE OF CLIMATE CHANGE
3
CLIMATE CONSULTATION ON THE SANTA BARBARA MOUNTAIN AND TRIFINIO FRATERNITY
YOUNG PEOPLE FROM THE SANTA BARBARA MOUNTAIN AND THE TRIFINIO FRATERNITY PARTICIPATING IN THE CONSULTATION


Socialization meetings and consultations
4
CLIMATE CONSULTATION ON THE SANTA BARBARA MOUNTAIN AND TRIFINIO FRATERNITY
WOMEN FROM DIFFERENT MUNICIPALITIES PARTICIPATE IN THE CONSULTATION
5
CLIMATE CONSULTATION IN THE TRIFINIO MOUNTAIN
REPRESENTATIVE OF MAYA CHORTI ETHNIC ORGANIZATIONS, PARTICIPATING IN THE CONSULTATION
6
CLIMATE CONSULTATION ON THE SANTA BARBARA MOUNTAIN AND TRIFINIO FRATERNITY
OTHER ACTORS REPRESENTATING DIFFERENT STRUCTURES AND LOCAL AND MUNICIPAL ORGANIZATIONS, PARTICIPATING IN THE CONSULTATION

Annex 3: Documentation of Second Consultations

Lista de participantes

Comunidad: El Sauce, Sb Fecha: 28 - Feb - 2024

	Nombre	¿Cómo se identifica? M	H	NB	Edad	Nivel escolar alcanzado	Estado civil	¿Se considera una persona indígena? Sí	No	Organización	¿Ocupa algún cargo de liderazgo comunitario? Sí	No	¿Está de acuerdo en participar en el grupo focal? (firma o huella)
1	Lavinni Sagastume	✓			31	primario	Unión libre	✓		Asistente Sociedad de Padres	✓		Lavinni Sagastume
2	Yeris Ruben Pineda		✓		39	Universitario	Unión Libre		✓	Patronato	✓		
3	Jose Isabel Teruel G.		✓		59	Secundario	Soltero		✓	NO		✓	
4	Bethan Pineda Teruel		✓		64	Primaria	Soltero		✓	Presidente Patronato	✓		
5	Lexis Teruel Fernandez	✓			45	basico	Casada		✓	—		✓	Alexis T.F.
6	Didier Yessuha Pineda Teruel	✓			14	basico	Soltero		✓	—		✓	Didier P.

Lista de participantes

Comunidad: Aldea El Aguacatal Fecha: 27/2/2024

Nombre	¿Cómo se identifica? M	H	NB	Edad	Nivel escolar alcanzado	Estado civil	¿Se considera una persona indígena? Sí	No	Organización	¿Ocupa algún cargo de liderazgo comunitario? Sí	No	¿Está de acuerdo en participar en el grupo focal? (firma o huella)
Lilian castellanos	X			42	nada	Unión libre		NO		X		Lilian castellanos
Lourdes Briceño	X			78	sexto	unionLibre		no		X		Lourdes
Leonila Pineda	X			66		unionLibre		No			X	Leonila
Lourdes Castellanos	X			34	6to	union libre		no		X		lourdes C.
mayra castellanos		X		69		unionLibre		no			X	mayra C.
Lesis castellanos	X			36	quinto	Union libre		No		X		Lesis

	Nombre	¿Cómo se identifica? M	H	NB	Edad	Nivel escolar alcanzado	Estado civil	¿Se considera una persona indígena? Sí	No	Organización	¿Ocupa algún cargo de liderazgo comunitario? Sí	No	¿Está de acuerdo en participar en el grupo focal? (firma o huella)
7													
8	Juan Carlos Chavez		✓		50	basico	Soltero	✓		Iglesia Catolica Sumidero	✓		
9	Miriam Pineda Chavez		✓		58	Primaria	Casado		✓	Iglesia		✓	Miriam Pineda Chavez
10	Medardo Sagastume Rodriguez		✓		47	Primaria	Casado		✓	Junta de Agua	✓		Medardo Sagastume Rodriguez
11	Anibal Tenas Hernandez	✓			32	Primaria	Casado		✓	Tesorero	✓		Anibal Tenas
12													
13													

Nombre	¿Cómo se identifica? M	H	NS	Edad	Nivel escolar alcanzado	Estado civil	¿Se considera una persona indígena? Sí	No	Organización	¿Ocupa algún cargo de liderazgo comunitario? Sí	No	¿Está de acuerdo en participar en el grupo focal? (firma o huella)
Deni pineda marquez	x			29	Primaria	colore: union libre		x		x		Deni pineda
Sthefany Caballero	x			18	Primaria	Soltera		X		X		Sthefany C.
Dilcia Díaz	x			40	bº grado	unión libre		x		X		[illegible]
Mayra Pineda	x			40	secundaria completa	Divorciada	✓		patronato	✓		[illegible]
Aracely Quintanilla	x			54	Ninguna	CASADA		X			X	
Luis Barahona				33	6 grado	Soltero		X	Junta de agua	X		Luis Barahona
Mercedes Rodriguez	x			18	Primaria	Casado		x		x		[illegible]

Lista de participantes

Comunidad: __________ Fecha: __________

Nombre	¿Cómo se identifica? M	H	NS	Edad	Nivel escolar alcanzado	Estado civil	¿Se considera una persona indígena? Sí	No	Organización	¿Ocupa algún cargo de liderazgo comunitario? Sí	No	¿Está de acuerdo en participar en el grupo focal? (firma o huella)
Maria Erlinda rosales	✓			37	Septimo	union libre	✓		Salud	✓		[illegible]
Maria Edita Galeón	✓			57	No estudió	Unión libre	✓		Patronato	✓		
Doris Lizeth Rosales	✓			35	septimo	union libre	✓		Sociedad de padres	✓		Doris Rosales
oscar Perez E. V.		✓		32	6º	union libre	✓				x	oscar Perez Enamorado
Nestor Omar Enamorado		✓		51	septimo	casado	✓		coordinación de agua [illegible]	✓		[illegible]
Emma Celia Enamorado	✓			46	---	Soltera	✓		Sociedad de Padres		✓	

Nombre	¿Como se identifica? M	H	NS	Edad	Nivel escolar alcanzado	Estado civil	¿Se considera una persona indígena? Sí	No	Organización	¿Ocupa algún cargo de liderazgo comunitario? Sí	No	¿Está de acuerdo en participar en el grupo focal? (firma o huella)
Alejandrina Teruel	X			42	Ninguno	colace: CASADA	X		Iglesia	X		
Carmen Izaguirre	X			57	Ninguno	CASADA	X		Iglesia	X		
Eberto Muñoz		X		68	Primaria	Casado	X		C. Salud	X		[illegible]
José Dimas Rosales Paz		X		60	Primaria	Casado	X		Patronato	presidente		[illegible]

Lista de participantes

Comunidad: El Zapote - Gualala   Fecha: 29-02-2024

Nombre	¿Cómo se identifica? M	H	NB	Edad	Nivel escolar alcanzado	Estado civil	¿Se considera una persona indígena? Sí	No	Organización	¿Ocupa algún cargo de liderazgo comunitario? Sí	No	¿Está de acuerdo en participar en el grupo focal? (firma o huella)
Kimberly Mitel	√			19	6° Grado	Soltera		√			√	Kimberly Mitel
Erika [illegible] paz	M			45	sexto	union libre		no			√	Erika paz
Alba Luz Sanchez	m			22	tercero	Unión libre		X			X	Alba Sanchez
Alba Luz López V.	X			27	tercero	Casado		X			X	Alba López
Yohana Torres L.	X			27	Septimo	unión libre		X			X	Yohana Torres
Dunia Sanchez	X			29	primero	Soltera		X			X	Dunia Sanchez

Nombre	¿Cómo se identifica? M	H	NB	Edad	Nivel escolar alcanzado	Estado civil	¿Se considera una persona indígena? Sí	No	Organización	¿Ocupa algún cargo de liderazgo comunitario? Sí	No	¿Está de acuerdo en participar en el grupo focal? (firma o huella)
Irma Yolanda Paz Sanchez	X			73	Septimo	soltera		X			X	Irma Paz
Angel Migdonio Pineda Moreno		X		46	sexto	Union libre	X		Pagona	X		[illegible]
Natividad Fernandez	X			44	Secundaria	casada	X		CODEL	X		[illegible]

Lista de participantes

Comunidad: El Playon, Concepción Sur   Fecha: 02/mar/2024

Nombre	¿Cómo se identifica? M	H	NB	Edad	Nivel escolar alcanzado	Estado civil	¿Se considera una persona indígena? Sí	No	Organización	¿Ocupa algún cargo de liderazgo comunitario? Sí	No	¿Está de acuerdo en participar en el grupo focal? (firma o huella)
Natividad Castellanos	✓			72	---	Casada	✓		[illegible] Patronato	✓		Natividad
Lelis Armando Maion		✓		41	Primaria completa	casado	✓		Codel [illegible]	✓		[illegible]
Jose Santos Erazo		✓		72	tercer grado	casado	✓		Codel	✓		[illegible]
Glendy Castellanos	✓			23	Diversificado	soltera		✓	Caja Rural	✓		Glendy C.
Mirna Muñoz	✓			32	Segundo Ciclo	casada		✓	---		✓	Mirna Muñoz

Nombre	¿Cómo se identifica? M	H	NB	Edad	Nivel escolar alcanzado	Estado civil	¿Se considera una persona indígena? Sí	No	Organización	¿Ocupa algún cargo de liderazgo comunitario? Sí	No	¿Está de acuerdo en participar en el grupo focal? (firma o huella)
German Gamez		✓			6to grado	Unión libre	6	✓	No.		✓	[illegible]
Wilmer José Mejía		✓			Primaria	Casado		✓	Iglesia	✓		[illegible]
Carlos Román Muñoz		✓			Primaria	Casado		✓	Comité del Agua	✓		Carlos Muñoz
Kenya Caballero	✓			31	Primaria	Casada		✓	Padres de familia		✓	Kenia
Alejandrina Castellanos	✓			64	Sin estudio	Soltera		✓	Iglesia		✓	
Belkis Castellano	✓			28	Primaria	Unión libre		✓	Iglesia	✓		Benis V.C.

Lista de participantes

Comunidad: San Isidro　　　Fecha: 05/03/2024

Nombre	¿Cómo se identifica? M	H	NB	Edad	Nivel escolar alcanzado	Estado civil	¿Se considera una persona indígena? Sí	No	Organización	¿Ocupa algún cargo de liderazgo comunitario? Sí	No	¿Está de acuerdo en participar en el grupo focal? (firma o huella)
María del Carmen Antúnez	✓			54	Sexto	Soltera		x	Iglesia		X	[illegible]
Norma Delia Andino	✓			56	Segundo	~~Soltera~~ Unión libre		x	Iglesia		x	[illegible]
Luis Alfredo Rodríguez		✓		62	Segundo	Unión libre	✓		Iglesia		x	Luis Rodríguez
Mercedes Guzmán	✓			46	Sexto	Unión libre		✓	Iglesia		x	Mercedes Guzmán
Ana Velásquez	✓			58	Sexto	Casada		✓	—		x	Ana Velásquez
Digna Ester Ulloa	✓			54	Sexto	Unión libre		✓	—		x	

Nombre	¿Cómo se identifica? M	H	NB	Edad	Nivel escolar alcanzado	Estado civil	¿Se considera una persona indígena? Sí	No	Organización	¿Ocupa algún cargo de liderazgo comunitario? Sí	No	¿Está de acuerdo en participar en el grupo focal? (firma o huella)
Harold de Jesús Ulloa		✓		67	Quinto	collore Casado		✓	—		✓	[illegible]
Ashly Yoely Ramírez	✓			15	Décimo	Soltera		✓	Grupo de jóvenes		✓	Ashly Ulloa
Ana Marlin Velásquez	✓			29	Primero sec.	Soltera		✓			✓	Ana Velásquez
Edna Lilian Cardona	✓			41	Secundaria	Soltera		✓	[illegible]	✓		Lilian Cardona
Vicente Gálvez		✓		66	Quinto	Unión libre		✓	—		x	Vicente [illegible]

Lista de participantes

Comunidad: Buenos Aires Fecha: 04/03/2024

Nombre	¿Cómo se identifica? M	H	NB	Edad	Nivel escolar alcanzado	Estado civil	¿Se considera una persona indígena? SI	No	Organización	¿Ocupa algún cargo de liderazgo comunitario? SI	No	¿Está de acuerdo en participar en el grupo focal? (firma o huella)
Juan Cifuentes	✓			33	[illegible] primaria	Casado		✓	—		✓	[illegible]
Keila Portillo	✓			48	Primaria	Unión libre		✓	—		✓	[illegible]
Reina Rosibel Castellanos	✓			32	media	Casada		✓	[illegible]		✓	[illegible]
José Santos Castellanos		✓		[illegible]	Primaria	Casado		✓	Cocode	✓		[illegible]
Jaime [illegible]		✓		65	[illegible]	Casado		✓	—			[illegible]
Francisco Cardona		✓		48	Primaria	Unión libre		✓	—	✓		[illegible]

Nombre	¿Cómo se identifica? M	H	NB	Edad	Nivel escolar alcanzado	Estado civil	¿Se considera una persona indígena? SI	No	Organización	¿Ocupa algún cargo de liderazgo comunitario? SI	No	¿Está de acuerdo en participar en el grupo focal? (firma o huella)
Leonel Castellanos		✓		39	Primaria	Unión libre		✓	Junta de Agua	✓		[illegible]
Fredy Castellanos		✓		46	Primaria	Casado		✓	Líder Comunitario	✓		[illegible]
Jon Reyes		✓		73	Segundaria	Casado		✓	---	✓		[illegible]
Walter Castellanos		✓		32	Secundaria	Casado		✓	---		✓	[illegible]
Jose Antonio Mateo		✓		68	---	viudo		✓	Junta de Agua	✓		[illegible]
Alexander Reyes		✓		43	Primaria 3to	casado		✓	Junta de Agua	✓		[illegible]

Lista de participantes

Comunidad: El carrcto, los Vegas SB Fecha: 07/Marzo/2023

Nombre	¿Cómo se identifica? M	H	NB	Edad	Nivel escolar alcanzado	Estado civil	¿Se considera una persona indígena? SI	No	Organización	¿Ocupa algún cargo de liderazgo comunitario? SI	No	¿Está de acuerdo en participar en el grupo focal? (firma o huella)
Osmon Martinez		✓		44	Sexto Grado	Soltero		X	Junta de Agua Cadel	✓		[illegible]
Ruby Sarmiento	✓			34	Cuarto grado	Soltera		X	---		✓	[illegible]
Glenda Martinez	✓			33	Sexto grado	Soltera		X	---		✓	[illegible]
Edwin Ramos		✓		36	Primaria Completa	casado		X	---		✓	[illegible]
Dasny Tejada	✓			24	Bachillerato	casada		X	---		✓	Dasny Tejada
cesar leonel tejada		✓		52	sexto grado	casado	X		---	✓		[illegible]

Nombre	¿Cómo se identifica? M	H	NB	Edad	Nivel escolar alcanzado	Estado civil	¿Se considera una persona indígena? Sí	No	Organización	¿Ocupa algún cargo de liderazgo comunitario? Sí	No	¿Está de acuerdo en participar en el grupo focal? (Firma o huella)
Adolfo Tinoco		✓		65	tercer grado	unión libre	✓		— · —	✓		Adolfo Tinoco
Rosa Maely Ramos	✓			34	sexto grado	unión libre		X	Patronato	✓		[illegible]
Betsy Orellana	✓			37	sexto grado	unión libre		X	— · —		✓	Betsy Orellana
Mayra Tejada	✓			37	octavo grado	casada		X	Patronato	✓		[illegible]
Carlos Hernández		✓		42	universitario	Casado	✓		CODEL Director de Centro	✓		[illegible]
Aylin Tejada	✓			36	Postgrado universitario	Soltera	✓		CODEL Presidenta	✓		[illegible]
Erica Ramos	✓			38	Sexto grado	Soltera		✓	— · —		✓	Erica Ramos

Lista de participantes

Comunidad: El Novillo Fecha: 08/marzo/2024

Nombre	¿Cómo se identifica? M	H	NB	Edad	Nivel escolar alcanzado	Estado civil	¿Se considera una persona indígena? Sí	No	Organización	¿Ocupa algún cargo de liderazgo comunitario? Sí	No	¿Está de acuerdo en participar en el grupo focal? (Firma o huella)
Elida Luz Mendez Benitez	✓			36	Primaria	Soltera		✓	Directiva de la escuela	✓		x Elida Luz
Alicia Marquez	✓			39	9no grado	Casada		✓	Iglesia	✓		x [illegible]
Deisa Leiva Rivera	✓			26	tercer grado Primaria	Unión libre	✓		—	✓		x Deisa Leiva Rivera
Elda Marina Hernandez	✓			27	Primaria	Unión libre	✓		—		✓	x Elda Hernandez
Alicia Redondo	✓			59	Sin estudios	Unión libre	✓		Iglesia		✓	x [illegible]
Moises Flores		✓		68	4to grado primaria	Unión libre	✓		—		✓	x Moisés Flores
Blanca Mendez	✓			22	universidad	soltera		✓	—	✓		[illegible]

5

Nombre	¿Cómo se identifica? M	H	NB	Edad	Nivel escolar alcanzado	Estado civil	¿Se considera una persona indígena? Sí	No	Organización	¿Ocupa algún cargo de liderazgo comunitario? Sí	No	¿Está de acuerdo en participar en el grupo focal? (Firma o huella)
Senyi Juarez	✓			28	6to Primaria	Unión libre		✓	Caja Rural	✓		x Senyi Juarez R
Nexi Ismaria Cardona	✓			33	3ro Primaria	Casada		✓	Iglesia	✓		x Nexi [illegible]
Feliciana Funez Rodriguez	✓			45	Quinto Primaria	Unión libre		✓	—		✓	x Feliciana Funez
Kenya Yolecka	✓			28	Primaria	Unión libre		✓	—		✓	x Kenia [illegible]
Natanael Flores	I	✓		34	Primaria	Unión libre		✓	—		✓	x Natanael Flores
Iris	✓			38	4to Primaria	Unión libre		✓	—		✓	x Iris Esmeralda Galvez
Maria Isabel Vasquez	✓			27	6to Primaria	Unión libre		✓	—		✓	x Isabel Vasquez
Myrna Maribel Funez	✓			36	Primaria	Unión libre	✓		—		✓	x Maribel Funez
Milton Cardona		✓		39	Primaria	Unión libre	✓		—		✓	Milton Cardona

Lista de participantes 1:25 pm

Comunidad: La Guama | Fecha: 6/03/2024

Nombre	¿Cómo se identifica? M	H	NB	Edad	Nivel escolar alcanzado	Estado civil	¿Se considera una persona indígena? Sí	No	Organización	¿Ocupa algún cargo de liderazgo comunitario? Sí	No	¿Está de acuerdo en participar en el grupo local? (Firma o huella)
Guillermina Padilla	✓			48	6to Primaria	Casada		✓	Iglesia	✓		[illegible]
Victoria Pineda Quintana	✓			61	Sin estudios	Soltera		✓	—		✓	
Maria Cepeda Rodriguez	✓			39	~~[illegible]~~ 3ero Primaria	Unión Libre		✓	Iglesia		✓	[illegible]
Kelly Martinez	✓			19	Promotor Deportivo	Soltera	✓		—	✓		K M
Alejandro Romero	✓			27	Secundaria	Unión Libre	✓		—		✓	Alejandro Romero
Angelica Pereira Suarez	✓			47	Primaria	Unión Libre		✓	Iglesia		✓	Angela [illegible]

Nombre	¿Cómo se identifica? M	H	NB	Edad	Nivel escolar alcanzado	Estado civil	¿Se considera una persona indígena? Sí	No	Organización	¿Ocupa algún cargo de liderazgo comunitario? Sí	No	¿Está de acuerdo en participar en el grupo local? (Firma o huella)
Eliot Mendez	✓			32	Bachillerato	~~soltero~~ casada		✓	—		✓	Eliot Mendez
Stefani Garcia	✓			23	Básica Completa	Soltera		✓	—		✓	[illegible]
Johan Rodriguez		✓		21	Bachillerato	Soltero	✓		Promotor ambiental	✓		[illegible]

Annex 4: Socioeconomic Study

1. Introduction

The project aims to improve the governance and adaptability process of the communities of the Santa Barbara Mountain region and the Lake Yojoa sub-basin area in the face of climate variability and change. To achieve the project goal, the following specific objectives were established:

- Promote participatory territorial planning and decision-making processes to address the impacts of climate change and instability.
- Support, strengthen, and promote the adoption of diversified and climate-smart agrifood systems.
- Increase understanding and knowledge about climate variation and adaptation processes.

2. Methodology

The following activities were carried out for the household survey data collection: the first was to call people to be interviewed in the morning, and the second consisted of conducting focus groups in the afternoon. Some participants were at the same address, facilitating the interviews. In other cases, the interviewers went to the participants' homes to conduct the interviews.

In specific communities, people were summoned to a single meeting point to participate in the focus group and the survey. However, in most cases, the survey and focus group participants were different.

Efforts were made to ensure equal participation of men and women in both cases. However, in some communities, there was more participation of women or men due to the participants' time factors, as people in the community stated that they were still cutting coffee or seasonal agricultural work. Despite this, in most cases, both men and women were represented.

As for the focus groups, the entire team worked together to support people in completing the activities. In addition, the necessary information and examples were provided to ensure understanding of the activities.

2.2. Literature and Census

For the literature search, we mainly used data from the XVII Population Census and VI Housing Census (CNPV-2013) from the INE Honduras website and the Sociodemographic Profile of each municipality prepared by the National Autonomous University of Honduras.

2.2. Household Survey

We obtained 110% (88 out of 80) of the participation goal for the total number of surveys carried out, with 44 (50% out of 88) men and 44 (50% out of 88) women.

The 88 surveys were conducted in 10 different communities, 68 in the department of Santa Bárbara and 20 in the department of Cortés. Table 1 shows the distribution of people by community and gender identity.

Table 1: Household Survey Participation by Gender Identity and Community

Municipality	Community	Man	Woman	Total
Concepción South	Buenos Aires	4	4	8
	El Playon	4	3	7
Gualala	El Zapote	4	5	9

	Lomas del Aguila	4	4	8
Las Vegas	El Carreto	4	4	8
	El Novillo	3	5	8
Santa Barbara	El Aguacatal	5	7	12
	El Sauce	4	4	8
Santa Cruz de Yojoa	La Guama	8	3	11
	San Isidro	4	5	9
Grand total		44	44	88

2.3. Focus Groups

Focus groups were conducted with 125 participants in 10 communities, meeting 100% of the target number of communities to be visited. Likewise, 79 women (63% of 100%) and 46 men (37% of 100%) participated overall. Table 2 shows participation by community and gender identity.

Table 2: Participation in a focus group by gender identity and community

Municipality	Community	Man	Woman	Total
Concepción South	Buenos Aires	9	3	12
	El Playon	7	6	13
Gualala	El Zapote	1	9	10
	Lomas del Aguila	4	8	12
Las Vegas	El Carreto	4	8	12
	El Novillo	2	14	16
Santa Barbara	El Aguacatal	7	13	20
	El Sauce	8	2	10
Santa Cruz de Yojoa	La Guama	-	10	10
	San Isidro	4	6	10
Grand total		46	79	125

3. Context of the Project Location

Regarding the project's context, such as population and education, we mainly used information from the XVII Population and VI Housing Census (CNPV-2013)[119] in the section Volume 1: General Characteristics of the Population.

3.1. Population

The national population is 8,303,771 inhabitants, of which 4,052,316 are men and 4,251,456 are women. The largest age groups are 10 to 14 years old, with 1,020,406 people, followed by the 5 to 9-year-old group, with 958,543 people, and the 1 to 4-year-old group, with 827,984 people. As for the distribution by gender, in all age groups, there is a slight majority of women, being more notable in the groups of 20 to 24 years (44,615 women difference), 25 to 29 years (49,686 women difference), 30 to 34 years (41,464

[119] INE Honduras (2013). XVII Population Census and VI Housing Census (CNPV-2013); Volume 1: General characteristics of the population.

women difference), and in the group of 80 years and over there is a higher proportion of women, with 49,296 people, compared to 41,134 men.

There are 5,987,006 people in different marital statuses, distributed among 2,870,901 men and 3,116,105 women. Free union is the most common marital status, with 1,627,387 people, of which 782,804 are men and 844,583 are women. This is followed by married status with 1,357,017 people, of which 658,404 are men and 698,613 are women. Likewise, there are 190,037 widows and widowers, with a higher proportion of women in this group, with 150,321, compared to men, who total 39,716. On the other hand, the number of single men and women reached 2,626,822, with a slight majority of men 1,343,181 compared to 1,283,641 women. Additionally, the marital status of separated or separated is notable, with 149,274 and 36,468 persons, although the proportion of men in this group is lower than that of women.

3.2. Education

At the national level, the total number of literate people is 5,559,962, of which 2,892,938 are women, and 2,667,023 are men, while the number of illiterate people reaches 814,252, distributed among 412,815 women and 401,438 men. In each age group division, there is a higher number of literate people than illiterate people. Mainly in the age groups of 20 to 24 years and 25 to 29 years, with a more significant difference between literates and illiterates, with 783,620 literates versus 57,180 illiterates in the first group and 599,902 literates versus 56,542 illiterates in the second group. In the age group of 80 years and older, there is a higher proportion of illiterates than literates, with 53,696 illiterates and 36,734 literates.

Nationally, there are a total of 2,316,820 people attending school, of which 1,135,486 are men and 1,181,334 are women. On the other hand, 2,141,537 people do not attend school, composed of 1,064,597 men and 1,076,940 women. In the group of people in the 5 to 10 age range, most attendees are older than ten (185,738 people). In contrast, most who do not attend are younger than six years old (134,898 people). On the other hand, as the age range increases, the number of people who do not attend school increases, with the highest number being in the 20-year age group with 143,884 people.

3.3. Labor Force

Between 2012 and 2022, there was a gradual increase in the labor force in the country, from 3,364,688 to 4,012,512 people. The number of employed has also grown steadily, reaching its highest point in 2018 with 4,090,651 people. However, the unemployment rate has varied, with a low of 120,811 in 2012 and a high of 348,858 in 2021. There was also an increase in underemployment due to insufficient working time and income, especially in recent years, being most notable in 2021, where it reached 1,535,290 and 1,002,123, respectively, indicating a significant challenge in terms of job quality, which led people to desire or work more hours, to cover their basic needs[120].

In 2021, the total working-age population (WAP) was 6,704,670. By age group: Young people between 19 and 24 years old have more unemployed people, with 111,544 people, followed by people between 25 and 29 years old, with 49,349 people. Regarding gender, men represent 48% of the total labor force, while women represent 52%. The number of unemployed persons for men is 163,854, while for women, it is 185,004. The average level of years of schooling is 6.7 years for the entire working-age population[121].

In 2019, the branches of economic activity, such as agriculture, livestock, forestry, and fishing, occupied the most significant number of people, with 1,212,269 employees, of which 816,015 were non-salaried. This was followed by wholesale and retail trade repair of motor vehicles and motorcycles, with 762,786 employed, of which 522,259 were non-salaried. By gender, most employed persons were men in most branches of economic activity. The most common occupations were service workers and store and market salespersons, followed by farmers and skilled agricultural, forestry, and fishing workers[122].

[120] INE Honduras (2022). Labor force by employment status (2012-2022).
[121] INE Honduras (2021). Unemployment Rate, Working Age Population and Labor Force by age range and sex.
[122] INE Honduras (2019). Employed population by remuneration condition according to branch of economic activity (2012-2019).

4. Project Location

4.1. Department - Cortés

For information on the Department of Cortés, including the general context and education, we used data from the XVII Population Census and VI Housing Census (CNPV-2013) of INE Honduras, specifically Volume 1: General characteristics of the population, Department of Cortés[123].

The department of Cortés has a total population of 1,562,394 inhabitants, distributed among 750,810 men and 811,584 women. Among the most abundant age groups are those between 15 and 19 years old, with 177,904 people, and between 20 and 24 years old, with 170,260 individuals. Likewise, there are 18,721 people under one year old and 158,490 children from 1 to 4 years old. As for the population over 80, there are 14,370 people, the majority being women, with 8,078, and men, with 6,292.

In the department of Cortés, with a total of 1,141,746 people in a registered marital status, of which 536,271 are men, and 605,475 are women, it is highlighted that free union is the most common situation, with 308,982 individuals distributed among 150,104 men and 158,878 women. This is followed by the married status with 267,182 individuals, of which 129,775 are men and 137,406 are women. In addition, there are 33,618 widows or widowers, the majority being women with 26,895, while men total 6,723. On the other hand, the number of single men and women reaches 491,702, with 239,172 men and 252,531 women. The state of separated or separated presents a great difference, with 30,968 people, highlighting that the proportion of women (23,097) in this state is notably higher than that of men (7,871).

Education

There are 1,115,192 literate people, 527,232 males and 587,959 females, while the number of illiterate people is 95,094, with 43,791 males and 51,303 females. In the younger age groups, there are more literate than illiterate people, mainly in the 20 to 24 age group, with 163,584 literate people and 6,676 illiterate people. However, in the older age groups, such as 80 years and older, there are more illiterate than illiterate people, with 7,161 literate people and 7,209 illiterate people.

There are 442,636 people attending school, with 216,912 males and 225,724 females, while 397,272 people do not attend, with 187,572 males and 209,700 females. There is a notable difference between children attending (15,913 people) and not attending (22,170 people) school at age 5, with the number of non-attenders being higher. In addition, there is a decrease in school attendance as age increases, being more pronounced in the 14 to 16 age groups, where the number of people who do not attend (13,291 people) exceeds those who do attend (20,853 people). The most significant difference between under-age attendees and non-attendees is found in the 18-year age group, where the number of people who do not attend school (21,677 people) is significantly higher than those who do attend (16,791 people).

Economy

The distribution by occupational category indicates that there are 301,526 private employees or laborers, of which 201,738 are men and 99,787 are women. In addition, 26,906 people work as public employees or laborers, of which 15,133 are men and 11,773 are women. There are 12,092 employers with employees, of which 8,943 are men and 3,149 are women. There are 106,523 self-employed workers, 80,924 men and 25,599 women. Likewise, there are 16,678 domestic employees, of which 2,227 are men and 14,450 are women. On the other hand, 9,791 people work as unpaid family workers, with 7,284 men and 2,507 women. Finally, the number of unpaid workers is 2,377, with 1,609 men and 768 women[124].

[123] INE Honduras (2013). XVII Population Census and VI Housing Census (CNPV-2013); Volume 1: General characteristics of the population, department of Cortés.

[124] INE Honduras (2013). XVII Population Census and VI Housing Census (CNPV-2013); Volume 7: Labor market, department of Cortés.

4.1.1. Municipality - Santa Cruz de Yojoa, Cortés

Regarding the general context and population statistics for the municipality of Santa Cruz de Yojoa, in the department of Cortés, we used data from the National Autonomous University of Honduras, specifically from the Sociodemographic Profile of Santa Cruz de Yojoa, Cortés for the year 2022[125].

Santa Cruz de Yojoa's municipality is in the extreme south of the department, with Lake Yojoa in its southwestern end and the Francisco Morazán dam to the southeast. It is bordered to the north by the municipalities of Potrerillos and Santa Rita (Yoro), to the south by Meámbar and Taulabé (both in Comayagua), to the east by La Libertad (Comayagua) and Victoria (Yoro), and the west by San Francisco de Yojoa, San Antonio de Cortés and Santa Bárbara (Santa Bárbara). The territorial extension is 722.4 km².

Its projected population for 2022 is 96,105 inhabitants, with 49.11% male and 50.89% female. Most of the population, 62.09%, reside in rural areas, while 37.91% reside in urban areas. The population is distributed in 20 neighborhoods in the urban area, 48 villages, and 305 hamlets in the rural sector. Regarding digital connectivity, 13.6% of the population has e-mail, and 67.2% has access to cell phones.

In terms of population density, there are 133 people per square kilometer. There are an estimated 26,194 homes in the municipality, of which 21,687 are occupied. The population is primarily young, with 31.29% of the inhabitants being under 14 years of age and 59.21% under 30 years of age. In addition, 8.15% of the population is over 60 years of age.

The economically active population (EAP) for those over 15 years old in 2022 is 29,558. The distribution of the EAP shows that 48.2% are employed in the private sector, followed by 24.98% who are self-employed. In addition, within the group of young people under 30 years of age, 31.29% corresponds to the child population, i.e., those under 14 years of age. Of these, approximately 9.41% are of school age, between 5 and 9 years old, while about 31.29% need basic education, i.e., between 10 and 14 years old. This situation generates a high dependency ratio since the working-age population supports 47.18%.

The human development index (HDI) is 0.622, per capita income is US$5,014, and life expectancy at birth is 74.5 years. Regarding educational level, 61.61% of the population over ten has completed basic education, while 21.71% has completed secondary education. The illiteracy rate at the municipal level is 13.5%, with a slight variation between men (13.4%) and women (13.5%).

In terms of migration, the number of returned emigrants in the municipality of Santa Cruz de Yojoa increased by 5.27% from 2016 to 2021. It is estimated that 4,521 people returned during this period, of which 79.7% were men, 20.3% were women, and approximately 19.6% were children. This represents 1,238% of the total number of Honduran returnees at the municipal level.

4.2. Santa Barbara Department

Data from the XVII Population Census and VI Housing Census (CNPV-2013) of INE Honduras # were used to provide information on the department of Santa Bárbara, the general context, education, and the economy.

The department of Santa Bárbara has a total population of 421,337 inhabitants, of which 214,132 are men and 207,205 are women. The groups from 10 to 14 years old stand out, with 53,915 people, and from 5 to 9 years old, with 49,091 people. Regarding age distribution, the 20 to 24 age group has 37,776 individuals, while the 40 to 44 age group has 20,066 people. In addition, the population over 80 years of age totals 5,813 inhabitants.

[125] National Autonomous University of Honduras (2022). Sociodemographic Profile of Santa Cruz de Yojoa, Cortés 2022. Tegucigalpa: IIES-UNAH.

The registered marital status population comprises 302,789 individuals, 153,255 men and 149,534 women. The most prevalent scenario is free union, accounting for 91,249. Within this category, 44,240 are men and 47,009 are women. The married status of 68,902 individuals is as follows: among them, 33,656 men and 35,246 women. There are 10,760 widowed, with a majority of 8,181 women and 2,580 men. Meanwhile, a significant contingent of 122,873 individuals are single. Among them, 70,051 men and 52,822 women. There are 7,624 separate individuals. These numbers reflect a notable gender discrepancy, with 2,287 men and 5,337 women widowed.

Education

A total of 113,902 people are literate, of which 54,737 are men and 59,164 are women, while the number of illiterate people is 20,824, with 10,141 men and 10,684 women. In the younger age groups, there are more literate than illiterate people, mainly in the 20-24 age group, with 16,271 literate people and 1,134 illiterate people. However, in the older age groups, such as 80 years and older, there are more illiterate than literate persons, with 1,926 illiterate and 717 literate persons.

In total, there are 106,480 people attending school, of which 53,405 are men and 53,076 are women, while 113,163 people do not attend, with 58,696 men and 54,467 women. There is a decrease in school attendance as age increases, being more significant at age 20, where the number of people who do not attend (7,609 people) exceeds those who do (1,293 people).

Economy

The distribution by occupational category indicates that there are 39,767 private employees or laborers, of which 34,361 are men and 5,405 are women. In addition, 6,825 people are working as public employees or laborers, with 3,559 men and 3,266 women. There are 1,487 employers with employees, of which 1,227 are men and 260 are women. Self-employed workers total 51,008, with 46,502 men and 4,506 women. In addition, 9,985 people work as unpaid family workers, of which 9,220 are men and 765 are women. There are also 3,305 domestic workers, 414 men and 2,891 women. The number of unpaid workers is 940, of which 883 are men and 57 are women[126].

4.2.1. Municipality - Santa Bárbara, Santa Bárbara

For the general context and population statistics for the municipality of Santa Barbara, data from the National Autonomous University of Honduras were used in the department of Santa Barbara, specifically from the Sociodemographic Profile of Santa Barbara, Santa Barbara, for the year 2022[127]—also, data from the XVII Population Census and VI Housing Census (CNPV-2013).

The municipality of Santa Bárbara is located in a ravine area along the Cececapa River and borders to the north with the municipalities of Gualala, Llama and San José de Colinas; to the south with Ceguaca, Concepción del Sur and Santa Rita (Copán); to the east with Las Vegas and Santa Cruz de Yojoa (Cortés); and the west with Arada, San Vicente Centenario, San Nicolás and Nuevo Celilac. It has a territorial extension of 295.6 km² as of 2022 and a projected population of 48,967 inhabitants, of which 49.17% are men and 50.83% are women, distributed in 39.34% in rural areas and 60.66% in urban areas. The urban population is settled in 35 neighborhoods, while the rural population is in 19 villages and 121 hamlets.

The population density is 166 persons per km², and there are an estimated 15,218 households in the municipality, with 15.8% of the population having access to e-mail and 60.9% having a cell phone. The economically active population (EAP) over 15 years of age is 16,412 people, with a diversity of occupations, mainly private employment (33.4%) and self-employment (28.73%). The working age

[126] INE Honduras (2013). XVII Population Census and VI Housing Census (CNPV-2013); Volume 7: Labor market, department of Santa Bárbara.
[127] National Autonomous University of Honduras (2022). Perfil Sociodemográfico de Santa Bárbara, Santa Bárbara 2022. Tegucigalpa: IIES-UNAH.

population in the municipality represents 61.58% of the total, of which 20.79% is in the 15 to 24 age range, 23.11% is between the ages of 25 and 39, and 17.68% is in the 40 to 59 age group. These data suggest that 43.89% of Santa Barbara's working population is young.

On the other hand, 61.58% corresponds to adults of working age, between 15 and 59 years old. However, 58.25% of the total population is under 30 years of age, which indicates a high dependency since the working-age population supports 46.35% of the total, composed of 39.13% of the young population under 20 years of age (19,160 people), and 7.22% of the population over 60 years of age. Within the population under 30 years of age, 28.39% corresponds to children and young people under 14 years of age. Within this group, approximately 9.41% are of school age, that is, they are between 5 and 9 years old, while about 28.39% require basic education, being children between 10 and 14 years old.

The human development index (HDI) is 0.657, with a per capita income of $4,587 and a life expectancy at birth of 76 years. The illiteracy rate is 16.5%, and of the population aged 15 to 59, 24.21% has completed secondary education, while only 6.03% has completed higher education, and a meager 0.22% has postgraduate education. Most of the population, 50.22%, has only obtained basic education.

By 2022, the municipality had a 2.77% decrease in returned emigrants from 2016-2021. During that span, an estimated 2,762 individuals returned, with a predominance of 86.5% males and 13.5% females. However, 15.24% of these returnees were children. In addition, Santa Bárbara represents 0.756% of the Honduran returnees at the municipal level.

4.2.2. Municipality - Gualala, Santa Bárbara

For the general context and population statistics for the municipality of Gualalá, in the department of Santa Barbara, data from the National Autonomous University of Honduras, specifically from the Sociodemographic Profile of Gualala, Santa Barbara 2022[128]were used.

Gualala is bordered to the north by the municipality of Arada, to the south by San Rafael (Lempira), to the east by Santa Rita and the west by La Union (Lempira), with a territorial extension of 72.4 km², with a projected population of 5,659 inhabitants by 2022, 53.9% men and 46.1% women, and is settled in 3 neighborhoods in the urban area; and in 8 villages and 53 hamlets in the rural sector. The population density is 78 persons per km², and it is estimated that there are 1,851 dwellings, of which 1,382 are occupied. In addition, 6.1% of the population has e-mail, and 50.8% has a cell phone.

The economically active population (EAP) in Gualala is 1,908 people over the age of 15, with a variety of occupations, mainly self-employed (42.53%) and privately employed (28.55%). Regarding human development indicators, the municipality has a Human Development Index (HDI) of 0.587, with a per capita income of US$3,146, a life expectancy at birth of 75.2 years, and an illiteracy rate of 24.7%.

By 2022, 26.29% of the population will be under 14 years of age, while 13.18% will be over 60 years of age. The remaining 60.52% comprises working-age adults between 15 and 59 years of age, projected at 3,425 people for that year. Almost half of the population, 49.85%, is under 30, reflecting a high youth level in the municipality. This distribution generates a significant dependency, given that the working-age population supports 43.84% of the total, including 34.1% of the young population and 9.74% over 60.

Only 10.76% of the population between 15 and 59 has completed secondary education, and 1.73% has attained higher education. The percentage of the population with postgraduate education is very low, barely 0.13%. The majority of the population, 63.77%, has only completed basic education, and the level of illiteracy stands at a worrying 21.69%.

The number of emigrants returning to the municipality increased significantly by 29.11% from 2016 to 2021, reaching 208 people by 2022. Of these, 81.03% were men, 18.97% were women, and 16.35%

[128] National Autonomous University of Honduras (2022). Sociodemographic Profile of Gualala, Santa Barbara 2022. Tegucigalpa: IIES-UNAH.

were children. In addition, Gualala represents a small percentage, 0.057%, of the total number of Hondurans who have returned at the municipal level.

4.2.3. Municipality - Concepción Sur, Santa Bárbara

For the municipality of Concepción Sur, in the department of Santa Bárbara, the general context and population statistics were taken from data from the Universidad Nacional Autónoma de Honduras, specifically from the Perfil Sociodemográfico de Concepción Sur, Santa Bárbara 2022[129].

The municipality of Concepción del Sur is located in the department of Santa Bárbara, Honduras; the municipality is bordered to the north by Petoa, to the south by Chinda, to the east by Villanueva and San Antonio de Cortés, and to the west by Trinidad and Chinda. Regarding demographics, it has experienced moderate growth since 1950, with an average annual growth rate of 1.83% until 2013; it has a population distribution comprising seven neighborhoods in the urban area and five villages, along with 43 hamlets in the rural sector.

It has a territorial extension of 63.3 km², with a rural population of 5,493 inhabitants, of which 47.57% are women and 52.43% are men, distributed among 1,666 dwellings, of which 1,295 are occupied. Regarding digital connectivity, 4.4% of the population has e-mail, and 49.8% has a cell phone.

The economically active population (EAP) is over 15 years old and reaches 1,733 inhabitants, with a variety of occupations that include self-employed (37.03%) and private employees (24.59%). By 2022, 30.62% of the population, approximately 1,682 inhabitants, are under 14 years of age, while 8.01% are people over 60, about 440 individuals.

The majority of the population, 61.38%, is in the 15- to 59-year-old age range, with a projected total of 3,372 people in this group by 2022. This group is distributed as 17.66% between 15 and 24 years old, 25.5% between 25 and 39 years old, and 18.22% between 40 and 59 years old, which indicates that 43.16% of the working population in Concepción del Sur is young.

In addition, 58.14% of the total population is under 30 years of age, with 3,194 people in this age group. This implies a high dependency since the working-age population supports 44.65% of the population, including 39.32% of the young population under 20 and 5.33% over 60 years of age. Within the 58.14% of young people under 30, 30.62% correspond to the child population of children under 14. Of this group, approximately 9.85% are of school age, between 5 and 9 years, while approximately 30.62% need basic education, ranging from 10 to 14.

The human development index (HDI) is 0.565, with a per capita income of US$2,746 and a life expectancy at birth of 75 years. Educational estimates for the population ten years and older in Concepción del Sur reveal deficiencies in the quality of the municipality's human resources to compete in a demanding labor environment. Of the 3,372 inhabitants between 15 and 59, only 12.37% have completed secondary education, 1.04% have attained higher education, and only a minimal 0.07% have postgraduate studies. Most of the population (63.49%) has only completed basic education, and the illiteracy rate is 20.16%.

In addition, migration indicators estimate an increase of 4.18% in the return of emigrants during the 2016-2021 period, with 359 people returning during this period. Of these returnees, 90.99% were men, and 9.01% were women; what stands out is that 10.31% were children. In addition, Concepción del Sur represents approximately 0.098% of the Honduran returnees at the municipal level during this period.

[129] National Autonomous University of Honduras (2022). Sociodemographic Profile of Concepción del Sur, Santa Bárbara 2022. Tegucigalpa: IIES-UNAH.

4.2.4. Municipality - Las Vegas, Santa Bárbara

The general context and statistics of the population of the municipality of Las Vegas, belonging to the department of Santa Barbara, were taken from the data of the National Autonomous University of Honduras, specifically from the Sociodemographic Profile of Las Vegas, Santa Barbara 2022[130].

Las Vegas is a municipality of Santa Barbara, which occupies 106.1 km² of territory. The projected population for 2022 is 27,472 inhabitants, with a slight majority of women (50.14%) over men (49.86%). The distribution between rural (50.27%) and urban (49.73%) areas is equal. Population growth has been moderate. From the 1988 to 2013 census, the average annual growth rate has been 1.49%, while at the national level, it was 3.3%.

The municipality comprises 25 neighborhoods in the urban area and seven villages, along with 82 hamlets in the rural sector. The population density is 259 persons per km², and there are 7,400 houses, of which 6,139 are occupied. Regarding technology, 13.3% of the population has e-mail, and 60% has a cell phone.

The division of the population by age groups shows that, by 2022, 32.22% (8,851 people) are under 14 years old, indicating a young population; 8.78% (2,411 people) are over 60 years old, considered older adults; and 59.01% of the population is in the adult age group, between 15 and 59 years old, projected at 16,212 people by 2022. Therefore, the municipality is predominantly young, with 60.81% of the total under 30 (16,708 people in 2022).

Therefore, a high dependency ratio is generated since the working-age population supports 48.87% of the total, representing 42.59% of the young population (under 20 years of age) and 6.28% of the population over 60. Within the 60.81% of young people under 30 years of age, 32.22% corresponds to the child population, those between 0 and 14. Of this group, approximately 10.92% are of school age, i.e., children between 5 and 9 years old, while about 32.22% need basic education, i.e., children between 10 and 14 years old. This highlights that more than a third of the population of Las Vegas are children who need protection, food, and education to ensure the productive structures of the municipality.

The Economically Active Population (EAP) in Las Vegas is 8,092 people over 15. Within this group, 20.47% are between the ages of 15 and 24, 21.65% are in the 25 to 39 age range, and 16.9% are between the ages of 40 and 59, meaning that 42.11% of the potentially active population of Las Vegas is young. The labor distribution shows more private employees (40.83%) and self-employed (24.42%).

In terms of human development, the Human Development Index (HDI) is 0.617, with a per capita income of US$3,857. The municipality has a Health Index of 0.86 and a life expectancy at birth of 75 years. The illiteracy rate is 15.9%, slightly lower than the departmental average. Most of the population over ten has completed basic education (58.13%), followed by high school (22.65%).

Also, Las Vegas is surrounded by rivers and is located on the left bank of Lake Yojoa. It is bordered to the north by the municipalities of Santa Barbara and Santa Cruz de Yojoa, to the south by San Pedro Zacapa, to the east by Lake Yojoa, and to the west by Santa Barbara and Concepción del Sur.

Over the period from 2016 to 2021, Las Vegas witnessed a notable demographic shift. The municipality experienced a 4.21% increase in returned emigrants, with an estimated 817 people returning. Among these, 83.07% were men and 16.93% were women. Interestingly, 16.16% of the returnees were children. At the municipal level, Las Vegas represents 0.224% of Honduran returnees.

[130] National Autonomous University of Honduras (2022). Sociodemographic Profile of Las Vegas, Santa Bárbara 2022. Tegucigalpa: IIES-UNAH.

5. Field Research Results

5.1. Household Dynamics

Out of 88 respondents, the majority, 42 people, are in common-law unions (48% of 88 responses). Then, 34 people are married (39% of 88)—nine single persons (10% of 88). Finally, there are three widows (3% of 88). This data provides a picture of the different marital statuses within this group (Table 3).

Table 3: Marital status by municipality

Marital status	Concepción Sur	Gualala	Las Vegas	Santa Barbara	Santa Cruz de Yojoa	Total	Percentage Total (%)
Married /Married	13	3	2	8	8	34	39
In free union	2	13	10	10	7	42	48
Single	0	0	4	1	4	9	10
Widow/Widower	0	1	0	1	1	3	3
Total	15	17	16	20	20	88	100
Percentage Total (%)	17	19	18	23	23	100	

N = 88

Regarding the responsibilities they are in charge of within the household, 294 multiple-choice responses were obtained from 88 respondents.

For the responsibility of cooking, 50 people indicate that they are in charge of this task, of which 80% (40 people) are women's responses and 10 (20%) are men. There are 62 responses for food shopping, divided almost equally between men 52% (32/62) and women 48% (30/62). For the responsibility of providing money, 62 people indicate being in charge, with a clear majority of men 68% (42/62) versus 32% (20/62) women. In cleaning, 61 people indicate having this responsibility, with a majority of women 69% (42/61) and fewer men 31% (19/61). For childcare, 46 people indicate having this responsibility, with 35% (16/46) men and 65% (30/46) women. For the care of older adults or people with disabilities, nine people indicated that they assume this role, with 67% (6/ 9) men and 33% (3/9) women. Finally, as for other responsibilities, only four indicated having, divided equally between men (2/4) and women (2/4).

Table 4: Responsibilities held by respondents, by gender identity, and by municipality. (M = Male, F = Female)

Municipality	Concepción Sur		Gualala		Las Vegas		Santa Barbara		Santa Cruz de Yojoa		Total	Total (%)
Sex	H	M	H	M	H	M	H	M	H	M		
Responsibilities - Cooking	3	6	2	9	2	8	2	11	1	6	50	17
Responsibilities - Purchase of feed	8	2	7	6	3	8	8	9	6	5	62	21
Responsibilities - Childcare	3	6	4	6	0	5	4	9	5	4	46	16
Responsibilities - Care of older adults or disabled persons	2	0	1	2	1	1	1	0	1	0	9	3
Responsibilities - Cleaning	5	6	3	9	4	9	3	11	4	7	61	21
Responsibilities - Other	0	1	0	0	1	0	1	0	0	1	4	1

Responsibilities - Providing money	7	0	8	6	6	4	9	5	12	5	62	21
Total	28	21	25	38	17	35	28	45	29	28	294	100
Percentage Total (%)	10	7	9	13	6	12	10	15	10	10	100	

N = 88

For the distribution of head of household by sex, a total of 88 households were surveyed, 64 (73% of 88 responses) of which were headed by someone who identified as head of household. Of these, 39 (61% of 64) identify as male and 25 (39% of 64) identify as female. In contrast, in 24 households, the respondent does not identify as head or head of household, with 5 (21% of 24) male and 19 (79% of 24) female.

In responses from individuals who didn't identify themselves as the head of household, the breakdown revealed that among female respondents, 84% (16 out of 19 responses) reported that the head of household was male. 11% (2 out of 19) indicated another woman held this position, and 5% (1 out of 19) stated it was shared between both members of the couple. For male respondents, 60% (3 out of 5) reported that both members of the couple assumed the role, 20% (1 out of 5) mentioned another man as the head, and another 20% (1 out of 5) identified a woman as the authority figure in the household.

Table 5: Persons who consider themselves heads of household by gender identity and by municipality

Municipality	Concepción South		Gualala		Las Vegas		Santa Barbara		Santa Cruz de Yojoa		Total	Percentage Total (%)
Sex	H	M	H	M	H	M	H	M	H	M		
No	1	3	0	4	0	5	3	4	1	3	24	27
Yes	7	4	8	5	7	4	6	7	11	5	64	73
Total	8	7	8	9	7	9	9	11	12	8	88	100
Total (%)	9	8	9	10	8	10	10	13	14	9	100	

N = 88

5.2. Household Conditions

5.2.1 Materials

Regarding the material of the house's roof, most of the people surveyed (86%) had a tin roof (76 out of 88 respondents), and a smaller percentage (5% each) had a roof made of zinc, tile, false ceiling, or block.

Table 6: House roofing material by municipality

Municipality	Block	False sky	Tile	Zinc	Aluzinc**	Foil	Total	Percentage Total (%)
Concepción South	0	0	1	0	2	12	15	17
Gualala	0	0	0	0	2	15	17	19
Las Vegas	0	0	0	3	0	13	16	18
Santa Barbara	1	1	1	0	0	17	20	23
Santa Cruz de Yojoa	0	1	0	0	0	19	20	23

Total	1	2	2	3	4	76	88	100
Percentage Total (%)	1	2	2	3	5	86	100	

N = 88

** Concrete block is an element used as a substitute for other materials such as adobe or brick. Currently, its use has become prevalent due to all the advantages it has, as well as the low cost that it manages[131].*

*** Aluzinc steel, or Galvalume, is corrosion resistant. It comprises cold-rolled steel coated with 55% aluminum, 43.3% zinc, and 1.6% silicon. It is stronger than galvanized steel and is used in roofing, wall panels, chimney hoods, and other exterior uses.*

The house floor material, which was observed in the highest percentage (84%) of respondents, is cement (74 out of 88 responses), followed by 8%, which is earth (7/88), and in lower percentage (< 5% each), wood and bark.

Table 7: House floor material by municipality

Municipality	Bajareque	Wood	Ceramic floor	Earth	Cement	Total	Percentage Total (%)
Concepción South	0	1	0	1	13	15	17
Gualala	0	0	1	1	15	17	19
Las Vegas	1	1	0	1	13	16	18
Santa Barbara	0	0	3	3	14	20	23
Santa Cruz de Yojoa	0	0	0	1	19	20	23
Total	1	2	4	7	74	88	100
Percentage Total (%)	1	2	5	8	84	100	

N = 88

5.2.2. Accessibility

The surveyors considered most communities accessible (47%, with 41 out of 88 responses), mainly because they could be reached by car. However, there is no public transportation in many of these communities. On the other hand, local inhabitants noted that this accessibility is only passable in the summer because, during the winter, the rains can make the mostly dirt roads impassable.

Table 8: Accessibility to reach the communities by municipality

Municipality	Concepción South	Gualala	Las Vegas	Santa Barbara	Santa Cruz de Yojoa	Total	Percentage Total (%)
Accessible to reach	9	11	3	13	5	41	47
Difficult to reach	4	1	1	2	0	8	9

[131] Jerez Materials (2024). Concrete block.

Easy access to get there	2	5	12	5	15	39	44
Total	15	17	16	20	20	88	100
Percentage Total (%)	17	19	18	23	23	100	

N = 88

Sixty-seven percent of the surveyors considered that most of the households were easily accessible (59 out of 88 responses), mainly because the houses were located close to each other, allowing walking from one to the other. However, in 31% of the cases, walking up or down slopes to reach the homes was necessary, which affected accessibility (27 out of 88 responses).

Table 9: Accessibility to reach households by municipality

Municipality	Concepción South	Gualala	Las Vegas	Santa Barbara	Santa Cruz de Yojoa	Total	Percentage Total (%)
Accessible to reach	8	5	2	8	4	27	31
Difficult to reach	0	0	2	0	0	2	2
Easy access to get there	7	12	12	12	16	59	67
Total	15	17	16	20	20	88	100
Percentage Total (%)	17	19	18	23	23	100	

N = 88

5.2.3. Services

Of 324 multiple-choice responses from 88 respondents, the most common service reported by the participants was electricity; 85 households had it (97% of 88). The second most common service is potable water in 81 households (92% of 88). Access to cell phone signal: 63 (72% of 88) households report having it. On the other hand, Internet connection through wifi was mentioned in 50 households (57% of 88), while access to drains is somewhat less common in 32 households (36% of 88). Internet use via cellular data is the least common, with only 13 households (15% of 88) indicating having it.

More than 50% of the households had access to the Internet via Wi-Fi because one or a few members of the community with more significant economic capacity shared or distributed the Internet they contracted for their homes.

Most households have toilets with water systems to evacuate waste. Still, the pipes, according to community members, go directly into the creek, which indicates the lack of an adequate drainage system. However, latrines or septic tanks were rarely observed.

Table 10: Access to services in households by municipality

Municipality	Concepción Sur	Gualala	Las Vegas	Santa Barbara	Santa Cruz de Yojoa	Total	Total (%)
Services - Internet (through cellular data)	0	3	1	4	5	13	4
Services - Drainage	3	3	7	9	10	32	10

Services - Internet (through wifi connection)	5	10	11	11	13	50	15
Services - Cell phone signal	7	15	12	9	20	63	19
Services - Drinking water	13	16	14	20	18	81	25
Services - Electricity	15	17	16	17	20	85	26
Total	43	64	61	70	86	324	100
Percentage Total (%)	13	20	19	22	27	100	

N = 88

5.3. Education

5.3.1 Education Level

About the educational level of the people surveyed, the largest group corresponds to those with primary education, with 48% (42 people out of 88). The next largest group is those with primary education, with 19% (17/88). This was followed by people who indicated that they had no education, with 18% (16/88). For secondary or diversified education, 11% (10/88) indicated having this level. The higher or university education level is relatively low, with only 2% (2/88). Finally, only one person has a technical education, representing 1% of the total.

Table 11: School level by municipality (persons surveyed)

Municipality	Concepción Sur	Gualala	Las Vegas	Santa Barbara	Santa Cruz de Yojoa	Total	Percentage Total (%)
No education	3	4	0	7	2	16	18
Primary education	7	8	8	8	11	42	48
Basic education	2	4	4	4	3	17	19
High school or diversified education	3	0	2	1	4	10	11
Technician	0	0	1	0	0	1	1
Higher or university education	0	1	1	0	0	2	2
Total	15	17	16	20	20	88	100
Percentage Total (%)	17	19	18	23	23	100	

N = 88

Of the 22%, i.e., 19 individuals out of 88 respondents stated that a person over 60 years of age lived in their household, they indicated that in most cases, the person only had primary education 58% (11 people out of 19). The other group with the highest percentage indicated not having studies (32%), six people out of 19. Finally, a lower rate (5% each) indicated having basic or secondary education (1 person out of 19). However, none mentioned that the person had a higher or university education.

Table 12: School level by municipality (people over 60 years old)

Municipality	Concepción South	Gualala	Las Vegas	Santa Barbara	Santa Cruz de Yojoa	Total	Percentage Total (%)
No education	0	1	0	2	3	6	32
Primary education	1	2	5	1	2	11	58
Basic education	0	0	0	0	1	1	5
High school or diversified education	0	1	0	0	0	1	5
Total	1	4	5	3	6	19	100
Percentage Total (%)	5	21	26	16	32	100	

N = 19

Of the (59%) 52 out of 88 people surveyed who stated that they lived between 1 and 2 adults between the ages of 31 and 59, they indicated that most people had primary education (63%) 37 people out of 59. The next group with the highest percentage corresponds to people with basic education (14%), eight out of 59. Finally, the lowest rate (5% and 2%, respectively) is the group with secondary or higher education, less than 3 and 1 out of 59, respectively.

Table 13: Schooling level by municipality (adults between 31 and 59 years old)

Municipality	Concepción Sur	Gualala	Las Vegas	Santa Barbara	Santa Cruz de Yojoa	Total	Percentage Total (%)
No education	3	2	1	1	1	8	14
Primary education	7	6	4	9	11	37	63
Basic education	2	1	2	3	2	10	17
High school or diversified education	0	0	2	0	1	3	5
Higher or university education	0	0	1	0	0	1	2
Total	12	9	10	13	15	59	100
Percentage Total (%)	20	15	17	22	25	100	

N = 59

Of the 65% (57 out of 88) of the people surveyed who stated that they lived between 1 and 3 young people between 12 and 30 years of age, most people in this age range had basic education 39% (35 out of 90). The other group with the highest percentage is people with primary education, 34% (31 out of 90), followed by the group with middle or high school education, 20% (18 out of 90). Finally, in the lower

percentage (2% each), there are groups of people with higher or university education, technical education, or no studies (2 out of 90 people).

Table 14: School level by municipality (young people between 12 and 30 years of age)

Municipality	Concepción South	Gualala	Las Vegas	Santa Barbara	Santa Cruz de Yojoa	Total	Percentage Total (%)
No education	1	1	0	0	0	2	2
Primary education	6	8	3	11	3	31	34
Basic education	4	5	10	6	10	35	39
High school or diversified education	2	0	8	1	7	18	20
Technician	0	0	0	0	2	2	2
Higher or university education	0	0	0	2	0	2	2
Total	13	14	21	20	22	90	100
Percentage Total (%)	14	16	23	22	24	100	

N = 90

Of the total respondents, 61% (54 of 88) stated that they lived with between 1 and 4 children between the ages of 0 and 11. We asked whether children over three years of age were enrolled in any school program, and of the 82 data collected, 83% (68 of 82) responded yes, while 17% (14 of 82) indicated no. Most of these non-enrolled children were five years old since, according to the respondents, schools do not admit children of that age or younger, or it is not customary to enroll them. However, 30% of these out-of-school children were between 10 and 11 years old, and the reasons for not attending school included lack of financial resources, health problems, and lack of interest on the part of the child to continue studying. Of the girls and/or boys between the ages of 0 and 11 who were enrolled in a school program were in primary school.

Most people in the household only have primary or basic education because there are no schools at this level in their community. During the surveys, participants explained that, in some cases, the schools are located in another community and that attending requires private transportation, which is costly due to their limited economic resources. In other situations, they would have to walk up to two hours each way to get to school, representing an obstacle to education.

Concerning parenthood, 91% (80 out of 88) of the people surveyed have sons and/or daughters. Of those 80, 31% (25 people) having children had to drop out of school when they became parents, while 69% (55 out of 80) who did not drop out attributed it to economic reasons.

Table 15: School dropouts due to paternity by community

Municipality	Concepción Sur	Gualala	Las Vegas	Santa Barbara	Santa Cruz de Yojoa	Total	Percentage Total (%)
No	12	10	11	9	13	55	69
Yes	3	6	2	9	5	25	31
Total	15	16	13	18	18	80	100
Percentage Total (%)	19	20	16	23	23	100	

N = 80

5.3.2. Language

99% (87 out of 88) of the people surveyed indicated their preferred language when communicating in Spanish. Regarding comfort reading in Spanish, 92% (81 out of 88) of respondents said they felt comfortable reading in Spanish. However, 8% (7 out of 88) indicated that they do not feel comfortable because they do not know how to read or write since they did not have any schooling.

Table 16: Respondent's Comfort Reading in Spanish by Community

Municipality	Concepción South	Gualala	Las Vegas	Santa Barbara	Santa Cruz de Yojoa	Total	Percentage Total (%)
No	2	1	0	2	2	7	8
Yes	13	16	16	18	18	81	92
Total	15	17	16	20	20	88	100
Percentage Total (%)	17	19	18	23	23	100	

N = 88

The majority of respondents, 86%, felt comfortable writing in Spanish. However, 14% expressed that they felt uncomfortable, mainly due to their level of schooling, as the majority who attended primary school only completed up to the third or sixth grade.

Table 17: Respondent's comfort with writing in Spanish by community

Municipality	Concepción South	Gualala	Las Vegas	Santa Barbara	Santa Cruz de Yojoa	Total	Percentage Total (%)
No	2	3	1	4	2	12	14
Yes	13	14	15	16	18	76	86
Total	15	17	16	20	20	88	100
Percentage Total (%)	17	19	18	23	23	100	

N = 88

During the household surveys, no person reported speaking any Mayan language. Only one person reported speaking another language, which was English.

5.4. Food Safety

5.4.1 Food Reserve

Of 88 households, 57 (65%) have a food reserve. On the other hand, 31 households have no reserve (35%). People who indicated they do not have food reserves explained that they live day-to-day as their income does not allow them to buy additional food to store.

Table 18: Food reserves in the household by community

Municipality	Concepción South	Gualala	Las Vegas	Santa Barbara	Santa Cruz de Yojoa	Total	Percentage Total (%)
No	4	5	6	9	7	31	35
Yes	11	12	10	11	13	57	65

Total	15	17	16	20	20	88	100
Percentage Total (%)	17	19	18	23	23	100	

N = 88

Of the 57 households with food reserves, the most significant proportion corresponds to those with food reserves for one week, with 53% (30 households). Then, households with food reserves for one fortnight were 14 households (25%). Other periods of food reserves include three days (2 households, 4%) and five days (2 households, 4%). Some households have reserves for more extended periods, such as three months (2 households, 4%), five months (1 household, 2%), and two months (1 household, 2%). Reservations for shorter periods are also observed, such as two days (1 household, 2%) and four days (1 household, 2%). In addition, respondents indicated that they stock up on food at the pulperías since the local market is in the center of the municipality, a location inaccessible to them.

5.4.2. Food insecurity

Out of 88 households, 69 (78%) indicated they had not run out of food. In contrast, 13 (15%) households did indicate having experienced running out of food. In addition, 6 (7%) households preferred to refrain from reporting this information.

Table 19: Household food insufficiency by community

Municipality	Concepción South	Gualala	Las Vegas	Santa Barbara	Santa Cruz de Yojoa	Total	Percentage Total (%)
No	12	12	14	18	13	69	78
I prefer not to say	2	2	0	1	1	6	7
Yes	1	3	2	1	6	13	15
Total	15	17	16	20	20	88	100
Percentage Total (%)	17	19	18	23	23	100	

N = 88

The number of people surveyed who indicated that they had gone without food was 13 out of 88 people (15%), with 35 multiple-choice responses, which suggests that more than one person in the household has gone without food. The largest group is adult women, with 20% (7 responses). This is followed by the group of children, with 6 cases (17%), and young women, with 5 cases (14%). As for men, the group of adult men has 4 cases (11%), as does the young men. There are 2 cases in adolescent men (6%) and older adult men (6%). Finally, there are also 2 cases in older adult women (6%) and 3 in girls (9%).

The household surveys revealed that, on many occasions, adults who play the role of mothers or fathers go without food to feed their children. However, others noted that when there is not enough food, everyone experiences a lack of food.

Table 20: Person in the household who has run out of food, by community

Municipality	Concepción South	Gualala	Las Vegas	Santa Barbara	Santa Cruz de Yojoa	Total	Percentage Total (%)
Not eating - Adolescent male	1	1	0	0	0	2	6
Not eating - older man	0	0	0	0	2	2	6

Not eating - older woman	0	0	0	0	2	2	6
Not eating - Girl	0	1	1	0	1	3	9
Not eating - Adult male	0	1	0	0	3	4	11
Not eating - young man	0	2	1	0	1	4	11
Not eating - young woman	1	2	1	0	1	5	14
Not eating - Child	1	1	1	0	3	6	17
Not eating - Adult female	1	1	1	1	3	7	20
Total	4	9	5	1	16	35	100
Percentage Total (%)	11	26	14	3	46	100	

N = 13

Fifteen percent (13 out of 88) households indicated that they do not have enough food to satisfy their needs. The largest group of households, with 39% (5 households), experience this situation several times yearly (Table 21). The second largest group, with 31% (4 households), reports going without enough food several times per month. On the other hand, 23% (3 households) indicated that this situation occurs weekly, and 8% (1 household) preferred not to answer.

Table 21: Frequency of insufficient food in households by community

Municipality	Concepción Sur	Gualala	Las Vegas	Santa Barbara	Santa Cruz de Yojoa	Total	Percentage Total (%)
I prefer not to answer	0	0	0	0	1	1	8
Weekly	1	0	0	1	1	3	23
Several times per year	0	2	0	0	3	5	39
Several times per month	0	1	2	0	1	4	31
Total	1	3	2	1	6	13	100
Percentage Total (%)	8	23	15	8	46	100	

N = 13

Of the 49% (43 out of 88) respondents engaged in agricultural activities, 67% (29 out of 43) indicated their families' food security depended on agricultural production. Of 66 multiple choice responses, the most frequently mentioned crop was coffee 27% (18 of 66), followed by maize 24% (16 of 66), beans 24% (16 of 66), bananas 12% (8 of 66), plantains 9% (6 of 66), in addition to vegetable crops and other agricultural activities. The people who indicated maize and beans were crucial crops for food security are those who grow them for their consumption. On the other hand, those who mentioned coffee as their main crop for food security depend on coffee for income, either because they grow and sell it or because they work as day laborers on coffee plantations, depending on the seasonal work income that this crop generates.

Table 22: Crops crucial for household food security by community

Municipality	Concepción South	Gualala	Las Vegas	Santa Barbara	Santa Cruz de Yojoa	Total	Percentage Total (%)
Dependence - Vegetables	0	0	2	0	0	2	3
Dependency - Other	0	1	0	1	0	2	3
Dependence - Banana	2	3	1	0	0	6	9
Dependence - Banana	3	1	2	1	1	8	12
Dependency - Beans	4	2	6	1	0	13	20
Dependence - Corn	4	2	8	1	1	16	25
Dependence - Coffee	6	4	3	4	1	18	28
Total	19	13	22	8	3	65	100
Percentage Total (%)	29	20	34	12	5	100	

N = 43

5.5. Community Involvement

5.5.1. Stakeholder Engagement

Out of 93 responses from 88 respondents, the most preferred period was the late afternoon, between 15:00 and 19:00, accounting for 42% (39 responses out of 93). Then, the first hour of the afternoon, between 13:00 and 17:00, was mentioned, equivalent to 36% (33 out of 93). On the other hand, the first hour of the morning, from 8:00 to 12:00, is preferred by only 9% (8 out of 93), while the time from 18:00 to 22:00 is preferred by only 7% (6 out of 93). Finally, 3% (3 out of 93) indicated they could participate anytime.

Table 23: Time available to participate in meetings by community

Municipality	Concepción South	Gualala	Las Vegas	Santa Barbara	Santa Cruz de Yojoa	Total	Percentage Total (%)
Hours - Any time	1	1	0	0	1	3	3
Hours - Early in the morning (8.00-12.00)	3	0	1	0	4	8	9
Schedule - Early afternoon (13:00 - 17:00)	8	6	7	5	7	33	36
Schedule - Evening (18:00 - 22:00)	0	4	0	2	0	6	7
Schedule - Other	0	2	0	1	1	4	4
Hours - Late afternoon (15:00 - 19:00)	3	8	8	13	7	39	42
Total	15	21	16	21	20	93	100
Percentage Total (%)	16	23	17	23	22	100	

N = 88

Out of 192 responses from 88 people, the least available time was the first hour of the morning between 8:00 and 12:00, with 33% (63 responses out of 192). Another unavailable period, most mentioned, was the last hour of the morning, from 10:00 to 14:00, with 14% (27 out of 192). The early afternoon, from 13:00 to 17:00, was also mentioned, with 6% (11 out of 192), and the evening hours, from 18:00 to 22:00, with 4% (7 out of 192). Other times included the late afternoon, from 15:00 to 19:00, with 5% (10 out of 192) and 1% (2 out of 192) indicated "any time".

This pattern explains why most respondents stated that either they or their partners work from morning until two in the afternoon. For this reason, the best time to attend community meetings is between three and five o'clock in the afternoon. The women also indicated that they are busy preparing food between 10:00 a.m. and noon, so they cannot participate at that time. Then, after five o'clock in the afternoon, they can also not attend because they have to prepare dinner.

5.5.2. Communication

Out of 126 responses from 88 respondents, word of mouth was the most common source for receiving information about community activities, with 57 responses (45%). Social media, such as WhatsApp and Facebook, are the second most used medium, with 35 responses (28%). Posters around the community are also an important source of information, with 15 responses (12%). In addition, four people (3%) receive information from a family member, and two more (2%) indicate that they do not participate in community activities.

Table 24: Means by which you receive information on community activities by community.

Municipality	Concepción South	Gualala	Las Vegas	Santa Barbara	Santa Cruz de Yojoa	Total	Percentage Total (%)
Did not participate in community activities	0	0	0	1	1	2	2
Someone in my family tells me	0	1	2	0	1	4	3
Other	1	4	2	6	0	13	10
Posters around the city	2	3	0	2	8	15	12
Social media	5	11	9	1	9	35	28
Word of mouth (someone else tells me about them)	13	11	10	15	8	57	45
Total	21	30	23	25	27	126	100
Percentage Total (%)	17	24	18	20	21	100	

N = 88

65% of the people surveyed (57 out of 88) indicated that they learn about community activities by word-of-mouth, generally when community leaders call them. This communication system turns out to be the most effective due to the limited accessibility to technological resources available to the population. Likewise, 39% (35 out of 88) indicated that social networks are also an essential means to learn about community activities, thanks to the ease of receiving information through applications such as WhatsApp.

5.5.3. Exclusion

There were 133 responses from 88 people regarding groups excluded from community meetings or those who could not participate. The largest group reportedly excluded was people with disabilities, with 29% (39 out of 133). The second most excluded group is youth, with 24% (32 out of 133). People with physical or mental health problems represent 14% (19 out of 133), while residents living in remote areas make up 13% (17 out of 133). Low-income families and people experiencing homelessness have 11 and 3 responses, representing 8% and 2% of the total, respectively. Women and members of the LGBTQ+ community have five responses each, representing 4% each. People with language barriers face exclusion, with 2% (2 responses).

Table 25: group excluded from community activities by community

Municipality	Concepción South	Gualala	Las Vegas	Santa Barbara	Santa Cruz de Yojoa	Total	Total (%)
No - People with language barriers	0	0	0	2	0	2	2
No - Homeless	0	0	0	2	1	3	2
No - Members of the LGBTQ+ community	0	1	0	0	4	5	4
No - Women	2	0	2	1	0	5	4
No - Low-income families	3	1	0	3	4	11	8
No - Residents living in remote areas.	5	4	1	4	3	17	13
No - Persons with mental health problems	4	3	3	3	6	19	14
No - Youth	6	3	8	6	9	32	24
No - Disabled persons	7	7	5	11	9	39	29
Total	27	19	19	32	36	133	100
Percentage Total (%)	20	14	14	24	27	100	

N = 88

Twenty-eight people (32% of 88) indicated the reasons for individuals staying away from community activities include various factors, such as disinterest or lack of desire to attend, physical health problems that make attendance difficult, such as lack of sight to read, or reduced mobility. Some people are simply uninformed of the activities, while others have jobs outside the community or are busy with work responsibilities. Reluctance to participate is also an essential factor, as some people do not see value in meetings or simply do not like to go. In other cases, a lack of financial resources makes people more focused on work than community activities. Youths sometimes do not get involved because they have not been taught the importance of participating, and homeless people often disregard meetings because they do not have a meaningful commitment to the community.

5.6. Migration

Of the 88 people who responded to the survey, 90 multiple-choice results were obtained on whether the person has migrated to another country or another city in Honduras. Of these, 58% (52 out of 90) indicated that neither the person nor anyone in their family has migrated. Eighteen percent (16 out of 90) have relocated to another city in Honduras, and 24% (22 out of 90) have migrated to another country.

There were 46 multiple-choice results on why people migrated (42%, 38% out of 88) to another country or city. The main reason is the lack of employment opportunities in the community, 67% (31 out of 46),

followed by people who indicated that the family needed another source of income 20% (9 out of 46). In smaller percentages (<5% each), other reasons mentioned were loss of livelihood due to climate variability and lack of educational opportunities in the community.

Other reasons mentioned (3 responses) include family disintegration and migration of women, who, upon marriage, move in with their partners.

Table 26: Household migrations by community

Municipality	Concepción South	Gualala	Las Vegas	Santa Barbara	Santa Cruz de Yojoa	Total	Percentage Total (%)
Migrated - No	11	12	7	13	9	52	58
Migrated - Yes, to another city in Honduras	1	2	4	6	3	16	18
Migrated - Yes, to another country	3	4	5	1	9	22	24
Total	15	18	16	20	21	90	100
Percentage Total (%)	17	20	18	22	23	100	

N = 88

Eighty-nine percent (78 out of 88) do not intend to migrate, while 11% (10 out of 88) plan to relocate to another country. Of those who do intend to migrate, 18 multiple choice responses were obtained on the reasons for migrating, the main reason being lack of employment opportunities in the community (44% of 18); another main reason is that the family needs another source of income (22% of 18) and lack of educational opportunities in the city (11% of 18), Other reasons (6% of 18, each) were mentioned as violence in general, loss of livelihood due to climate variability, increased frequency and intensity of storms, and corruption in the country.

Table 27: Intention to migrate within the household by community

Municipality	Concepción South	Gualala	Las Vegas	Santa Barbara	Santa Cruz de Yojoa	Total	Percentage Total (%)
Migrate - No	14	12	16	20	16	78	89
Migrate - Yes, to another country	1	5	0	0	4	10	11
Total	15	17	16	20	20	88	100
Percentage Total (%)	17	19	18	23	23	100	

N = 88

5.7. Livelihoods

5.7.1. Revenues

For sources of income in the household, either from the respondent or from someone in the family, 114 multiple-choice responses were obtained from 88 people. Agriculture is the primary source of income for 52% (46 out of 88) of households. Employment or work is the second most common source of income in 34% (30 out of 88) of the households. Trade (2% of 88 households), entrepreneurship (8% of 88), fishing (10% of 88), and remittances (7% of 88) were also mentioned as a source of household income. In some households, there is more than one source of income, depending on whether several members of the household work or only one person has the function of contributing money to the household.

Table 28: Economic activities in the household, by community

Municipality	Concepción South	Gualala	Las Vegas	Santa Barbara	Santa Cruz de Yojoa	Total	Percentage Total (%)
Income - Agriculture	11	9	10	11	5	46	40
Revenue - Trade	0	0	1	0	1	2	2
Income - Employment-Work	3	8	8	6	5	30	26
Income - Entrepreneurship	1	0	0	4	2	7	6
Income - Other	4	3	0	3	4	14	12
Revenues - Fishery	0	0	1	0	8	9	8
Income - Remittances	1	2	0	0	3	6	5
Total	20	22	20	24	28	114	100
Percentage Total (%)	18	19	18	21	25	100	

N = 88

Other sources of income were mentioned in 12% (14 of 88) of the households, including construction work (14% of 14), coffee cutting (1 of 14), and day labor (21% of 14). Others receive financial support from sons and/or daughters (29% of 14), who send money periodically or help cover family expenses. Some mentioned jobs, such as washing other people's clothes (1 woman), mechanic services (1 person), and another that depends on a check from the U.S. government (1 man).

The same behavior is shown regarding the economic activity representing the highest household income. Agriculture was the most mentioned in 43% (38 out of 88) of the households, followed by employment or work mentioned in 25% (22 out of 88). Of those surveyed, it was observed that many of those with jobs or jobs on which they depend work in the agricultural sector, cutting coffee, working on avocado farms, or doing maintenance work on agricultural farms.

Table 29: Main source of income in the household, by community

Municipality	Concepción South	Gualala	Las Vegas	Santa Barbara	Santa Cruz de Yojoa	Total	Percentage Total (%)
Agriculture	10	6	9	10	3	38	43
Trade	0	0	1	0	1	2	2
Employment/Job	1	6	5	5	5	22	25
Entrepreneurship	1	0	0	2	2	5	6
Another	2	3	0	3	1	9	10
Fishery	0	0	1	0	6	7	8
Remittances	1	2	0	0	2	5	6
Total	15	17	16	20	20	88	100
Percentage Total (%)	17	19	18	23	23	100	

N = 88

75% of people (66 out of 88) indicate that their income is insufficient to cover their basic needs. This compares with 25%, who suggest they have sufficient income to meet these needs (22 out of 88).

Table 30: Sufficiency of income for basic needs in the household by community							
Municipality	Concepción South	Gualala	Las Vegas	Santa Barbara	Santa Cruz de Yojoa	Total	Percentage Total (%)
No	12	12	13	13	16	66	75
Yes	3	5	3	7	4	22	25
Total	15	17	16	20	20	88	100
Percentage Total (%)	17	19	18	23	23	100	

N = 88

Eighty-one percent (71 out of 88) of the respondents indicated that they do not have sufficient funds to save, while 19% (17 out of 88) showed they can save. According to the people surveyed, they can't save due to a lack of funds since their salaries or income from their economic activities can most meet their basic needs.

Table 31: Sufficiency of income to save for future emergencies in the household by community							
Municipality	Concepción South	Gualala	Las Vegas	Santa Barbara	Santa Cruz de Yojoa	Total	Percentage Total (%)
No	11	13	15	14	18	71	81
Yes	4	4	1	6	2	17	19
Total	15	17	16	20	20	88	100
Percentage Total (%)	17	19	18	23	23	100	

N = 88

5.7.1. Livelihoods in the region

Among livelihoods, in addition to agriculture, results were obtained for trade, remittances, entrepreneurship, work or employment, and fishing.

Of the people who indicated they were engaged in commercial activities, both were women (100% of 2). The type of commerce they engage in is based on having their sales of necessities, such as food, canned goods, sausages, etc. This type of business is known as "pulperías" in the region. One of them knew that the approximate monthly income from this activity is between 10,000 and 15,000 lempiras.

Of the people who mentioned receiving remittances (7% of 88) as a source of household income, they indicated that it is mainly their sons and daughters who send money for economic support and husbands who contribute to their spouse's finances. One person also mentioned that her cousin and son-in-law were the ones who sent these remittances. According to the people surveyed, the approximate income from these remittances is less than 5,000 lempiras per month (50% of 6 responses), and only one person indicated that they receive between 10,000 and 15,000 lempiras per remittance.

Of the respondents who indicated they had an enterprise, four stated they had a pulpería. Their income was less than 5,000 lempiras per month. However, most of them said it was an approximate amount at the time of the survey since they usually do not track how much money comes in and how much goes out. Instead, they invest the money from sales or use it for the household daily.

Of the people who responded to the question, 96% (29 out of 30) answered that they had a job. From this group, 90% (26 out of 29) responded that they did not have a formal job, meaning they did not have access to benefits and protections by law. Similarly, 28% (8 out of 29) indicated that they work in

agriculture, 10% (3 out of 29) in a business, and 62% (18 out of 29) in other activities. Of the other employment activities, 83% (15 out of 18) indicated masonry, construction company, guardian, internet cable company employee, mechanical workshop, domestic work (washing, ironing, house cleaning), chicken processing plant, and as a teacher in an educational institution.

Of those who indicated that someone in their household had a job, 66% (19 of 29) mentioned that they earned less than 5,000 lempiras per month. Most of them work in the agricultural sector, doing day labor. Their income is 1,200 lempiras per week. However, the people surveyed indicated that when there is no employment due to heavy rains or some other factor (mainly climate), they do not get that income, affecting them economically.

Table 32: Wages for employment or work in the household by community

Municipality	Concepción South	Gualala	Las Vegas	Santa Barbara	Santa Cruz de Yojoa	Total	Percentage Total (%)
Less than 5,000 lempiras	2	5	5	4	3	19	66
From 5,000 to 10,000 lempiras	1	2	3	1	1	8	28
From 10,000 to 15,000 lempiras	0	0	0	1	0	1	3
More than 15,000 lempiras	0	0	0	0	1	1	3
Total	3	7	8	6	5	29	100
Percentage Total (%)	10	24	28	21	17	100	

N = 29

Most (52% of 29) of the working people started working before 18. According to the respondents, this was because they did not have enough money at home, so they had to start working very young to support the family.

Table 33: Age at start of employment or work in the home by community

Municipality	Concepción South	Gualala	Las Vegas	Santa Barbara	Santa Cruz de Yojoa	Total	Percentage Total (%)
From before the age of 18	1	3	5	3	3	15	52
From the age of 18	1	3	2	1	2	9	31
Another	1	1	1	2	0	5	17
Total	3	7	8	6	5	29	100
Percentage Total (%)	10	24	28	21	17	100	

N = 29

As for the people who carry out fishing activities, nine responses were obtained (10% of 88). Of these, 77% (7 out of 9) own a boat for their fishing activities. Of these, 43% (3 out of 7) plan to pass on their boat to their sons, but none mentioned passing it on to their daughters. However, the other 57% (4 out of 7) indicated that the boat cannot be passed down since its useful life span is approximately two years.

The main fish species caught were Tilapia and bass, and the others mentioned were Rayado, Guapote, Dormilón, Carpa, and Galaxia.

Table 34: Species of fish caught in the household by community

Municipality	Las Vegas	Santa Cruz de Yojoa	Total	Percentage Total (%)
Fishery - Bagre	0	1	1	5
Fishery - Bass	0	5	5	25
Fishery - Other	0	6	6	30
Fishery - Tilapia	1	7	8	40
Total	1	19	20	100
Percentage Total (%)	5	95	100	

N = 9

Regarding the sale of fish, survey participants mentioned that they sell fish daily but three times a week. People obtain a permit to fish, which only allows them to catch 100 pounds per week, three days per week. If, for example, the person catches 100 pounds in one day, they are not allowed to go fishing the other two days. Whatever they sell, a single buyer buys all the fish species together. One person reported that he gets approximately 8,000 lempiras of income. Tilapia and Bass are sold by the pound, tilapia is 25 lempiras per pound, and bass, 50 lempiras per pound. All participants indicated that they use the fish to sell and for consumption. However, one participant suggested that sometimes he prefers not to sell Tilapia because it is the best to consume.

5.8. Agriculture

5.8.1. Land

Out of 94% (43 out of 47) of people who carry out agricultural work as a source of income, 47 multiple-choice answers were obtained regarding access to land for people who carry out economic activities in agriculture. The majority, 66% (31 out of 47), have access to their land without debt. The other most frequently mentioned type of land was leased or rented land, with 15% (7 out of 47). Access to different kinds of land was 11% (5 out of 47), while borrowed land was mentioned by 6% (3 out of 47).

The people who mentioned not having access to land for farming or other activities indicated that one person owns family land (1 out of 6), another mentioned having access to land through agrarian reform (1 out of 6), and others who work in agriculture, but do not own land, reported working as day laborers (3 out of 6).

Table 35: Household landholding tenure by community

Municipality	Concepción Sur	Gualala	Las Vegas	Santa Barbara	Santa Cruz de Yojoa	Total	Percentage Total (%)
Agricultural - None	1	0	0	0	0	1	2
Agricultural - Borrowed land	0	1	0	1	1	3	6
Agricultural - Other land type	1	2	0	0	2	5	11
Agricultural - Leased or rented land	1	1	2	2	1	7	15
Agricultural - Own land without debt	8	5	9	8	1	31	66
Total	11	9	11	11	5	47	100

Percentage Total (%)	23	19	23	23	11	100	

N = 88

78% (38 of 46) of the people working in agriculture indicated having an overall average of 2.3 apples of land (1.4 HA), with 0.25 apples being the minimum and 12 apples being the maximum amount of land reported.

Of those who own their land without debt (35% of 88), 90% (28 responses out of 31) plan to inherit it. Of those who plan to inherit their land, 18% (5 out of 18) plan to pass it on to their daughters, 46% (13 out of 28) to their sons.

Two people (a man and a woman) indicated that the land was in the name of her parents, who decided to inherit it from her, so they claim that they now own it (7% of 28). Another person (a woman) indicated that the land is in her grandfather's name and that she thinks it will be inherited by her father, i.e., the grandfather's male child. 25% (7 out of 28) indicated that the property would be in the name of "other," of which 57% (2 men and two women) plan to inherit to their sons and daughters equally, one (man) who mentioned that he would inherit only to his sons because he has no female daughters. In contrast, one woman said she did not know to whom, as her husband made the decision.

5.8.2. Crops

Of the 91% (42 out of 46) of people who carry out agricultural work as a source of income, 100% (43 out of 43) are agricultural work, such as vegetables, fruit, basic grains, etc. Of these 92 multiple-choice responses, where the crop is mainly produced in households is coffee (28% of 88 people), followed by corn (27% of 88), beans (23% of 88), and bananas (13% of 88). Also mentioned in percentage (<5%, each) were bananas, vegetables, and other crops.

Among those who responded with another crop, masapan (20% of 5), taro (20% of 5), ginger (40% of 5) and avocado (20% of 5) were mentioned.

Table 36: Crops produced by community

Municipality	Concepción South	Gualala	Las Vegas	Santa Barbara	Santa Cruz de Yojoa	Total	Percentage Total (%)
Production - Vegetables	0	0	2	0	0	2	2
Production - Other	0	2	0	1	2	5	5
Production - Banana	2	2	1	0	0	5	5
Production - Bananas	5	2	2	1	1	11	12
Production - Beans	4	2	8	6	0	20	22
Production - Corn	5	2	10	6	1	24	26
Production - Coffee	8	5	5	6	1	25	27
Total	24	15	28	20	5	92	100
Percentage Total (%)	26	16	30	22	5	100	

N = 42

Fifty-six percent of the people who cultivate (24 of 43) plant corn. Of these, 29 multiple-choice responses were obtained regarding using the crop. 100% (24 out of 24) of the households indicated that they use the crop for family consumption, and only 17% (4 out of 24) sell their product for the frequency of sale of the maize crop. Fifty percent (2 out of 4) indicated that it is twice a year, obtaining an average income of 3,750 lempiras, with a minimum of 2,500 and a maximum of 5,000 lempiras per sale. 25% (1 out of 4) indicated that it was weekly with an income of 3,500 lempiras, and the remaining 25% (1 out of 4) stated that it was annual (1 out of 4) with an income of 100,000 lempiras.

Forty-seven percent of the people who cultivate (20 out of 43) grow beans. Of these, 22 multiple-choice answers were obtained regarding the use of the crop. Ninety-five percent (19 out of 20) of the households use this crop for consumption, and only 15% use this crop for retail marketing. Of those who sell their product, 67% (2 out of 3) sell it once a year with an income of 100,000 lempiras (1 response out of 2), and 33% (1 out of 3) sell it twice a year.

Twenty-six percent of the farmers (11 out of 43) produced bananas. 13 multiple-choice answers indicated the uses of the crop. The majority, 77% (10 of 13), use the banana crop only for household consumption. Fifteen percent (2 out of 13) were engaged in retail marketing, and only one person (8% out of 13) was involved in wholesale marketing. Of the people who sell bananas, two (66% of 3) mentioned that their sale is annual, while one (34% of 3) said they sell to landowners. Of these, only one person knew how much income they obtained from the annual sale, 30,000 lempiras.

12% of respondents cultivate plantain (5 out of 43). The majority (67% of 6) said it was for home consumption only. Only 33% (2 people) indicated that they commercialized the crop. This trade was carried out twice yearly and monthly (1 person, respectively). As for the income from this semi-annual sale, the person indicated they obtained 10,000 lempiras.

The people who grow vegetables (2 out of 43) only plant them for consumption. One of the people indicated that the size of the vegetables they obtain is small, so they are not of good quality to sell due to the climate of their community.

Of the people who produce other crops, one person reported that the marzipan crop is for export, as it is in alliance with an organization. The woman who produces taro indicated that one person comes to buy all the products.

5.8.3. Livestock

None of the farmers reported that they were engaged in livestock farming for commercial purposes; some people during the survey indicated that they have backyard chickens, which they use for family consumption, but not on a large scale.

Annex 5: Environmental and Social Management Plan

1. Introduction

This Environmental and Social Management Plan (ESMP) has been prepared in compliance with the Environmental and Social Policy (ESP) of the Adaptation Fund (AF), which ensures that projects and programs it supports promote positive environmental and social benefits and mitigate or avoid adverse environmental and social risks and impacts. CASM, as the implementing entity of the project, is responsible for the leadership of the ESMP, for preparing the executing entities (CIAT and SERNA) to implement and monitor the ESMP and uphold the ESP of the AF.

The proposed project, “Constructing Resilience Together to Face Climate Change and Variability in Western Honduras” includes Partially Unidentified Sub Projects (USPs), as there are undefined aspects of the development of the climate smart agriculture activities and funding mechanisms that will be developed during the course of the project. According to the ESP, the IE (CASM) is accountable for all environmental and social damage caused by a project it implements.

2. Social and Environmental Principles

The Adaptation Fund's Environmental and Social Policy (ESP) outlines 15 environmental and social principles that form the basis for identifying and managing environmental and social risks. This study determined which of the 15 principles are relevant to the project and the associated risks. Following the guidelines of the ESP, the appropriate mitigation and management measures will be integrated into the project plan to reduce risks and impacts. The 15 principles are:

1. Compliance with the Law
2. Access and Equity
3. Marginalized and Vulnerable Groups
4. Human Rights
5. Gender Equality and Women's Empowerment
6. Core Labor Rights
7. Indigenous Peoples
8. Involuntary Resettlement
9. Protection of Natural Habitats
10. Conservation of Biological Diversity
11. Climate Change
12. Pollution Prevention and Resource Efficiency
13. Public Health
14. Physical and Cultural Heritage
15. Lands and Soil Conservation

During the preparation of the concept note, an initial environmental and social risk assessment was completed. In response to the Adaptation Fund's feedback, a more detailed evaluation was completed during the entire project preparation. The results are shared in the following sections.

3. Social and Environmental Risk Assessment

Methods

Focus groups were organized with women and men from the community. We collected various data types during the focus groups through interactive group activities, individual activities, and group discussions. Surveys were conducted with community members using KoboToolbox. Different data types were collected during the survey using multiple-choice and open-ended questions. More details about these methods can be found in Annex 1 (Gender Assessment) or Annex 4 (Socioeconomic Study).

Based on the review of the provided documents, here is a summary of the environmental and social risk assessment results for the climate change adaptation and resilience project in rural Honduras, focusing on the 15 principles mentioned in the documents.

Field Research Results

Principle 1: Compliance with legislation

The legislation in Honduras will be considered for the project. The project will comply with national laws and international treaties, ensuring adherence to environmental, labor, and human rights standards. Relevant national laws include those on environmental protection, labor, and the rights of marginalized groups. The applicable laws and international conventions are summarized.

Conservation and Biodiversity Laws

Forestry, Protected Areas, and Wildlife Law Decree 98- 2007[132] The law addresses the management, protection, restoration, exploitation, conservation, and management of forest ecosystems, protected areas, and wildlife, promoting sustainable development and taking into account Honduras's social, economic, and cultural interests.

Law of Fisheries and Aquaculture Decree No 106-2015[133]: The Fisheries and Aquaculture Law aims to establish a regulatory framework to order, protect, and promote the country's hydrobiological resources related to fisheries and aquaculture. It generates the bases to order hydrobiological resources in a planned and regulated manner, identifying the fishing and aquaculture resources in the national territory and in other areas where the state has fishing rights with adherence to respect for the environment in fishing and aquaculture activities.

General Water Law Decree No. 181/2009[134]: The General Water Law aims to establish principles and regulations for properly managing water, seeking to protect, conserve, enhance, and exploit water resources at the national level. The State administers the use, exploitation, and development of water and related ecosystems through the Water Authority. Principles such as the priority of human consumption, equitable access to water, citizen participation in its management, and remuneration for water-related services are established.

Forestry, Protected Areas and Wildlife Law. Decree No 98/2007[135]: This decree creates the National Institute for Forest Conservation and Development, Protected Areas and Wildlife (ICF). It includes conserving forest resources and creating protected areas, including procedures for their creation, management, and administration. This law contains wildlife protection and community participation, recognizing the fundamental role of local communities in the conservation and management of natural resources, promoting their participation in decision-making, and implementing conservation actions.

In addition to national laws, Honduras has signed international treaties concerning the conservation of the environment and biodiversity.

- The Convention on Wetlands (RAMSAR) is a key instrument for the conservation and sustainable use of wetlands worldwide. It establishes a legal and international cooperation framework for their protection and management.
- Convention on Biological Diversity: Aims to promote measures leading to a sustainable future.
- Paris Agreement: It is a treaty on climate change that seeks to limit global warming.
- United Nations Convention to Combat Desertification
- United Nations Framework Convention on Climate Change (UNFCCC)

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132 FAOLEX DATABASE (2008) Forestry, Protected Areas and Wildlife Law Decree 98- 2007

133 DIGEPESCA (2017) Law on Fisheries and Aquaculture Decree No 106-2015.

134 FAOLEX DATABASE (2009) General Water Law Decree No. 181/2009

135 FAOLEX DATABASE (2008) Forestry, Protected Areas and Wildlife Law

- Convention on the Elimination of All Forms of Discrimination Against Women, CEDAW
- Convention on the Rights of the Child
- Protocol to Prevent, Suppress, and Punish Trafficking in Persons, Especially Women and Children
- International Convention on the Elimination of All Forms of Racial Discrimination

Laws to protect women's rights

Law for Equal Opportunities for Women Decree No. 34/2000[136]: This comprehensive law seeks to promote equal opportunities for women in Honduras, eliminate gender discrimination, and fully exercise their human rights in all spheres of society. It includes the promotion of equal opportunities, elimination of discrimination, protection of women's rights, empowerment of women, and creation of protection mechanisms.

Law against Domestic Violence[137]: This law seeks to prevent, punish, and eradicate domestic and gender violence in the country. Some critical aspects of this law include the protection of victims (including women, children, adolescents, and vulnerable groups), prevention and awareness, comprehensive care for victims, punishment of aggressors, and inter-institutional coordination.

Laws on citizen and community participation in environmental projects

General Environmental Law Decree 104/93[138]: The Law recognizes the importance of protecting, conserving, and sustaining the environment and natural resources. It establishes that both the Government and the Municipalities must promote the rational use of these resources to preserve them and obtain economic benefits. This legislation provides for preparing Environmental Impact Studies to prevent possible negative effects on the environment. Its objectives include establishing an adequate framework for agricultural, industrial, and forestry activities compatible with environmental preservation, maintaining the ecological balance, defining the environmental impact of public or private projects, encouraging citizen participation in environmental protection, promoting environmental education, and improving the quality of life of the inhabitants.

Regulation of the National System of Environmental Impact Assessment (SINEIA) Agreement No 8/2015[139]—Organize, coordinate, and regulate the system, ensure that plans, policies, programs, and projects are evaluated to avoid environmental damage, and promote public participation. Generate the procedures to carry out environmental impact studies and follow-up and evaluation.

Labor Laws

Labor Code[140]: The Honduran Labor Code recognizes and protects several fundamental rights of workers. Some of these rights include the: right to work, right to equality and non-discrimination, right to fair and equitable working conditions, right to unionization and collective bargaining, right to social protection, right to protection against unjustified dismissal. Any project, company, or organization in Honduras must comply with the regulations of the Labor Code.

General Regulation of Preventive Measures for Occupational Accidents and Occupational Diseases: establishes measures to prevent and protect workers against occupational accidents and diseases. It requires the identification of risks, a prevention plan, training on prevention measures, use of personal protective equipment, medical surveillance, accident investigation, occupational health and safety committees, and the existence of registration and notification of accidents and illnesses.

[136] FAOLEX DATABASE (2000) Women's Equal Opportunity Act(2000)
[137] Organization of American States (2006). Law against Domestic Violence
[138] FAOLEX DATABASE (1993) General Environment Law
[139] FAOLEX DATABASE (2015) Regulation of the National System of Environmental Impact Assessment (SINEIA).
[140] Secretaria de Trabajo y Previsión Social (1993) Labor Code

Laws for the protection of vulnerable groups

Childhood and Adolescence Code. Decree 73/1996[141]: This comprehensive legislation establishes the country's rights and protection of children and adolescents. Some key points of the code are fundamental rights, special protection, a comprehensive protection system, participation, and opinion.

Law on Equity and Integral Development for Persons with Disabilities Decree 160/2005[142]: The Legislation seeks to ensure that persons with disabilities can fully use their land to promote and provide equity in the person's integral development within society.

Laws regarding Indigenous peoples

Article 346 of the Honduran Constitution states, "It is the duty of the State to dictate measures for the protection of the country's existing lands and forests, especially the lands and forests where they are settled."

ILO Convention 169 concerning Indigenous and Tribal Peoples in Independent Countries[143]: Honduras ratified this international convention, which guarantees the rights of indigenous peoples to land, territory, prior consultation, and free consent, as well as the preservation of their traditions and customs.

Plan for Indigenous and Afro-Honduran Peoples (PPIAH)[144]: The plan seeks to respect the rights of indigenous peoples' rights, promote their social rights, and generate conditions that help reduce the socioeconomic differences between these peoples and the general population.

Principle 1: Risk Assessment
There is a low risk due to strong adherence to legal frameworks and regular stakeholder consultations. There is a minimal risk that USPs do not comply with the law, however this will be regularly monitored as part of the USP monitoring.

Principle 2: Access and equity

The project will be highly participatory in the community and should ensure that inequality and inequity do not deepen. Equitable access to services will be facilitated, and for any historically marginalized group or group that has traditionally experienced violence, this will be an opportunity to include and empower them. CASM and project partners consulted with stakeholders during project design, including historically marginalized people.

CASM has numerous mechanisms to ensure fair and equitable access to the project's activities and benefits, such as:

- The institutional code of conduct guides employees and collaborators in avoiding conflicts of interest and upholding equal and fair treatment. Employees are trained annually on the code of conduct.
- CASM has a policy for accountability to affected populations that ensures fair and representative participation in projects and activities, mainly including vulnerable or marginalized groups.

[141] Organization of American States (1996) Code of childhood and adolescence.
[142] SITEAL (2005) Law for Equity and Integral Development for Persons with Disabilities Decree
[143] International Labour Organization(2014) ILO Convention 169 concerning Indigenous and Tribal Peoples in Independent Countries.
[144] UNESCO Plan for Indigenous and Afro-Honduran Peoples (PPIAH)

In the framework and process for selecting USPs, equity and access will be included in decision making, to ensure equitable access to USP funding for CSA. Additionally, USP participants will receive training on the CASM Code of Conduct.

Principle 2: Risk Assessment
The risk is assessed as low considering the extensive experience of CASM in participatory engagement and social inclusion and the policies that will guide participation.

Principle 3: Marginalized and vulnerable groups

Vulnerability is a complex process that amplifies the risk of harm to individuals and communities in the face of internal or external changes[145]. In Honduras, natural disasters, such as prolonged droughts or floods, increase cases of malnutrition, especially among those who already suffer from chronic malnutrition or poverty, increasing their vulnerability. The vulnerable groups identified during the assessment include:

- Children and Adolescents (youth)
- Women
- Elderly
- Indigenous Peoples
- People with disabilities
- Low-income families
- People from the LGBTQIA+ community
- People with physical or mental health challenges

Based on the survey results (88 respondents), different groups of vulnerable people were identified. From the perspective of the participants, the groups of people who are usually excluded from community meetings are people with disabilities (44%), young people (36%), and people with physical or mental health problems (22%). Also mentioned were people living in remote areas (19%), low-income families (13%), people from the LGBTQIA+ community (4%), homeless people (3%), and people with language barriers (2%).

Children and Adolescents (youth)

Children and adolescents represent almost 42% of the Honduran population. They are the most vulnerable to the impact of climate change, especially in rural areas. Extreme weather conditions such as droughts, hurricanes, and floods can cause severe problems for this group, requiring additional protection from their families and the State.

In addition, approximately 30.9% of the population resides in areas vulnerable to climate change, where 62% of the territory and 92% of the total population are exposed to two or more natural hazards. About 100,000 people are affected yearly, and about 650 people die from storms, floods, and landslides. People in these vulnerable areas are often aware of the risks. Still, lack of access to credit and high land prices limits their housing and work options, leading a significant part of the population to live in risky areas where disaster risk reduction infrastructure is deficient.

The population living in conditions of poverty and inequality faces the most significant risks from natural disasters, which can increase levels of violence and insecurity. Hydrometeorological events are the most destructive and recurrent in the country. For Santa Barbara and Cortés, UNICEF Honduras estimates the

[145] CLACSO (2020). Vulnerability, poverty and social policies. Abanico de sentidos en América Latina, Europa y China. Buenos Aires, Argentina.

percentage of areas at risk due to the effects of climate change at the departmental level. Six indicators are broken down below:

Women

Women in the Central American region show outstanding leadership and participation in forming civil society organizations focused on local actions to address environmental problems, such as biodiversity conservation, forest management, recycling, and water management, all crucial in the fight against climate change. In addition to their role in responding to natural disasters, women demonstrate strengths in areas such as agricultural diversification, food security, knowledge transmission, and decision-making at the family and community levels.

Despite these strengths, Central American women face disadvantages in risk situations due to their limited access to and control over land and natural resources. Although they assume traditional unpaid roles in human reproduction, household management, and family care, their organizational experience in responding immediately to climatic disasters such as floods or hurricanes is remarkable.

As part of climate change, drought and erratic rainfall impose an additional burden on women, who must work harder to provide food, water, and energy for their households. However, they also suffer differential impacts due to specific illnesses, such as complications during pregnancy. In addition, there are concerns about the risk of violence and aggression when women are forced to stay in shelters during natural disasters, as well as psychological effects that need to be urgently addressed. Depending on the environment, whether rural or urban, due to climatic zones and ecosystems, women may face differentiated health, and infrastructure needs due to the consequences of climate change.

Elderly

In Honduras, the elderly face increased vulnerability due to high levels of poverty. Additionally, migration means many in this group are responsible for their grandchildren. Older adults are the part of the population most involved in agricultural activities.

Indigenous Peoples

The ILO identifies six distinctive characteristics of Indigenous Peoples and Afro-descendant Peoples that make them particularly vulnerable to climate policies and impacts. Thus, these unique characteristics make Indigenous peoples especially susceptible to climate change and require special attention in adaptation and mitigation policies and strategies. However, for these reasons, their economic dependence on natural resources and their traditional knowledge makes them powerful agents of change in climate action. Their role is fundamental for environmental conservation and mitigation of the effects of climate change.

In Honduras, indigenous peoples are immersed in a situation of poverty and lack of opportunities. It is important to note that Indigenous children are especially vulnerable to this reality, as they face difficulties related to a lack of access to basic services, health care, and education. In addition, historical inequalities persist in income distribution, with the wealthiest 40% of the population accounting for most of the country's economic resources.

In addition, public policy limitations regarding decent employment, access to economic resources, and labor productivity contribute to high rates of underemployment and precarious labor. On the other hand, child malnutrition and other forms of social exclusion are more frequent in regions inhabited by the indigenous population, as is the case of the western departments where the Lenca people live.

Despite all of the above, vulnerability can be reduced by strengthening the resilience of at-risk communities and adopting early warning and information dissemination systems.

People from the LGBTQIA+ community

LGBTI people in Honduras continue to face stigmatization, discrimination, and violence because of their sexual orientation and gender identity. In 2022, 43 murders and two disappearances of LGBTI people were reported, but only eight of these cases are under criminal investigation. There are still pending actions, such as developing a procedure for recognizing gender identity.

People with disabilities, physical or mental health challenges

People with disabilities and other health challenges are often marginalized or excluded from aspects of society. Climate change can exacerbate this marginalization, and in the event of a disaster, services may not be accessible.

Low-income families

People in low-income families are more vulnerable to climate change as they likely do not have the resources to increase their resilience or to survive extreme disasters like droughts, floods, and hurricanes. Low-income families may rely more on natural resources for their livelihoods or to meet their basic needs (e.g., collecting firewood), so a changing climate may have a stronger impact.

Principle 3: Risk Assessment
For this project, the risk of adverse impacts on vulnerable groups is low since families from marginalized groups such as women, youth, and older adults have been consulted and will participate in and be part of the decision-making process. Indigenous peoples participated in both consultations done by the project, and CASM has a long history of working with IPs in the region. Likewise, their access to services and participation in the project will be prioritized. In addition, women's participation will be promoted, strengthening their capacity to implement effective adaptation practices. CASM has institutional policies consistent with the AF Environmental and Social Policy that establish how to serve these groups and not deepen inequalities. These are the Child Protection Policy, Gender Equity Policy, and Policy for the Protection of Vulnerable Adults. In addition, the project will sensitize the community about the need to serve these groups to understand and analyze the challenges they experience in accessing specific services, such as climate information, financial products, supplies, etc. The project will work through a combination of household surveys, focus group discussions, and community consultations at general meetings to understand the needs of these groups.

Principle 4: Human rights

There are no current open procedures for the Office in Honduras of the United Nations High Commissioner for Human Rights. However, the last special consultations procedures highlighted the following human rights concerns: children's rights in the digital environment, children's right to privacy, torture, global water crisis, and human rights, killings of human rights defenders, rape as a grave and systematic human rights violation and gender-based violence against women, children's rights, COVID-19 and sustainable development, and protecting human rights in peaceful protests in crisis contexts.

A preliminary analysis asserts that the proposed project does not infringe upon any human rights pillar and aligns with the Universal Declaration of Human Rights principles and other international instruments. Honduras, as a signatory to the Universal Declaration of Human Rights, incorporates its fundamental tenets into the national Constitution. In the implementation phase, rigorous monitoring mechanisms will ensure adherence to human rights standards and the fulfillment of international obligations, thereby mitigating potential adverse impacts on the country's human rights landscape.

The project addresses environmental and socioeconomic challenges and demonstrates a commitment to human rights and social inclusivity. The participatory approach, consideration of vulnerable groups, and emphasis on gender equality contribute to a comprehensive, rights-based strategy for sustainable development in Honduras's Santa Barbara Mountain region and the Yojoa Lake sub-watershed area.

Throughout the project's identification and formulation, human rights issues, particularly the rights of vulnerable groups, have been considered in consultations with stakeholders. The selection criteria for families to benefit from the project consider socioeconomic status, productive conditions, vulnerability conditions, and environmental conditions, focusing on single farming parents, socially vulnerable households, indigenous groups, and climate-related events. This targeted approach reflects a commitment to inclusivity and the recognition of the specific challenges marginalized groups face.

Principle 4: Risk Assessment
This risk is low or null since analysis has been carried out, and it is preliminarily determined that this project does not violate any pillar of human rights under any circumstances and is consistent with the Universal Declaration of Human Rights and other international instruments. Honduras is a signatory to the Universal Declaration of Human Rights, and the most fundamental aspects are reiterated in the Constitution of the Republic. However, in the universal periodic reviews, broad recommendations are established to improve the application of the SDGs and other aspects of the country's human rights system. At the request of the Honduran State, there is an office of the United Nations High Commissioner for Human Rights. However, human rights monitoring will be carried out in the implementation process to ensure compliance.

Principle 5: Gender Equality and Women's Empowerment

See the gender study for further details and a complete assessment.

The consultation workshops and interviews conducted as part of the proposal analysis on climate change and related components revealed crucial insights regarding gender and women's experiences. The findings underscored the disproportionate impact of climate risks on women and girls, specifically in terms of access to water, food, and increased workload. The data indicated that women bear a heavier burden when it comes to the consequences of climate change. The consultations emphasized the importance of implementing water systems to alleviate the increased workload for women and girls. They highlighted the necessity of educating communities about climate risks and adaptation strategies.

Some specific risks regarding gender equality arose during the field research. These are:

- There is a risk that project activities will increase women’s burden of unpaid work. Women already perform more unpaid work in the household, particularly in caregiving and domestic tasks, which limits their participation in paid employment and project activities. The project should be sensitive to the time availability of women and design activities with women to minimize increasing their burden of unpaid work.

- Traditional gender roles persist among community members, limiting women's opportunities and reinforcing stereotypes about what men and women can and cannot do. These roles can hinder the project's ability to effectively engage women. Additionally, there is a risk that project staff may reinforce gender stereotypes and gender roles. To address this, the project team will be trained in gender issues in the region and gender-sensitive approaches to leadership and project management.

- Women have less decision-making authority about agricultural activities than men and are generally less involved in agricultural activities, so there is a risk that they will be excluded from project activities related to agriculture. Nonetheless, they are highly vulnerable to climate change, and the impacts of agricultural production affect household dynamics and food security, so they should not be excluded from decision-making. To mitigate this, women and men will be invited to participate in agricultural workshops. Special efforts will be made to facilitate planning and decision-making between spouses or other key family members, not just those responsible for the day-to-day agricultural production.

Principle 5: Risk Assessment
This principle is assessed as medium risk because the project will be implemented in the context of gender inequality, harmful gender norms, and harmful stereotypes for both men and women—the gender action plan guides mitigating the associated risks.

Principle 6: Fundamental labor rights.

Honduras is a signatory to the eight ILO fundamental rights conventions. Additionally, they are signatories to three of four governance conventions and 15 of 177 technical conventions. Of the conventions ratified by Honduras, all are in vigor, and none have been denounced in the last year. CASM will respect national and international labor laws and ensure partner organizations comply with the legislation. The project will not hire minors and will ensure that none of the executing organizations with which they coordinate. Likewise, in the communities, we will seek to raise awareness about the worst forms of child labor.

In the surveyed households, employment or work is the second most common source of income (34% of them). Many have jobs or work in the agricultural sector, performing tasks such as coffee cutting, activities in avocado farms, or crop maintenance work. However, other work sectors were also mentioned, such as masonry, construction company, guardian, internet cable company employee, mechanical workshop, domestic work (washing, ironing, house cleaning), chicken processing plant, and as a teacher in an educational institution.

Of the people reporting having jobs, 90% (26/29) indicated the job is not formal, i.e., it does not have benefits according to the law. The majority of people (66%) who have employment reported earning less than 5,000 lempiras (200 USD) per month. Numerous people surveyed indicated that when there are heavy rains or other factors (mainly climate), they cannot work and do not get that income.

The survey collected data about the participation of children under 12 and adolescents between 12 and 18 in various agricultural activities. While limited, there was evidence that children participated in banana production and other crops. Adolescents between 12 and 18 participated in banana, coffee, maize, beans, and other crop production. A household or family approach to farming is common in the zone. Still, it is important to ensure no increase in child labor by implementing new, climate-smart agriculture practices.

The USPs for implementing CSA plans and initiatives will need to be assessed and monitored for upholding labor rights in the proposed work.

Principle 6: Risk Assessment
The risk of breaking the ILO's fundamental labor rights is low. Nonetheless, due to the sensitivity of this matter and the possible harmful impacts, the project will take various mitigation measures to ensure compliance if there is non-compliance. First, project team members from all organizations will be trained on the fundamental labor rights by CASM. Second, the operations committee will monitor project organizations and community rights. Finally, during the training on climate-smart agriculture, a module will be developed and incorporated to familiarize farmers with the projects about their labor rights and the harmful impacts of forced labor and child labor.

Principle 7: Indigenous peoples

The highest percentage of people in the project area, according to the survey, identify themselves as Mestizo (39% of 88); likewise, there is a high number of people who do not know their ethnicity, do not know the term or do not identify with any of them (27%). Although in smaller percentages, people mentioned identifying with the ethnicities of the Lenca (10%), Misquito, and Maya (1%, each). In addition, 3% of people indicated that they are Indigenous People but did not express more detail.

The Lenca People, an indigenous community, reside within the project area. As depicted in Figure 1 their ancestral lands are delineated in purple and overlap with the boundaries of the project site.

Figure 1: Indigeous territories of Honduras

In Honduras, indigenous peoples face poverty and lack of opportunities. It is important to note that Indigenous children are especially vulnerable to this reality, as they face difficulties related to a lack of access to basic services, health care, and education. In addition, historical inequalities persist in income distribution, with the wealthiest 40% of the population having the largest share of the country's economic resources. In addition, there are limitations in public policy regarding decent employment, access to financial resources, and labor productivity, which contribute to high rates of underemployment and precarious labor. On the other hand, child malnutrition and other forms of social exclusion are more frequent in regions inhabited by the indigenous population, as is the case of the western departments where the Lenca people live[146].

The International Labor Organization (ILO) identifies six distinctive characteristics that make Indigenous Peoples particularly vulnerable to the policies and impacts of climate change: extreme poverty, dependence on natural resources, geographic vulnerability, forced migration, gender inequality, and lack of recognition and participation.[147] These unique characteristics mean that Indigenous peoples require special attention in adaptation and mitigation policies and strategies. However, for precisely these reasons, their economic dependence on natural resources and their traditional knowledge makes them powerful agents of change in climate action. Their role is fundamental for environmental conservation and mitigation of the effects of climate change[148].

For CSA workshops and the development of plans and initiatives for USPs, Indigenous Peoples will be invited and encouraged to participate. The selection framework for USPs will include the inclusion of Indigenous Peoples.

[146] OHCHR-Regional Office for Central America (2010). Diagnosis on the human rights situation of indigenous peoples in Central America . Honduras.
[147] ILO (2018). Indigenous peoples and climate change: From victims to agents of change through decent work . Geneva.
[148] ILO (2018). Indigenous peoples and climate change: From victims to agents of change through decent work . Geneva.

Principle 7: Risk Assessment
This category is low risk. Indigenous peoples, including the Lencas, are present in the proposed areas of intervention. The project's participatory approach will ensure their inclusion. They participated in the initial consultations and will continue to be involved in each project design and implementation process.

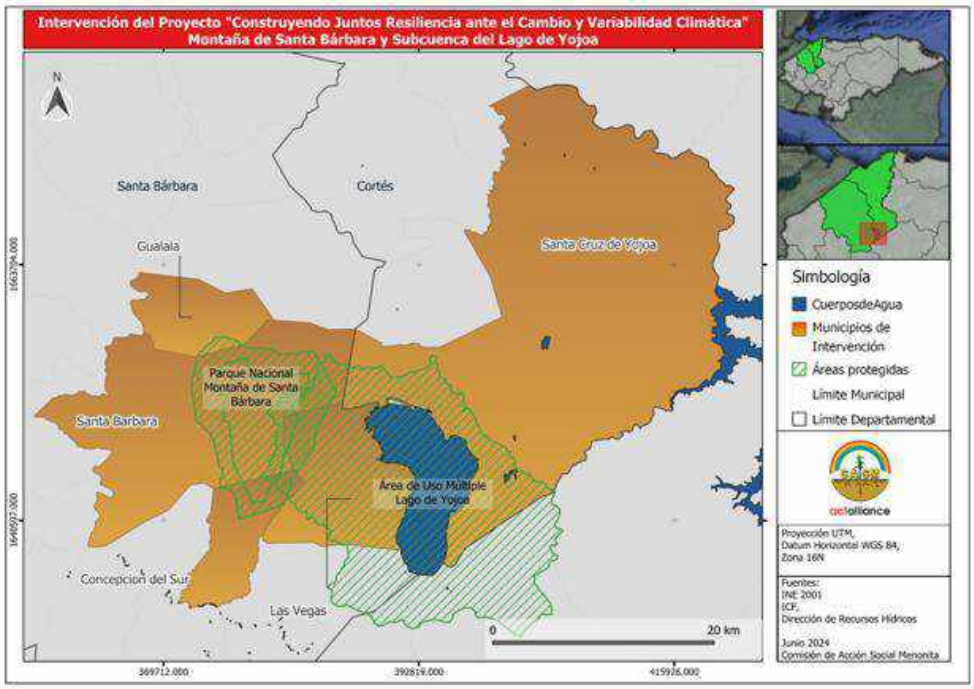
Principle 8: Involuntary Resettlement

This project does not apply to the risk. The risk is null because the project will not lead to resettlement. On the contrary, the project will ensure that the families already settled in these communities learn new production techniques, which, combined with their ancestral knowledge, will ensure resilient and adaptive mechanisms to stay in their territory despite the changing and variable climate.

Principle 9: Protection of natural habitats.

There are two national parks in the project area, as seen in the figure below. Project communities surround the park but are not within the park; thus, no project activities will be implemented directly in these natural habitats. If a person selected for USPs plans to work on land adjacent to these natural areas, an assessment will be made to determine if the possible interventions could negatively impact the nearby habitat. All USPs will be assessed to make sure no negative impact is possible for the protected areas. As climate-smart agriculture practices are designed for minimal negative or positive environmental impacts, no adverse impacts are expected. Still, due to the sensitive nature of protecting these critical habitats, the assessment will be carried out by environmental specialists within the project team to ensure that no planned activities cause harm.

Figure 2: Project area in relation to national parks



Principle 9: Risk Assessment
The risk is low. The project will likely generate positive impacts by promoting sustainable land use and conservation practices.

Principle 10: Conservation of biological diversity.

Honduras has high biodiversity and a wide range of ecosystems. It is part of the Mesoamerican biodiversity hotspot, and in Honduras alone, there are approximately 8,000 known species of plants, 276 reptiles, 153 amphibians, 771 birds, and 220 species of mammals. There are numerous Key Biodiversity Areas in Honduras, two of which overlap with the project area (see figure 3).

Figure 3: Key biodiversity areas

Honduras, with a Red List Index of 0.7412[149], is facing a serious situation. A score of 1 signifies that all species are of least concern, while a score of 0 indicates that all species have gone extinct. The fact that Honduras' Red List Index is declining is a cause for concern, as it implies a decrease in biodiversity and an increase in the number of species at risk.

Honduras has 31 known alien invasive species. This number is higher than that of neighboring Guatemala and Nicaragua but much lower than that of other countries in the region, like Mexico, with 143 alien invasive species and 67 in Costa Rica. The area around the project area in Santa Barbara is considered to have a very high risk of invasion from alien species.

Given the high-risk nature of the area, the project is committed to ensuring that no new crop or livestock species are introduced, and no work is done with any known invasive species. To ensure this, all USPs that result from CSA planning will be assessed for risk to biological diversity prior to approval.

Principle 10: Risk Assessment
There is a low risk of harming biodiversity. On the contrary, the project activities are designed to conserve and improve biodiversity. To keep the risk low, no new crop or livestock species will be promoted in the project.

[149] UNEP GRID. Honduras Interactive Country Fiche.

Principle 11: Climate change.

To assess this risk and comply with the principle, a qualitative assessment of possible drivers of climate change was completed. The five drivers of greenhouse gas emissions and climate change are agriculture, waste management, energy, land conversion, and industrial processes. The assessment is summarized in Table 2.

Table 2. Assessment of drivers of climate change impacted by the project.

Driver	Description of associated project activities	Nature of impact on GHG / climate change
Agriculture	The project will promote the transition of current agricultural production to climate-smart agriculture practices. It will not include or introduce agrochemicals in this effort but promote the use of locally produced or self-made organic fertilizers.	Positive—The activities will promote agricultural systems that reduce GHG emissions and possibly increase soil carbon sequestration through soil conservation practices.
Waste Management	The project is not expected to impact emissions from waste management.	No impact.
Energy	The project will require energy for transportation between project communities, offices, and the project area.	Energy use in Honduras contributed to 41% of the total country emissions from 2000 to 2015, of which 43% were from ground transportation in 2015. A total of 4,108 Gg (4,108,000 metric tons) of CO2 equivalent was emitted in 2015 from Honduran ground transportation. Approximately 100,000 km are expected to be driven during the project, equal to about 15 metric tons of CO2-e emissions. The increased emissions are negligible compared to the national emissions.
Land conversion	Land conversion will not be promoted in this project. The project will promote climate-smart agricultural practices that reduce farmers' vulnerability and decrease their likelihood of clearing forests for agriculture, as they are expected to improve incomes using CSA practices.	Positive—The project will promote practices that should reduce pressure on forested land, reducing the possibility of land conversion.
Industrial Processes	The project is not expected to impact emissions from waste management.	No impact.

CSA USPs will be designed to reduce GHG emissions, however they will be monitored to ensure there are no unintentional negative impacts.

Principle 11: Risk Assessment
There is a low or null risk of contributing to climate change through increased greenhouse gas emissions. On the contrary, the project is designed to reduce GHG emissions and increase carbon sequestration in soils by incorporating CSA practices among farmers in the project area.

Principle 12: Pollution prevention and resource efficiency.

This principle has low or null risk since the project does not include activities that will release pollutants. Agricultural activities will not promote agrochemicals that could pollute the soil and water; instead, they will encourage the production of organic fertilizers on the farm to increase nutrient cycling, thus increasing resource efficiency. All USPs will be designed and reviewed to ensure they are in line with these criteria.

With efforts led by the operations committee, the project team will work together to improve resource efficiency by planning joint field visits and reducing the project's expenses and GHG emissions from transport. Additionally, remote team tools will be used to reduce the costs and emissions from traveling for in-person meetings between project collaborators.

Principle 13: Public health.

A Devon Health Forum[150] adapted screening checklist completed a health impact assessment. The results are presented in Table 3.

Table 3: Health Impact Screening

Will the project impact…?	People Affected	Description of impacts	Actions
1. Income levels and the distribution of wealth	Farmers and farm families	The project will likely positively impact income levels through more resilient, climate-smart agricultural practices.	No action is needed.
2. Employment	Project team members	The project will create several employment opportunities in the project teams, which is expected to have a positive impact.	No action is needed.
3. Healthy beginnings for children	NA	The project does not focus on early childhood health interventions.	No action is needed.
4. Personal supportive networks	Community members	The project is expected to positively impact personal support networks by facilitating engagement with community members. This will bring diverse communities together to solve climate-related challenges.	No action is needed.
5. People's feeling of control over their own lives and decisions	Community members	The project is expected to positively impact people's feelings of control over their decisions and lives because they will be empowered with more information and tools to make decisions about their family's climate adaptation.	No action is needed.
6. Physical safety, level of and fear of crime in communities	NA	The project is not designed to positively or negatively impact this area.	No action is needed.
7. Educational opportunities for all age ranges	Community members	The project design includes educational opportunities for people of all ages, including curriculum and education efforts for primary schools and adult-oriented education.	No action is needed.

[150] Devon Health Forum. 2003. Health and Well-Being Screening Checklist.

8. Health-related or risk-taking behavior	NA	The project will have neither a positive nor negative impact on this topic.	No action is needed.
9. The provision of quality housing	NA	The project will have neither a positive nor negative impact on this topic.	No action is needed.
10. The natural environment	Farmers, People around farmland		No action is needed.
11. The built environment	NA	The project will have neither a positive nor negative impact on this topic.	No action is needed.
12. Modes of transport and supporting infrastructure	NA	The project will have neither a positive nor negative impact on this topic.	No action is needed.
13. The provision of fair, equitable access to public services	NA	The project will have neither a positive nor negative impact on this topic.	No action is needed.
14. Health inequalities among different groups	Vulnerable groups	The project promotes and works toward inclusion and equality in climate change adaptation. Exposure to climate-related disasters ultimately impacts people's health. Health inequalities are reduced by promoting the inclusion of vulnerable groups in climate change adaptation.	No action is needed.

Principle 13: Risk Assessment
There is a low or null risk of harming public health. The health impact screening identified only positive impacts, so no mitigation efforts are needed.

Principle 14: Physical and cultural heritage

The risk of harming physical heritage is low or null. The project will avoid impacting physical heritage sites, and there are no planned infrastructure works that could damage the physical heritage. In the case of a chance find of physical heritage during project activities, CASM will coordinate with the Honduran Institute of Anthropology and History to report and protect the heritage.

Regarding cultural heritage, promoting new agricultural practices could lead to the loss of cultural heritage related to traditional and indigenous knowledge about agriculture. This is a low risk because the design and selection of climate-smart agricultural practices are done using a participatory methodology, which will include the importance of using traditional knowledge to design more sustainable and resilient agricultural systems.

Principle 15: Land and soil conservation

The Lake Yojoa subbasin is between the Cortés, Santa Bárbara, and Comayagua departments. Its extension is 436.41 km^{2,} which includes 349.40 km^2 of natural drainage area and 87 km^2 of altered flow area that drains into the lake[137]. Santa Barbara National Park occupies 132 km^{2,} and Meambar Blue National Park occupies 209 km^2. The three protected areas cover 635 km^{2,} and considering the entire macroregion, the total area reaches 2000 km^2.

Although there is no specific study of the soils in this region, the national soil studies done by Simmons cover the area and indicate the following data:

Table 4: Soils of the Lake Yojoa Region[151]

Name	Soil Classification	Depth	Drainage	Ph	Slope
Chandala[152]	Rendzina	Shallow	Well		> 50%
Chimbo	Lithosol	Shallow	Well	6	40%
Chimizales	Yell-red Podzol	Deep	Well	6	> 50%
Cocona	Lithosol	Shallow	Well	5 - 5.5	30 - 60%
Milile	Andosols	< 30 cm	Well	6	30%
Naranjito	Red-yell Podzol	Deep	Well	6	> 50%
Ojojona	Lithosol	Shallow	Well	6.3	30 - 50%
Valley soils		Deep	Mod. Well		< 30%
Sulaco	Rendzina	Shallow	Well	7	> 60%
Urupas	Volcanic lavas		Mod. Well	6	< 30%
Yojoa	Andosols[153]	50 cm	Well	5	< 20%

Due to the high slopes, most soils in the project area are fragile, making them particularly vulnerable to erosion. Across Central America, including in this region, farmers are accustomed to farming on sloped plots; national practices promoted by the project will increase soil quality and reduce the risk of erosion of these vulnerable soils. There is a minimal risk that CSA practices could cause further soil degradation; however, one of the goals of CSA practices is to improve soil conservation and soil quality, so this risk is unexpected. Nonetheless, each USP will be evaluated for possible soil conservation related risks.

Principle 15: Risk Assessment
There is a low risk for the land and soil. On the contrary, the project activities are designed to conserve and improve soil quality, which is essential to building climate resilience. The project will monitor the

[151] The Nature Conservancy (2002). Environmental Diagnosis of Lake Yojoa, Honduras.
[152] FAO. (1969). The Soils of Honduras
[153] FAO. (2007). Global Soil Resource Reference Base: A conceptual framework for classification, correlation and international communication.

impact of the CSA practices in USPs on soil to ensure no adverse impacts occur and mitigate if necessary.

4. E&S Risk and Mitigation Table

The following table summarizes the risks that were discovered in the Environmental and Social Risk Assessment, relevance to the project, significance of the risk, and the proposed mitigation actions.

Principle	Potential impacts and risks	Relevance	Risk Significance	Mitigation Actions
1. Compliance with the Law	Low risk due to strong adherence to legal frameworks and regular stakeholder consultations. The project and USPs will comply with national laws and international treaties.	Yes	Low	The legal framework will be updated annually with new or changed legislation.
2. Access and Equity	Due to CASM's experience in participatory engagement and social inclusion, the project ensures fair and equitable access to services and the empowerment of marginalized groups, including in the USPs.	Yes	Low	Mechanisms for fair and equitable access, training on code of conduct, policy for accountability.
3. Marginalized and Vulnerable Groups	CASM has a long history of working with marginalized and vulnerable groups. Key participants from these groups were involved in project consults.	Yes	Low	Consultations with vulnerable groups, policies for child protection, gender equity, and protection of vulnerable adults.
4. Human Rights	No human rights violations occurred during project activities. Nonetheless, given the national context, they may be raised. Thus, it is essential to monitor these issues.	Yes	Low	Monitoring for human rights adherence.
5. Gender Equality and Women's Empowerment	There is a risk that project activities will increase women's burden of unpaid work. Women already perform more unpaid work in the household, particularly in caregiving and domestic tasks, which limits their participation in employment and project activities. Traditional gender roles persist among community members, limiting women's opportunities and reinforcing stereotypes about what men and women can and cannot do. These roles can hinder the project's ability to engage women effectively. Additionally, there is a risk that project staff may reinforce gender stereotypes and gender roles. Women have less decision-making authority about agricultural activities than men and are generally less involved in agricultural activities, so there is a risk that they will be excluded from project activities	Yes	Moderate	A gender action plan (GAP) was developed and budgeted to implement to reduce the possibility of excluding women. The GAP considers gender-sensitive and gender-transformative approaches to address risks of exclusion, GBV, and increased unpaid work burdens. The project should be sensitive to the time availability of women and design activities with women to minimize increasing their burden of unpaid work. The project team will be trained in gender issues in the region and gender-sensitive approaches to

Principle	Potential impacts and risks	Relevance	Risk Significance	Mitigation Actions
	related to agriculture. Nonetheless, they are highly vulnerable to climate change, and the impacts of agricultural production affect household dynamics and food security, so they should not be excluded from decision-making.			leadership and project management. Women and men will be invited to participate in agricultural workshops and USPs and special efforts will be made to facilitate planning and decision-making between spouses or other key family members.
6. Core Labour Rights	The risk of breaking the ILO's fundamental labor rights is low. Nonetheless, due to the sensitivity of this matter and the possible harmful impacts of non-compliance, the project will take various mitigation measures to ensure compliance.	Yes	Low	CASM will train project team members from all organizations on fundamental labor rights. The operations committee will monitor the rights among the project organizations and in the communities. During the climate-smart agriculture training, a module will be developed and incorporated to familiarize farmers with the projects, their labor rights, and the harmful impacts of forced and child labor. USPs will be assessed and monitor for labor rights.
7. Indigenous Peoples	The Lenca People are Indigenous to the project area. They have been consulted about the project and have participated in the field research. There is a low or null risk of harming IPs or their access to livelihoods and natural resources. Though the project will work in the territory of Indigenous Peoples, it will not impact their lands, so FPIC is not planned.	Yes	Low or null	The project will continue to engage with IPs and monitor and avoid any adverse impacts the project has on IPs. IPs will be invited to participate in USPs.
8. Involuntary Resettlement	There is no resettlement in this project; the principle does not apply.	No		
9. Protection of Natural Habitats	While the project is near natural habitats, the promoted practices will likely improve conservation. Nonetheless, suppose a participant selected has land next to a priority natural habitat. In that case, a more in-depth analysis will be made before implementing CSA practices to understand and avoid possible risks to that natural habitat.	Yes	Low or null	Additional environmental risk assessment if land selected for CSA practices is next to a priority natural habitat. All USPs will be assessed for the protection of national habitats.

Principle	Potential impacts and risks	Relevance	Risk Significance	Mitigation Actions
10. Conservation of Biological Diversity	The project is expected to positively impact biodiversity through climate-smart practices. There is a low to null risk because no invasive species will be introduced, and no use of agrochemicals will be incorporated into the project.	Yes	Low or Null	No introduction of new crop or livestock species. All USPs will be reviewed to ensure this is upheld.
11. Climate Change	The project is expected to have a positive impact, as the CSA practices reduce GHG emissions from agriculture and promote soil carbon sequestration.	Yes	Low or null	Monitor soil impacts to ensure no unintentional negative impacts. Monitor USPs to ensure no negative impacts.
12. Pollution Prevention and Resource Efficiency	The project does not promote the use of agrochemicals, but rather the use of organic inputs focused on products made on the farm with locally available and recycled materials. This promotes nutrient cycling and, thus, resource efficiency. The operations committee will seek to improve resource efficiency by coordinating field visits and reducing vehicle transport.	Yes	Low or null	A waste and pollution prevention and management plan will be developed at project initiation. USPs will be assessed and monitored to ensure no negative impacts.
13. Public Health	A public health screening was completed, and no risks were identified.	Yes	Low or null	Public health concerns will be monitored.
14. Physical and Cultural Heritage	The project avoids impacting physical heritage sites and includes traditional knowledge to promote the conservation of cultural heritage.	Yes	Low or null	In the unlikely case that project activity results in the discovery of essential physical heritage elements, the project will coordinate with the Honduran Institute of Anthropology and History for chance finds.
15. Lands and Soil Conservation	The soils in the project region are highly sloped and thus considered fragile, but they are the reality for small-scale farmers in Honduras. There is a minimal risk that CSA practices could cause further soil degradation; however, one of the goals of CSA practices is to improve soil conservation and soil quality, so this risk is unexpected.	Yes	Low	Monitoring of CSA practices' impact on soil, mitigation if needed, including in USPs.

Mitigation Planning

For each principle that was triggered, the following table provides details on the mitigation action, when the action should take place, indicators for monitoring, and the responsible parties.

Principles	Mitigation Actions	Timing	Indicator/s	Responsible Parties
1. Compliance with the Law	The legal framework will be updated annually with new or changed legislation.	Annual	# of new laws or changed laws that impact the project	Strategic Committee, CASM
2. Access and Equity	Mechanisms for fair and equitable access, training on code of conduct, policy for accountability.	Annual, or upon new members joining the project team	# and % of project staff trained	CASM
3. Marginalized and Vulnerable Groups	Consultations with vulnerable groups, policies for child protection, gender equity, and protection of vulnerable adults.	Annual	# and % of people consulted who are from marginalized and vulnerable groups # and % of beneficiaries who are from marginalized and vulnerable groups	CASM, CIAT, SERNA
4. Human Rights	Monitoring for human rights adherence.	Ongoing	# and % of claims in the Grievance Mechanism regarding violations of human rights	CASM
5. Gender Equality and Women's Empowerment	A gender action plan (GAP) was developed and budgeted to implement to reduce the possibility of excluding women. The GAP considers gender-sensitive and gender-transformative approaches to address risks of exclusion, GBV, and increased unpaid work burdens. The project should be sensitive to the time availability of women and design activities with women to minimize increasing their burden of unpaid work. The project team will be trained in gender issues in the region and gender-sensitive approaches to leadership and project management. Women and men will be invited to participate in agricultural workshops, and special efforts will be made to facilitate planning and decision-making between spouses or other key family members.	Ongoing	% of women beneficiaries % of activities with leadership by women (i.e. MAPs, EWS directorate, PICSA) % of municipal climate adaptation plans that incorporate a gender perspective	CASM, CIAT, SERNA
6. Core Labour Rights	CASM will train project team members from all organizations on fundamental labor rights.	Annual	% of people consulted are IPs	CASM, CIAT, SERNA

Principles	Mitigation Actions	Timing	Indicator/s	Responsible Parties
	The operations committee will monitor the rights among the project organizations and in the communities. During the climate-smart agriculture training, a module will be developed and incorporated to familiarize farmers with the projects, their labor rights, and the harmful impacts of forced and child labor.	Ongoing	% of beneficiaries are IPs	
7. Indigenous Peoples	The project will continue to engage with IPs and monitor and avoid any adverse impacts the project has on IPs.	Ongoing		
8. Involuntary Resettlement	Not Applicable	Not Applicable		
9. Protection of Natural Habitats	Additional environmental risk assessment if land selected for CSA practices is next to a priority natural habitat.	Only if land selected is next to priority habitat, otherwise NA	% of land near priority natural habitat	
10. Conservation of Biological Diversity	No introduction of new crop or livestock species.	Ongoing	# of new crop or livestock species introduced or promoted (should be zero) % of CSA practices that promote improved biodiversity	CASM, CIAT
11. Climate Change	Monitor soil impacts to ensure no unintentional negative impacts.	Ongoing	% of participating farmers who observe reduced soil quality (expected to be zero) % of participating farmers who implement practices that increase GHG emissions (expected to be zero)	CIAT, CASM
12. Pollution Prevention and Resource Efficiency	A waste and pollution prevention and management plan will be developed at project initiation.	Updated annually	# of waste reduction and prevention initiatives	CASM, Strategic Committee

Principles	Mitigation Actions	Timing	Indicator/s	Responsible Parties
			implemented in the project	
13. Public Health	Public health concerns will be monitored.	Ongoing	% of grievances reported that project activities harm public health	CASM
14. Physical and Cultural Heritage	In the unlikely case that project activity results in the discovery of essential physical heritage elements, the project will coordinate with the Honduran Institute of Anthropology and History for chance finds.	Ongoing	# of cases of physical heritage discovery (expected to be zero)	CASM, SERNA, CIAT
15. Lands and Soil Conservation	Monitoring of CSA practices' impact on soil, mitigation if needed.	Ongoing	% of participating farmers who observe reduced soil quality (expected to be zero)	CIAT, CASM

5. EMSP Roles and Responsibilities

CASM is responsible for the overall implementation and monitoring of the ESMP. Nonetheless, in order to carry out the ESMP, it is necessary to involve all partners in understanding and monitoring risks, as partner organizations CIAT and SERNA will operate field activities. The roles and responsibilities for the ESMP are as follows:

- CASM: Overall supervision and coordination of ESMP implementation and monitoring. Train CIAT and SERNA on ESMP concepts, risks, and mitigation efforts. Update ESMP as the project progresses to ensure adaptive management during the life of the project.
- CIAT and SERNA: Receive training (coordinated by CASM) for the ESMP, provide feedback to CASM on changes to risks, ensure compliance with mitigation measures during project activities.
- Local communities and key stakeholders: Provide feedback through consultation and feedback sessions, contributing to the adaptive management of the project.
- Strategic Committee: Oversee project compliance with AF ESP, Honduran laws, and ESMP implementation.

6. ESMP Monitoring and Evaluation

Monitoring and evaluation of the ESMP will be done in conjunction with the overall M&E of the project. The responsible person for M&E within each institution will also be trained to monitor the ESMP indicators to ensure compliance on a regular basis. The indicators and timeline for measurement are detailed in the above section under mitigation planning. These indicators will guide the monitoring and evaluation of the ESMP.

7. Adaptive Management

The ESMP is designed to be updated based on ongoing monitoring of indicators for risks and mitigation. Based on bi-annual reviews from the Strategic Committee and annual feedback sessions (consultations) from community members and key stakeholders, the ESMP will be updated based on emerging or change risks and impacts. The project will adapt based on the guidance provided by the Strategic committee who will oversee the process for ESMP updates.

8. Grievance Mechanism

CASM has established a structured Grievance Mechanism to facilitate an open channel for both internal and external parties to voice complaints or provide feedback on CASM operations. This includes complaints or feedback on the actions of our board, management team, technical and support staff, consultants, project partners and team members, and all other individuals and entities associated with CASM activities.

This system ensures project feedback and grievances are logged, addressed, and resolved. Grievances can encompass a range of issues, including environmental, social, and gender-related impacts resulting from CASM's institutional programs and projects across varied operational areas, impacting different population groups or regions.

To bolster transparency and foster an open dialogue with stakeholders, CASM has laid out multiple communication avenues:

1. Office Suggestion Boxes:
    - Each CASM office features a secure, accessible suggestion box.
    - Equipped with paper and pencil for user convenience.
    - The box's key remains with the respective office management, while the main office's is with the executive management.
2. Dedicated Complaints Email:
    - Direct feedback can be sent to quejas@casm.hn.
    - This email is accessible to both our internal team and the public.
    - Messages are periodically reviewed by the executive management and the board's president.
3. Website Portal:
    - Visit our website, https://casm.hn/contactanos, for a dedicated section on submitting complaints.
4. Direct Communication:
    - Stakeholders can mail their inputs to P.O. Box 2757, San Pedro Sula.
    - For immediate communication, reach out to us at +504 9460-07-79.

The complaint submission process is confidential, and CASM ensures the complainant’s identity is always protected. The regional managers, executive management, and board president spearhead the oversight and management of this feedback system, with the Management and Advisory Team (MAT) stepping in as necessary. The mechanism delineates the process, from receipt to resolution of concerns about CASM's operations.

Additionally, SERNA has their own complaints and grievances mechanism that can also receive grievances related to the project. If a grievance about the project is submitted to SERNA, SERNA should also share the relevant information with CASM and the project strategic committee to ensure proper follow-up.

9. ESMP Budget

M&E Line item	Responsible Party	Budget Allocated
ESMP monitoring training	CASM	$8,000
Monitoring and Evaluation (including ESMP monitoring)	CASM	$74,124
Strategic coordination meetings (to review ESMP and indicators)	CASM	$6,900
	Total ESMP	**$89,024**

Annex 6: Indicator Monitoring Tables

Adaptation Fund Core Impact Indicator "Number of Beneficiaries"				
Date of Report	14 January 2025			
Project Title	Constructing Resilience Together to Face Climate Change and Variability in Western Honduras			
Country	Honduras			
Implementing Agency	CASM			
Project Duration	39 months			
	Baseline *(absolute number)*	Target at project approval *(absolute number)*	Adjusted target first year of implementation *(absolute number)*	Actual at completion[154] *(absolute number)*
Direct beneficiaries supported by the project	0			
Female direct beneficiaries	0			
Youth direct beneficiaries	0			
Indirect beneficiaries supported by the project	0			
Female indirect beneficiaries	0			
Youth indirect beneficiaries	0			

[154] At project completion, the proponent could report on % targeted population reached or successfully supported (the absolute numbers could then be deduced from that figure)

Adaptation Fund Core Impact Indicator "Early Warning Systems"				
Date of Report	14 January 2025			
Project Title	Constructing Resilience Together to Face Climate Change and Variability in Western Honduras			
Country	Honduras			
Implementing Agency	CASM			
Project Duration	39 months			
	Baseline	Target at project approval	Adjusted target first year of implementation	Actual at completion
Adopted Early Warning Systems *(Category targeted – 1, 2, 3, 4; and absolute number)* *(1) risk knowledge,* *(2) monitoring and warning service,* *(3) dissemination and communication,* *(4) response capability.* *(report for each project component)*	0	1, 2, 3		
Hazard *(select from the list on page 2)* *(report for each project component)*	NA	Drought, flood, hurricane, frost		
Geographical coverage *(km2)* *(report for each project component)*	0	TBD		
Number of municipalities *(number)* *(report for each project component)*	0	5		

Adaptation Fund Impact Indicator "Increased income, or avoided decrease in income"				
Date of Report	14 January 2025			
Project Title	Constructing Resilience Together to Face Climate Change and Variability in Western Honduras			
Country	Honduras			
Implementing Agency	CASM			
Project Duration	39 months			
	Baseline	Target at project approval	Adjusted target first year of implementation	Actual at completion
Income Source[155] *(name)*	Farming	Farming		
Income Source				
Income level *(USD)*	TBD in baseline	TBD after baseline		
Number of households *(total number in the project area)* *(report for each project component)*	TBD in baseline	TBD after baseline		

[155] When the numbers of livelihoods go through significant changes, such as when sources of income are diversified, it may be useful to illustrate the changes by primary livelihoods.