

# REQUEST FOR PROJECT/PROGRAMME FUNDING FROM THE ADAPTATION FUND

The annexed form should be completed and transmitted to the Adaptation Fund Board Secretariat by email or fax.

Please type in the responses using the template provided. The instructions attached to the form provide guidance to filling out the template.

Please note that a project/programme must be fully prepared (i.e., fully appraised for feasibility) when the request is submitted. The final project/programme document resulting from the appraisal process should be attached to this request for funding.

Complete documentation should be sent to:

The Adaptation Fund Board Secretariat 1818 H Street NW MSN N7-700 Washington, D.C., 20433 U.S.A

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### PROJECT/PROGRAMME PROPOSAL TO THE ADAPTATION FUND

#### PART I: PROJECT/PROGRAMME INFORMATION

Project/Programme Category: Regular Programme

Country/ies: Costa Rica

Title of Programme: Increasing the resilience of vulnerable populations in Costa Rica by scaling up Adapta2+

Type of Implementing Entity: National Implementing Entity

Implementing Entity: Fundecooperación para el Desarrollo Sostenible

Executing Entity/ies: National Ministry of Environment and Energy (MINAE), Ministry of Agriculture (MAG), Academia,

NGO's, local organizations, others.

Amount of Financing Requested: 10 000 000 (in U.S Dollars Equivalent)

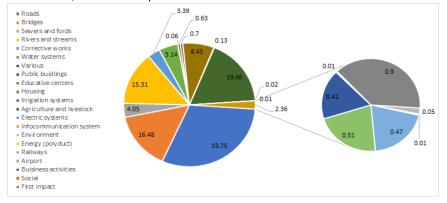
## **Project / Programme Background and Context:**

Provide brief information on the problem the proposed project/programme is aiming to solve. Outline the economic social, development and environmental context in which the project would operate.

Costa Rica has been identified as one of the most vulnerable countries to climate change impacts, and more particularly to extreme hydro-meteorological events due to a combination of geographical location and economic factors. In fact, Costa Rica is identified as "one of the most prominent climate change hotspots in the tropics". The particularity of the country lies in the fact that the historical records of the IMN and of extreme events of climate variability (El Niño-Southern Oscillation, ENSO) show that the Costa Rican territories do not experience the same impacts of climate events throughout the country due to its topographic characteristics. It was noted that the impacts of climatic events are experienced inversely on the coasts, in other words, while droughts are experienced on the Pacific slope, floods are suffered on the Caribbean slope. It is predicted that the future climate will be similar to the climate experienced by the country during the "el Niño" phenomenon (IMN, 2019).

Costa Rica is already experiencing impacts of climate change. Between 2005 and 2020, the country suffered 21 climatic events, including 2 droughts, which had strong impacts on infrastructure, services and products as shown in figure 1. As it can be observed, roads have mostly been affected (33.75%), then the agriculture sector (19.46%), then bridges (16.46%).

Figure 1. Percentage of losses due to extreme weather-related events impacts on infrastructures, services and production between 2005 - 2020 in Costa Rica. Sources: CNE, 2021



Moreover, the National Meteorological Institute (IMN) conducted its first regionalized climate change scenarios in 2012, updated in 2017, using the regional model Providing Regional Climates for Impacts Studies (PRECIS¹). In 2020, a new exercise was carried out using regional models with the Coordinated Regional Downscaling Experiment (CORDEX) experiment design. The results of the latter can be accessed through the Climate Change Scenarios of Central America²: <a href="https://centroamerica.aemet.es">https://centroamerica.aemet.es</a> (MINAE, 2020). From those projections, it has been identified that one of the parameters that best reflects global warming in Costa Rica is the increase of the number of warm nights, defined as the number of days per year whose minimum temperature exceeds the 90th percentile of the 1971-2000 climate reference period. In the CORDEX model, with the low emissions scenario (RCP 2.6), the number of warm nights doubles by the end of the century, or triples for the same period with the high emissions scenario (RCP 8.5). The increase of warm nights has a direct negative impact in agriculture (MINAE, 2020).

Regarding temperatures, the regional model PRECIS shows that they increase between 1° C to 2° C for all time-horizons. As for the precipitation scenarios, compared to the current climate, an increase in rainfall is predicted in the short term in the Northern Caribbean and the Northern Zone. The same is observed in the Nicoya Peninsula, lower parts of the Central Pacific and the most southern sector of the South Pacific. In the other regions, in turn, a decrease in rainfall is predicted (MINAE, 2020).

The University of Costa Rica also generated a RCP 8.5 PRECIS model, in the framework of the Plan A project (DCC MINAE - UNEP 2020) with information from the PRECIS model provided by the IMN. As a result, they mapped the different impacts of climate change and the RPC 8.5 showed as a result the following maps (from map 1 to map 6.). As it can be observed, the aridity index shows that aridity will increase in current wet zones of the country. In the short and long-term, precipitations will reduce, while in the short-term temperature will increase and slightly decrease in the long-term.

Climate change impacts have created challenges for the agricultural and fisheries sectors – and will continue to do so. Climate change-induced increases in temperatures, rainfall variation and the frequency and intensity of extreme weather events are adding to pressures on global agricultural and food systems. Climate change is affected and is expected to negatively impact both crop and livestock production systems in most regions. The changing climate is also adding to resource problems, such as water scarcity, pollution and soil degradation (OCDE, 2016). Climate change also affects fish and their habitats. Warmer temperatures will influence the abundance, migratory patterns and mortality rates of wild fish stocks and determine what species can be farmed in certain regions. These climatic effects on fish will have social and economic consequences for people dependent on fisheries and aquaculture - from workers to coastal communities to consumers of fish (OCDE, 2011). In this context, in Costa Rica, in 2019, the Agricultural Value Added (VAA) reached an amount of 1,410,676 million colons, while in 2020, the agricultural sector ranked second as a generator of employment, with a 12.8% share within the total employed population (of whom about 12.5% are female). It employed on average 270 673 people, with an annual growth of 2.0%. This growth presented the highest variation rate in the employed population of the three sectors of the national economy (primary, secondary, and commerce and services).

<sup>&</sup>lt;sup>1</sup> The meteorological variables considered were precipitation, temperature (minimum, average and maximum), relative humidity, solar radiation (irradiance) and wind speed.

<sup>&</sup>lt;sup>2</sup> The time horizons of these projections are: 2010-2039, 2040-2069, 2070-2099.

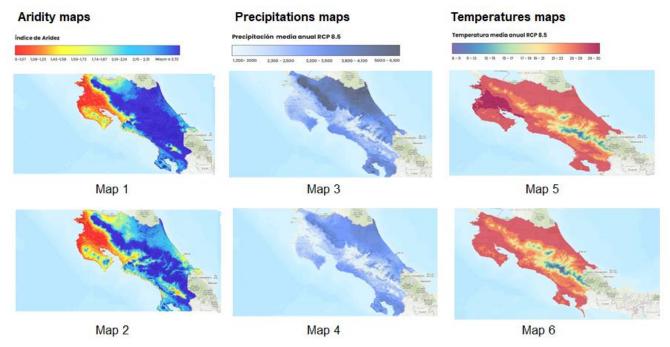


Figure 2. Aridity maps: Areas with higher aridity are indicated in red and areas with lower aridity in blue. Map 1. Historical climatological aridity (1971 - 2000). Map 2. Short-term climatological aridity (1971 - 2000).

**Precipitations maps:** The lowest average precipitation is indicated in light blue and the highest average precipitation in dark blue. **Map 3.** Short-term mean annual precipitation average (2011 – 2040). **Map 4.** Long-term mean annual precipitation average (2041 – 2070).

**Temperatures maps:** The lowest average temperature is indicated in blue and the highest average temperature in dark red. **Map 5.** Short-term average annual mean temperature (2011 - 2040). **Map 6.** Long-term average annual mean temperature (2041 - 2070).

From 1988 to 2018, Costa Rica's agricultural sector experienced an estimated USD 590 million in losses due to extreme floods and droughts, representing 18% of the total economic losses across all sectors of the economy from climatic events during that time period. Moreover, in 2020, the effects of the pandemic, the reduction of external demand, and lower exportable supply of pineapple and other agricultural products affected by hurricanes Eta and lota led to a contraction of 0.9% of the VAA. In 2018 and 2019, the banana sector was the main sector affected by the ENSO phenomena that reduced the exportable supply by up to 5% with respect to 2017. Rising temperatures along with shifting rainfall conditions have also led to the multiplication of pests and diseases. Climate change-induced losses in agricultural production are projected to reduce agriculture's contribution to Gross domestic product (GDP) by between 8% and 12% by 2100, relative to 2007 (MIDEPLAN, 2019). Added to rising competition for resources, such as water, and the large-scale degradation of land and water resources, these effects will significantly impact famers and, at a larger scale, the Costa Rican economy. Hence, the agricultural sector, although a key economic sector, is one of the most vulnerable to climate change impacts, and the rapid increase of extreme climate events pressures the sector to transform quicker into fully resilient one needs.

Costa Rica's artisanal fishing industry is also highly vulnerable to climate change, and the poorer and less empowered the fishing regions are with respect to their resource and economic activity, the more vulnerable they are. Indeed, due to projected climate change in the mid-21st century and beyond, the global redistribution of marine species and reduction of marine biodiversity in sensitive regions will challenge the sustained provision of fisheries productivity and other ecosystem services (Moreno Diaz, Alfara, 2018). This is exacerbated by ineffective management of marine resources and lack of productive diversification.

Artisanal fisheries are not very adaptive to changes in productivity or fishing distribution and to natural disasters (Ambientico 2014)

To face the CC impacts in the productive sectors, the National Adaptation Policy (NAP) presents the priorities to be acted to:

- Reduction of water availability
- Loss, damage and death for flooding and landslide
- Vectors multiplication and disease spreading
- Changes in composition and distribution of pests
- Flooding and salinization of coastal areas
- Losses due to lower crop and livestock herd yields

However, spite of the efforts realized by the administration and other key actors of the agricultural sector to comply with the sectoral objectives (such as the increase in added value, promoting improvements in productivity, sustainable rural development, and mitigation and adaptation to climate change), the increasing impacts of climate change put further pressure on the sector and activities linked to it, which requires, thus, further efforts to support a quicker transformation into an adapted one.

In this context, previous national adaptation experiences in the agricultural and fisheries sectors, have shown the need to adapt the food systems rather than only focusing on the sectors to its long-term transformation. Indeed, the Adapta2+ experience has shown that the slow shift from traditional agricultural food value chains and agricultural practices to sustainable food consumption and production patterns will occur and will last by engaging governments, farmers, agro-industry, retailers and consumers while, the implementation of agricultural and fisheries adaptation strategies in farms and fishing needs to address each step from production to consumption for adapted products. This leads to a more integrated approach linking dimensions and levels of the value chain of the food system, understood as the sum of actors and interactions along the food value chain, from input supply and production of crops, livestock, fish, and other agricultural commodities to transportation, processing, retailing, wholesaling, and preparation of foods to consumption and disposal.

The latter has also shown the necessity of a multi-stakeholder dialogue for the sustainable consumption and production of food and built partnerships for innovative new collaborations to ensure long-term impact, while activities that increase the sustainability of intensified agro-food production, reduce food waste and losses in the food production system, and help find ways to achieve more sustainable diets, must continue to be implemented to increase the overall system resilience. To transform the traditional food system into a fully resilient one, systems related to food production also need support because they impact on the good implementation of the adaptation strategies. Amongst the key sectors to integrate, water is crucial to sustainable food production. Indeed, it is an essential resource for the agricultural sector, ecosystems and various economic activities in the country; thus, competition for its use among different actors, based on each need and priority of access and demand, is occurring. In 2019, the Executive Secretariat for Sectoral Planning (SEPSA), with the support of the Food and Agriculture Organization of the United Nations (FAO), and the Mesoamerica without Hunger Program realized a diagnosis of the state of the access to and the use of water resources in the Costa Rican agriculture. They stated the necessity to take measures to guarantee secure access to water for people involved in family agriculture who live in vulnerable conditions, but also for small and medium-sized agricultural producers, due to their importance in food security and the local and national economy.

To transform the traditional food system into a fully resilient one, it is also crucial to support the micro, small and medium producers (MSMPs), but also the micro, small and medium enterprises (MSMEs). Indeed, the micro, small and medium enterprises (MSMEs), who represent 97.5% of the business park (MEIC, 2021) and are also highly vulnerable to climate change and key to food systems. Indeed, to increase the sector's overall resilience there is a need to create enabling conditions and finance products for agricultural value chains. By supporting the MSMEs, thus, it will allow promoting local markets where farmers will be able to sell their products and MSMEs benefit from the sustainable products.

To allow MSMPs and MSMEs' transformation, climate finance tools and mechanisms must be developed and/or promoted because they are still currently limited. While farmers still have limited access to financial services due to stringent requirements and are underserved by the commercial sector, MSMEs have little alternative to access credit to implement adaptation to climate change strategies.

On the one hand, agricultural credit represented only 2.5% of total loans provided through public or private banks in Costa Rica in 2015 (SEPSA, 2015), while around 14% of all farmers received credit or financial services (INEC-Censo agropecuario, 2014). Agricultural producers in general have limited access to financial services due to stringent requirements, and are underserved by the commercial sector (OCDE, 2017). However, in 2017, the total amount of new placements in the Agricultural Sector, during the period under analysis, was 1 868 629.58 million colones, with an average annual growth rate of 3.74% and 1.85% in 2017 (participation with a downward trend, if compared to 2015 and 2016) (SEPSA, 2018). On the other hand, in the country, 21.5% of the MSMEs indicated that during 2016 and 2017 they required specific financing to operate. When analyzing the behavior by company size, 20.8% of micro companies required some type of financing, as well as 23.4% of small companies and 27.8% of medium-sized companies. Of those, 89.0% indicated that they used their own funds, 4.4% accessed loans, 7.5% personal loans, 10.5% used credit cards, 0.3% with National Trust for Development (FINADE) funds, 0.8% with the development banking system and 7.6% with suppliers (OdD, 2018).

The financing sources of the MSMEs are from both the formal sector and from unregulated entities. In 2017, 79.4% of the MSMEs indicated that their funds came from the formal sector, while 18.6% from unregulated entities. In the case of small companies, 69.3% indicated that financing came from the formal sector and 27.4% from unregulated entities; for medium-sized companies, 78.6% came from the formal sector and 20.6% from unregulated entities (OdD, 2018).

However, credits for MSMPs and MSMEs do not necessarily take future exposure into account, and due to cumbersome requirements for credit access. Indeed, there are very few options to access climate finance for MSMEs. On the one hand, in 2021, a credit cooperative announced the Plus Credit, both for MSMEs and individuals, aimed at efficient environmental solutions such as solar panels, changing the refrigerator for an efficient one, buying electric bicycles or replacing luminaries with LED lights. On the other hand, Fundecooperación para el Desarrollo Sostenible announced that during 2021 to have ¢2,000 million available to finance people who are starting a business or who wish to grow the one they already have. However, efforts are still needed to popularize this type of credit and properly boost adaptation to climate change in MSMEs (Cordero Perez, 2021a, 2021b).

In this context, the vulnerability of women and their need to access climate finance is greater than men. Indeed, according to the Better Jobs Index report prepared by the Inter-American Development Bank (IDB), Costa Rica is the second country in Latin America with the largest labor gap between men and women. This situation is also the case in the population of the agricultural sector, where women participated

in only 13.3% during the fourth quarter of 2017. Based on the 2018 National Survey of Household Microenterprises (ENAMEH) prepared by the National Institute of Statistics and Census (INEC), at the national level, 57.6% of women entrepreneurs implement it out of necessity, and 37.5% implement it out of opportunity. Added to this, due to imposed gender roles and the sexual division of labor, women dedicate less time to the development of their productive and economic activities.

According to the 2017-2018-2019 Agricultural Sector Performance reports prepared by the SEPSA, women present a lower participation in the labor market in the sector, the average unemployment rate of this population during the 2017-2019 period was 16.65%, while that of men was 7.18%. As a consequence, women have been forced to start businesses out of necessity and under the structure of informality. The Study with a gender approach on the state of MSMEs organizations led by women according to their potential, conducted by the National Women Institute (INAMU) in conjunction with SEPSA in 2019, reaffirms that, due to gender roles, women spend approximately four hours a day on their productive activities, unlike men, who spend eight hours a day, which limits their capacity in their productive and economic activities (SEPSA, 2019, MAG, 2020).

On the other hand, this same study indicates that 82% of the organizations led by women are in some condition of informality. It should be noted that those led by men, to a greater extent, operate as cooperatives and corporations, while those led by women mostly opt for the legal figure of the Associations Law No. 218. Based on the above, men's enterprises are viewed as businesses in most cases, while those of women are mostly seen as subsistence activities and, therefore, non-profit, which limits their economic autonomy (MAG, 2020).

Of the total number of debtors in the financial system, 56.2% are men while 43.8% are women. Women's debt delinquency is lower than men's one. For example, 91% of women's total debt is up to date, while 88% of men's total debt is up to date. Complementarily, the study with a gender focus on the status of MSMEs organizations led by women, according to their potential, indicates that there are significant differences in access to credit between organizations led by women and those led by men. This difference is present in organizations with primary production activities, of which 39% of those led by women have had access to credit, while in organizations led by men this percentage is 61% (MAG, 2020).

The report on gaps between men and women in the access and use of the financial system in Costa Rica, prepared by INAMU, the Development Banking System (SBD) and the General Superintendence of Financial Entities (SUGEF), published in August 2019, indicates that women represent between 17% and 23% of the total credits requested for agriculture, livestock and related service activities such as: fishing and aquaculture, mining and quarrying, electricity, telecommunications, gas, water and transportation. Loans for construction, purchase and repair of real estate are granted to 89,633 women and 119,463 men nationwide. The average amounts are ¢24,767,979 for women's loans and ¢29,775,464 for men's loans. In other words, of the total housing loan portfolio (¢5,777,094,458,666), 61.6% is granted to men and 38.4% to women (MAG, 2020).

Regarding SMSEs, the Observatory of Development's (OdD) study (2018) shows that 79.0% of owners are men, while 19.8% are women. It also shows that 78.4% of the owners of micro companies are men and 20.0% are women; in the case of small companies, 77.4% are men and 22.6% are women, finally, in the case of small companies, 77.4% are men and 22.6% are women. 22.6% women, and finally, in the case of medium-sized companies, 89.2% men and 22.6% women. Regarding the participation of

men and women in the companies, it is interesting to note that 6.6% of the companies indicated that they did not have any men participating in their business, while 32.5% of the companies indicated that they did not have any women. In turn, 65.4% of the companies reported having between 1 and 4 men in their company, while 53.4% of the companies reported having between 1 and 4 women in their company (OdD, 2018). These percentages show the existing gender discrepancy in MSMEs.

In this context, climate change adaptation projects that are currently being implemented in the country do not directly address the accelerated need of transformation of the food system, while Adapta2+ experiences showed successful results that are great opportunities for scaling up and replication identifying the challenges explained previously. The program has also shown the importance of enabling conditions for farmers and fishing workers of the private sector to increase local resilience to ensure the long-term impacts of the adaptation strategies. Hence, the need to reinforce local markets based on local value chains for farmers and MSMEs has been identified to upscale its results. Joining farmers, businesses along the value chain, community-based organizations, and local and national governments to work together would allow strengthening local markets, which will promote low-emissions, resilient and efficient food systems that better integrate small farmers and micro, small and medium agribusinesses into value chains that recognize the added value of the product, generating decent employment, and making low-emission nutritious food available. Based on the implementation of the PLAN A project, which supports the planification of adaptation at local level, this proposal would support the involvement of the private sector (MSMEs) in the implementation of the adaptation and address concrete escalated actions, which could be used as further inputs to support local and national planification, including agriculture and finance sector.

To do so, MSMPs and MSMEs, especially led by women, need financial access to implement adaptation strategies. However, this need is impaired by the lack of, or little, options to finance the implementation strategy yet. Hence, to escalate the existing finance options and create new ones for the private sector would support the transformation of the agriculture sector and MSMEs. To do so, training and supporting finance institutions is key to show the rentability of financing adaptation. Building capacities in finance institutions also ensures the long-term impact of the project and its continuity after the end of the project.

MSMPs, fishermen and MSMEs also need to be linked to local markets to ensure the continuity of the adaptation strategies in farms, MSMEs and fisheries. Moreover, the importance of sustainable food production and consumption must be raised among decision-makers, and stakeholders involved in the food supply chain, from producers to consumers, who will access better quality food and benefit from improved livelihoods. To raise awareness and improve the communication strategy on the importance of sustainable food systems is therefore necessary, advocating for the inclusion of the program on sustainable food systems. To do so, information platforms for activities on sustainable consumption and production must be used and new tools to assess the sustainability of food systems necessary and new sustainability assessment approaches and tools must be implemented.

To reach such goals, there is also the need for strengthening further local and national institutions, knowledge and implementation capacity. Indeed, creating capacities in the food system allows to habilitate resilient and sustainable local markets. Moreover, continuous capacity building on climate adaptation must be carried out in the public sector to ensure to fully overcome the fragmented institutional structure, in some cases, overlapping tasks, lack of updated knowledge and increasing transaction costs

that have resulted in significant challenges to implement actions, guidelines and even policy objectives; and reduce further the deficit in technical capacity. Local, national and regional financial institutions also need capacity building to build efforts to focus on building local skills, along with sharing experiences of both successes and failures across countries. Furthermore, the global situation related to COVID-19 has enhanced the need to further innovate in digital and adaptive capacity building processes at the level of most vulnerable stakeholders.

## **Project / Programme Objectives:**

List the main objectives of the project/programme.

The project aims to increase the resilience of vulnerable populations in Costa Rica, particularly women, by scaling up adaptation actions and strengthening climate finance, value chains and organization-based communities of food systems.

This goal compels to work with a wide range of actors and build capacities along the value chain, from finance and public institutions to local micro, small and medium businesses and agriculture production systems. The approach includes implementing solid capacities and climate finance mechanisms, focusing on women, increasing further the resilience of female and male farmers and entrepreneurs, promoting and supporting local markets, and building capacity in public and finance institutions for them to be able to support, replicate the project and sustain it in the long-term.

## **Project / Programme Components and Financing:**

Fill in the table presenting the relationships among project components, activities, expected concrete outputs, and the corresponding budgets. If necessary, please refer to the attached instructions for a detailed description of each term.

For the case of a programme, individual components are likely to refer to specific sub- sets of stakeholders, regions and/or sectors that can be addressed through a set of well-defined interventions / projects.

Table 1. Project components, activities, expected concrete outputs, and the corresponding budget.

Project/Programme Components	Expected Concrete Outputs	Expected Outcomes	Amount (Million US\$
Component 1: Improvement of the adaptive capacity of food systems and communities involved in the development of the territory, with a gender perspective.	Output 1.1 Food systems transform their practices to implement nature-based adaptation solutions.  Output 1.2: Local organizations implement communities-based adaptation actions that benefit themselves and their members and promote it to stakeholders with a gender perspective.  Output 1.3: In order to enhance transformation actions in adaptation with a gender perspective in the food system, a sustainable local market is promoted through the creation of local partnerships with MSMEs and other private entities in the territory.	Outcome 1: Food systems and communities adapt to climate effects and implement nature-based solutions that contribute to the resilience and sustainable development of the territory with a gender perspective.	3.36
Component 2: Strengthening access to finance for nature-based adaptation investments.	Output 2.1: Access to existing climate finance tools to implement nature-based adaptation solutions in the agriculture sector and MSMEs part of the value chain of the food system is promoted.  Output 2.2. New financial mechanisms are developed to support the implementation of climate finance in the agriculture sector and MSMEs part of the value chain of the food system, with a gender perspective.	Outcome 2: Access to climate finance products and mechanisms is facilitated in the food systems.	2.5
Component 3: Strengthening capacities for local, national and regional decision making.	Output 3.1 Tools and information with a gender perspective are developed, as well as spaces for knowledge dissemination that enhance adaptation solutions to improve decision making in adaptation actions in the food system with a gender perspective.  Output 3.2: The knowledge with a gender perspective created from project results and lessons learned is disseminated and shared at local, national and regional levels to improve decision making on adaptation actions with a gender perspective.	Outcome 3: Knowledge with a gender perspective is created, strengthened and disseminated along the value chain to reinforce decision-making capacities in adaptation actions to improve resilience to climate change in the territories.	2.5
6. Project/Program	nme Execution cost		0.86
7. Total Project/Programme Cost			
8. Project/Programme Cycle Management Fee charged by the Implementing Entity (if applicable)			
Amount of Finan	cing Requested		10

## **Projected Calendar:**

Indicate the dates of the following milestones for the proposed project/programme

Milestones	Expected Dates
Start of Project/Programme Implementation	July 2023
Mid-term Review (if planned)	July 2026
Project/Programme Closing	December 2029
Terminal Evaluation	September 2029

### 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 current increase in mean annual temperature and decrease in precipitation and their projections for the year 2040 and 2070 due to the effects of climate change has already had and will continue to have significant impacts on agriculture throughout Costa Rica. As a result, areas suitable for agriculture that support agricultural exports and farmer food security are likely to change in the future. Some cantons will gain productive suitability for certain crops, others will lose it.

The main paradigm shift of this proposal lies in the integrated approach planned to drive the transformation in adaptation, while escalating and replicating Adapta2+ successful results taking into account its learnt lessons. Adapta2+ experience has allowed carrying out local actions that have had a tangible impact on communities and producers, by working with community actors and addressing specific realities. Moreover, Adapta2+ has already created a wide range of robust alliances between multiple executing entities and public institutions, which have a great potential of leverage to achieve better and quicker results for this proposed project, with a greater degree of local ownership and commitment. Therefore, the new program will be based on the transformed agricultural practices, expanding the program's actions-range to food systems and its value chains, linking nature-based and community-based solutions taking a gender approach. It will allow the new program to be implemented at different levels, while bottom-up and top-down approaches will feed into each other and contribute to national adaptation policies.

Working in a collaborative way on the ground for agriculture and small and medium enterprises (SMEs) development, this project will greatly improve the female and male farmers and communities' adaptive capacity, leading to a better resilience along the value chains of food systems, which will also require capacity building and strengthening gender equality. The program will also develop further financial instruments and investment models to enhance climate resilience and create new climate finance products and mechanisms in MSMEs and MSMPs with a gender perspective. Financial mechanisms and products as well as capacity building with a gender perspective will help them to improve their own resilience as well as the female and male farmers' one. Hence, the program creates enabling conditions for the female and male farmers, working in collaboration with communities, community-based organizations and micro, small and medium-sized enterprises. By doing so, it will strengthen new markets and niche markets, promoting agricultural best practices and participative environmental management and biodiversity conservation, while improving the private sector and institutional capacity to promote, support, participate and manage such activities.

This programme is designed to benefit a large range of individuals, which will contribute to increasing the overall resilience of the sectors. The project exact location will be selected during the development of the full proposal based on:

- Knowledge of key actors of the impacted sectors
- Adaptation maps produced by the NAP construction process supported by PLAN A (UNEP), a project financed by the GCF focusing on adaptation planning at the local level in the country.

- Climate projections developed by the academia
- Different indexes developed at the national level (Human Development Index, social development index, among others).
- The location and results of Adapta2+
- The prioritized areas by the Territorial Economic Strategy for an Inclusive and decarbonized economy.
- Other criteria identified during the elaboration of the full proposal. The previous information will be used during a participative approach through workshops with key actors of the adaptation, agricultural, public, and private sectors, which will allow to identify specific populations and value chain of the food system to focus on and allow the future close collaboration between institutions.

## Component 1: Improvement of the adaptive capacity of food systems and communities involved in the development of the territory with a gender perspective.

Baseline: The results of Adapta2+ showed the necessity to further support small farm holders and fishermen, particularly women, and their local market to be able to further strengthen their resilience, while other adaptation projects in the country have shown the necessity to involve the private sector in the adaptation process. Hence, based on the learnt lessons of the previous program, this component supports the creation and/or enhances enabling environments through the coordination and capacity building of the actors in the food system and along the value chain in the territory including community-based organization, Civil and Non-Governmental Organizations (NGOs), MSMEs, and female and male farmers with a gender perspective. The integrated process allows the identification and modification of current vulnerable settings into a strong and resilient value chain and creates sustainable local markets which benefit all actors, particularly women.

The approach of the project of working with communities and implementing actions at local level allows the program to have a tangible impact on the most vulnerable, with a strong emphasis on activities led by women. It considers the vision of women into a sector where women's role and work are not recognized, and often related to domestic work. Indeed, the dual role of women (as housewives and family providers) must be taken into account because it limits women's participation and actions. Once the issue is recognized and addressed, they can play a fundamental role in the value chain of food systems and generate incomes. In this proposed program, both men and women are treated equally to access resources, get organized, participate, and benefit from all activities.

Output 1.1 Food systems transform their practices to implement nature-based adaptation solutions.

- Activity 1.1.1 Promotion of adapted production practices that consider nature-based adaptation solutions and other previously validated sustainable technical options to improve the resilience of female and male producers in the agricultural system and fishery sector.
- Activity 1.1.2 Identification of new adapted productive practices that consider nature-based adaptation solutions and other validated sustainable technical options in the food system and fishery sector.
- Activity 1.1.3 Implementation of new adapted production practices that consider nature-based adaptation solutions and other sustainable technical options previously validated by experts to improve the resilience of the food system. To this end, demand will be taken into account in order to strengthen local markets.

Output 1.2: Local organizations implement community-based adaptation actions that benefit themselves and their members and promote it to stakeholders, with a gender perspective.

- Activity 1.2.1 Facilitation of the implementation of nature-based and community-based adaptation practices, such as, protection of critical ecosystems, improvement of water resources availability, and others, that support resilience of local communities
- Activity 1.2.2 Identification of new nature-based and community-based adaptation practices and previously validated sustainable technical options for community organizations.
- Activity 1.2.3 Implementation of nature- and community-based solutions in community organizations to contribute to a sustainable local market with expert support.

Output 1.3: In order to enhance transformation actions in adaptation with a gender perspective in the food system and the local organizations, a sustainable local market is promoted through the creation of local partnerships with MSMEs and other private entities in the territory.

- Activity 1.3.1 Creation of alliances between the community, community-based organizations, private sector, such as development organizations, MSMEs, Communal water and sewage systems (ASADAs), the public sector and the agricultural sector to promote a sustainable local market.

- Activity 1.3.2 Strengthening of adaptation actions in the local chain and markets, including the creation of local suppliers (MSMEs) of nature-based adaptation technologies, with special attention to youth and women.

Outcome 1: Food systems and communities adapt to climate change and implement already validated and new nature-based solutions that contribute to the resilience and sustainable development of the territory, with a gender perspective.

#### Component 2: Strengthening access to climate finance for nature-based adaptation investments.

**Baseline:** On the one hand, Fundecooperación developed an innovative microcredit product specialized in climate actions during Adapta2+, answering the necessity of the micro, small and medium female and male farms holders to be able to adapt, reinventing their linkage, approach, alliances. Addressing the most vulnerable population in one of the most vulnerable sectors, the microcredit is adapted to the female and male producer capacity<sup>3</sup>. The necessity to escalate and replicate this process in the food system has been identified. On the other hand, financial tools and mechanisms for adaptation in the private sector still lack to strengthen adaptive capacity, awareness of climate threats and risk, and reduced exposure to climate risks. Hence, creating and implementing financial mechanisms and tools for the private sector and community-based organizations is crucial to be able to work in an integrated way. Attending to the financial necessity of the actors along the value chains generates a better replicability, scalability and sustainability of nature and community-based adaptation strategies with a gender approach.

Output 2.1: Access to existing climate finance tools to implement nature-based adaptation solutions in the agriculture sector and MSMEs part of the value chain of the food system is promoted

- Activity 2.1.1 Facilitation of access to financial mechanisms for agricultural producers to implement climate change adaptation practices and/or invest in new technologies as a contingency for the impact caused by climate change.
- Activity 2.1.2 Implementation of the agricultural insurance program and other financial incentives to promote climate resilience criteria.
- Activity 2.1.3 Facilitation of access to climate finance mechanisms in the private sector through the promotion of existing products in local sustainable driven markets; with special emphasis on MSMEs led by young and women.

Output 2.2. New financial mechanisms are developed to support the implementation of climate finance in the agriculture sector and MSMEs part of the value chain of the food system, with a gender perspective.

- Activity 2.2.1 Development of credit and climate finance products for the agricultural sector, MSMEs and food systems to drive the transformation of sectors to finance nature-based solutions and validated adaptation technical options.
- Activity 2.2.2 Bridge the gap to strengthen implementation and scope of credit programs that encourage adaptation to climate change.
  - Activity 2.2.3 Generation of financial mechanisms that facilitate access to climate finance for women.
- Outcome 2: Access to climate finance products and mechanisms is facilitated in the food systems.

#### Component 3: To strengthen capacities for local, national, and regional decision making.

**Baseline:** Knowledge creation and dissemination with gender perspective is crucial to avoid duplicating efforts, mistakes, replicate and/or escalate, exchange and/or evaluate projects or program results at local, national, and regional levels. Thus, the project will create knowledge with gender perspective on climate change adaptation in food systems, private and finance sectors, agricultural value chain and local markets, amongst others, based on communities, and institutional and non-institutional actors during the project, which will also be disseminated. Disseminating this knowledge along the value chain, in the public and private sector, at local, national, and regional level, allows strengthening resilience and supporting decision-making with gender equality of the actors at all levels. Disseminating nature-based adaptation knowledge in the finance sector will allow its actors to impulse their involvement in climate finance.

At local level, women and youth are agents of change and they will take the lead in dissemination of information using various strategies such as focus groups, study circles and roundtable discussions. The Learning Grant request

<sup>&</sup>lt;sup>3</sup> In turn, the producer is supported in his transformation process towards resilience while improving economic conditions and wellbeing through technologies which combine both climate change adaptation and mitigation, and an insurance which covers his activity.

submitted by Fundecooperación to the Adaptation Fund will strengthen the availability and access to knowledge gained in previous projects.

Output 3.1: Tools and information are developed, as well as spaces for knowledge dissemination that enhance adaptation solutions to improve decision making in adaptation actions in the food system, with a gender perspective.

- Activity 3.1.1 Creation of an agricultural innovation center where national and international knowledge with gender perspective can be found, the results of the project as well as knowledge from other institutions to enable the food system to transform its activity.
- Activity 3.1.2 Support and promotion of new and existing national platforms to promote scaling up of measures for adaptation to climate change with gender perspective.
- Activity 3.1.3 Scaling up of model farms to promote adapted agricultural practices as well as best practices at community level, particularly with women.
- Activity 3.1.4 Creation of the necessary information for the country's productive sectors with gender disaggregation data to enable them to make timely decisions on nature-based adaptation.

Output 3.2: Knowledge created from project results and lessons learned are published and shared at local, national and regional levels to improve decision making on adaptation actions through the identification of needs, barriers and the generation of tools according to the needs of each part of the value chain, with gender perspective.

- Activity 3.2.1 Dissemination of knowledge and lessons learned with gender perspective through: farm schools, platforms, agricultural innovation center.
- Activity 3.2.2 Training of actors at the local, national and regional levels in the agricultural and financial sector to improve decision-making in adaptation actions, with a gender perspective.
- Activity 3.2.3 Exchange of knowledge among female and male producers on good practices on agricultural farms through events, training, model farms and tours.
- Activity 3.2.4 Facilitation of communication and dissemination of project results, lessons learned and traditional knowledge among local sustainable market members and decision-makers, with gender perspective.
- Activity 3.2.5 Strengthening of inter-regional learning and cooperation with a gender perspective through training, information exchange and technology transfer.

Outcome 3: Knowledge is created, strengthened and disseminated along the value chain to reinforce decision-making capacities in adaptation actions to improve resilience to climate change in the territories, with a gender perspective.

Objective: The project aims to increase the resilience of vulnerable populations in Costa Rica, particularly women, by scaling up adaptation actions and strengthening climate finance, value chains and organization based communities of food systems.

Component 1: Improvement of the adaptive capacity of food systems and communities involved in the development of the territory with a gender perspective.

Output 1.1: Food systems transform their practices to implement nature-based adaptation solutions.

#### Activities 1.1

- Promotion of adapted production practices that consider nature-based adaptation solutions and other previously validated sustainable technical options to improve the resilience of producers in the agricultural system and fishery sector.
- Identification of new adapted productive practices that consider nature-based adaptation solutions and other validated sustainable technical options in the food system and fishery sector.
- Implementation of new adapted production practices that consider nature-based adaptation solutions and other sustainable technical options previously validated by experts to improve the resilience of the food system.

Output 1.2: Local organizations implement community-based adaptation actions that benefit themselves and their members and promote it to stakeholders, with a gender perspective.

Component 2: Strengthening access to climate finance for nature-based adaptation investments.

Output 2.1: Access to existing climate finance tools to implement nature-based adaptation solutions in the agriculture sector and MSMEs part of the value chain of the food system is promoted.

#### **Activities 2.1**

- Facilitation of access to financial mechanisms for agricultural producers to implement climate change adaptation practices and/or invest in new technologies as a contingency for the impact caused by climate change.
- Implementation of the agricultural insurance program and other financial incentives to promote climate resilience criteria.
- Facilitation of access to climate finance mechanisms in the private sector through the promotion of existing products in local sustainable driven markets; with special emphasis on MSMEs led by young and women.

Output 2.2. New financial mechanisms are developed to support the implementation of climate finance in the agriculture sector and MSMEs part of the value chain of the food system, with a gender perspective.

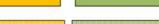
Component 3: To strengthen capacities for local, national, and regional decision making in climate actions.

Output 3.1: Tools and information are developed, as well as spaces for knowledge dissemination that enhance adaptation solutions to improve decision making in climate actions in the food system, with a gender perspective.

#### **Activities 3.1**

- Creation of an agricultural innovation center where national and international knowledge can be found, the results of the project as well as knowledge from other institutions to enable the food system to transform its activity.
- Support and promotion of national platforms to promote scaling up of measures for adaptation to climate change, with a gender perspective.
- Scaling up of model farms to promote adapted agricultural practices as well as best practices at community level, particularly with women.
- Creation of the necessary information for the country's productive sectors to enable them to make timely decisions on nature-based adaptation.

Output 3.2: Knowledge created from project results and lessons learned are published and shared at local, national and regional levels to improve decision making on adaptation actions, with gender perspective.



#### **Activities 1.2 Activities 2.2 Activities 3.2** Development of credit and climate finance Dissemination of knowledge and lessons learned, Facilitation of the implementation of nature-based products for the agricultural sector, MSMEs and food with gender perspective through: farm schools, and community-based adaptation practices, such systems to drive the transformation of sectors to platforms, agricultural innovation center. as, protection of critical ecosystems, finance nature-based solutions and validated Training of actors at the local, national and improvement of water resources availability, and adaptation technical options. regional levels in the agricultural and financial others, that support resilience of local Bridge the gap to strengthen implementation sector to improve decision-making in adaptation communities and scope of credit programs that encourage actions, with gender perspective. Identification of new nature-based and adaptation to climate change. Exchange of knowledge among female and male community-based adaptation practices and Generation of financial mechanisms that producers on good practices on agricultural farms previously validated sustainable technical options facilitate access to climate finance for women. through events, training, model farms and tours. for community organizations. Facilitation of communication and dissemination Implementation of nature- and community-based of project results, lessons learned and traditional solutions in community organizations to knowledge among local sustainable market contribute to a sustainable local market with members and decision-makers, with gender expert support. perspective. Strengthening of inter-regional learning and cooperation through training, information exchange and technology transfer. Output 1.3: In order to enhance transformation actions in adaptation along the food system and the local organizations, a sustainable local market is promoted through the creation of local partnerships with MSMEs and other private entities in the territory. **Activities 1.3** Creation of alliances between the community, community-based organizations, private sector, such as development organizations, MSMEs, Communal water and sewage systems (ASADAs), the public sector and the agricultural sector to promote a sustainable local market. Strengthening of adaptation actions in the local chain and markets, including the creation of local suppliers (MSMEs) of nature-based adaptation technologies, with special attention to youth and women Outcome 1: Food systems and communities Outcome 2: Access to climate finance products and mechanisms is facilitated in the food Outcome 3: Knowledge is created, strengthened adapt to climate change and implement already validated and new nature-based solutions that contribute to the resilience and sustainable development of the territory, with a gender and disseminated along the value chain to reinforce decision-making capacities to improve systems. resilience to climate change in the territories with a gender perspective.

Figure 3. Components, outputs, outcomes and activities of the proposed project

Due to the planification of the development of the proposal, the following table presents the potential adaptation actions related to each activity. These specific actions corresponding to each activity will be selected during the development of the full proposal.

Table 2. Potential adaptation actions related to each activity

Activity	Potential adaptation actions
	Component 1
Promotion of adapted production practices that consider nature-based adaptation solutions and other previously validated sustainable technical options to improve the resilience of female and male producers in the agricultural system and fishery sector.	The adapted production actions promoted will be the successful practices identified during Adapta2+.  Amongst other it can be found:  Precision farming Soil conservation measures Local crops use
Identification of new adapted productive practices that consider nature-based adaptation solutions and other validated sustainable technical options in the food system and fishery sector.	<ul> <li>Silvopastoral Practices</li> <li>Nature based wind barriers and erosion reduction</li> <li>Rational grazing, tree farm fences and divisions, better usage of fodder as animal feed</li> <li>integrated pest management and agroforestry arrangements</li> </ul>
Implementation of new adapted production practices that consider nature-based adaptation solutions and other sustainable technical options previously validated by experts to improve the resilience of the food system. To this end, demand will be taken into account in order to strengthen local markets.	<ul> <li>Increase and distribution of improved drought-tolerant varieties in different regions of the country</li> <li>Reproduction and conservation of native materials and seedlings of basic crops</li> <li>Development and implementation of bio-inputs and bio irrigation in the production of vegetables, roots, tubers, and musaceae.</li> <li>Establishment of germplasm banks of local and/or climate adapted crops in local communities.</li> </ul>
Facilitation of the implementation of nature-based and community-based adaptation practices, such as, protection of critical ecosystems, improvement of water resources availability, and others, that support resilience of local communities	<ul> <li>Diversification of productive activities within the farm.</li> <li>Reforestation of mangroves, coastal reforestation and recovery of coral reefs</li> <li>Implementation of innovative, efficient and sustainable production models.</li> <li>Use of genetic improvement (crop and animal varieties better adapted to weather conditions).</li> <li>changes in cropping pattern and calendar of planting, and crop diversification,</li> <li>conserving soil moisture through appropriate tillage methods,</li> </ul>
Identification of new nature-based and community-based adaptation practices and previously validated sustainable technical options for community organizations.	<ul> <li>improving irrigation efficiency, and afforestation</li> <li>Investment in infrastructure for the efficient use of water resources and soil</li> <li>Water harvesting, storage and security</li> <li>Efficient use of water resources and protection of water recharging zone</li> <li>Wastewater treatment (slurry recycling, irrigation)</li> <li>Forest fire management and control</li> <li>Based on new target populations and tools developed during Adapta2+, amongst other, this activity</li> <li>leads to new researches realized in collaboration with academia and key experts from institutions which</li> </ul>
Implementation of nature- and community-based solutions in community organizations to contribute to a sustainable local market with expert support.	will help identify the best adapted practices to implement amongst nature-based adaptation solutions and other validated sustainable technical options in food systems.
Creation of alliances between the community, community-based organizations, private sector, such as development organizations, MSMEs, Asociaciones Administradoras de Sistemas de Acueductos y Alcantarillados Sanitarios (hereinafter ASADAs), the public sector and the agricultural sector to promote a sustainable local market.	This activity will facilitate the implementation of the adaptation actions.  • Events organizations  • Meeting organizations  • field visits
Strengthening of adaptation actions in the local chain and markets, including the creation of local suppliers (MSMEs) of nature-based adaptation technologies, with special attention to youth and women.	This activity will be based on the successful practices identified during Adapta2+: Local procurement, promoting market opportunities for adapted farmers, and community actions.
	Component 2

Scaling up access to financial mechanisms for agricultural producers to implement climate change adaptation practices and/or invest in new technologies as a contingency for the impact caused by climate change.	This activity comprises: Microcredits with adaptation incentives or value-added assistance (Pro-clima) which creates financial incentive to farmers who implement adaptation actions.
Scaling up the implementation of the agricultural insurance program and other financial incentives to promote climate resilience criteria.	This activity is based on the scalability and replication of the agriculture insurance of the National Insurance Institute and other financial incentives to be identified.
Facilitation of access to climate finance mechanisms in the private sector through the promotion of existing products in local sustainable driven markets; with special emphasis on MSMEs led by young and women.	This activity is based on microcredits that present financial benefits to MSMEs that integrate climate change measures in their businesses.
Development of credit and climate finance products for the agricultural sector, MSMEs and food systems to drive the transformation of sectors to finance nature-based solutions and validated adaptation technical options.	<ul> <li>Incorporation of adaptation and climate risk assessment measures in credit analysis.</li> <li>Improving understanding of credit analysts in potential adaptation actions to be financed in the food system.</li> </ul>
Bridge the gap to strengthen implementation and scope of credit programs that encourage adaptation to climate change.	Integrating climate change adaptation variables in programs, norms and regulations.
Generation of financial mechanisms that facilitate access to climate finance for women.	Integrating gender variables in programs when possible.
	Component 3
Creation of an agricultural innovation center where national and international knowledge with gender perspective can be found, the results of the project as well as knowledge from other institutions to enable the food system to transform its activity.	This is part of capacity building and knowledge dissemination about new and not-new adaptation actions including:  Technologies indicated in component 1, Capacity building in different adaptation measures, i.e. forest germination for the regeneration of forested areas. Analysis of meteorological events and communication of extreme events for prevention. Analysis of appraisals and construction permits with a focus on climate change resilience Infrastructure climate vulnerability analysis
Support and promotion of new and existing national platforms to promote scaling up of measures for adaptation to climate change with gender perspective.	This is part of capacity building and knowledge dissemination about adaptation actions.
Scaling up of model farms to promote adapted agricultural practices as well as best practices at community level, particularly with women.	This is part of capacity building and knowledge dissemination about adaptation actions.
Creation of the necessary information for the country's productive sectors with gender disaggregation data to enable them to make timely decisions on nature-based adaptation.	This is part of capacity building and knowledge dissemination about adaptation actions.
Dissemination of knowledge and lessons learned with gender perspective through: farm schools, platforms, agricultural innovation center.	This is part of capacity building and knowledge dissemination about adaptation actions.

**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. Overall, the project will contribute to health and wellbeing, food and water security, increased resilience and enhanced livelihoods of the most vulnerable people, communities in Costa Rica.

The project will directly benefit the agricultural and fisheries sectors, including the micro, small and medium farmers, livestock breeder and fishermen and MSMEs to whom the traditional banking system does not provide services due to the informality of their productive activities, scarce guarantee, low schooling or lack of knowledge in areas of work such as climate actions.

As mentioned previously, the agriculture sector represents 12.8% share within the total employed population of whom about 12.5% are female. Of those, of the 100% of farms registered in individuals, 84.4% are run by men, while only 15.6% are run by women. Of the 2,406,418.4 hectares under cultivation in Costa Rica (including individuals and legal entities), women produce only 4.4% of the land. Of the total number of farms run by individuals (80,987 farms), female producers who receive some type of technical assistance represent only 3.1% and, in the case of male producers, it is 16.6%. The following tables show with more details the number of farms of women in the agriculture sector in comparison to the number of men.

Moreover, in 2008, 3,000 legal artisanal fishermen were listed in the country and 2,000 who carried out their practice illegally were identified. At the national level, it is reported that 50% of men and 3.8% of women carry out this activity for their own account. Moreover, it is noteworthy that more than 30% of men do not have social security and a similar amount are self-insured or voluntarily insured in Puntarenas, while in Guanacaste, 37% are salaried insured. The insurance situation is different for women, since in Puntarenas there is a predominance of employed insured women (28.1%) and self-employed women (22.2%), which indicates that approximately half are insured (Fernández, 2013). However, in both the agricultural and fisheries sectors, an additional larger population will benefit from the improved value chain and local market, such as the private sector, and outside the value chain, such as people involved in sustainable resources management, disaster risk management and sustainable agricultural practices and local micro, small and medium enterprises of the food system.

In Costa Rica, the number of microenterprises in the country increased from 102,177 in 2012 to 108,079 in 2017, according to the most recent "Report on the State of the Situation of SMEs in Costa Rica", presented by the Ministry of Economy, Industry and Commerce (MEIC), as part of the celebration of the month of MSMEs (MEIC, 2021). The study points out that small companies increased in number, going from 15,277 in 2012 to 16,900 in 2017, while medium-sized companies also grew from 4,760 in 2012 to 5,409 in 2017, representing an increase of 13.63%. In 2017, SMEs represented 97.5% of the business park nationwide, by registering an increase from 125,198 in 2012 to 133,765 in 2017, for an increase of 6.8% (MEIC, 2021). The SMEs in the agricultural sector represent 9.60% of the SMEs, or 287.957 businesses in May 2021, identified as potential as shown in table 3 and figure 2.

Table 3 Number of businesses per sector (2021).

Sector	Number of Enterprises
Agrarian	278 956
Industry	174 287
Construction	399 266
Services	2 124 290
Total	2 906 799

Ref: MEIC, 2021

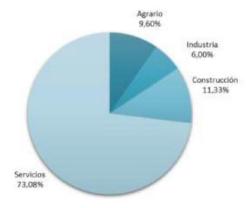


Figure 2
Percentage of businesses depending on the sector. Ref: MEIC, 2021

The report reveals the important contribution of SMEs in terms of employment generation. Job creation by MSMEs was 34.5% (320,767 working people) in 2012, a percentage that decreased in 2013 and 2014 to 34.1%, while in 2015 they contributed to employment with 33.9%. By 2016 it went to 33.41% and in 2017 to 33.3%, for a total of 344,390 working people, which corresponds to an increase of 4.7% compared to the base year (MEIC, 2021).

The project, through its focus on the food systems, will promote and implement further agricultural adapted practices, production practices that consider nature-based adaptation solutions and other previously validated sustainable technical options as the national context and climate change issues that push micro small and medium agriculture producers and MSMEs along the food chain to look for alternatives to maintain their activities. The technologies financed by the program increase both resilience and adaptive capacity, while improving environmental management and protection.

The adaptation strategies are community and nature-based and allow the farmers and entrepreneurs to decrease risks to climate change impacts such as severe weather and change in precipitation pattern, increase productivity, and protect ecosystem services. For example, soil conservation or rainwater harvesting allows to increase the resource availability for agricultural activities through increasing the adaptive capacity of producers to droughts. Another example would be the genetic improvement of livestock which allows the animals to be more resistant to heat stress or lowland weather and productive, improving the resilience of the activity.

Therefore, the female and male farmers will continue to improve their economic situation and resilience through the agriculture insurance and other appropriate financial mechanisms and the implementation of adaptation and mitigation technologies. The following table states the potential social and economic benefits per adaptation action.

Table 4. Social and economic benefits per adaptation action.

Activity	Potencial adaptation actions	Social and economic benefit			
Component 1					
Promotion of adapted production practices that consider nature-based adaptation solutions and other previously validated sustainable technical options to improve the resilience of female and male producers in the agricultural system and fishery sector.	The adapted production actions promoted will be the successful practices identified during Adapta2+. Amongst other it can be found: Precision farming Soil conservation measures Local crops use Silvopastoral Practices				
Identification of new adapted productive practices that consider nature-based adaptation solutions and other validated sustainable technical options in the food system and fishery sector.	<ul> <li>Silvopastoral Practices</li> <li>Nature based wind barriers and erosion reduction</li> <li>Rational grazing, tree farm fences and divisions, better usage of fodder as animal feed integrated pest management.</li> <li>agroforestry arrangements</li> <li>Increase and distribution of improved drought-tolerant varieties in different regions of the</li> </ul>	<ul> <li>Decrease cost of production</li> <li>Obtain healthy, environment friendly and quality products</li> <li>higher production of first-class products</li> </ul>			
Implementation of new adapted production practices that consider nature-based adaptation solutions and other sustainable technical options previously validated by experts to improve the resilience of the food system. To this end, demand will be taken into account in order to strengthen local markets.	<ul> <li>country</li> <li>Reproduction and conservation of native materials and seedlings of basic crops</li> <li>Development and implementation of bio-inputs and bio-irrigation in the production of vegetables, roots, tubers, and musaceae.</li> <li>Establishment of germplasm banks of local and/or climate-adapted crops in local communities.</li> </ul>	<ul> <li>Increase production</li> <li>Increase the resilience of practices to face climate change impacts</li> <li>More efficient water use and nutrition, and the reduction of pests and diseases</li> <li>Reduce the impact of extreme weather and climate variability on</li> </ul>			
Facilitation of the implementation of nature-based and community-based adaptation practices, such as, protection of critical ecosystems, improvement of water resources availability, and others, that support resilience of local communities	<ul> <li>Reforestation of mangroves and coastal reforestation and recovery of coral reefs</li> <li>Implementation of innovative, efficient and sustainable production models.</li> <li>Use of genetic improvement (crop and animal varieties better adapted to weather conditions).</li> <li>crop diversification,</li> </ul>	<ul> <li>production</li> <li>Legalize activity</li> <li>Improve economic conditions</li> <li>Reach more agricultural products in a</li> </ul>			
Identification of new nature-based and community-based adaptation practices and previously validated sustainable technical options for community organizations.	<ul> <li>changes in cropping pattern and calendar of planting,</li> <li>conserving soil moisture through appropriate tillage methods,</li> <li>Improving irrigation efficiency, and afforestation</li> <li>Investment in infrastructure for the efficient use of water resources and soil</li> <li>Water harvesting, storage and security</li> </ul>	water. with special emphasis on farms led by young and women			
Implementation of nature- and community-based solutions in community organizations to contribute to a sustainable local market with expert support.	<ul> <li>Water harvesting, storage and security</li> <li>Efficient use of water resources and protection of water recharging zone</li> <li>Wastewater treatment (slurry recycling, irrigation)</li> <li>Forest fire management and control</li> <li>Based on new target populations and tools developed during Adapta2+, amongst other, this activity leads to new researches realized in collaboration with academia and key experts from institutions which will help identify the best adapted practices to implement amongst nature-based adaptation solutions and other validated sustainable technical options in food systems.</li> </ul>				
Creation of alliances between the community, community-based organizations, private sector, such as development organizations, MSMEs, Asociaciones Administradoras de Sistemas de Acueductos y Alcantarillados Sanitarios	This activity will facilitate the implementation of the adaptation actions.  Events organizations  Meeting organizations  field visits	Networking     Experiences exchanges     Improved knowledge of other fields and sectors			

(hereinafter ASADAs), the public sector and the agricultural sector to promote a sustainable local market.			
Strengthening of adaptation actions in the local chain and markets, including the creation of local suppliers (MSMEs) of nature-based adaptation technologies, with special attention to youth and women.	This activity will be based on the successful practices identified during Adapta2+: Local procurement, promoting market opportunities for adapted farmers, and community actions "Purchase with a cause". This will be replicated.	Improved economic conditions of both the famers and business owner benefiting from quality and adapted products and ensuring the purchase and use of the products, with special emphasis on MSMEs led by young and women	
	Component 2		
Scaling up access to financial mechanisms for agricultural producers to implement climate change adaptation practices and/or invest in new technologies as a contingency for the impact caused by climate change.	This activity comprises:  • Microcredits with adaptation incentives or value-added assistance components (Proclima) which creates financial incentive to farmers who implement adaptation actions.	Improved access to agriculture finance tools and products     Expert support to implement adaptation strategy	
Scaling up the implementation of the agricultural insurance program and other financial incentives to promote climate resilience criteria.	This activity is based on the scalability and replication of the agriculture insurance of the National Insurance Institute and other financial incentives to be identified.	Covering of crops and animals by agricultural insurance Financial incentive to implement adaptation strategies	
Facilitation of access to climate finance mechanisms in the private sector through the promotion of existing products in local sustainable driven markets; with special emphasis on MSMEs led by young and women.	This activity is based on microcredits that present financial benefits to MSMEs that integrate climate change measures in their businesses.	Improved access to MSMEs finance tools and products with special emphasis on MSMEs led by young and women	
Development of credit and climate finance products for the agricultural sector, MSMEs and food systems to drive the transformation of sectors to finance nature-based solutions and validated adaptation technical options.	Incorporation of adaptation and climate risk assessment measures in credit analysis.	Improved access to MSMEs finance tools and products	
Bridge the gap to strengthen implementation and scope of credit programs that encourage adaptation to climate change.	Integrating climate change adaptation variables in programs, norms and regulations.	Improved access to local markets leading to the improvement of economic condition	
Generation of financial mechanisms that facilitate access to climate finance for women.		Improved access to MSMEs finance tools and products with special emphasis on MSMEs led by young and women	
Component 3			
Creation of an agricultural innovation center where national and international knowledge with gender perspective can be found, the results of the project as well as knowledge	This is part of capacity building and knowledge dissemination about new and not-new adaptation actions including:  Technologies indicated in component 1,	Improved access to knowledge	

from other institutions to enable the food system to transform its activity.	<ul> <li>Capacity building in different adaptation measures, i.e forest germination for the regeneration of forested areas.</li> <li>Analysis of meteorological events and communication of extreme events for prevention.</li> <li>Analysis of appraisals and construction permits with a focus on climate change resilience</li> <li>Infrastructure climate vulnerability analysis</li> <li>Other</li> </ul>	
Support and promotion of new and existing national platforms to promote scaling up of measures for adaptation to climate change with gender perspective.	This is part of capacity building and knowledge dissemination about adaptation actions.	Improved access to knowledge
Scaling up of model farms to promote adapted agricultural practices as well as best practices at community level, particularly with women.	This is part of capacity building and knowledge dissemination about adaptation actions.	Improved access to knowledge for farmers and experience exchange
Creation of the necessary information for the country's productive sectors with gender disaggregation data to enable them to make timely decisions on nature-based adaptation.	This is part of capacity building and knowledge dissemination about adaptation actions.	Improved access to knowledge
Dissemination of knowledge and lessons learned with gender perspective through: farm schools, platforms, agricultural innovation center.	This is part of capacity building and knowledge dissemination about adaptation actions.	Improved access to knowledge

The support of the MSMEs will also strengthen local markets for adapted products and anchor sustainable practices along the value chain. Strengthening the local market allows:

- To decrease in Food Miles (which refers to the distance that food travels to reach the local supermarket). The more food miles collected during food transportation, the more fossil fuels are burned, allowing more harmful greenhouse gas emissions to be released into the atmosphere. Purchasing local food that does not travel thousands of miles does not cause a massive fuel consumption and pollution, and it does not involve the need for facilities such as refrigeration that consume vast amounts of energy.
- Protects Local Land wildlife. When local products are purchased, local female and male farmers are supported to successfully operate their business. When it happens, female and male farmers are compensated for their products, and will be less likely to sell their land, which would often be redeveloped for industrial or commercial use. These uses would decrease biological corridors, affect water resources protection zones, release significantly more greenhouse gas emissions than farming does and would further eliminate habitats for the wildlife living in the local area.

Moreover, the creation of partnerships at community level will help to identify adaptation needs of communities between the different sectors that will allow local development. By addressing adaptation needs at community level, such as the protection of water resources, the generation of resilient jobs, and the restoration of ecosystems, amongst others, the project will coordinate the transformation of the necessary activities to develop a resilient local market. By doing so, the project will economically, environmentally and socially impact communities, because it will address the local cause of vulnerability.

Finally, by supporting MSMEs and creating capacities in community-based organizations, existing barriers to access climate tools, finances and adaptation mechanisms will be overcome and this will allow the strengthening of local markets making them more resilient to climate change impacts. As the project aims to work with the most vulnerable, gender issues will also be addressed. The exact number of beneficiaries will be determined in the stage of construction of the full proposal, as mentioned previously

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

To achieve profitable and efficient resource management, this proposal will strengthen sustainable local markets, developing and implementing adapted practices and nature-based solutions that improve the adaptive capacity and reduce vulnerability to climate risks of communities involved in food systems while increasing economic conditions of actors along the value chain. It has already been demonstrated that protecting ecosystem services thanks to adaptation actions such as nature-based and community-based solutions present great economic benefits. For example, a hybrid approach was applied in one study to estimate the value of ecosystem value of ecosystem services of mangrove forests in the Gulf of in the Gulf of Nicoya, using traditional benefit transfer and benefit transfer and expert-modified benefit transfer for 11 ecosystem services. In addition, primary studies were conducted for 3 ecosystem services ecosystem services (fisheries, climate regulation, and coastal protection) and coastal protection), including the use of INVEST models in combination with benefit transfer.

Using traditional benefit transfer, the economic value of 11 ecosystem services was economic value of 11 ecosystem services of these mangroves was estimated at \$812 million mangroves was estimated at \$812 million per year (median = \$88 million per year), and the average total value of ecosystem services provided by the ecosystem services provided by the total extent of mangroves in Costa Rica at \$1.5 billion per year (median = \$88 million per year). By applying the expert-modified benefit transfer, the total average value of mangrove forests in the Gulf of Nicoya was estimated to be \$470 million per year and a median value of \$470 million per year and a median value of \$75 million per year. This shows the importance of protecting the environment as well as adapting to climate change impacts.

On the other hand, vulnerable communities are the least equipped to cope and adapt to it through climate finance tools. In this regard, the agricultural and fisheries sectors have limited financing options for adaptation, and there is a growing need to provide access to these resources applied to nature-based adaptation solutions. The cost of implementing new agricultural practices can be significant, especially in the case of small-scale agricultural production or production that has been more exposed to adverse climatic events in the past.

Access to capital has so far been one of the most prevalent barriers to innovation in climate change mitigation and, especially, adaptation, which is rarely associated with an increase in income (from its financing) in the short-term. As a result, producers often find it difficult to absorb the capital investment needed to launch new initiatives and implement improved agricultural practices.

Moreover, the agricultural sector has limited financing options for adaptation, and there is a growing need to provide access to these resources applied to nature-based adaptation solutions, and the gap is wider with women. The cost of implementing new agricultural practices can be significant, especially in the case of small-scale agricultural production or production that has been more exposed to adverse climatic events in the past. That is why in this proposal there is a special focus on implementing financial instruments and investment models in favor of the agricultural sector, community organizations and small and medium-sized enterprises, creating enabling conditions in the local market.

The problem needs to be addressed and without the program the continuous deterioration of the Costa Rican ecosystem and the increased vulnerability of livelihood systems will increase. Moreover, the implementation of this programme is highly significant because it discusses a series of key issues for Costa Rica:

- The beneficiaries of the programme are amongst the most vulnerable population of the country: communities with low human development indicators, highly dependent on natural resources. It's expected through the programme to integrate appropriate considerations of climate change and variability into strategic planning and daily practices among beneficiaries.
- Access to climate finance is extremely limited or nonexistent for these populations
- The participatory approach and processes (a multi-stakeholder participation) both at the time of design and implementation of the programme will allow improving capacities of governmental organizations, civil society organizations, farmers associations and NGOs.

In this context, it is important to note that the agricultural sector has been neglected by the financial sector (with the exception of a few large producers), so agricultural producers have had problems accessing financing in general. Only 3.03% of all placements by regulated FIs were in agriculture, livestock, hunting and related service activities. related service activities. The problem of access to financing for the sector is accentuated with climate finance, for mitigation The problem of access to financing for the sector is accentuated with climate finance, for actions to mitigate and adapt to climate change. It is observed that very few climate finance products are targeted or designed specifically for the sector and it is reflected in the placements (GIZ, 2017).

Amongst the few climate credit options, Fundecooperación implements Tailor-Made Credit Programs. The Foundation's focuses on the niche of entrepreneurship, micro, small and medium-sized enterprises with a differentiated value approach based on the implementation of environmental, social, gender and innovation practices. The priority rural focus areas are: Talamanca, Guápiles, Sarapiquí, San Carlos, Grecia, Naranjo, Atenas, Orotina, Pérez Zeledón, Buenos Aires, Palmar Norte and Sur, Golfito, Puntarenas, San Carlos, San Carlos, Naranjo, Atenas, Orotina, Pérez Zeledón, Buenos Aires, Palmar Norte Norte and Sur, Golfito, Puntarenas, Cóbano, Jicaral, Tarrazú, León Cortes, Acosta, Dota and Cartago.

For 2018, the expectation was to open at least four specialized credit products in order to improve the supply and provide innovative financing options at the national level, these being: Sustainable Coffee, Sustainable Livestock, Sustainable Trades and Sustainable Horticultural Producers. The interest rates are diversified for each segment with the strategy based on regionalization, which makes the supply of credit products more specific to cover niche markets. The interest rates for each segment have been diversified with the strategy based on regionalization, which makes the supply of credit products more specific to cover underserved and more specialized niches of the population.

Fundecooperación is the only finance entity to implement a climate microcredit, PRO+CLIMA microloan (since 2019). The PRO+CLIMA microloans are custom-made and allow micro, small and medium farmers to access financing options to implement sustainable practices and develop further their activity. The loan is built depending on the customer's resources flow to ensure that their repayment is adjusted to their activity type and income scheme, offering solutions and conditions adapted to each client, and may also offer guarantees for more financial inclusion. In return, PRO+CLIMA requires the female and male farmers to implement sustainable practices and a possible subscription to an agriculture insurance. The insurance covers the farmers' activities, while offering financial incentive to implement the strategies. As a result, female and male farmers improve their resilience to climate change and economic conditions. For some, this process also allows them to formalize their activities.

Therefore, the project proposes to invest in continuing transforming agriculture practices into adapted one, transforming the farms as an example for others, and improving the economic conditions of farmers. By parallelly investing in the value chain of the food system through the MSMEs, the farmers are ensured to sell their products, while the MSMEs are benefiting from quality products, adapting themself to climate change impacts. Finally, by supporting climate finance through microcredit, the project ensures the continuity of the project and that the farmers and MSMEs who will want to adapt will be able to do so without the need of further non-reimbursable financing.

A fundamental part of the project is the creation of knowledge on climate change adaptation in order to strengthen the agricultural production value chain and local markets. Indeed, the previously described activities, related to knowledge management and capacity building, will have a multiplier effect on adaptation actions, which involve technology transfer between beneficiaries, technicians and private organizations, public institutions, communities and small and medium-sized enterprises, seeking to move from traditional uses, methods and practices of resource management to new technologies or measures that increase their resilience.

Knowledge sharing mechanisms promoted among communities and organizations, as well as capacity building, will ensure adaptation in planning processes, as well as improved decision making through stakeholder participation on issues such as climate change, resilience and adaptation in agriculture. Knowledge sharing will reduce operational costs and increase benefits through the opportunity to replicate best practices and lessons learned among

communities. During program implementation, it is expected to count on counterparts that, by joining efforts, will make it possible to achieve a greater impact.

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 programmes of action, or other relevant instruments, where they exist.

The project supports the national priorities of Costa Rica. Indeed, Costa Rica is currently reinforcing its efforts to increase society's resilience to the impacts of climate change and strengthening the country's capacity for decarbonized development.

## Component 1: Improve the adaptive capacity of productive systems and communities involved in the development of the territory.

- The component contributes to axis 5 of Costa Rica's National Policy on Adaptation to Climate Change by strengthening standards and technical guidelines for the resilience of productive sectors, increasing adaptive capacity through the exchange of best practices and innovation for eco-competitiveness, raising consumer awareness and taking advantage of opportunities that favor synergies between mitigation and adaptation in climate action.
- This component contributes to the National Plan for Development and Public Investment (PNDIP) , which promotes the implementation of adaptation projects to strengthen the capacities of the rural sector by promoting adaptation strategies that involve environmentally friendly technologies, such as the value of water resources, dual purpose applications such as fertigation to ensure water distribution for livestock and crops, family gardens, food security, and the implementation of strategies with adaptation technology. It also supports community organizations with the development of projects that apply adaptation actions in the communities, seeking to adapt to sustainable production and consumption patterns.
- On the other hand, component 1 contributes to the 2019-2022 Policy Guidelines for the Agricultural, Fishing and Rural Sector, in its Resilient Agribusiness Management axis, which seeks to boost agribusiness capacity for sustainable and competitive production. It is defined that technology must be used in such a way as to increase productivity, but always seeking to make efficient use of natural resources, coordinating the work between the public, private and academic sectors.
- The component also contributes to Costa Rica's Nationally Determined Condition (NDC), which presents the National Policy for Adaptation to Climate Change, including adaptation criteria in territorial planning instruments, and also indicates that measures must be taken by 2030, considering that productive systems must reduce their Greenhouse gas emissions (GHG) emissions and considering adaptation, mitigation and resilience measures. Mention is made of the implementation of Costa Rica's National Bioeconomy Strategy 2020-2030, which seeks to assist all regions of the country in production based on the fair and equitable use of its biodiversity, involving various sectors and communities for its implementation.
- The component contributes to strategic orientations 2 and 3 of the Territorial Economic Strategy for an Inclusive and Decarbonized Economy 2020-2050 as it suggests diversifying and balancing economic activities in favor of resilience and suggests optimizing economic activity linked to ports, expanding sustainable fishing activity and developing human capital and innovation.
- This component also contributes to axis 4 of the gender equality policy for inclusive development in Costa Rica's
  agricultural, fishing and rural sector by facilitating rural women's effective access to climate information and advisory
  and training services on sustainable agricultural practices that favor their capacity to adapt to and mitigate climate
  change.
- Axis 8 of the Decarbonization Plan seeks to promote agrifood systems that are efficient and reduce carbon emissions; achieving sustainable and resilient agriculture will be the answer to alternatives and methods for adapting to climate change. This is achieved through board agreements in relevant institutions (National Institute for Rural Development (INDER), SBD, National Community Development Direction (DINADECO), and others) for the allocation of resources for the development of decarbonization projects, in addition to generating plans to be applied in the agri-food industry and in SMEs in the sector that seek to reduce emissions and achieve sustainable productivity.
- This component contributes to axes 1 and 5 of the national risk management policy by improving adaptive capacity,

thus reducing the risk and vulnerability of communities throughout the territory. It also helps to reduce economic losses due to disaster events in the productive sector, since by strengthening adaptation mechanisms, disaster events can be prevented and mitigated.

Finally, it contributes to every axis of the Gender equality policy for inclusive development in the Costa Rican
agricultural, fisheries and rural sector 2020-2030 and Action Plan I as it supports the institutional management to
support women, support women economic conditions and well-being, and help them implement new technologies
and adapt to climate change.

#### Component 2: Strengthen access to financing for nature-based adaptation investments.

- This component contributes to axis 6 of Costa Rica's National Policy on Adaptation to Climate Change, facilitating access to public and private financial resources to effectively implement adaptation measures and reduce losses and damages for vulnerable populations due to the adverse impacts of climate change. This is intended to be done by identifying climate actions in annual budget exercises, strengthening financial instruments for conservation, sustainable management and recovery of natural resources and for payment by results for the provision of strategic environmental services for adaptation, incorporating adaptation criteria in financial instruments for risk transfer, such as guarantees, insurance and reinsurance, and by incorporating adaptation criteria and reduction of current vulnerability in post-disaster reconstruction and recovery processes.
- The component contributes to strategic orientations 2 and 3 of the Territorial Economic Strategy for an Inclusive and Decarbonized Economy 2020-2050 as it suggests diversifying and balancing economic activities in favor of resilience and suggests optimizing economic activity linked to ports, expanding sustainable fishing activity and developing human capital and innovation.
- This component contributes to the PNDIP since it mentions that the demand for financial services is increasing in the country, since there was a reduction in the requirements for opening debit accounts, which seeks to increase the banking penetration of small businesses and improve the conditions for financing dynamic and traditional enterprises. In addition, the Development Bank is working to increase the annual percentage of loans granted to SMEs and is seeking to increase SME insurance and agricultural insurance as a means of mitigating climate change. The National Insurance Institute (INS), on the other hand, has already enabled access to affordable crop insurance for producers who apply climate change adaptation and mitigation standards to their crops.
- Additionally, it supports axis 4 of the 2019-2022 Policy Guidelines for the Agricultural, Fishing and Rural Sector, which
  promotes institutional modernization as a strategic line with the private sector and other sectors that promotes actions
  to facilitate public-private linkages, as this allows taking advantage of institutional services, provides access to
  financial resources and risk reduction instruments (insurance), which is useful for developing capacities and effective
  articulation with other sectors.
- It also contributes to the NDCs, which want to ensure partnerships with the financial sector, so that it is decarbonized and resilient, and also encourages investment and financing of green businesses. In this area there is also a commitment by the country to strengthen tools such as insurance and tariff instruments as adaptation and mitigation measures.
- Specifically for the agricultural sector, the idea is to develop a sectoral plan for adaptation to climate change that
  analyzes its main impacts, focusing on the transformation of the productive sector through the adoption of
  technologies to reduce emissions and adaptive policies and practices.
- The component contributes to axis 2 of the gender equality policy for inclusive development in the Costa Rican
  agricultural, fishing and rural sector so that women linked to the sector improve their economic autonomy through
  access to financial resources, increasing their capacity to access land and technology.
- The component observed in the Decarbonization Plan seeks to consolidate strategies that allow access to financing
  in all its axes, through financing at scale, to reduce barriers in the strategies and ensure that the actions to be
  implemented are carried out.
- This component contributes to axis 4 of the national risk management policy, since by strengthening access to adaptation financing, it contributes to increasing the financial investment available to protect and secure infrastructure and public services.
- Finally, it also contributes to every axis of the Gender equality policy for inclusive development in the Costa Rican agricultural, fisheries and rural sector 2020-2030 and Action Plan I as it supports the institutional management to

support women, support women economic conditions and well-being, and help them implement new technologies and adapt to climate change.

#### Component 3: Strengthen capacities for local, national and regional decision making.

- This component contributes to axis 1 of Costa Rica's National Policy on Adaptation to Climate Change by promoting
  the implementation of information platforms and climate services, promoting scientific research, incorporating
  adaptation to climate change in all educational systems, and promoting community management and participation in
  adaptation to reduce the vulnerability of communities and households to climate change through capacity building.
- This component contributes to the PNDIP, which proposes to create value-added products based on the knowledge
  that the National Center for Food Science and Technology transmits to the sector, in addition to Ministry of Science,
  Innovation, Technology and Telecommunications (MICITT) support to help SMEs with experimentation, digital
  manufacturing, prototyping and learning tools.
- In addition, the component contributes to axis 2 of the 2019-2022 Policy Guidelines for the Agricultural, Fishing and Rural Sector, establishing measures to strengthen the domestic market through productive organizations that favor the participation of stakeholders with the action of institutions linked to the sector, which help add value to products by improving access to markets and competitiveness. The knowledge and experience gained throughout the production chain can be profitably applied by forming alliances with government agencies, international organizations, producers' organizations and entrepreneurs, among others.
- It contributes to the NDCs regarding climate empowerment actions, which is sought to be implemented from primary
  school to university level with the help of civil society organizations and community organizations that have the
  capacity to implement education programs to include content related to climate change in education programs.
  Actions are also sought to promote community management and participation in adaptation activities in order to
  reduce the vulnerability of communities to climate change.
- The component also contributes to axes 2 and 3 of the gender equality policy for inclusive development in Costa Rica's agricultural, fishing and rural sector, so that capacity building can improve organizational and business management for the well-being and economic autonomy of women linked to the sector; in addition, capacity building facilitates research and technological innovation, helping to improve the competitiveness of the productive and economic activities of agricultural and rural women.
- This component is addressed in the Decarbonization Plan with a planning that seeks to generate knowledge from various groups and actors, with the objective of making decisions that direct markets and productive sectors to generate zero emissions. The aim is to use knowledge to digitize processes and base the economy on it, since it allows accumulating, processing and analyzing data to have competitive conditions in the new context. There is also support from institutions to transmit information to the various sectors and, specifically in the agricultural sector, the aim is to provide training to guide farms under sustainability models.
- The component contributes to axis 3 of the national risk management policy, as it helps in research, observation and generation of information on risks to make the best decisions regarding actions to reduce risks and vulnerability.
- Finally, it contributes to axis 4 of the Gender equality policy for inclusive development in the Costa Rican agricultural, fisheries and rural sector 2020-2030 and Action Plan I as it supports the institutional management to support women.
- **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 will be implemented following international national guidelines, policies and technical standards framework. Labor codes and the relevant sectoral laws and regulations that include adaptation measures will also be taken into account for the design of the project. Among the aspects considered during the initial concept preparation of the project have been the general regulatory framework that affect activities of the components mentioned, and that are related with the AF Environmental and Social Policy. Further elaboration on the compliance with national technical standards, Environmental and Social Policy of the Adaptation Fund and Environmental will be provided in the full proposal.

Table 5. Relevant national technical standards

Output	AF ESP	Relevant Rules, Regulations, Standards and Procedures	Compliance procedure and authorizing offices
1.1	1, 2, 3, 5, 6, 8,	General Regulations on the environmental viability (licensing) of new activities, works or projects - D1-D2.	* National Environmental Technical Secretariat (SETENA), if applicable authorization, (D1-D2)
	11, 12, 15	Veterinary Operating Certificate issued by SENASA.	*National Animal Health Service (SENASA) relevant sanitary measures on the control of the safety of animal health products.
		Technical guide for the dissemination of sustainable agricultural production technologies. Protocol for the implementation of COVID-19 prevention and mitigation measures for producer households.  Productive Development Policy (PDP) focuses on rethinking the productive model that the country needs to achieve by 2050.  Technical standards established by the National Seeds Office.  Regulations to Law No. 8591 Regulations for the Development, Promotion and Encouragement of Organic Agriculture and Livestock Activity  Land use plans	*Ministry of Agriculture and livestock: compliance with Soil Use, Management and Conservation Regulations as well as technical compliance for sustainable production technologies and permits for seed use and reproduction, generation and approval of Land Use Plans.
		Fishing and aquaculture regulations - decree 36782 Code of Conduct for Responsible Fishing, the norms issued by the Central American Integration System on fishing and aquaculture and other applicable norms.	*Incopesca: compliance with the Code of Conduct for Responsible Fishing, as well as the provisions of the decree with respect to closures, financing of the sector, licenses, permits, concessions, etc.
		Building permits, operating permits. Costa Rican Labor Code.	*Local Governments: building permits, operating permits, land use plans. *Ministry of Labor, application of the labor code for all required hiring.
1.2	1, 2, 3, 5, 6, 9, 10,	General regulation on the environmental viability (license) for new activities, works or projects - D1-D2	* National Environmental Technical Secretariat (SETENA), if applicable authorization, (D1-D2)
	10,	Veterinary Operating Certificate issued by SENASA.	*National Animal Health Service (SENASA) relevant sanitary measures on the control of the safety of food products.
		Decree Nº 42582-S-MINAE's that regulates the operation of the organizations for the community management of aqueduct and wastewater sanitation services.	*Ministry of Environment and Energy y AyA, delegation permits, guidelines for infrastructure improvements.
		Protocol for the implementation of COVID-19 prevention and mitigation measures for producer households. Protocols established by COVID-19.	*Ministry of Agriculture and livestock: implementation of farm plans, operating permits, as well as technical compliance for sustainable production technologies and seed use and reproduction.
		Costa Rican Labor Code Building permits, operating permits, land use plans.	*Ministry of Labor, application of the labor code for all required hiring. *Local Governments: building permits, operating permits, land use plans.
1.3	1, 2, 3, 5, 6, 9,	General Regulations on the environmental viability (licensing) of new activities, works or projects - D1-D2.	* National Environmental Technical Secretariat (SETENA), if applicable authorization, (D1-D2)
	10, 11,15	Veterinary Operating Certificate issued by SENASA.	*National Animal Health Service (SENASA) relevant sanitary measures on the control of the safety of animal health products.
		Technical guide for the dissemination of sustainable agricultural production technologies. Protocol for the implementation of COVID-19 prevention and mitigation measures for producer households.  Productive Development Policy (PDP) focuses on rethinking the productive model that the country needs to achieve by 2050.  Technical standards established by the National Seeds Office.  Regulations to Law No. 8591 Regulations for the Development, Promotion and Encouragement of Organic Agriculture and Livestock Activity	*Ministry of Agriculture and livestock: Soil Use, Management and Conservation Regulations compliance as well as technical compliance for sustainable production technologies and permits for the use and reproduction of seed, generation and approval of Land Use Plans.

		Fishing and aquaculture regulations - decree 36782, Code of Conduct for Responsible Fishing, the norms issued by the Central American Integration System on fishing and aquaculture and other applicable norms.	*Incopesca, compliance with the Code of Conduct for Responsible Fishing, as well as the provisions of the decree with respect to closures, financing of the sector, licenses, permits, concessions, etc.
2.1	1, 3, 6, 9.	*Rules of the General Superintendency of Financial Institutions Compliance with: Law 7786 - Money laundering (Legitimization of capitals) Law 7472 - Promotion of competition and effective defense of consumers (Usury Law). Law 8968 - Protection of Individuals with respect to the processing of their personal data. Including Agreement SUGEF 13-19 "Regulation for the prevention of LC, FT, FPADM risk, applicable to regulated entities".	* General Superintendency of Financial Institutions, periodical reports.
2.2	1, 3, 6, 9, 15.	Rules of the General Superintendency of Financial Institutions Decree No. 37168: Regulations of the Program for Strengthening Innovation and Technological Development of SMEs. Agreement SUGEF 13-19 "Regulation for the prevention of LC, FT, FPADM risk, applicable to regulated entities".	* General Superintendency of Financial Institutions, periodical reports.
3.1	1, 2, 4, 5, 6, 15.	Geographic Information Technical Standard of Costa Rica (NTIG_CR05_01.2016) Cartographic Specifications for the Topographic Map Scale TIG_CR02_11.2020) Standards par1:25.000 of Costa Rica (NTIG_CR06_01.2016) Decree National System of Metrics for Climate Change (SINAMECC) N° 42961_MINAE Decree No. N° 40710 MP-MINAE-PLAN - Operating Regulations of the Secretariat of Sectoral Planning for the Environment, Energy, Seas and Land Use Planning (SEPLASA). Decree N° 37658-MINAET creates the National Environmental Information System (SINIA), which will be under the responsibility of the Ministry of Environment, Energy and Telecommunications, coordinated by the National Center for Geoenvironmental Information (CENIGA). Personal data protection regulations in force in Costa Rica.	SINIA, National System of Metrics for Climate Change (SINAMECC), SNIT and CENIGA, compliance with standards for the publication of Costa Rica's Geographic Information and map scales required to make information available. Data protection regulations.
3.2	1, 2, 3, 4, 5, 9, 10, 11.	Protocol for the implementation of COVID-19 prevention and mitigation measures for farmers households.  Personal data protection regulations in force in Costa Rica.	*Ministry of Health, compliance with protocols for face-to-face events. *Protection of personal data of beneficiaries and project participants.

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

This proposal arises from the need to work beyond the farm and individual farmer and fisherman, and focus on the overall food system to ensure the sustainability of the adaptation practices in farms and fisheries. It addresses more parts of the food system value chains than the work of Adapta2+, contributing to sustainable production and consumption through the implementation of solutions based on nature, also ensuring access to healthy and nutritious food for all people (zero hunger). Working on the overall food system leads to addressing and linking parts of the value chain and strengthening adaptation measures; therefore, the proposal includes activities related to the production, processing, distribution, preparation and consumption of food. The proposal works through mechanisms of change: adequate financial mechanisms and innovation in agriculture for the transformation of food systems, considering gender and human rights.

The expected outcomes from the project will differ from ADAPTA2+ as shown in the following table:

Table 6. Comparison between Adapta2+ and proposal's outcomes

Adapta2+ outcomes and results	Proposal's outcomes and Main breakthroughs
Outcome 1: Strengthened farming productivity in response to climate change, in order to reduce loss of soil and improve water management.	Outcome 1: Food systems and communities adapt to climate effects and implement nature-based solutions that contribute to the resilience and sustainable development of the territory with a gender perspective.
Main results: At least 800 farms improved their production with the implementation of at least 25 different technologies, including rotational grazing and increased forage availability, with which the farms have been able to double or even triple their production.	Based on new target populations and tools developed during Adapta2+ the main expected results under the proposed project:  *The new focus of the proposal is the overall Food System instead of only farms, which will upscale and replicate agricultural adapted practices and production practices, already validated by adapta2+, that consider nature-based adaptation solutions. *It is expected to support micro small and medium agriculture producers and MSMEs along the food value chain to adapt to climate change to maintain their activities.  *Creation of partnerships between agriculture and fisheries sector and organizations at community level will help to identify adaptation needs of communities between the different sectors that will allow local development *Support of communities to generate their adaptation to climate change through the support of the different existing value chains. *Scale up the measures achieved with Adapta2+ by bringing the market closer to the adaptation issue. The exact number of MSMP supported will be defined during the development of the full proposal.
Outcome 2: The availability of water resources for human consumption is preserved and the vulnerability of coastal communities is reduced through the participation of communities in protecting critical ecosystems (For example: mangroves, watersheds and coastal areas).  Main results: At least 100 community aqueducts strengthened, and more than 70.000 people with access to water.	Unlike the Outcome achieved with Adapta2+, the project seeks:  Outcome 2: Access to climate finance products and mechanisms is facilitated in the food systems.  Main expected results under the proposed project:  *New microcredits with adaptation incentives or value-added assistance components for MSMEs  *Scaling up and replication of the agriculture insurance of the National Insurance Institute and other financial incentives to be identified  *Scale up of existing microcredit mechanisms  *Incorporation of adaptation and climate risk assessment measures in credit analysis to be accessed by the private sector for financing
Outcome 3: stakeholders improve capacities regarding adaptation to climate change by developing and improving the information, awareness and abilities about related socioeconomic and environmental risks.  Main results: Inclusion of adaptation focus in public policy, democratization of knowledge through the creation of more than 312 materials of adaptation to climate change.	Outcome 3: Knowledge with a gender perspective is created, strengthened and disseminated along the value chain to reinforce decision-making capacities in adaptation actions to improve resilience to climate change in the territories.  Main expected results under the proposed project:  *Creation of more knowledge tools considering new nature-based adaptation actions.  *Support the implementation of local policies on adaptation for local decision making.  *Continue the support and creation of analysis of meteorological events to support communication of extreme events for prevention to communities.  *Creation of exchange activities between communities that have carried out adaptation and new actions implemented.  *Support the creation of greater public policy necessary to promote adaptation in the daily life of communities and the country.

Due to the various national strategies and plans related to climate change adaptation and development, a large number and range of initiatives and projects related to those sectors exist. However, along with the Climate Change Directorate and the Ministry of Environment and Energy as lead entities, the current proposal was conceptualized based on the scaling up of Adapta2+ (previously financed by the Adaptation Fund), considering work areas that have not been covered by ongoing

initiatives. Moreover, although coordination with ongoing initiatives and projects is expected, the proposal objectives do not depend on co-financing of other initiative or technical results from other actors.

The proposal is built and will enhance actions already achieved. It is important to note, however, that the initial review of the initiatives does not give any indication of technical duplication, but the full proposal considers a coordination process to ensure alignment/synergy and even constant identification of coordination initiatives, allowing a construction based on the sharing of experiences, results and lessons learned.

Table 7. Relevant Projects for this programme.

Relevant Project/Progra mme	Description of the Project/Programme	Relevant results for this programme	Complementary Potential and non-Duplication	Timeline
ADAPTA2+	Funded by the Adaptation Fund to support adaptation programs in developing countries that are vulnerable to the adverse effects of climate change. The goal of the initiative in Costa Rica is to reduce the vulnerability of communities to the impact of climate change and enhance resilience in the following sectors that have been classified as critical: agriculture, water resources and coastal areas, and capacity-building.	Farms improved their production with the implementation of different technologies, including rotational grazing and increased forage availability, with which the farms have been able to double or even triple their production.  Community aqueducts strengthened, and inclusion of adaptation focus in public policy, democratization of knowledge through the creation materials of adaptation to climate change.	Adapta2+ focused on adaptation actions in the agriculture sector, the water sector and knowledge creation, the new proposal goes further, creating bridges between the different elements of the value chain of the food system implementing adaptation actions, also linking the three components of the proposal along the value chain of the food system including climate finance, making sustainable the outcomes of the program.  As mentioned above, the proposal builds on what has already been achieved at the farm level, extending its support to the Food System, working at community and private sector levels, to facilitate their access to climate finance and sustainable markets.  The key difference between the programs is their level of focus. While Adapta2+ focused on individual and/or farm level mainly validating and providing technical solutions, the new program focuses on a value chain level, providing sustainable technical and finance solutions to its different actors, reinforcing, thus, the local market.	
Plan A	Adaptation project which is implemented in the country financed by United Nations Environmental Program (UNEP). Plan A aims to build sustainable country capacity in identifying, prioritizing, planning and implementing measures that address a diversity of local adaptation needs. The ultimate objective of the project is to reduce the country's vulnerability to the impacts of climate change and variability, by building adaptive capacity and resilience through the integration of adaptation into regional and municipal planning, including government entities, the private sector, and civil society.	Plan A aims to: *Strengthened current planning frameworks at regional and cantonal levels *Cantonal risk assessments to identify adaptation needs, based on i) available and pertinent knowledge, and ii) a validated and efficient methodology are available. *Appropriate monitoring and reporting mechanisms for adaptation at sub-national level in place.	This proposal will benefit from the knowledge creation of Plan A such as the vulnerability maps, local climate scenarios and other tools created, amongst others. Already preliminary used in this concept note, the knowledge created and implemented during Plan A will be used to develop the full proposal (vulnerability maps, and capacity building at local level, amongst others).  It will also benefit from the local capacity created at local level to facilitate the implementation of the program. As Plan A is focused on urban areas (local planning), the proposal will complement the implementation of adaptation actions in the food system.  The adaptation planning generated with the project is an	2019- 2022

			important input for the generation of actions based on the knowledge of the communities. These adaptation planning documents are already under construction and are expected to be delivered to the territories no later than 2022. Therefore, this proposal and Plan A do not duplicate efforts, on the contrary, they complement each other and Plan A results help to facilitate its implementation and root the new proposal in communities.	
The Microfinance for Ecosystem-based Adaptation (MEBA)	The project sought a paradigm shift through private sector engagement in adaptation finance by facilitating microfinance products aimed at small-scale farmers to invest in ecosystem-based adaptation (EbA) options, thus improving their income and resilience to climate change. It supports the development and dissemination of microfinance products such as small loans, which were used for climate change adaptation in the affected regions.	The project built up know-how on ecosystem-based adaptation (EbA) in the microfinance institutions (MFIs). Using the instruments that have already been developed, the MFIs autonomously granted loans that enabled investments in EbA and increased the income of the borrowers.  Activities of the project include:  *Facilitate the creation of Eba microfinance products.  *Private sector engagement in adaptation finance	outcomes. Indeed, the recommendations formulated about including the adaptation variable in the microfinance sector and the lessons learned provide a roadmap to support the development of Ecosystem-based Adaptation	2018- 2020
BIOFIN	Initiated in response to the urgent global need to divert more finance from all possible sources towards global and national biodiversity goals, as highlighted during the 2010 CBD COP 10 in Nagoya. BIOFIN works with governments and the private sector to demonstrate how tailored investments and incentives in biodiversity not only protect nature but also create jobs, reduce pandemics, and combat climate change.	tailored finance solutions that will help them transition to a nature positive economy: protecting and preserving nature and boosting economies. Based on the evaluation of available finance alternatives, in Costa Rica finance solutions have been prioritized such as (amongst many other):	working with the agriculture sector and transform their activity into sustainable one, protecting and restoring biodiversity through the implementation of adaptation actions and nature-based solutions. Therefore, farm and	2018 - 2025

		BIOFIN offers 6 concrete and innovative Financial Solutions (SF) and a transversal component of Gender Equality Integration, to mobilize resources so that Costa Rica can increase and make more effective and efficient investment in conservation, sustainable use and equitable distribution of the benefits of ecosystems and biodiversity.		
The Productive Landscapes Project (PPP) is led by the UNDP in partnership with MINAE	The PPP is innovative and seeks to achieve biodiversity conservation, sustainable land management and carbon sequestration in production landscapes and interurban biological corridors, benefiting both people and biodiversity.  The PPP has a specific geographic focus: Region 1: La Amistad Pacific Conservation Area Region 2: María Aguilar River Inter-urban Biological Corridor	The PPP leads to the implementation of nurseries for endemic and native plant species, financing of socio-productive community initiatives, MRV systems and risk management tools, information and information tools about forest, land property registries, environmental education program in production landscapes, and female and male private producers informed about and trained about the monitoring tools and how to use it to enforce the Forestry Law.	If the selected implementation areas of the proposal correspond to the zones of the PPP, the proposal will ensure the sustainability of the PPP results (information, tools and trained communities and farmers) and integrate the results in the adaptation strategies implemented along the value chain of the food system. Moreover, the proposal will also allow replicating some of the PPP strategies (information tools amongst others) in other parts of the country.	2018- 2023
Strengthening of Communal Aqueducts Project (SCAP)	The SCAP aims to strengthen the infrastructure and operational capacity of more than 300 ASADAS in the cantons of Liberia, La Cruz, Cañas, Carrillo, Santa Cruz, Nicoya, and Hojancha in the Chorotega region and the cantons of Los Chile, Upala and Guatuso in the North-North territory, by incorporating the adoption of ecosystem-based adaptation measures, with strong participation of communities, not only as customers of water services, but also as actors responsible for water services, Upala and Guatuso in the North-North territory, by incorporating the adoption of ecosystem-based adaptation measures, with a strong participation of the communities, not only as clients of water services, but also as actors responsible for the protection and preservation of the water resource.	The project strategy includes the generation of associative dynamics, capacity building, infrastructure improvement and knowledge development of managers, active participation of women, local communities and productive sectors, for the promotion and implementation of sustainable practices for water use, in addition to the improvement of infrastructure and operation to expand service coverage, thus promoting compliance with the 2030 Agenda and the Sustainable Development Goals (SDGs), especially SDG 6: Ensure availability and sustainable management of water and sanitation for all.	The program will benefit from the SCAP results as it already ensures the adaptation of ASADAs, and more specifically the tools generated by the project and avoid duplication of efforts by replicating the successful actions in new ASADAs or to support the creation of alliance between ASADAs and agricultural actors of the region if already adapted. In addition, the project will go beyond solely working with ASADAS as it will support actions related at the community level.  However, the SCAP is implemented in a specific geographical area. When implementing the new AF program, the results of the SCAP project will be taken into account and no efforts will be duplicated in the ASADAs.	2016- 2021
Biodiver_City	The Biodiver_City San José Project aims that public institutions (MINAE, SINAC,	The project seeks to ensure that interurban biological corridors and the	If the selected implementation areas of the proposal correspond to the zones of this project, this proposal will	2018- 2021

	municipal administrations) and private stakeholders (private sector, non-governmental organizations, urban initiatives) incorporate urban ecosystem services, the establishment and management of inter-urban biological corridors in their urban development planning.  The project contributes to a better connectivity between natural (gallery forests, urban wetlands, charrales) and urban green areas (parks, green zones, tree-lined streets, gardens, etc.), small in size and isolated from each other, by restoring river protection zones and other tree planting measures, creating a green belt ("Trama Verde") and a coherent network within and around the GAM.	benefits that nature brings to urban life are considered in the planning and management of spaces in the Great Metropolitan Area (GAM).  The project is relevant because it integrates the productive actions that take place in the city with the interurban corridors. Two interurban biological corridors have been prioritized in the country leading to: capacity building and framework conditions at the GAM level and strengthening implementation and cooperation capacities.	complement the Biodiver_City project, by working with the agriculture sector implementing adapted agricultural practices which sustain over time, restoring and preserving biodiversity. Indeed, thanks to the Biodiver_City project, the urban population benefits from improved air and water quality, an improved microclimate and greater availability of nearby recreation areas, while the new proposal will allow urban population to access new local markets, supporting sustainable farms and fisheries through supported MSMEs. Therefore, both projects will work in a complementary manner, linking both agricultural and private sectors in urban and rural areas.	
Scaling-up Ecosystem- based adaptation (EbA) measures in rural Latin America / EBA- LAC	The project increases the resilience of vulnerable communities and ecosystems in rural areas of the partner countries. To this end, it develops and implements proven, innovative and cost-effective EbA approaches in different ecosystems. It also strengthens the capacity of a wide range of actors, including national and local government and civil society organizations, the private sector, service providers and rural communities. It also embeds EbA practices into the revised NDCs, sectoral plans and national adaptation plans to better achieve national adaptation goals. The project ensures long-term impact in partner countries through, among other things, the (further) development of innovative financial instruments and products, improved governance and knowledge exchange.	The project seeks to contribute to safeguarding and restoring areas of high conservation value, increasing biodiversity in agricultural production systems, and maintaining ecosystem goods and services, such as water and fertile soil. It aims at generating significant and sustainable results at the landscape, subnational and national levels in each country, as well as generating relevant experience and knowledge at the regional level. This is especially important since such actions can generate alliances with the project.	The work carried out by EBA-LAC strengthens the resilience of vulnerable communities and Ecosystems. However, the EBA-LAC project is implemented in a specific area of the country and its work is limited to the farm level. Therefore, similarly to the Adapta2+ results, the proposal will scale up the project outcomes and link it to new value chains of the food system. Moreover, when implementing the new program, different communities to work with will be selected.  The results of the Eba project will feed into the component 3 of the new proposal, while the adaptation strategy implemented will help the new proposal to be more quickly implemented as they will already be validated. Moreover, the proposal will also use the lessons learnt of the project while communities which have been working in the project will already be trained and ready to work with the new actors.  The proposal is complementary to the EBA-LAC projects and will support the sustainability of the Eba project by strengthening niche and adapted products markets.	2020- 2025

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

The knowledge management aspect is intrinsic in the whole proposal. However, due to its importance on the impact and sustainability of the program, it was enhanced as an independent component which responds to the third objective of the program. Hence, knowledge management is the component 3: Strengthen capacities for local, national and regional decision making. Hence, this component supports the strengthening of capacities through dissemination, awareness building, training and knowledge exchange mechanisms for initiatives along the value chain to promote informed decision-making at all levels.

This component builds upon previous experience with COVID-19 which obliged Fundecooperación and executing entities to apply adaptive management measures. These new strategies have led, in certain cases, to the improvement of communities and organizations' participation in meetings, as well as to the creation of new training materials for technical support to female and male farmers, sharing projects' results and experience exchange using different multimedia platforms. The recent COVID-19 crisis has also shown that more work is still needed, for example, the financial difficulties of a community impacts on the ASADAs, which find themselves unable to collect the funds necessary to function.

During Adapta2+'s implementation, robust capacity building has been carried out, initially on-site but then through virtual activities due to the current conditions, to continue creating enabling conditions for adaptation. During the pandemic, virtual activities and multimedia platforms have been developed to communicate with a large range of actors involved in the program and for community empowerment. The virtual activities developed are of different types: virtual fieldwork days via Facebook live; virtual talks through Zoom on specific adaptation topics; webinars through Zoom to share results<sup>4</sup>. The executing entities, which were granted a project completion date extension, have also carried out project activities and adapted to this new reality.

Moreover, complementing on Adapta2+ results and lessons learnt from this new phase, tools and spaces for knowledge dissemination will be developed to enhance adaptation solutions to improve decision making in the productive agricultural system and along the value chain. Hence, not only the project will create and disseminate knowledge, it will also regroup the knowledge from the different projects about adaptation and finance options for the agriculture sector and SMEs in a dedicated center and virtual platform, which will allow reaching more communities nationally and internationally.

Then, the knowledge created from project lessons learned will be published and shared at local, national and regional levels to improve decision making on adaptation actions at local, national and regional levels. Training and events at farm level, community-based organization, local SMEs, finance sector and local and national government level for decision-making in adaptation actions will be organized and tours to model farms will be carried out.

During the implementation of the project, the following material will be produced: model farms, videos, photos, PowerPoint presentations, and technical reports on adapted practices in ferns and MSMEs.

H. Describe the consultative process, including the list of stakeholders consulted, undertaken during project

<sup>&</sup>lt;sup>4</sup> This resulted in reaching more than 1,500 individuals, which might not have been possible without those tools.

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.

Fundecooperación, along with the DCC that is the country's DNA (Designated National Authority) have worked in close coordination for formulating this programme. Besides, it has been a priority to identify the country's needs regarding the three components selected for the proposal. To realize this proposal, a meeting and a workshop has been carried out.

The meeting was carried out with Ximena Apestegui, coordinadora de PLAN A

During this meeting, the objective, limits and current results of PLAN A were discussed. Hence, it was mentioned that PLAN A is focusing on the creation of planification tools and supporting the integration of adaptation at local level. Currently, maps of risk are being created, while the integration of risk in municipality planning is being realized. From this meeting, it has been concluded that there is a shortcoming concerning adaptation projects in the agriculture production and private sector.

The workshop with key actors (July 02, 2021)

The objective of the workshop was to discuss the outputs and determine the activities of the new proposal for the Adaptation Fund. Participated to this workshop the following entities:

- Ministry of Agriculture and Livestock
- NAMA Livestock
- Ministry of National Planning and Economic Policy
- · Institute of Water and Sewer
- Ministry of Environment and Energy
- National Institute for Innovation and Transfer of Agricultural and Livestock Technology
- National Seed Office

The following image shows the agenda of the workshop:

Table 8. Workshop Agenda

Time	Activity	Actor
9.00 – 9.05 am	Introduction	Jessica Roccard
9.05 – 9.30 am	Presentation of Adapta2+ results	Carolina Reyes
9.30 – 9.40 am	Presentation of components	Jessica Roccard
9.40 – 10.25 am	Discussion on outputs, outcomes and identification of activities:  • brainstorming of activities and • Suggestions for improvement in outputs or outcomes*.	By group
10.25 – 10.45 am	Presentation of results	All
10.45 am	Closing of the workshop	Jessica Roccard

#### Meeting with executing entities

The objective of the meeting was to present the results of the Adapta2+ Program, to define the next steps and the scalability potential of initiatives and projects. Participated to this meeting the following entities:

- Executive Director, Fundecooperación
- Project Department Coordinator, Fundecooperación
- Board Representative, Fundecooperación
- National Commission of Emergency
- Dean of the Faculty of Agri-Food Sciences, University of Costa Rica
- International Affairs Unit, Ministry of Agriculture and Livestock
- Deputy Manager of Communal Systems,
- International Affairs Unit, Ministry of Agriculture and Livestock
- Climate Change Direction, Ministry of Environment and Energy
- Ministry of Agriculture and Livestock

- Planning and Administration Area, Climate Change Direction, Ministry of Environment and Energy
- Technical Coordinator, Climate Action Office, Ministry of Environment and Energy
- Advisor to the Minister of Tourism, Costa Rican Institute of Tourism

## During this meeting, it was stated that:

- Some of the projects that have been successful in the field can be scaled up.
- There are links between adaptation and Risk Management that require organization between both topics. This is key so that the warning systems installed have a response from the entire institutional apparatus.
- In the area of information and communication platforms, a way must be found to articulate them with other official information systems.
- The impact that the communities are having should be communicated so that people are aware of what they are consuming. It is very important that all this is disseminated, as it may attract more alliances.
- It is key to continue working on the issue of Water Security Plans.
- It is necessary to organize the process of strategic vision in the field.
- Within the future actions, the Adapta2+ program could contribute by generating a database or information base of everything that is being done in the country in the different institutions in terms of adaptation to climate change.
- It is fundamental to make alliances with the academy.

During the development of the full proposal, more public and private institutions will be involved. It is planned to involve amongst others: the Institute of Rural Development due to their role in the development of rural areas and the academia (National University and the University of Costa Rica, leading universities in national research that already supported the developments of many adaptation strategies). Vulnerable populations will also be consulted.

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

The full cost of adaptation reasoning per component is:

Baseline: Climate change-induced increases in temperatures, rainfall variation and the frequency and intensity of extreme weather events are adding to pressures on global agricultural and food systems. In this context, studies have shown that "the current health crisis caused by COVID-19 evidenced the fragility of food systems in terms of sustainability, food security, unemployment, inequality, hunger and malnutrition". At national level, it has been identified that "47.6% of households experienced difficulties in obtaining food, households in extreme poverty, 43% experienced high food insecurity". However, most of the agriculture adaptation projects in the country focus on implementing adaptation actions at farm level and the increasing pressure of climate change can destabilize the adaptation strategies implemented in farms if no market is ready to buy adapted products and if the food system as a whole is not adapting to the climate impacts. Also, working in a very specific part of the value chain makes difficult to scale up and to integrate adaptation actions in a community, regional and even national level. Costa Rica had direct damages due to natural phenomena for around 3,134 million dollars between 2005 and 2018. This means that the country lost an average of 223 million dollars per year in that period, representing 68% of the value of the total damage that occurred in the last thirty years and at least 18% of that are losses of the agricultural sector. The growth of vulnerability is evident, as well as the change in the intensity of hydrometeorological phenomena attributable to climate change. And the food system needs to tackle it integrally.

Thus, without the implementation of actions promoted by the project, it is expected that the food sector will continue to suffer from:

- Reduction of water availability
- Loss, damage and death for flooding and landslide
- Vectors multiplication and disease spreading
- Changes in composition and distribution of pests
- Flooding and salinization of coastal areas
- Losses due to lower crop and livestock herd yields

On the other hand, in 2017, a study from the GIZ5 states that the supply of climate finance still remains modest, and, it has been demonstrated that most of the financial institutions (> 90%) interviewed for the national diagnosis of the role of the sector financial in climate financing in Costa Rica do not have an environmental and social risk management system. Moreover, the risk management systems currently used do not have a climate focus and require updating. In addition, its use is partial and considered a compliance issue (internal), rather than a material issue. This leads to a setback to support organizations who would wish to transform their activities into adapted one. Additionally, in the agriculture sector, there are, among others, three key barriers that have traditionally limited the access of smallholder farmers, SMEs and agribusiness to sufficient and adequate finance, namely: inadequate enabling environments, insufficient capacity to manage exposure to agriculture sector specific risks and high transaction costs.

The knowledge created is often disseminated in different places and platforms, while for decision making at national level, "hand-on" knowledge does not exist, and no efforts have been carried out to support the adaptation of the whole food system. Moreover, some sectors such as the finance sector still lack knowledge about the great opportunity that represents adaptation to climate change, while others lack the opportunity to reach appropriate knowledge and support to transform. If no actions are carried out about this issue, actors will face other barriers when trying to take decision at every level. This means that there are several challenges to face: access to information, technical assistance due to increasingly limited resources and the limitations of virtuality, as well as a continuing need to learn how to do it and that there are no appropriate technologies (suppliers) to do it.

## Component 1:

Component 1 supports the transformation of the value chain supporting the implementation of adaptation strategies in farms, MSMEs, and community-based organizations in value chains of the food system.

Outcome 1: Food systems and communities adapt to climate change and implement already validated and new nature-based solutions that contribute to the resilience and sustainable development of the territory, with a gender perspective.

Additionality: By supporting farmers and fishermen to implement adaptation nature-based actions based on the ones successfully implemented in other communities that are already validated by the Adapta2+ projects or new ones identified during the implementation of the program, the project ensures to expand quicker already known adaptation strategies in farms and fisheries (Output 1.1) and local base adaptation. These actions enable adaptation to climate change because they increase resilience by reducing climate impacts caused by changes in precipitation, while enabling a better productivity and the protection of ecosystems. To secure local adaptation to climate change, the program will connect local producer groups to market opportunities, supplying sustainable agricultural products to local businesses, activities such as leveraging/strengthening existing distribution channels, creating new ones and others to reach goals requires additional fundings, as new markets need to become robust and attractive and able to face climate change impacts by increasing the resilience of farmers and fishermen, MSMEs, and community-based organizations in value chains of the food system.

Then, the program will strengthen market opportunities for the farmers and fisherman in the private sector for sustainable agricultural value chains adapted to climate change. To do so, it will create strong partnership between the different identified actors of the value chain such as MSMEs, community-based organizations and other public institutions and private sector partners by supporting them to also adapt. By doing so, adaptation measures will be scaled up to the food system value chain, including communities, SMEs, community-based organizations and other public institutions and private sector partners, that will raise adaptation to the level of territories and markets. Working on the value chain will push more farmers and

fishermen to implement the adaptation actions mentioned in previous sections (Output 1.2.).

Finally, linking environmentally responsible economies and participating companies will allow the creation of sustainable local value chain and markets, ensuring the farmers and fisherman to be able to sell their product promoting the transformation of Costa Rica towards a green, inclusive and innovative economy, through environmentally and socially responsible production and the productive reconversion of SMEs This will allow a stronger sustainability of the adaptation actions at local and national level (Output 1.3.).

# Component 2:

- Outcome 2: Access to climate finance products and mechanisms is facilitated in the food systems.

Additionality: this component will focus on climate finance for all the actors of the value chain of the food system. During Adapta2+, adaptation strategies have been integrated into tangible financial mechanisms for farmers and fishermen and the project will scale up the climate finance products and processes already created and validated by the Adapta2+ program. Indeed, although already being implemented, support will be provided to promote existing mechanisms and accelerate its implementation. The existing financial mechanisms will be promoted and new communities need to be trained to understand the reality they are facing and the opportunity they have. Moreover, the creation of opportunities for farmers and fishermen to transform their activities with the development of climate finance tools and products must be carried out, updating the environmental and social risk management systems and at the same time reorient their focus towards a more complete vision of the significance of climate risk for financial institutions (FIs). Without, it will impede farmers and fishermen and in general the value chain, to adapt to the increasing impact of climate change.

Therefore, the program will support the design, implementation and promotion of financial mechanisms and products for other local entities to continue strengthening the local sustainable and adapted market created in component 1.

### **Component 3:**

Outcome 3: Knowledge is created, strengthened and disseminated along the value chain to reinforce decision-making capacities in adaptation actions to improve resilience to climate change in the territories, with a gender perspective.

**Additionality:** The project aims to create practical and centralized knowledge about adaptation for farmers, fishermen and policymakers to facilitate the implementation of future adaptation actions as well as to facilitate access to the knowledge. Thanks to the Open Data Policy, the program will be able not only to show the programs results but also official data that can be used to carry out research, to take decisions or to promote the successful practices in farms and fisheries (Output 3.1.).

Disseminating knowledge to the communities, businesses and organizations that have a commitment to sustainable procurement allows tackling issues such as knowledge leakiness and rework, speeding up access to information and knowledge, improving decision-making processes and promoting innovation and cultural change. In addition to the creation of a physical and virtual place, activities include participation in events; developing informational materials in alliance with educational institutions; social and traditional media coverage; alliances with entities and institutions interested in featuring the program and its beneficiaries (Output 3.2.).

Both outputs will contribute to empower and strengthen the resilience of all actors of the food system and others and allow them to take informed decision about their activities by facilitating access to relevant information or by creating such information. Actors that will strengthen their resilience thanks to this component include not only local actors, but also national actors that will be able to formulate policies, measures and program more adapted to the reality.

The components, outcomes and outputs of the proposed project are fully aligned with the country's policies, institutional priorities and seek to build on the needs identified in the adaptation theme, with a clear and direct response as identified in the NDC, in our Adaptation policy and other public policy instruments on the subject. The components, results and outputs are also aligned with the outcomes of the EF. In this context, the program responds to the different AF's outcomes:

Table 9. Project aims AF's results framework

AF outcomes	AF output	Proposal	
Outcome 1: Reduced exposure to climate-related hazards and threats	Output 1.1: Risk and vulnerability assessments conducted and updated Output 1.2: Targeted population groups covered by adequate risk reduction systems	needed to define the adaptation actions to be implemented in communities an farms.	
Outcome 2: Strengthened institutional capacity to reduce risks associated with climate-induced socioeconomic and environmental losses	Output 2.1: Strengthened capacity of national and sub-national centers and networks to respond rapidly to extreme weather events Output 2.2: Increased readiness and capacity of national and sub-national entities to directly access and program adaptation finance	The third component of the program focuses on building capacities along the value chain of the food system and public institutions to ensure the sustainability of the outcomes of the program and decision making based on data.  The number of staff trained will be defined during the development of the full proposal.  Because the program will work along the value chain of the food system, the institutions involved will be public and private and cover various sectors.	
Outcome 3: Strengthened awareness and ownership of adaptation and climate risk reduction processes at local level	Output 3.1: Targeted population groups participating in adaptation and risk reduction awareness activities Output 3.2: Strengthened capacity of national and subnational stakeholders and entities to capture and disseminate knowledge and learning	Thanks to the knowledge dissemination strategies, any interested person will be able to access national platforms and/or the innovation center about all adaptation strategies and options. The exact number of persons as well as number of news outlets in the local press and media, No. of technical committees/associations formed to ensure transfer of knowledge and No. of tools and guidelines developed (thematic, sectoral, institutional) and shared with relevant stakeholders will be defined during the development of the full proposal.	
Outcome 4: Increased adaptive capacity within relevant development sector services and infrastructure assets	Output 4: Vulnerable development sector services and infrastructure assets strengthened in response to climate change impacts, including variability	The responsiveness of development sector services to evolving needs from changing and variable climate will be increase along the value chain of the food system. Physical infrastructure improved to withstand climate change and variability-induced stress	
Outcome 5: Increased ecosystem resilience in response to climate change and variability induced	Output 5: Vulnerable ecosystem services and natural resource assets strengthened in response to climate change impacts, including variability	Ecosystem services and natural resource assets will be maintained or improved under climate change and variability-induced stress thanks to the agricultural best practices implemented. The No. of natural resource as will be defined during the development of the full proposal.	

stress		
Outcome 6: Diversified and strengthened livelihoods and sources of income for vulnerable people in targeted areas	Output 6: Targeted individual and community livelihood strategies strengthened in relation to climate change impacts, including variability	The percentage of households and communities having more secure access to livelihood assets and sets created, maintained or improved to withstand conditions resulting from climate variability and change (by type and scale) and the Percentage of targeted population with sustained climate-resilient alternative livelihoods will be defined during the development of the full proposal. The No. and type of adaptation assets (tangible and intangible) created or strengthened in support of individual or community livelihood strategies will be an increased income and better economic conditions, while the type of income will come from the strengthened value chain.
Outcome 7: Improved policies and regulations that promote and enforce resilience measures	Output 7: Improved integration of climate-resilience strategies into country development plans	Climate change priorities will be integrated into national development strategy, the No. of targeted development strategies with incorporated climate change priorities enforced and the No. of policies introduced or adjusted to address climate change risks (by sector) will be defined during the full proposal.
Outcome 8: Support the development and diffusion of innovative adaptation practices, tools and technologies	Output 8: Viable innovations are rolled out, scaled up, encouraged and/or accelerated.	Innovative adaptation practices are rolled out, scaled up, encouraged and/or accelerated at regional, national and/or subnational level thanks to the development of climate finance strategies for the most vulnerable and its number will be defined during the full proposal. Key findings on effective, efficient adaptation practices, products and technologies generated will be disseminated through the dissemination's places defined in component 3.

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

Costa Rica's National Implementing Entity and institutions has proven to be fully committed to promote female and male farmers development and have contributed to previous projects. The strong capacity development component and the reliance on strong partnerships with local institutions for the project implementation will contribute to mainstream and maintain measures beyond the duration of the project and create enabling conditions for female and male farmers to transform their activities, while the initiative will be implemented under a concept of collective impact to ensure its institutionalization at government, academic and private levels. The project will strengthen the capacity of existing financial mechanisms to access resources and will build upon the internationally accepted better practices and emerging lessons from ADAPTA2+ contributing to sustainable outcomes, supporting private and public sector and communities to respond to and prepare for climate issues while, in other cases, the focus was on disaster recovery (for example with hurricanes Otto, Nate, Eta and Iota) which allow us to validate outcomes in community resiliency and community transformation.

Project outputs will also contribute to improving further entrepreneurial skills for more vulnerable groups and support the growth of formal and informal enterprises for resilient agricultural production and related activities (and promote the legalization of their activities), promote further disaster risk prevention, including development of early warning systems and information systems, and develop risk assessment and vulnerability mapping. Hence, the project will focus on the Food System and also ensure that community organizations, including youth and women's groups, will have enhanced and appropriate capacities to carry on best practices, sustainable approach facing an increasing climate variability. To do so, the project will be based on the knowledge created by the AF projects and continue its creation processes while sharing it on existing virtual and no-virtual platforms and events, while leaving installed capacities at the local level in strategic issues such as project development and multi-sector partnerships.

Based on traditional knowledge and practices, enhanced financial access will enable new opportunities for agricultural and no-agriculture communities. To do so, the project will strengthen the implementation of existing and new adaptation microcredit. Hence, the project will facilitate the access to adaptation credits and micro-credits to the agriculture and the private sector, which will allow female and male farmers to replicate, continue and/or expand the technologies implemented in the framework of the project, while allowing SMEs to benefit from the agriculture product improving their resilience. The project will promote entrepreneurship among communities to support the implementation of resilient and sustainable approaches to agriculture and SMEs, and the dissemination of market, climate and environmental information, closing the gap between the local markets demand and local production.

Hence, it will enable the adoption of adaptation strategies for the long-term; and capacity building and training on best resilient and adapted practices will be more effective through these locally suited and community-owned systems. It will ensure resilient processes to transform and commercialize products, creating sustainable mechanisms linking female and male farmers to local business, thus enhancing ecotourism as well. The capacity building will be carried out adapted to the community (nights classes for example); and peer to peer knowledge exchange events will be organized such as school farms, amongst others). The restrictions related to COVID-19 have deepened the need to innovate in transformation and capacity building methodologies and processes, and this project will contribute to solving such challenges and finding ways to be more effective on it.

The engagement of communities' organizations in ecologically produced, climate smart, sustainable and low-emissions products and the facilitation of the integration of these products in private sector markets will increase livelihood options, and income sources and generation in the long term. In turn, the involvement of these new raising markets will create linkages with farmers communities beyond the project lifetime. The strengthened environment through enhanced institutional coordination and collaboration, and information and data sharing, will, in addition, incentivize such mechanisms and sustain an enabling environment. Overall, the process will lead to strengthened value chains for agriculture, improved ecosystems, enhanced climate information, and increased private sector investments.

Finally, the creation of capacity at all levels and alliance creation is a lesson learned from Adapta2+, where it has been noted that it is key to ensure alliances and long-term impacts. Resources will also be invested in building capacities for climate-resilient, integrated solutions for agriculture following sustainable approaches based on resilient solutions along the value chain allowing a greater impact of the local adaptation strategies implemented. To do so, the project will join all knowledge in one location and collaborate with existing institutional platforms ensuring thus the possibility to consult the knowledge disseminated in the long term. It will build further capacities in communities, especially focusing on youth and women, farmers and micro enterprises in rural areas to engage these strategies in their community.

The creation of capacities will also continue in public institutions to ensure the long-term support of the strategies. To reach this goal, the project will continue to facilitate institutional vertical coordination and collaboration across authorities and farmers, and communities, ensuring communities 'members financial viability post-project through a facilitated access to microcredit, and a strong involvement at every level of planning and execution through accompanying mechanisms for public institutions and local entities. More particularly, the sustainability of the program will be ensured in each component.

Component 1: The sustainability of this component is ensured by working along the value chain of the food

system. Indeed, once the adapted agriculture practices are implemented in farms, the project ensures the farmers will be able to sell their product by supporting and implementing adaptation strategies in MSMEs and community-based organizations involved in the production, processing until the final use of the product. In other words, farmers are supported to implement adaptation actions, community-based organizations such as ASADAs are also supported to be able to provide water for their subscribers and farmers, and MSMEs are helped to be able to purchase and sell the adapted products, while increasing their own resilience buying adapted agricultural products. In the short term, people will benefit from capacitation and expert help to transform their activity, while in the long term, they will ensure the purchasing and consumption of their product.

Component 2: To be able to adapt, farmers, MSMEs and community-based organizations need to be able to access climate finance. However, climate finance at such a level for such a vulnerable population is limited if it exists. Hence, the sustainability of this component lies in the creation, implementation, replication of climate finance products and mechanisms in finance institutions, showing them the necessity and benefit of such instruments. In the short-term, farmers, MSMEs and other organizations and vulnerable populations will benefit from access to climate finance, while in the long-term, the climate finance products will be consolidated, replicated and escalated by other finance institutions due to their proven relevance.

Component 3: The sustainability of component 3 does not only lie in the creation of knowledge, but also the creation of a place to be able to make its access easier, as well as other means of information consultation such as national platforms. By building capacity at all levels in different sectors (public, private, public institutions, agriculture, community-based organization, business, amongst others), the program ensures the appropriation of results by all actors and the possibility to use the knowledge created during the implementation of the program and other processes. In the short-term, capacity building will allow to put on board actors from different sectors, while in the long-term it will allow to create a base to build on a more resilient future.

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

The proposed program is designed to comply with all legal, and environmental and social systems requirements. Nevertheless, potential risks will be assessed and monitored to ensure such compliance. The vast social and environmental legislation of Costa Rica provides for environmental protection, access to human rights, gender and equitable access to resources.

A preliminary study of the 15 principles of the Adaptation Fund's Social and Environmental Policy, as well as Fundecooperación's Social, Environmental and Gender Policy, has been carried out for the development of the concept. During the formulation of the full proposal, a more in-depth analysis will be carried out to ensure that no relevant risks exist or that if they do, they will be mitigated. As a first step, an existing methodology developed during Adapta2+ to verify whether there are risks or not will be implemented. It will allow the elaboration of a preliminary environmental and social impact assessment and identify the impacts of project activities on the people and the environment if existing. The tool can be found: https://fundecooperacion.org/transparencia-y-politicas/

An environmental and social management system (ESMS) will then be put in place to mitigate any negative project consequences and enhance project benefits. This system will include an impact monitoring framework to record, monitor and control the occurrence of both expected and unexpected impacts and

implement corrective action as appropriate. As it was mentioned before, a preliminary screening of potential impacts and risks was conducted against the national legal framework and environmental and social principles of the AF and due the potential risks identified the project could be categorized as Category b. However, the following table indicates areas which will need further assessment during the full project proposal.

Table 10. ESP	Potential im	pacts and risks.
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No further assessment required for compliance	Potential impacts and risks – further assessment and management required for compliance			
	ESP: Compliance with the Law			
A review of potential laws, standards and technical standards with which the proposal must comply has been carried out, however proposed program is not foreseen to violate applicable national or international laws or regulations.				
	Risk identified at the moment: when working with the agricultural sector, there is a risk that actions or activities do not comply with the legislation due to its high informality (avoiding labor rights) and non-application of permits in order to implement any infrastructure action,.			
	Mitigation actions: During full project preparation, the project design team will closely collaborate with Government stakeholders to ensure compliance with national law, including the National Environmental Regulation. Further evaluation will be carried out about all components, especially considering possible laws that are in the process of being approved. Moreover, the program team will closely work with the SETENA office and closely follow national mechanisms to obtain the environmental viability for agriculture and fisheries activities.			
	ESP – Access and Equity			
	The programme components promote equality and access by all participants. However, since the geographic zones and, therefore, the final beneficiaries have not been defined yet, and a potential risk in guaranteeing this equity exists. During the preliminary research to build this concept note, women and child-headed families are identified as being disadvantaged by traditional practices in how they access land and productive resources, microcredit and MSMEs. This is particularly relevant as such households are often those that are most vulnerable to climate changes and therefore are important target beneficiaries for the sub projects.  Potential Risk: Conditions for access to financing are not equally accessed by all. The program will work with farmers, fishermen and MSMEs to better manage their land resources and access niche markets. However, conservative norms and traditions would impede women participation in project activities.  Mitigation actions: During the proposal development process, priority will be given to women and the most vulnerable local populations or groups. Likewise, financial products will be designed and capacity building will be established that address the gender gaps.			
	Opportunities to increase women and disadvantaged people's participation in the program's activities and decision-making processes will be identified and implemented. Targeting criteria will be put in place for prioritization of people to benefit from the activities. To minimize risks, the project will be designed in a participatory manner and detailed environmental and social assessment, including gender, will be performed during project preparation to further inform the preparation and adoption of mitigation measures.			
ESP – Marginalized and Vulnerable Groups				
	Potential Risk: Due to the fact that the project's areas have not yet been determined, it is not possible to ensure what specific vulnerable groups will be involved at the concept definition level. Also, currently the conditions for access to financing are not equally accessed by all and many groups are marginalized. For this reason, the risk is that financing options will continue to promote conditions that do not allow vulnerable people to access such financing.			
	Mitigation actions: When developing the full proposal, a characterization and consultation of the vulnerable population will be carried out. With respect to financial mechanisms, the aim is to design and support the generation of capacity to establish financial products that address these gaps.			

### ESP - Human Rights

The initial screening does not identify any risk with the proposal. No activities are proposed that could present a risk of non-compliance with either national requirements relating to Human Rights or with International Human Rights Laws and Conventions.

Potential Risk: the possibility exists that because of limited capacity of local institutions and government to monitor the integrated approach, and/or inadequate actions of the communities at local level (both authorities as well as farmers) during implementation of some initiatives, human rights may be disrespected, for example civil rights or labor rights.

Mitigation actions: an in-depth analysis of the actions at the local level will be carried out in order to address possible deviation or disrespect of human rights. In addition, the organizations involved in the project must sign their commitment to the ESP.

## ESP – Gender Equity and Women's Empowerment

Potential risk: Conservative and traditional norms and traditions could impede women's ability to participate in project activities, exacerbating gender inequality. As mentioned above, women are largely discriminated against and have little access to financing, an aspect that the proposed program pays great attention to.

Mitigation actions: This proposal has been designed to be gender responsive and even gender transformative, therefore it is in compliance with gender equality and women's empowerment. Opportunities to increase women and disadvantaged people's participation in the programs' activities and decision-making processes will be identified and implemented during the programs designed.

Targeting criteria will be put in place for prioritization of disadvantaged groups to benefit from the activities. Detailed environmental and social assessment, including gender, will be performed during project preparation to further inform the design in adopting adequate mitigation measures.

### ESP - Core Labor Rights

The project will ensure respect for international and national labor laws as prescribed by the International Labor Organization as stated in Fundecooperación's policies, as well as the Costa Rican Labor Law. In this regard, the project shall respect freedom of association and shall not involve forced or compulsory labor. Costa Rica has a strong Labor Law that was updated in December 2015, which came to evolve and modernize labor legislation in the country.

It shall also not be employing children in forced, economically exploitative or hazardous work without previous training; or in a way that interferes with education or is harmful to health or physical, mental, spiritual, moral, or social development.

Potential Risk: Given the sector served by the project, the existence of issues such as minimum salary, vacations, insurance, etc., is common, especially among migrant workers in the country, so the project will particularly pay attention to those most vulnerable populations when characterizing the areas and communities where it will be implemented in order to avoid any violation of rights.

Mitigation actions: Discrimination in respect to employment and occupation will be controlled through transparent targeting and effective complaints channels.

Regarding labor rights and child labor, the project will respect these rights and will avoid promoting child labor at all costs. Training about the current labor law will be part of the actions, as well as the verification of compliance with labor responsibilities by partners and executing agencies, to avoid any violation of labor rights.

### ESP - Indigenous Peoples

	The Costa Rican State recognizes 24 indigenous territories and has an indigenous law that the project must respect. While unlikely to be negatively affected by the programs, owing to the presence of indigenous people in the districts where the activities are located further consideration of this aspect is required. This requires, amongst others, determination of their characterization and of their potential to be impacted by the specific program activities, or have an interest in, or influence on them.			
	Potential risks: the main risk is that, in order to promote adaptation actions, the the project do not respect their culture and beliefs regarding what they need to combat climate change. Also to promote "recipes" that do not respond with the indigenous reality.			
	Mitigation actions: The implementation of actions with indigenous population will employ the participation of cultural intermediaries as well as consultation processes for an appropriation and validation of the actions.			
	ESP – Involuntary Resettlement			
The program's components do not involve activities potentially leading to involuntary, physical or economic resettlement of any people settled in or using the area of influence of the sub projects	involve activities potentially leading to involuntary, physical or economic resettlement of any people settled in or using the area of influence of the sub			
	ESP – Protection of Natural Habitats			
	The project promotes the protection of natural habitats. Indeed, activities include the implementation of nature-based solutions in the food system. The project also respects the areas dedicated for protection. There are no project components which require any unjustified conversion of habitats recognized for their legal protected status or by communities, and high in conservation value. In fact, the components recognize the conservation value of Natural habitats.			
	Potential risk: A risk that some agricultural activities are developed nearby protected areas or surrounding areas that could impact natural habitats exists.			
Mitigation actions: these types of risks can be avoided through the implementation of local intervention plans, considering and respending the second				
ESP – Conservation of Biological Diversity				
	The activities include the implementation of nature-based solutions in the food system and communities. Some of the proposed program's interventions consider nature-based solutions intended to provide for human well-being and positive impact biodiversity. Component 1 which involves the restoration of forest, coastal and wetland ecosystems, will involve activities the include the adaptation actions that are described previously.			
	Potential Risk: A minor risk of unjustified reduction of biodiversity during the development of agricultural activities does exist.			
Mitigation actions: Avoid the use of invasive species in any of the actions to be promoted at the local level and based on previous validated adaptation actions				
ESP – Climate Change				

The program addresses climate change and implements adaptation actions, while building resilience of beneficiaries in the face of climate induced impacts on their food production and livelihoods. In addition, many of the actions identified have a significant contribution to climate change mitigation. The adaptation measures implemented are aligned with low-carbon strategies and there is no risk of being affected. Risk: The measures implemented will be based on low-emissions strategies validated in the field. However, it is possible that some measures won't be able to avoid carbon emissions as no other alternatives are available yet. Risk mitigation: the technologies will be validated according to approved strategies and only promote those that promote climate change adaptation and mitigation and will be validated with experts. ESP - Pollution Prevention and Resource Efficiency The main focus is to carry out activities that include the implementation of nature-based solutions in the food system and communities. Potential Risk: there are several risks that the project must avoid: the inefficient use of resources such as construction must be avoided, but also the way of disposing of different wastes, this is particularly important in rural areas of the country where there is no culture of proper waste treatment. Additionally, the production of waste or even the production of pollution emissions and effluent may also be a plausible project by-product. The potential risks cannot be adequately assessed at this stage and would require future elaboration Mitigation Actions: the implemented adaptation actions in farms are based on previously validated adaptation practices which minimize pollution and maximize resources efficiency. However, if new adaptation practices must be implemented, they will be first validated with experts and with the community. ESP - Public Health The initial review does not indicate a health risk. Potential risk: There is a risk of not identifying risks at the concept level (likelihood extremely low). Hence this component will be reviewed for the development of the full proposal. Likewise, given the COVID issue in the country, the implementation of events where protocols are not duly followed could increase the risk of contagion. Mitigation actions: monitoring of the protocols implemented in the face-to-face activities, compliance with the requirements and promotion of virtual actions if possible. ESP – Physical and Cultural Heritage An impact to Physical and Cultural Heritage have not been identified at the concept stage, Potential risk: Since the territory has not been fully defined, there is a risk that this may happen during the execution, therefore, preventive actions will be implemented from the definition of the territory. Mitigation actions: Many of the country's physical and cultural heritage areas are protected by different international conventions ratified by the country, such as the UNESCO Convention on the Protection of the Underwater Cultural Heritage. Considering the above, the project aims to avoid the implementation of actions in this type of territory, especially those that are already protected by law. Likewise, the project should be of special interest in projects that include indigenous territories.

During the development of the full proposal, it will be carried out: Identification of presence of cultural heritage areas. Screening of national and international instruments on cultural heritage. Description of measures during avoid impacts on cultural heritage.			
ESP – Lands and Soil Conservation			
	The project includes the implementation of nature-based solutions in the food system and no risk to land and soil have been identified.		
	Potential risks: Deforestation and land degradation will not be carried out, especially since many actions are addressed by the proposed adaptation actions. Possible risk is that during the application of good practices technical errors might incur may generate degradation of land and soil.		
	Mitigation actions: The adaptation actions implemented will be validated with land and soil experts after the compliance with Law of Soil Use and Conservation is ensured. Then, the monitoring of the adaptation measures with technical experts implementation will be realized.		

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

# A. Record of endorsement on behalf of the government<sup>2</sup>

Provide

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

Patricia Campos

Climate Change Office Director Ministry of Environment and Energy

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Date: August, 5, 2021

**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 (National Development Plan, National Adaptation Policy, National Descarbonization Plan, Costa Rica NDC,) 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.

Marianella Feoli

Implementing Entity Coordinator

Fundecooperacion para el Desarrollo Sostenible

Date: August, 5, 2021 Tel. and email: +506 2225-4507

mfeoli@fundecooperacion.org

Project Contact Person: Marianella Feoli

Tel. And Email: +506 2225-4507 mfeoli@fundecooperacion.org

<sup>&</sup>lt;sup>6.</sup> 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.







### **Letter of Endorsement by Government**

Climate Change Office
Ministry of Environment and Energy of Costa Rica

August, 5, 2021 **DCC-145-2021** 

To: The Adaptation Fund Board

c/o Adaptation Fund Board Secretariat Email: afbsec@adaptation-fund.org

Fax: 202 522 3240/5

Subject: Endorsement Increasing the resilience of vulnerable populations in Costa Rica by scaling up Adapta2+

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

Accordingly, I am pleased to endorse the above project proposal with support from the Adaptation Fund. If approved, the project will be implemented by Fundecooperacion para el Desarrollo Sostenible and executed by National Ministry of Environment and Energy (MINAE), Ministry of Agriculture (MAG), Academia, NGO's, local organizations, others.

Sincerely,

Patricia Campos Climate Change Office Director Ministry of Environment and Energy





# **Project Formulation Grant (PFG)**

Submission Date: January, 2022

Adaptation Fund Project ID: Country/ies: Costa Rica

Title of Project/Programme: "Increasing the resilience of vulnerable populations in Costa

Rica by scaling up Adapta2+".

Type of IE (NIE/MIE): NIE

Implementing Entity: Fundecooperacion para el Desarrollo Sostenibe.

Executing Entity/ies: National Ministry of Environment and Energy (MINAE), Ministry of

Agriculture (MAG), Academia, NGO's, local organizations, others.

# A. Project Preparation Timeframe

Start date of PFG	March 2022	
Completion date of PFG	March 2023	

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

Describe the PFG activities and justifications:

List of Proposed Project	Output of the PFG Activities	USD Amount	
Preparation Activities  Consultation with Stakeholders/beneficiaries on proposal actions, environmental and social safeguards and	Appropriate interventions identified. Interventions in environmental, social and gender aspects identified.	\$15.000	
Gender equity.  Validation Workshops	Consultative report of workshops	\$5.000	
·	·	'	
Formulation of proposal	Full proposal ready and approved by the	\$26.000	
	Adaptation Fund.		
Administrative fee		\$4.000	
Total Project Formulation Grant		\$50.000	

# C. Implementing Entity

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

Implementing Entity Coordinator, IE Name	Signature	Date (Month, day, year)	Project Contact Person	Telephone	Email Address
Marianella Feoli	Fedli	08-08-2021	Marianella Feoli	+506 22254507	gerencia@fundecooperacion.org

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