ADAPTATION FUND

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Adaptation Fund Board
Project and Programme Review Committee
Thirty-second Meeting
Bonn, Germany, 10-11 October 2023

PROPOSAL FOR NICARAGUA

ADAPTATION FUND BOARD SECRETARIAT TECHNICAL REVIEW OF PROJECT/PROGRAMME PROPOSAL

PROJECT/PROGRAMME CATEGORY: Regular Size Full Proposal

Country/Region: Nicaragua
Project Title: Climate Resilient Livelihoods in the Nicaraguan Dry Corridor
Thematic Focal Area: Food Security
Implementing Entity: United Nations World Food Programme
Executing Entities: Ministry of Environment and Natural Resources
AF Project ID: AF00000262
IE Project ID: **Requested Financing from Adaptation Fund (US Dollars):** 10,000,000
Reviewer and contact person: Camila Florez **Co-reviewer(s):** Imen Meliane
IE Contact Person:

Technical Summary	The project "Climate Resilient Livelihoods in the Nicaraguan Dry Corridor" aims to reduce the climate vulnerability of smallholder farmers and their agro-ecosystems in the Nicaraguan Dry Corridor by increasing their adaptive capacity through the rehabilitation of their agricultural livelihoods. This will be done through the four components below: Component 1: Transfer of capacities to farming families leading to the implementation of resilient natural resource management practices and degraded landscape restoration in 14 municipalities in the Dry Corridor (USD 959,887). Component 2: Restoration of forest landscape to enable the generation of ecosystem services (USD 2,005,955). Component 3: Rehabilitation of agricultural livelihoods at farm level, using climate-resilient and environmentally sustainable practices for landscape restoration (USD 5,066,758). Component 4: Knowledge management including the capture and dissemination of knowledge and lessons from the project among assisted farming families to promote the sustainability of the project's impact on landscapes (USD 504,000).

	Requested financing overview: Project/Programme Execution Cost: USD 680,000 Total Project/Programme Cost: USD 9,216,600 Implementing Fee: USD 783,400 Financing Requested: USD 10,000,000 The initial technical review raises a number of issues, such as the cost-effectiveness of the project, compliance with technical standards, the need for an assessment of financial and project risk management, the lack of description on lessons learned from previous projects, compliance with the Fund's environmental and social policy, among other issues, as is discussed in the number of Clarification Requests (CRs) and Corrective Action Request (CAR) raised in the review. The second technical review finds that the proposal has not addressed all of the CR and CAR requests. Namely, the following issues remain outstanding: the potential use of unidentified sub-projects; the justification of the project cost-effectiveness and its sustainability; compliance with the environmental and social policy, and the adequacy of the results framework, amongst others.
Date:	September 17, 2023

Review Criteria	Questions	Comments Initial Technical Review (August 2023)	Comments Second Technical Review (September 2023)
Country Eligibility	1. Is the country party to the Kyoto Protocol or the Paris Agreement?	**Yes.**	-
	2. Is the country a developing country particularly vulnerable to the adverse effects of climate change?	**Yes.** Nicaragua is particularly vulnerable to climate change, with the Dry Corridor exposed to increasing heat and droughts, which will impact the agriculture sector and associated livelihoods.	-

Project Eligibility	1. Has the designated government authority for the Adaptation Fund endorsed the project/programme?	**Yes.** As per the Endorsement letter dated May 12, 2023.	**-**
	2. Does the length of the proposal amount to no more than One hundred (100) pages for the fully-developed project document, and one hundred (100) pages for its annexes?	**Yes.** The proposal is 96 pages and has 95 pages of annexes.	**-**
	3. Does the project / programme support concrete adaptation actions to assist the country in addressing adaptive capacity to the adverse effects of climate change and build in climate resilience?	**Yes, but more information is needed.** **CR1:** In the background section, climate projections are provided. Kindly provide the timeframe for the given scenarios, particularly in paragraph 10. Also, please clarify whether Figures 1 and 2 refer to a climate scenario or to historical weather patterns. Kindly enlarge these figures to make them legible. **CR2:** Output 2.1 is phrased as an outcome (the results), and Outcome 2 is rather phrased as an output (the actions that lead to the results). Outcome 3 also refers to the activities to be carried out but should indicate	**CR1: Cleared.** As per the additional information provided on pages 9 and 10. **CR2: Cleared.** The phrasing of the outcomes and outputs were revised and corrected throughout the proposal document. **CR3: Not cleared.** The proposal details the activities that the specialists will carry out – however the main activity remain to hire a consultant. Please adjust the project activities to reflect the activities leading to the results and outputs. The

		the results to be achieved. The phrasing of outputs and outcomes is important as it shows logical coherence in the project's theory of change. Please revise them. **CR3:** The proposal has outlined the main project activities. Within these activities, specialist roles have been included rather than the activities that will be carried out by these experts. Please revise. **CR4:** Regarding component 2, the proposal document indicates that resilient natural resource forest management practices will be implemented. Kindly provide further details on the resilient practices to be implemented and how these will address climate risks. **CR5**: Concerning component 3, the project builds on AGRIADAPTA project, which has validated adaptation practices in agriculture. Kindly include information on these practices, particularly on how these are effective, considering the climate projections for the Dry Corridor. This may be included in an annex.	consultancy can be added as a note in the budget (as a means to carry out the activity). **CR4: Not cleared.** The proposal provided more detail on the resilient natural resource forest management practices as informed by the findings of the PAGRICC project. It provides a list of over 20 possible practices. In addition, the proposal states that "*Buidling on this previous experience, the current project will adopt a differentiated approach based on the specific characteristics of the intervention areas".* Given that the specific interventions are not fully defined, the project contains Unidentified Sub-projects. The use of USP should be recognised and justified as per the Fund's guidance on USPs https://www.adaptation-fund.org/wp-content/uploads/2021/05/Updated-guidance-on-USPs-.pdf **CR5: Cleared.** **However**, given the additional information provided, component 3 also includes USPs. Please acknowledge and justify their use. (See CR4 above). Please also note that the ESMP will need to be revised as per the USP guidance. **CR6: Cleared.**

		CR6: Under component 3, in-kind incentives will be provided to farmers. A considerable part of these incentives constitutes seeds. Please clarify if all seeds provided will be included in the community seed banks, or if there are certain conditions or limitations? Please also clarify how will farmers have future access to all seeds?	As per the additional information provided in Part II, section A, Paragraph 95 and Section B, Table 5.
	4. Does the project / programme provide economic, social and environmental benefits, particularly to vulnerable communities, including gender considerations, while avoiding or mitigating negative impacts, in compliance with the Environmental and Social Policy and Gender Policy of the Fund?	**Yes, but more information is needed.** The economic, social, and environmental anticipated benefits are clearly described. The project will benefit 14 municipalities where the project will be implemented, with specific benefits to women and Indigenous communities. The project will support resilient natural resource management in 18,119 ha distributed between forested and productive areas. The project emphasizes addressing gender inequalities, and the beneficiaries of the interventions are 40% women and 20% youths. A Gender	**CR7: Not cleared.** The proposal clarifies that the beneficiaries indicated are direct beneficiaries and provided disaggregated estimated by gender. Given the importance of Indigenous People in this project it would be important to provide gender disaggregated data with intersectionality. In particular, please clarify the estimates for indigenous women that would benefit from the project. Please also consider adding the summary data on beneficiaries (updated with intersectionality) in a table in Section II-B. **CR8: Cleared.** As per the details provided in Part II, Section C, paragraph 128. **CR9: Cleared.**

		Analysis and Action Plan is included in Annex 2. **CR7:** The proposal indicates that the project will benefit 9,730 beneficiaries, including farming families. Then, each component indicates the number of families that will benefit, considering the indirect benefits to family members. Given the project's gender considerations and knowledge management needs, it is important to have clarity on who will be the direct beneficiaries for each component (e.g., disaggregating men and women farmers, avoiding over- or under-counting of women's participation), ensuring this will be considered in future monitoring and reporting activities. Please clarify. **CR8:** Given the focus on livelihood diversification and crop yield improvement for farmer's economic resilience, please provide more information on the current agricultural income of farmers in the targeted area and the expected income increase with the project interventions. Likewise, please provide more details on the expected crop yield changes.	As per the additional information in table 5 of section B and Annex 3, Table 16, Indigenous Peoples Action Plan.

		CR9: The proposal estimates that 175 Indigenous families will participate in the project. Please outline the benefits for the Indigenous Peoples in all three areas (economic, social, and environmental), and highlight how these reflect the needs and priorities raised by Indigenous groups in the consultation process (those outlined in the Gender Analysis and Action Plan).	
	5. Is the project / programme cost effective?	**Partially.** The proposed project has justified Component 3 by providing detailed information on the three farming systems (agroforestry, silvopastoral, and home garden and irrigation systems). **CR10:** Please explain the overall project scope and approach and include an assessment of alternative options to the project components to demonstrate their cost-effectiveness.	**CR10: Not cleared.** The additional information provided in Section II-C, paras 123-138 rely mostly on cost-benefit analyses. The analyses related to demonstrate the effectiveness of the proposed measures and approaches compared to other alternative adaptation options remain weak. The proposal should include comparison on effectiveness to other possible interventions that could have taken place to help adapt and build resilience in the same sector, geographic region, and/or community; with quantitative estimates where feasible and useful. Also, please demonstrate the cost-effectiveness form a sustainability-point of view. Given that many of the options relay on management and restoration of natural resources, please elaborate

			on the resilience of these resources in face of the projected climate impacts.
	6. Is the project / programme consistent with national or sub-national sustainable development strategies, national or sub-national development plans, poverty reduction strategies, national communications and adaptation programs of action and other relevant instruments?	**Yes**. The project is aligned with Nicaragua's National Climate Change Policy, the NDC, the national family agriculture promotion strategy for food security, and the national strategy for REDD+, among others.	**-**
	7. Does the project / programme meet the relevant national technical standards, where applicable, in compliance with the Environmental and Social Policy of the Fund?	**Partially.** **CR11**: The project proposal has identified relevant regulations and standards for each project component and explained the relevant norms and regulations. However, compliance with the technical standards is not explained. Please include this information in Table 12.	**CR11: Cleared.** As per the additional details provided in Section II-D, para 140 and Tables 12 and 13.
	8. Is there duplication of project / programme with other funding sources?	**Not clear.** **CR12:** The proposed project builds on previous experiences in Nicaragua, particularly	**CR12: Cleared.**

		AGRIDAPTA and PRAGRICC. There is geographical overlap in relation to these two projects, and project activities are scaling up lessons learned. However, the proponent needs to explain in detail the actions taken to avoid duplication at the local level. **CR13:** Regarding the "Nicaragua Dry Corridor Nutrition-Sensitive Agricultural Project" project, synergies do not address the investment in agricultural productivity and climate resiliency. Please clarify which specific lessons learned from this project have been integrated into the project. **CR14**: In relation to the "Resilient Landscapes Management" project and the "Strengthening Resilience in Protected Areas" project, the proponent has not considered potential synergies or building on lessons learned. This would be important as the proposed project will operate in protected areas' buffer zones. Please revise accordingly.	As per the clarifications provided in the response sheet and the additional information in Section II-F, paragraph 142, and Table 14. **CR13: Cleared.** As per the clarifications provided in the response sheet and the additional information in Section II-F and Table 14. **CR14: Cleared.** As per the clarifications provided in the response sheet and the additional information in Section II-F, paragraph 143, and Table 14.

	9. Does the project / programme have a learning and knowledge management component to capture and feedback lessons?	**Yes.** Component 4 is focused on knowledge management, and project monitoring and reporting. In particular, the project will formulate and implement its knowledge and communication strategy through a participatory process, and produce lessons learned materials addressing diverse audiences.	**-**
	10. Has a consultative process taken place, and has it involved all key stakeholders, and vulnerable groups, including gender considerations in compliance with the Environmental and Social Policy and Gender Policy of the Fund?	**Yes, but more information is needed.** The relevant section of the proposal (pages 57-60) provides an overview of the extensive consultations held during the preparation of the proposal, outlining key consultation findings per beneficiaries' groups. Annex 5 includes a list of stakeholders consulted and key topics discussed in each meeting. The consultation process included national and territorial representatives and project beneficiaries. Consultations were undertaken through various means (i.e., surveys, interviews, and focus groups). Consultations of beneficiaries were gender-	**CR15: Cleared.** As per the additional information provided in Section III-C, paragraph 207, and Annex 4.

		specific, with consultations taken with adult and young women separately from men. Consultations with Indigenous Peoples were carried out with farmers and the community board, outlining the free, prior, and informed consent process. **CR15:** The proposal includes a project Grievance Mechanism. Please provide more details regarding how the project will ensure that all stakeholders and beneficiaries are aware of and can access this mechanism (including gender, language, and accessibility considerations).	
	11. Is the requested financing justified on the basis of full cost of adaptation reasoning?	**Yes.** The requested financing will address adaptation needs and cover all activities to implement it. The proposal includes (pages 61-63) a comparison of business as usual (baseline scenario), and an added value scenario with the proposed project.	**-**
	12. Is the project / program aligned with AF's results framework?	**Yes.** The proposal includes information linking the project with the AF's results framework, particularly AF Outcomes 2, 3, 5 and 6.	**-**

	13. Has the sustainability of the project/programme outcomes been taken into account when designing the project?	**Yes, but more information is needed.** The project ensures sustainability by focusing on the active participation of beneficiaries and local representatives, strengthening their capacities for resilient natural resource management, addressing current barriers, as well as building entrepreneurship. **CR16:** Please clarify how the project will ensure that beneficiaries who conserve or restore forests continue to do so after the project ends, and once the economic incentives are terminated? **CR17:** Given that the Municipalities' Mayor or Vice-Mayor are members of the technical monitoring committee (for Component 2), please clarify how the technical assistance and monitoring efforts will not be affected by changes in elected authorities.	**CR16: Not Cleared.** The additional information provided in paras 181 and 181 are mostly general assumptions. Please provide some evidence of how such behavioural changes have occurred in other projects in similar context. **CR17: Cleared.** As per the changes to paragraph 84.

	14. Does the project / programme provide an overview of environmental and social impacts / risks identified, in compliance with the Environmental and Social Policy and Gender Policy of the Fund?	**Partially.** The environmental and social screening presented in the proposal (pages 66-69) provides an overview of the risks identified and classifies the project as Category B. The risks and proposed mitigation measures are covered in the ESMP (Annex 4). A gender assessment with a gender action plan (Annex 2) and a Free, Prior, and Informed Consent and Indigenous Peoples' Action Plan (Annex 3) are included. **CR18**: In Section II, K, Table 18, a checklist of environmental and social risks is provided. For risks identified, further assessment and management are required for compliance, outlined in Section III – C and Annex 4. Please adjust the table to reflect this in the column "no further assessment required for compliance". Likewise, please revise table 7 of Annex 4 accordingly. **CR19**: The project has identified low risks for some ESPs. However, in Annex 4, the description of the risk assessment is limited. Particularly, pages 140 to 146 do	**CR18: Not cleared.** Given the use of USPs by the project, the environmental and social risks of USP will need to be identified during implementation. This should be acknowledged in the proposal. **CR19: Not cleared.** The revised details in Annex 4 do not always provide a substantiation of the risk findings, but sometimes elaborates on the mitigation measures. (example – Principle 8). Please ensure that risk assessments for all 15 principles are adequately substantiated.

		not explain the risks identified and potential impacts, focusing only on the project's positive impacts and management measures. This section requires the proponent to describe the potential risks in detail. Based on this description, then management approaches can be built upon. Kindly revise.	
Resource Availability	1. Is the requested project / programme funding within the cap of the country?	**Yes.**	**-**
	2. Is the Implementing Entity Management Fee at or below 8.5 per cent of the total project/programme budget before the fee?	**Yes.**	**-**
	3. Are the Project/Programme Execution Costs at or below 9.5 per cent of the total project/programme budget (including the fee)?	**Yes.**	**-**
Eligibility of IE	1. Is the project/programme submitted through an eligible Implementing Entity that has been	**Yes.** WFP is an accredited MIE**.**	**-**

	accredited by the Board?		
Implementation Arrangements	1. Is there adequate arrangement for project / programme management, in compliance with the Gender Policy of the Fund?	**No.** Implementation arrangements include a clear description of the roles and responsibilities of project stakeholders. **CR20:** In the proposal, please indicate the institutional arrangements for project implementation that ensure compliance with the AF Gender Policy. **CR21**: Please clarify how issues or delays relating to project execution will be addressed? **CR22**: Please explain the roles of the 4 project specialists. **CR23**: Given the expected role of Indigenous Peoples' councils/leaders, please explain their role in the project execution. Please also, indicate who will be responsible for overseeing the implementation of the Indigenous Peoples Action Plan.	**CR20: Cleared.** As per the additional information in Section III-A para 199. **CR21: Cleared.** As per the additional information in Section III-A para 193. **CR22: Not cleared.** The additional information provided on the roles of the project specialists is well noted and it is now clear that they will be part of the core project implementation team. This in turns triggers additional questions. Please clarify that they will be hired by the executing entity MARENA. We note that the cost of these consultants is under project components. Please note that project staff should be covered by the executing costs. **CR23: Not cleared.** The additional information on the role of the Indigenous Peoples' councils/leaders are noted. With such an active role in the project design and execution, please clarify why the IP Council or an IP representative is not part of the Project Steering Committee, as this would strengthen the principles of locally-led adaptation.

	2. Are there measures for financial and project/programme risk management?	**No.** **CR24**: Table 19 describes financial and project risks, categorized as low or medium. However, it is not clear how these have been rated. Is it due to their probability or their impact? Please clarify. Furthermore, the potential response measures should not affect the risk evaluation (i.e., the "final risk evaluation" may provide a false sense of risk and affect its management). Please provide a risk assessment based on the probability of occurrence and potential impacts without the mitigation measures. **CR25**: Regarding financial risks, the assessment considers the underutilization of funds. It is worth considering further financial risks that may occur, such as risks related to fraud, procurement, and accounting. **CR26**: The assessment needs to fully consider governance barriers and risks to the project management and implementation. Please revise to that effect.	**CR24: Not cleared.** The additional information provided in the IE response sheet, Section III-B, para 201 and Table 19. The methodology remains unclear, and the substantiation of the risk findings is limited. For example, it is unclear what is counted when "the event has never happened or is unlikely to happen in 20 years." Did the event never happened in WFP managed projects? Or in projects managed in the country? Please provide a clear substantiation of the risk findings, in particular the likelihood. **CR25: Cleared.** As per the additional details presented in Section III-B, paras 201-202 and Tables 20-21. **CR26: Not cleared.** Please address CR24. Please also consider any potential environmental risks, such as climate extreme events or disaster risks that may impact project implementation given that Nicaragua is at a high-risk level for climate-related and other natural disasters.

	3. Are there measures in place for the management of environmental and social risks, in line with the Environmental and Social Policy and Gender Policy of the Fund?	**Partially.** Environmental and social risks have been identified, and appropriate measures have been described to address them. However, the management of the ESMP needs further clarification. **CR27:** The roles and responsibilities concerning the ESMP implementation are unclear. Please indicate the roles and responsibilities for each ESP risk identified, mentioning monitoring and evaluation of these ESPs, and indicate under which budget this is covered.	**CR27: Not cleared.** The additional information on the management of the ESMP are well noted. However, the ESMP (including its management) needs to be revised to acknowledge the use of USPs in the proposal. Please see CR4, CR5 and CR18.
	4. Is a budget on the Implementing Entity Management Fee use included?	**No.** A summary breakdown of the Implementing Entity Management Fee is provided. However, further details are needed. **CR28**: Please provide a detailed breakdown of the Implementing Entity Management Fee with budget notes under that table.	**CR28: Cleared.** As per the additional information in the budget table MIE breakdown.
	5. Is an explanation and a breakdown of the execution costs included?	**Yes.** The budget includes a breakdown of the execution costs on page 88.	**-**

	6. Is a detailed budget including budget notes included?	**Yes, but more information is needed.** The proposal includes a detailed budget indicating the breakdown of costs at the activity level. **CR29:** More detailed information is needed in the budget notes to explain the costs. For example, under component 1, an external specialized consultancy on Indigenous safeguards will be hired. The budget notes do not provide further information, for example, how many days per year this consultant will dedicate to the project and at what rate. Likewise, information on activity 1.1.1.11, innovation and capacity strengthening for entrepreneurs to encourage agricultural product transformation, packaging, and commercialization, is missing. What is the budget covering for this activity? Please note that these are only two examples, and the entire budget note table should be improved. **CR30:** Please include the budgeted items indicated in the	**CR29: Cleared.** **However**, please see **CR22** related to project staff currently covered under project components. **CR30: Cleared.** As per the additional information provided in the budget notes in Section III-H (Budget Observations). **CR31: Cleared.** Format has been corrected in all budget tables.

		gender action plan in the budget notes. **CR31**: Please format numbers to indicate thousands with commas.	
	7. Are arrangements for monitoring and evaluation clearly defined, including budgeted M&E plans and sex-disaggregated data, targets and indicators, in compliance with the Gender Policy of the Fund?	**Partially.** An M&E plan and budget are included. The project management unit (PMU) will have a designated monitoring & evaluation specialist to oversee the overall project evaluation. **CR32**: The M&E section under Implementation Arrangements should include descriptions of how gender considerations will be incorporated during M&E implementation where relevant. **CR33**: The M&E arrangements should indicate the monitoring and managing environmental and social risks identified.	**CR32: Not Cleared.** The additional information provided in Section III-D address the comment. **However**, please also see **CR7**, and update the monitoring plan to include gender disaggregated data considering intersectionality. **CR33: Not Cleared.** The additional information provided in para 210 address the comment. **However**, the M&E arrangements of USPs will need to be reflected as per the changes needed in ESMP. Please see CR4, CR5, CR18 and CR27.
	8. Does the M&E Framework include a breakdown of how implementing entity IE fees will be utilized in the supervision of the M&E function?	**No.** The M&E budget indicates three activities covered by the IE; however, the IE fees on page 88 need to be broken down (see **CR28**).	**CR28: Cleared.** As per the additional information in section III-H (Budget).

	9. Does the project/programme's results framework align with the AF's results framework? Does it include at least one core outcome indicator from the Fund's results framework?	**No.** **CR34**: The results framework (Section III, E) has been included. However, critical information such as baseline, verification means, and assumptions are sometimes missing. Please revise. **CR35**: Targets should include those indicated in the project proposal (gender, youth, Indigenous People's participation targets). Also, it would be beneficial to include definite targets (e.g., number of beneficiaries trained) rather than percentages (e.g., 75% of families trained), which could be included in brackets. In other cases, the indicators are not defined or clear enough (e.g., amount of area of forest – can it be phrased in ha?), or indicators and targets do not match (e.g., the target column does not include the number of irrigated systems installed, only water harvesting ones). The results framework table needs to be thoroughly revised. **CR36**: The results framework should also provide a clear	**CR34: Cleared.** As per the revised table in Section III-E. **CR35: Not Cleared.** While the results framework has been revised, some of the indicators are not best suited for the outputs. For example output 2.1.1 should include an indicator and target on the nb of families that have adopted such practices. For outcome 3.1, an indicator and target on income generated would be more suitable. Please ensure that the indicators and targets selected at outputs and outcome level are fit for purpose and suitable to monitor the success and benefits generated by the project. **CR36: Not cleared.** The project should include an impact indicator on total number of direct and indirect beneficiaries disaggregated by gender (considering intersectionality as relevant). **CR37: Not Cleared.** Given the importance of the natural resource management the AF indicator 5.1 should be an impact indicator of the project. In addition, AF Indicator 5.1 in full is “5.1. No. of natural resource assets created, maintained or improved to withstand conditions resulting from climate variability and change (by type and scale)”. Please consider that monitoring addresses the second part of the indicator.

		perspective of the number of beneficiaries, disaggregated by gender (AF core indicator). Target beneficiaries should include estimations for direct and indirect beneficiaries. Kindly revise. **CR37**: Given that the project works with natural assets, the results framework should also include a second AF core indicator - Natural Assets Protected or Rehabilitated. **CR38**: Regarding the project's main objective of reducing the climate vulnerability of smallholder farmers families and their agroecosystems in the Nicaraguan Dry Corridor, it may be necessary to revise its alignment with the selected Fund outcome 3 (Section III, D). AF outcomes 5 and 6 better reflect the project's alignment, as AF outcome 3, "Strengthened institutional capacity (…)" refers to institutional organizations, which is not the project's primary target. **CAR1**: Please revise the Alignment with AF Result Framework table (Section III, D), linking project objectives with AF	**CR38: Cleared.** **CAR1: Cleared.** As per the revised table in Section III-G.

		outcomes and outcome indicators, and project outcomes with AF outputs and related indicators.	
	10. Is a disbursement schedule with time-bound milestones included?	**No.** **CR40**: The proposal includes a disbursement schedule without milestones. Please revise. **CAR2**: Please adjust disbursements to rounded figures (no decimals).	**CR40: Cleared.** **CAR2: Cleared.**

ADAPTATION FUND BOARD SECRETARIAT TECHNICAL REVIEW OF PROJECT/PROGRAMME PROPOSAL

PROJECT/PROGRAMME CATEGORY: Regular Size Full Proposal

Country/Region: Nicaragua
Project Title: Climate Resilient Livelihoods in the Nicaraguan Dry Corridor
Thematic Focal Area: Food Security
Implementing Entity: United Nations World Food Programme
Executing Entities: Ministry of Environment and Natural Resources
AF Project ID: AF00000262
IE Project ID: **Requested Financing from Adaptation Fund (US Dollars):** 10,000,000
Reviewer and contact person: Camila Florez **Co-reviewer(s):** Imen Meliane
IE Contact Person:

Technical Summary	The project "Climate Resilient Livelihoods in the Nicaraguan Dry Corridor" aims to reduce the climate vulnerability of smallholder farmers and their agro-ecosystems in the Nicaraguan Dry Corridor by increasing their adaptive capacity through the rehabilitation of their agricultural livelihoods. This will be done through the four components below: Component 1: Transfer of capacities to farming families leading to the implementation of resilient natural resource management practices and degraded landscape restoration in 14 municipalities in the Dry Corridor (USD 959,887). Component 2: Restoration of forest landscape to enable the generation of ecosystem services (USD 2,005,955). Component 3: Rehabilitation of agricultural livelihoods at farm level, using climate-resilient and environmentally sustainable practices for landscape restoration (USD 5,066,758). Component 4: Knowledge management including the capture and dissemination of knowledge and lessons from the project among assisted farming families to promote the sustainability of the project's impact on landscapes (USD 504,000).

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Date:	August 15, 2023

Review Criteria	Questions	Comments	Response
Country Eligibility	1. Is the country party to the Kyoto Protocol or the Paris Agreement?	**Yes.**	
	2. Is the country a developing country particularly vulnerable to the adverse effects of climate change?	**Yes.** Nicaragua is particularly vulnerable to climate change, with the Dry Corridor exposed to increasing heat and droughts, which will impact the agriculture sector and associated livelihoods.	
Project Eligibility	1. Has the designated government authority for the Adaptation Fund endorsed the project/programme?	**Yes.** As per the Endorsement letter dated May 12, 2023.	
	2. Does the length of the proposal amount to no	**Yes.**	

	more than One hundred (100) pages for the fully-developed project document, and one hundred (100) pages for its annexes?	The proposal is 96 pages and has 95 pages of annexes.	
	3. Does the project / programme support concrete adaptation actions to assist the country in addressing adaptive capacity to the adverse effects of climate change and build in climate resilience?	**Yes, but more information is needed.** **CR1:** In the background section, climate projections are provided. Kindly provide the timeframe for the given scenarios, particularly in paragraph 10. Also, please clarify whether Figures 1 and 2 refer to a climate scenario or to historical weather patterns. Kindly enlarge these figures to make them legible. **CR2:** Output 2.1 is phrased as an outcome (the results), and Outcome 2 is rather phrased as an output (the actions that lead to the results). Outcome 3 also refers to the activities to be carried out but should indicate the results to be achieved. The phrasing of outputs and outcomes is important as it shows logical coherence in the project's theory of change. Please revise them.	**CR1:** • The climate projections timeframes included in paragraph 10 from Karmalkar et al. (2011) are the following: – Baseline run (1960–1990) – IPCC Scenario SRES A2 run 2070–2100 for climate change projections. – Campbell et al. includes projections from scenarios of rainfall and temperature changes for the period 2071–2100. • Figures 1 and 2 show the yearly mean temperature and rainfall, respectively, both in the current countrywide scenario, based on average data for the 1970 – 2000 period. Figures 1 and 2 were placed below paragraph 13. **CR2:** The phrasing of the outcomes and outputs were revised as suggested. This has been corrected throughout the entire document. Please find below the revised version: • Outcome 2: Forest landscapes are preserved and restored for the generation of ecosystem services. – Output 2.1: Farming families have implemented resilient natural resource management practices to restore the forest

		CR3: The proposal has outlined the main project activities. Within these activities, specialist roles have been included rather than the activities that will be carried out by these experts. Please revise. **CR4:** Regarding component 2, the proposal document indicates that resilient natural resource forest management practices will be implemented. Kindly provide further details on the resilient practices to be implemented and how these will address climate risks. **CR5**: Concerning component 3, the project builds on AGRIADAPTA project, which has validated adaptation practices in agriculture. Kindly include information on these practices, particularly on how these are effective, considering the climate projections for the Dry Corridor. This may be included in an annex. **CR6**: Under component 3, in-kind incentives will be provided to farmers. A considerable part of these incentives constitutes seeds. Please clarify if all seeds provided will be included in the	landscape, which helps improve the flow of critical ecosystem services in drought periods, in 14 municipalities of the Dry Corridor. • Outcome 3: The livelihoods of farming families are rehabilitated and diversified through climate resilient systems and practices for landscape restoration. – Output 3.1: Farming families have established and improved practices in agroecology, water and landscape management, crop production and income generation. Changes will be reflected throughout the document narrative. **CR3:** The activities that these specialists will carry out are mostly to provide overall coordination and guide the implementation of all the actions that will be implemented under each respective component. This has been revised in the text, in Part II, Section A, paragraphs 68,86 and 100. Additionally, a more detailed description of their roles and responsibilities have been included under Part III (Implementation Arrangements Section), in paragraph 196, in response to CR22. **CR4:** The project will promote resilient natural resource forest management practices that have been informed by the findings of the PAGRICC project. This project was implemented between 2010-2016 and it tested the effectiveness of environmental restoration systems in the Dry Corridor, incorporating tree cover practices, eco-forestry management, soil conservation

		community seed banks, or if there are certain conditions or limitations? Please also clarify how will farmers have future access to all seeds?	practices, and water harvesters. According to the evidence generated by this project, the practices helped increase natural resource productivity in the presence of severe droughts during the life of the project. These practices include: 1. Living fences 2. Windbreaks with tree species 3. Shrub living barriers 4. Living barriers with grasses 5. Establishment of fruit trees 6. Establishment of Musaceae 7. Coffee establishment 8. Shade trees with coffee plantations and pastures 9. Preparation and management of forest management plan 10. Silvicultural works according to forest management plan (thinning, pruning, natural regeneration) 11. Establishment of forest plantations 12. Establishment of agroforestry plantations 13. Establishment of silvopastoral plantations 14. Saving firewood in cooking 15. Cover crops 16. Soil conservation works 17. Cropping on stubble bed 18. Production of compost and/or worms 19. Establishment of forage banks of trees, grasses, or legumes 20. Dual-purpose living barriers in crop plots with forage grasses 21. Establishment of more suitable pastures Part of the key conclusions of the previous project is that natural resource conservation, recovery, and restoration practices are

			compatible with agricultural production, and that they improve the productivity and resilience of agroecosystems. The main lesson learned is that technological options for farmers must meet both environmental sustainability and economic profitability within reasonable time frames. The practices have been added to the PRODOC in Part II, Section A, paragraph 69; Section F, Table 14, and more details are provided in Annex 6. **CR5:** In the context on climate change projections, the most effective practices in the Dry Corridor are those that promote change towards a better management of water, soils, and forests resources. The AGRIADAPTA project validated practices that do so, most of which had also been tested by the PAGRICC project, as described in CR4 (See Annex 6). These practices are as follow: 1. Soil and water conservation (soil management and improvement) 2. Micro irrigation, catchment reservoirs 3. Establishment of agroforestry systems (alley cropping, green manure, live fences, tree planting, fruit tree management, basic grains). 4. Production of drought resistant seed and vegetative material. 5. Silvopastoral system (summer feeding practices and pasture management including alley pasture arrangement with leguminous plants every ten meters) 6. Diversification of production and crop rotation 7. Beekeeping incentives 8. Incentives for the improvement of water wells for drip irrigation.

			9. Incentives for environmental initiatives for well improvement. AGRIADAPTA also delivered additional lessons on the effectiveness of the practices considered by this project: 1) Initiatives of natural regeneration of forest areas managed by community members, aiming restoration and protection of water sources and/or water recharge zones, a communication strategy for behavioural change to generate awareness on the co-responsibility of communities in the protection of water resources is required. 2) community nurseries have the potential for reducing losses of plants when these are transported to the final sites and due to a lack of soil-plant compatibility when plants are brought from other places. Community nurseries require periodic and constant technical support for an adequate agronomic management to improve the percentage of seedlings (40% in AGRIADAPTA). 3) Complementary practices such as water systems, eco-stoves, the strengthening of Drinking Water and Sanitation Committees, and the organization of young people. These investments allowed rural families to have greater access to better quality of drinking water and reducing time of women to get water; and for improving families capacities for climate change adaptation. This has been included in Part II, Section A, Paragraph 88; Section F, Table 14, and Annex 6.

			CR6: The farmers will acquire their seeds from different sources, including markets, INTA, farmer organizations, and local seed banks, but buying from existing community seed banks will be prioritized when possible. This includes the seed banks that will be established through the project and those that already exist in the territories. To confirm the level of capacity of the seedbanks, a more detailed mapping of these already-existing community structures will be conducted during the inception period. This mapping will identify the status of existing seedbanks and the local capacities and needs to establish new ones. Based on the findings, a plan will be designed to strengthen those that are already operative and to set up new ones where needed, thus facilitating farmers´ future seed access. This will strongly take into consideration the vision of the local Indigenous Peoples. Lessons learned from other projects suggest that this type of investment requires strong technical support to bring these community organizations to a minimum operational and sustainable level. In all cases, these banks require an initial endowment of seeds to initiate seed sales, loans, and seed replenishment. The central engagement of INTA and MEFCCA, as well as their participation in inter-institutional coordination spaces and structures, will promote coordination to ensure that these plans are developed as part of the exit strategy. This was

			included in the PRODOC in Part II, section A, Paragraph 95 and Section B, Table 5.
	4. Does the project / programme provide economic, social and environmental benefits, particularly to vulnerable communities, including gender considerations, while avoiding or mitigating negative impacts, in compliance with the Environmental and Social Policy and Gender Policy of the Fund?	**Yes, but more information is needed.** The economic, social, and environmental anticipated benefits are clearly described. The project will benefit 14 municipalities where the project will be implemented, with specific benefits to women and Indigenous communities. The project will support resilient natural resource management in 18,119 ha distributed between forested and productive areas. The project emphasizes addressing gender inequalities, and the beneficiaries of the interventions are 40% women and 20% youths. A Gender Analysis and Action Plan is included in Annex 2. **CR7:** The proposal indicates that the project will benefit 9,730 beneficiaries, including farming families. Then, each component indicates the number of families that will benefit, considering the indirect benefits to family members. Given the project's gender considerations and	**CR7:** The beneficiaries indicated in the proposal are direct beneficiaries. This has been further clarified in the text in Part II, Section B, paragraph 121, and Table 5. In addition, the beneficiary breakdown, disaggregated by gender was added. For ease of reference, the details are as follows: • Components I and IV: 9,660 beneficiaries will be empowered with knowledge, 3,373 are women, 1,932 are youth, and 175 are Indigenous Peoples. • Component II: 3,079 farmers will directly benefit from forest management actions for the restoration of ecosystem services in landscapes. This includes conservation and natural regeneration. Of these, 924 will be women, 616 will be youth, and 175 will be Indigenous Peoples. • Component III: 6,581 farmers will benefit from sustainable livelihood activities, 2,449 will be women, 1,316 youth and 990 participants from Indigenous Peoples especially focused on community seed banks. A note on gender disaggregation: considering the data gathered during the consultations and the structural norms that create gender barriers and inequalities in the areas targeted by the project, the participation of women farmers is expected to be reach approximately 40% women. The Gender Action Plan will focus on encouraging women's engagement to increase the share of women in the project and to establish measures

		knowledge management needs, it is important to have clarity on who will be the direct beneficiaries for each component (e.g., disaggregating men and women farmers, avoiding over- or under-counting of women's participation), ensuring this will be considered in future monitoring and reporting activities. Please clarify. **CR8:** Given the focus on livelihood diversification and crop yield improvement for farmer's economic resilience, please provide more information on the current agricultural income of farmers in the targeted area and the expected income increase with the project interventions. Likewise, please provide more details on the expected crop yield changes. **CR9:** The proposal estimates that 175 Indigenous families will participate in the project. Please outline the benefits for the Indigenous Peoples in all three areas (economic, social, and environmental), and highlight how these reflect the needs and priorities raised by Indigenous groups in the consultation process (those outlined in the	that can be integrated into the project to address these longer-term structural norm issues. **CR8:** The project proposal considers the economic impact of improving 3 different livelihood systems. The farmers' current average incomes by type of production systems are: • Agroforestry System: USD 1,510 per ha • Silvopastoral System: USD 900 per ha • Home gardens: USD 867 per garden. Based on an economic-financial assessment of the agricultural activities included in the productive models the expected income increase is as follows: • An increase of 81% is expected in the income perceived by farmers working in the agroforestry production system. This amounts to USD 2,740 per ha (USD 1,510 per ha without the project). • An increment of 114% is expected in the income perceived by farmers working in the silvopastoral production system, which signifies USD 1,926 per cow annually (USD 900 without the project). • It is expected that the income of farmers working with home gardens will increase by 6% approximately; this means that their earnings are projected to grow (from USD 867 per garden to USD 921). With regards to crop yield changes, the latest National Agricultural Census from 2012 indicates that the average crop yields of beans are 13.5 qq/manzana (19.3 qq/ha) and the average crop yields of maize are 26.1 qq/manzana

		Gender Analysis and Action Plan).	(27.6/qq/ha). As for silvopastoral systems, each farmer is getting only 3 liters of milk per cow. With the project and given the analysis done to calculate the projected income increments for the farmers, it is expected that the crop yields will be the following: • Beans: 24 qq per ha (24% increase) • Maize: 41 qq per ha (49% increase) • Silvopastoral: each cow is projected to produce at least 5 liters of milk daily (and up to 8), given that they will be able to eat more and more consistently. Note: qq refers to “quintales” and is equivalent to 100 kilograms. More details are provided in Part II, Section C, paragraph 128. **CR9:** As core participants of all the components of the project, the intervention is expected to bring important economic, social, and environmental benefits for the targeted Indigenous families. These will stem from their engagement in the activities, which were developed and included based on the recommendations, priorities, interests and needs expressed by the communities in the consultations done through the application of the Free, Prior and Informed Consent Process. As a result, the project is planned to respond to their expectations. Below is a summary of the benefits that the Indigenous families will get out of the intervention (included in the PRODOC, in table 5 of section B and Annex 3, Table 16, Indigenous Peoples Action Plan):

			• Economic benefits: the community seed banks will guarantee seeds for farmers and generate income opportunities for the Indigenous families who will be able to sell the seeds produced during the lifetime of the project and thereafter. Similarly, livelihood diversification promoted through vegetable gardens and plant nurseries including medicinal plants will also generate an important economic opportunity during and after the project and will contribute towards their food security. It is important to note that these will include low-cost water harvesting technologies. Additionally, - the incentives for forest conservation and restoration will provide an economic transfer to the Indigenous families participating in this component. Attention to women and young people participating in economic activities has also been prioritized. • Social benefits: as requested by the consulted Indigenous People during the project design, the project seeks to strengthen Indigenous organisational structures. This will be done through the support to the community seed banks to rescue and restore native seeds and through the support provided by a specialized consultancy, which will advise and support Indigenous Peoples' groups on organisational aspects such as project management. Additionally, the project will enhance their capabilities on climate change adaptation through training on low-cost irrigation systems, organic

			agricultural inputs, ancestral agricultural practices, inheritance rights, gender, forest restoration, among others, as indicated in the Indigenous Peoples Action Plan. Finally, the project seeks to address the gender gap through an intersectional lens, promoting women's empowerment, which will bring benefits for all beneficiaries, including Indigenous women. • Environmental: As indicated in Annex 3, the Indigenous Peoples that participated in the FPIC consultations indicated that this intervention could help reinforce current initiatives to promote environmental restoration, bringing environmental benefits to their communities. They also highlighted that the project could help raise awareness about the importance of avoiding deforestation and contamination of water sources at the community level, as well as contribute to recovering ancestral practices for environmentally friendly farming. The project will also contribute to the protection of water recharge areas and better soils for crops production and agroforestry systems.
	5. Is the project / programme cost effective?	**Partially.** The proposed project has justified Component 3 by providing detailed information on the three farming systems (agroforestry, silvopastoral, and home garden and irrigation systems).	**CR10**: The overall project scope and approach involves an integrated solution scheme with two major areas of focus: the implementation of landscape restoration actions and environmentally sustainable production practices. Delivering these joint areas of focus via the same implementation actors creates an overall cost-efficiency in addressing farmer needs and their

		CR10: Please explain the overall project scope and approach and include an assessment of alternative options to the project components to demonstrate their cost-effectiveness.	surrounding landscape, and which likewise increases cost effectiveness in maximizing beneficiary adaptive capacities and project outcomes. The efficiency of delivering support to farmers jointly with the improvement of their surrounding landscape via the same implementation actors creates an overall cost-effectiveness. To evaluate the cost effectiveness of the project, in-depth cost-benefit analyses have been conducted and which provide a strong case for the value of this project's investments. An additional cost-benefit ratio conducted for alternative approaches determined that the proposal's activities were the most efficient way to achieve the project´s overall objective, with the resources at hand and within the project´s time scope. To justify the cost-effectiveness of the proposal's actions, in addition to the cost-benefit analysis conducted for environmentally sustainable production practices that include 3 different farming models (agroforestry, silvopastoral and home gardens), a rigorous analysis for the project's landscape restoration focus has been added to Section C, paragraph 137, to provide more evidence on the cost efficiency of the landscape restoration actions. The added analysis includes a cost- benefit ratio examination of the alternatives considered during the project proposal development phase. These alternatives are:

			• Inaction, where the status quo continues as it is. The costs associated to this course of action sum up to almost USD 33.4 million in ecosystem, production, and income losses. • Another incentive scheme implemented through the municipalities, which has been used in other national projects, but is more expensive than the options proposed in this project (Costs= USD 6.8 mill approx., versus USD 5.3 million, for the same project duration). More details regarding this section were directly incorporated in the PRODOC, under Part II, Section C, starting on paragraph 138.
	6. Is the project / programme consistent with national or sub-national sustainable development strategies, national or sub-national development plans, poverty reduction strategies, national communications and adaptation programs of action and other relevant instruments?	**Yes**. The project is aligned with Nicaragua's National Climate Change Policy, the NDC, the national family agriculture promotion strategy for food security, and the national strategy for REDD+, among others.	
	7. Does the project / programme meet the relevant national technical standards, where applicable, in compliance with the Environmental and	**Partially.** **CR11**: The project proposal has identified relevant regulations and standards for each project component and explained the relevant norms and regulations.	**CR11:** After thoroughly reviewing Tables 12 and 13, the updated section provides an accurate list and description of all relevant national technical standards and regulations applicable to the project. In addition, the plan for complying with these standards is explained in detail, based on

	Social Policy of the Fund?	However, compliance with the technical standards is not explained. Please include this information in Table 12.	each project outcome listed in Table 12 exclusively. These updates are reflected on Section D, paragraph 139, Table 12.
	8. Is there duplication of project / programme with other funding sources?	**Not clear.** **CR12:** The proposed project builds on previous experiences in Nicaragua, particularly AGRIDAPTA and PRAGRICC. There is geographical overlap in relation to these two projects, and project activities are scaling up lessons learned. However, the proponent needs to explain in detail the actions taken to avoid duplication at the local level. **CR13:** Regarding the "Nicaragua Dry Corridor Nutrition-Sensitive Agricultural Project" project, synergies do not address the investment in agricultural productivity and climate resiliency. Please clarify which specific lessons learned from this project have been integrated into the project. **CR14**: In relation to the "Resilient Landscapes Management" project and the	**CR12:** This geographical overlap is because the three projects prioritized areas that have poorly adapted agricultural practices, environmental degradation, high risk of droughts, floods, and low forest coverage in critical areas such as basin, sub-basin and micro basins. Despite the geographical convergence, this project will not result in duplication, but will rather complement and build on previous experiences. To ensure this, during the inception phase the project will conduct a detailed mapping of the beneficiaries reached with the AGRIADAPTA and PAGRICC projects (as well as other relevant projects in the intervention areas). Implementers of AGRIADAPTA and PAGRICC will also be invited to contribute lessons learnt and best practices during the project inception phase to ensure these valuable experiences are integrated into the project. This will help guide the targeting strategy, avoiding duplication and enabling synergies across project. This has been included in Part II, Section F, paragraph 142, and Table 14. **CR13:** This World Bank project is at early stages of implementation. By the start of the project, there will already be results on investments in climate-resilient, nutrition-sensitive agriculture that include community seed banks for drought resistant and biofortified seeds, biointensive

		"Strengthening Resilience in Protected Areas" project, the proponent has not considered potential synergies or building on lessons learned. This would be important as the proposed project will operate in protected areas' buffer zones. Please revise accordingly.	gardens, water technologies such as tanks for rainwater collection, and investments in small agri-food processing technologies. The project will learn from the results of these technologies and investments to improve the livelihoods of people in other areas of the Dry Corridor. Stakeholders from previous projects will be invited in the Inception Phase to share lessons and best practices. These activities coincide with some of the activities in the proposal to the AF. Relevant coordination would be established for farmer-to-farmer exchanges and demonstrations. However, it will be based on the recommendations of the farmers during the consultations. This has been included in Part II, Section F, Table 14. **CR14:** Synergies and lessons learned from these projects are of great value for this project, and the PRODOC was developed in constant validation with the teams that worked in these interventions. This project will use the mapping of existing local organizations in the intervention zones necessary for a landscape restoration approach. The mapping includes information on the existence of, Community Water and Sanitation Committees (CAPS); micro-watershed committees; agroforestry, forestry, and artisanal cooperatives; organized youth and women's groups; organized non-formal community groups; women's associations or collectives; and organized mestizo and Indigenous communities. The lessons learned from the community agroforestry approach will be key to optimize project resources, especially the viability of

			community forest nurseries to guarantee the production of plants for the implementation of agroforestry, silvopastoral, and forest management systems. Another learning from these projects considered in the proposal is the types of incentives, practices and systems farmers prefer when dealing with forest management and restoration. Farmers prefer to receive fence wire and other key tools; the installation of water systems for livestock or irrigation; economic incentive to cover the cost of their work in the agronomic management practices of the areas; and resources and technical assistance to develop effective agroforestry and silvopastoral systems. This explanation was included in the narrative in Part II, Section F, paragraph 143, and Table 14.
	9. Does the project / programme have a learning and knowledge management component to capture and feedback lessons?	**Yes.** Component 4 is focused on knowledge management, and project monitoring and reporting. In particular, the project will formulate and implement its knowledge and communication strategy through a participatory process, and produce lessons learned materials addressing diverse audiences.	
	10. Has a consultative process taken place, and has it involved all key stakeholders, and vulnerable groups, including gender	**Yes, but more information is needed.** The relevant section of the proposal (pages 57-60) provides an overview of the extensive	**CR15:** The project will follow a series of measures to ensure that all stakeholders and beneficiaries are aware of and can access the Grievance Mechanism (using WFP's Community Feedback Mechanism, CFM), including the following:

	considerations in compliance with the Environmental and Social Policy and Gender Policy of the Fund?	consultations held during the preparation of the proposal, outlining key consultation findings per beneficiaries' groups. Annex 5 includes a list of stakeholders consulted and key topics discussed in each meeting. The consultation process included national and territorial representatives and project beneficiaries. Consultations were undertaken through various means (i.e., surveys, interviews, and focus groups). Consultations of beneficiaries were gender-specific, with consultations taken with adult and young women separately from men. Consultations with Indigenous Peoples were carried out with farmers and the community board, outlining the free, prior, and informed consent process. **CR15:** The proposal includes a project Grievance Mechanism. Please provide more details regarding how the project will ensure that all stakeholders and beneficiaries are aware of and can access this mechanism (including gender, language, and accessibility considerations).	• During stakeholder engagement to identify beneficiaries with relevant national government institutions and community stakeholders, WFP and MARENA will ensure that the preferred and accessible communication channels, as well as the preferred languages, are identified. • Beneficiaries will be made aware of the existence of the CFM mechanism in every stage of the project, particularly during direct contact with beneficiaries. • The modalities to operationalize the CFM for this project, includes but it is not limited to a toll-free number and grievances boxes. The beneficiaries will be provided with clear instruction in local languages, on how to log a grievance, and posters with contact information about how to report urgent and critical issues. The distribution of the boxes will be made in an equitable way (according to beneficiaries' coverage). • Messages for people with disabilities will be also produced and CFM Standard Operating Procedures (SOPs) will consider how communication can be performed. • Technical units will be trained on how to respond according to the severity of the reported grievances and identify the correct resolutions within a proper timeline. WFP's ready-to-use CFM toolkit will be made available and resources to collect, process, respond and inform feedback on grievances will be assigned. This information was added in the PRODOC in Part III, Section C, paragraph 207, and Annex 4.

	11. Is the requested financing justified on the basis of full cost of adaptation reasoning?	**Yes.** The requested financing will address adaptation needs and cover all activities to implement it. The proposal includes (pages 61-63) a comparison of business as usual (baseline scenario), and an added value scenario with the proposed project.	
	12. Is the project / program aligned with AF's results framework?	**Yes.** The proposal includes information linking the project with the AF's results framework, particularly AF Outcomes 2, 3, 5 and 6.	
	13. Has the sustainability of the project/programme outcomes been taken into account when designing the project?	**Yes, but more information is needed.** The project ensures sustainability by focusing on the active participation of beneficiaries and local representatives, strengthening their capacities for resilient natural resource management, addressing current barriers, as well as building entrepreneurship.	**CR16:** The project understands that forest conservation and restoration will require changes in practices, and which mean longer-term behavior change considerations. To achieve this, care needs to be taken in the phasing of support, beginning with economic incentives but moving to internalized incentives for beneficiaries on the value of their investments in these changed practices. As such, the economic incentives provided in the initial phase of the project will play an important role to encourage the beneficiaries to engage in landscape restoration. As the project progresses, it is expected that the training, capacity strengthening, and other

		CR16: Please clarify how the project will ensure that beneficiaries who conserve or restore forests continue to do so after the project ends, and once the economic incentives are terminated? **CR17:** Given that the Municipalities' Mayor or Vice-Mayor are members of the technical monitoring committee (for Component 2), please clarify how the technical assistance and monitoring efforts will not be affected by changes in elected authorities.	activities carried out in components 1 and 4 will allow the protagonists to increase their awareness of the benefits of these practices and will be motivated to maintain these behaviors. This will allow beneficiaries to better recognize the value of the ecosystem services being provided from conservation and restoration activities and that create internalized, non-economic incentives that form the basis of deeper behavior change, allowing for sustainable adoption of these adaptive practices in the longer-term. A further ingredient to ensure sustainability of these actions beyond the project will be to encourage an enabling environment, supported by local institutions. Executing partners will design a sustainability strategy during the first year of the project, which will build on existing structures, national and local initiatives, and existing activities to maximize initiatives. For instance, the project will explore the possibility of linking the protagonists to the Community Drinking Water and Sanitation Committees (CAPS), a community organization regulated by Law 722 which ensures water supply for the rural communities. The CAPS generate income from family water consumption fees and part of the income is re-invested for environmental purposes. Building on this, the project will seek to connect the protagonists to these community organizations, enabling farmers protecting the forest in water recharge areas upstream to continue to receive economic compensation from the communities consuming water downstream. There are some successful experiences of this

			win-win relationship at the community or territorial level in Nicaragua. The main national entity responsible for this is the National Water Authority (ANA), who is part of the PMU of this project and will be able to provide support towards these efforts. Additionally, the project will leverage the institutional support of MARENA, MEFCCA, INAFOR, and ANA for livelihoods diversification, including forest areas for firewood production (energy corridors), and non-farm livelihoods to expand opportunities for the sustainability. This information was added in the PRODOC in section Part II, section J, paragraph 181-182. **CR17:** Acknowledging the comment, and in discussion with MARENA, the PRODOC has been updated to not include mayors as part of the monitoring and follow-up committees. Municipality Mayor and Vice-Mayor will participate in technical visits and in biannual follow-up meetings. Changes are reflected in in the PRODOC in paragraph 84.
	14. Does the project / programme provide an overview of environmental and social impacts / risks identified, in compliance with the Environmental and Social Policy and Gender Policy of the Fund?	**Partially.** The environmental and social screening presented in the proposal (pages 66-69) provides an overview of the risks identified and classifies the project as Category B. The risks and proposed mitigation measures are covered in the ESMP (Annex 4). A gender assessment with a gender action plan (Annex 2) and a Free, Prior, and Informed	**CR18:** After a thorough review of the in-depth consultations done at the proposal development stage, further assessment and compliance provisions have been detailed in Table 18 and Table 7, Annex 4 for the risks identified. **CR19:** This comment has been addressed with further details provided in Annex 4 for the risks identified.

		Consent and Indigenous Peoples' Action Plan (Annex 3) are included. **CR18**: In Section II, K, Table 18, a checklist of environmental and social risks is provided. For risks identified, further assessment and management are required for compliance, outlined in Section III – C and Annex 4. Please adjust the table to reflect this in the column "no further assessment required for compliance". Likewise, please revise table 7 of Annex 4 accordingly. **CR19**: The project has identified low risks for some ESPs. However, in Annex 4, the description of the risk assessment is limited. Particularly, pages 140 to 146 do not explain the risks identified and potential impacts, focusing only on the project's positive impacts and management measures. This section requires the proponent to describe the potential risks in detail. Based on this description, then management approaches can be built upon. Kindly revise.	

Resource Availability	1. Is the requested project / programme funding within the cap of the country?	**Yes.**	
	2. Is the Implementing Entity Management Fee at or below 8.5 per cent of the total project/programme budget before the fee?	**Yes.**	
	3. Are the Project/Programme Execution Costs at or below 9.5 per cent of the total project/programme budget (including the fee)?	**Yes.**	
Eligibility of IE	1. Is the project/programme submitted through an eligible Implementing Entity that has been accredited by the Board?	**Yes.** WFP is an accredited MIE**.**	
Implementation Arrangements	1. Is there adequate arrangement for project / programme management, in compliance with the Gender Policy of the Fund?	**No.** Implementation arrangements include a clear description of the roles and responsibilities of project stakeholders. **CR20:** In the proposal, please indicate the institutional arrangements for project implementation that ensure	**CR20:** To ensure the compliance with the Adaptation Fund Gender Policy, the project will count with the support and leadership of the Ministry of the Woman (MINIM), who is a key stakeholder in the Project Management Unit that will be directly involved across the board in the implementation. As per its mandate, MINIM is the national instance responsible for ensuring that all programmes, projects, and plans are designed and implemented in line with the gender

		compliance with the AF Gender Policy. **CR21**: Please clarify how issues or delays relating to project execution will be addressed? **CR22**: Please explain the roles of the 4 project specialists. **CR23**: Given the expected role of Indigenous Peoples' councils/leaders, please explain their role in the project execution. Please also, indicate who will be responsible for overseeing the implementation of the Indigenous Peoples Action Plan.	practices and requirements established in Nicaragua's policies and laws and it does so by working with the different national institutions through coordination spaces. Therefore, based on its experience, MINIM will ensure that the project is implemented in line with Gender Policy of the Adaptation Fund and of WFP, as well as national policies. To do so, it will work in close coordination with the other implementing national institutions and with the project coordinator, ensuring that needs, rights, choices, and preferences of women are adequately reflected and protected and will ensure that the Gender Action Plan is implemented by the Project Management Unit. At the same time, MINIM will strengthen the capacities of other national institutions, particularly the Gender Unit within MARENA, so that they can also ensure that the activities are gender responsive. MINIM also has presence in the territories and will use its reach to address the barriers that hinder women's participation in the project. To further reinforce the work of the national institutions, WFP will also provide oversight and advice, with the support of its gender specialist, who is an integral part of the team of WFP's country office in Nicaragua and has vast experience overseeing the inclusion of gender sensitive and transformative approaches in projects. This explanation was included in the PRODOC under Part III, Section A paragraph 199. **CR21:** The progress in the implementation will be closely monitored during the life of the project and regularly discussed in the Project Steering Committee, which will be responsible for

			reviewing and approving the annual plans prepared by the IATT. As explained in the implementation arrangements section, the PSC will meet at least two times per year to supervise progress towards outcomes and progress compared to what was established in the annual operational plans, among other functions. This platform will allow for close supervision to anticipate risks and possible factors that could result in a delay of the implementation. Yet, in case this occurs, the PSC will carefully evaluate the barriers and constraining factors and will provide solutions that will be collectively endorsed. Timelines for resuming delayed tasks will be established and monitored. WFP will be part of this structure, as well as the PMU, which will operationalize the decisions of the PSC. WFP will stand ready to provide strategic advice and possible ideas and solutions that could help expedite implementation. Finally, this will be timely reported to the Adaptation Fund through the reporting tools. This explanation was added in Part III, Section A, paragraph 193. **CR22:** The project includes four specialists, budgeted under each project component, who will be specifically hired to support the implementation from start to end. These are: i) Capacity Building and Knowledge Management Specialist (Components 1 and 4); ii) Forestry Restoration and Resource Management Specialist (Component 2); iii) Livelihoods Specialist (Component 3); and iv) Indigenous Specialist (consultant). The first three specialists will be responsible for coordinating the implementation of the project

			components, working directly with the national institutions that are involved in each respective area. They will also work closely with the project manager, who will ensure overall cohesion and coherence, particularly supporting the preparation of the annual plans, the implementation of the activities established in these plans, the coordination with the different national institutions that have a role in the implementation of their respective components and will provide the corresponding inputs for the preparation of reports. The Indigenous Specialist (consultant) will be hired for a specific time during the project to strengthen the capacities of the institutions and support the design of the activities and the creation of content. A detailed description of their roles has been added in the PRODOC under Part III, section A paragraph 196. **CR23:** The Indigenous Peoples' councils/leaders will have an active role in the project. As recommended by the participants during the FPIC consultations, traditional representatives will be involved throughout the execution of the project, starting in the planning phase, and extending to their participation in the monitoring and follow-up of the implementation. They will be engaged in the process of selection of the beneficiaries to conduct this process in a consensual manner with the authorities of the Indigenous communities. Similarly, the actions and activities will be coordinated with their respective authorities and Council of Elders and the Community Board. The mechanisms for coordinating this engagement will be established

			at the beginning of the project, in consultation with the targeted Indigenous Peoples' communities. These stakeholders will also be included in the territorial structures that will be set up at the local level for the implementation of the project, which will connect with the other structures set up as part of the implementation arrangements, particularly the PMU. With regards to the implementation of the Indigenous Peoples Action Plan, this will be a joint responsibility of the Project Coordinator and the four project specialists. As detailed in the response included in CR22, the Indigenous Peoples Specialist will particularly provide guidance and ensure that the measures included in the Indigenous Peoples Action Plan are integrated into the operational plans and programming of all components, while the operationalization will be then responsibility of the other specialists. It will also support the implementation of specific actions of the plan, such as the strengthening of organizational structures (output 4.2 of the Indigenous Peoples Action Plan). WFP's Project Coordinator will also provide oversight and follow up on the implementation of the plan, requesting regular updates at the working sessions, PMU meetings, and reports. This has been explained in the PRODOC in Part III, Section A, paragraph 198.

	2. Are there measures for financial and project/programme risk management?	**No.** **CR24**: Table 19 describes financial and project risks, categorized as low or medium. However, it is not clear how these have been rated. Is it due to their probability or their impact? Please clarify. Furthermore, the potential response measures should not affect the risk evaluation (i.e., the "final risk evaluation" may provide a false sense of risk and affect its management). Please provide a risk assessment based on the probability of occurrence and potential impacts without the mitigation measures. **CR25**: Regarding financial risks, the assessment considers the underutilization of funds. It is worth considering further financial risks that may occur, such as risks related to fraud, procurement, and accounting. **CR26**: The assessment needs to fully consider governance barriers and risks to the project management and implementation. Please revise to that effect.	**CR24:** The Risk Assessment Table has been updated, using WFP methodology. The methodology includes the following components: • Likelihood, which considers future probabilities and past occurrences to determine how likely it is that an event happens. The scale goes from 1 to 5. Each component of the scale will be explained in the project document. • Impact, which measures the project´s ability to deliver its projected outcomes, even in the event of a risk occurrence. The scale also goes from 1 to 5; each component of this scale will be explained in the narrative. The product of the likelihood and impact of a specific risk (Likelihood * Impact) is the overall risk level (seriousness of a risk). The overall risk level can be low, medium, or high. This has been included in Part III, Section B, paragraph 201, and Table 19. **CR25:** A deeper and more exhaustive analysis of the project risks has been performed utilizing WFP's methodology. WFP Risk Catalog has been utilized to classify these risks in fiduciary, financial, operational, and strategic risks. Fiduciary risks cover fraud risks; in the financial section, accounting risks have been included. Operational risks cover procurement complications that might be faced during project implementation. More details are presented in the PRODOC Part III, Section B, paragraphs 201-202, and Tables 20-21.

			CR26: The narrative has been adjusted to explain better the risk assessment that was done, mitigation strategies already identified for medium-ranked risks, and how those risks look like once the mitigation/remedy strategy takes place. Additionally, a more exhaustive list of risks related to governance, project management and implementation has been included. More details are presented in the PRODOC Part III, Section B, paragraphs 200-201, and Tables 20-21.
	3. Are there measures in place for the management of environmental and social risks, in line with the Environmental and Social Policy and Gender Policy of the Fund?	**Partially.** Environmental and social risks have been identified, and appropriate measures have been described to address them. However, the management of the ESMP needs further clarification. **CR27:** The roles and responsibilities concerning the ESMP implementation are unclear. Please indicate the roles and responsibilities for each ESP risk identified, mentioning monitoring and evaluation of these ESPs, and indicate under which budget this is covered.	**CR27:** The ESMP will be an integral part of the project's interventions and will serve as a living document, which can be revised, updated, and adapted depending on any additional and/or different environmental and social risks which may be identified during the implementation phase. The mitigation measures indicated will therefore be tailored to the specific on-site interventions once these are clearly designed. During implementation and operational phase, the PMU and executing entity will be responsible for the execution of the measures in the ESMP. In particular, the Project Coordinator and the three Specialists that will be recruited to provide overall coordination of the project components will ensure that these measures are put in place and duly monitored for all activities implemented during the life of the project. Even though MARENA, the lead executing agency, has established capacity and knowledge on environmental and social safeguards and their monitoring, specialized training will be provided by WFP to enhance the national capacities to comply with international standards, AF ESP, and WFP environmental and social framework to

			allow the entities to undertake their roles with a strong focus on the issues. As the implementing agency, WFP country office will oversee the ESMP implementation. WFP's Country Office has a team of interdisciplinary experts, which includes a gender specialist, agronomists, and livelihoods experts with a wealth of experience in implementing socio-productive programmes. Additionally, a Project Coordinator trained on ESS will be hired to provide overall coordination and oversight of the implementation. Nonetheless, to ensure that its core team involved in this project is in a strong capacity to provide this support to MARENA and the other entities, the Country Office will refresh and strengthen its knowledge on these topics, with a mission from its specialised HQ ESS team scheduled for the last trimester of 2023. The Country Office will count on the ongoing support of the HQ and regional ESS specialists throughout the entire project. In terms of monitoring and reporting arrangements, the ESMP is integrated in the implementation and monitoring plan of the intervention and will be subject to the formal agreement between WFP and the different partners. The national entities and the PMU will periodically report on the risks and risk management measures. This in turn be duly reported in the annual reports presented to the Adaptation Fund. This explanation was included in Part III, section D, paragraphs 206 and 210 and in Annex 4.

			The costs required to ensure the monitoring of the ESMP have been integrated in the budget allocated to monitoring and reporting. Additionally, this will be a core function of the staff budgeted under the project costs, particularly the project coordinator and specialists. This was further clarified in the MIE breakdown and budget notes reflected in Part III, Section H.
	4. Is a budget on the Implementing Entity Management Fee use included?	**No.** A summary breakdown of the Implementing Entity Management Fee is provided. However, further details are needed. **CR28**: Please provide a detailed breakdown of the Implementing Entity Management Fee with budget notes under that table.	**CR28:** This has been added to the narrative document. Next to each budget line, a description of the type of costs covered has been specified. This can be found in Part III, Section H.
	5. Is an explanation and a breakdown of the execution costs included?	**Yes.** The budget includes a breakdown of the execution costs on page 88.	
	6. Is a detailed budget including budget notes included?	**Yes, but more information is needed.** The proposal includes a detailed budget indicating the breakdown of costs at the activity level.	**CR29:** This information has been added in the budget observations. A more exhaustive and detailed list of the type of costs covered by each line has been now presented in the Budget Notes. This can be found in Part III, Section H (Budget Observations).

		CR29: More detailed information is needed in the budget notes to explain the costs. For example, under component 1, an external specialized consultancy on Indigenous safeguards will be hired. The budget notes do not provide further information, for example, how many days per year this consultant will dedicate to the project and at what rate. Likewise, information on activity 1.1.1.11, innovation and capacity strengthening for entrepreneurs to encourage agricultural product transformation, packaging, and commercialization, is missing. What is the budget covering for this activity? Please note that these are only two examples, and the entire budget note table should be improved. **CR30:** Please include the budgeted items indicated in the gender action plan in the budget notes. **CR31**: Please format numbers to indicate thousands with commas.	**CR30:** Each budget note now contains the specific activity under the Gender Action Plan (GAP) and Indigenous Peoples Action Plan (IPAP) for which funds have been planned. This has been reflected in Part III, Section H (Budget Observations). **CR31:** Format has been fixed on all budget tables.
	7. Are arrangements for monitoring and evaluation clearly	**Partially.**	**CR32:** The overall gender approach analysis and disaggregation have been further enhanced throughout the M&E section and is reflected in

	defined, including budgeted M&E plans and sex-disaggregated data, targets and indicators, in compliance with the Gender Policy of the Fund?	An M&E plan and budget are included. The project management unit (PMU) will have a designated monitoring & evaluation specialist to oversee the overall project evaluation. **CR32**: The M&E section under Implementation Arrangements should include descriptions of how gender considerations will be incorporated during M&E implementation where relevant. **CR33**: The M&E arrangements should indicate the monitoring and managing environmental and social risks identified.	the entire M&E cycle of the project, from baseline to evaluation. This is reflected in Part III, Section D. **CR33:** Part III, Section D includes this information in paragraph 208. It outlines the mechanism for reporting and communicating risk assessment findings and mitigation progress, in accordance with the Environment and Social Risk Management Plan detailed in Annex 4. This mechanism will be the channel for risk evaluation and monitoring, sharing findings and mitigation measures progress internally and externally. All planning, monitoring, and reporting templates shall be validated during the inception workshop and endorsed by the PMU. The gender and M&E specialists will oversee all monitoring and reporting exercises.
	8. Does the M&E Framework include a breakdown of how implementing entity IE fees will be utilized in the supervision of the M&E function?	**No.** The M&E budget indicates three activities covered by the IE; however, the IE fees on page 88 need to be broken down (see **CR28**).	**CR28:** In the MIE Budget Breakdown, the notes further specify the budget line assigned to these monitoring and evaluation activity costs (ISC Budget). This can be found in section H of Narrative Document (Budget).
	9. Does the project/programme's results framework align with the AF's results framework? Does it include at least one core outcome indicator	**No.** **CR34**: The results framework (Section III, E) has been included. However, critical information such as baseline, verification means, and	**CR34:** The results framework matrix has been thoroughly revised. References have been added and completed. **CR35**: Targets related to beneficiaries have been completed (women, youth, and Indigenous Peoples and indirect beneficiaries). Alignment among indicators and targets was also revised.

	from the Fund's results framework?	assumptions are sometimes missing. Please revise. **CR35**: Targets should include those indicated in the project proposal (gender, youth, Indigenous People's participation targets). Also, it would be beneficial to include definite targets (e.g., number of beneficiaries trained) rather than percentages (e.g., 75% of families trained), which could be included in brackets. In other cases, the indicators are not defined or clear enough (e.g., amount of area of forest – can it be phrased in ha?), or indicators and targets do not match (e.g., the target column does not include the number of irrigated systems installed, only water harvesting ones). The results framework table needs to be thoroughly revised. **CR36**: The results framework should also provide a clear perspective of the number of beneficiaries, disaggregated by gender (AF core indicator). Target beneficiaries should include estimations for direct and indirect beneficiaries. Kindly revise.	**CR36:** Targets related to beneficiaries were revised and modified accordingly. **CR37:** AF Indicator 5.1- (Natural Assets Protected or Rehabilitated) was already included, under the project´s outcome 2.1 in the original submission. **CR38:** The Results Framework has been updated to respond to this comment. The project main objective has been aligned with the AF Outcome 6. **CAR1:** The Alignment with Adaptation Fund Results Table (Table G) was revised and modified; alignment at the output level was also revised and added where applicable.

		CR37: Given that the project works with natural assets, the results framework should also include a second AF core indicator - Natural Assets Protected or Rehabilitated. **CR38**: Regarding the project's main objective of reducing the climate vulnerability of smallholder farmers families and their agroecosystems in the Nicaraguan Dry Corridor, it may be necessary to revise its alignment with the selected Fund outcome 3 (Section III, D). AF outcomes 5 and 6 better reflect the project's alignment, as AF outcome 3, "Strengthened institutional capacity (…)" refers to institutional organizations, which is not the project's primary target. **CAR1**: Please revise the Alignment with AF Result Framework table (Section III, D), linking project objectives with AF outcomes and outcome indicators, and project outcomes with AF outputs and related indicators.	
	10. Is a disbursement schedule with time-	**No.**	**CR40:** This has been revised as requested. The disbursement template reflects the milestones. A detailed Workplan will be developed with

	bound milestones included?	**CR40**: The proposal includes a disbursement schedule without milestones. Please revise. **CAR2**: Please adjust disbursements to rounded figures (no decimals).	stakeholders during the Inception Phase. This can be found in section H of Narrative Document (Budget). **CAR2:** Tables have been adjusted to reflect only rounded figures**.** This can be found in section H of Narrative Document (Budget).

ADAPTATION FUND

FULLY DEVELOPED PROPOSAL FOR SINGLE COUNTRY

PART I: PROJECT/PROGRAMME INFORMATION

Title of Project/Programme:	Climate Resilient Livelihoods in the Nicaraguan Dry Corridor
Country:	Nicaragua
Thematic Focal Area:	Food Security
Type of Implementing Entity:	Multilateral Implementing Entity
Implementing Entity:	United Nations World Food Programme
Executing Entities:	Ministry of Environment and Natural Resources
Amount of Financing Requested:	10,000,000 (in U.S Dollars Equivalent)
Letter of Endorsement (LOE) signed:	Yes ☒ No ☐

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

Stage of Submission:

☒ This proposal has been submitted before including at a different stage (concept, fully-developed proposal)
☐ This is the first submission ever of the proposal at any stage

In case of a resubmission, please indicate the last submission date: Click or tap to enter a date.

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

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Acronyms

AF	Adaptation Fund
AGRIADAPTA	Project for Innovation and Dissemination of Technologies for the Adaptation of Agriculture to Climate Change
EbA	Ecosystem-based Adaptation
ANA	National Water Authority
AWP	Annual Work Plan
AOP	Annual Operations Plan
APP	Annual Procurement Plan
APR	Annual Project Report
BCN	Central Bank of Nicaragua
Belém do Pará Convention	Inter-American Convention on the Prevention, Punishment, and Eradication of Violence against Women
C/B	Cost-Benefit
CABEI	Central American Bank for Economic Integration
CAF	Development Bank of Latin America
CATIE	Tropical Agricultural Research and Higher Education Center
CBIT	Capacity-building Initiative for Transparency
CEDAW	Convention on the Elimination of All Forms of Discrimination Against Women
CFU	Climate Funds Update
CIAT	International Center for Tropical Agriculture
CIMMYT	International Maize and Wheat Improvement Center
CN	Concept Note
COVID-19	Coronavirus Disease 2019
CRS	Catholic Relief Services
CSA	Climate-Smart Agriculture
CSB	Community Seed Banks
DSSAT	Decision Support System for Agrotechnology Transfer
ECLAC	Economic Commission on Latin America and the Caribbean
ENDE REDD+	National Strategy for Reducing Emissions from Deforestation and Forest Degradation
ENDESA	Nicaraguan Demographic and Health Survey
ESA	Environmental and Social Assessment
ESMP	Environmental and Social Management Plan
ESP	Environmental and Social Policy
ETF	Enhanced Transparency Framework
FAO	Food and Agriculture Organisation of the United Nations
FFS	Farmer Field Schools
FIIT	Technological Research and Innovation Farms
FONTAGRO	Regional Fund for Agricultural Technology
FPIC	Free, Prior and Informed Consent
FUNICA	Foundation for the Technological Development of Agriculture and Forestry of Nicaragua
GAFSP	Global Agriculture and Food Security Program
GAP	Gender Action Plan
GCF	Green Climate Fund
GDP	Gross Domestic Product
GEF	Global Environment Facility
GHGs	Greenhouse gases
GWP	Global Water Partnership
ha	hectare
HadCM3	Hadley Centre Coupled Model, version 3
IATT	Inter Agency Task Team
ICEFI	Central American Institute of Fiscal Studies

ICT	Information and Communications Technology
IDB	Inter-American Development Bank
IFAD	International Fund for Agricultural Development
ILO	International Labor Organisation
INAFOR	National Forestry Institute
INATEC	National Technological Institute
INETER	Nicaraguan Institute of Territorial Studies
INIDE	National Institute of Development Information
INIFOM	Nicaraguan Institute for Municipal Development
INTA	Nicaraguan Institute of Agricultural Technology
IP	Indigenous Peoples
IPAP	Indigenous Peoples Action Plan
IPCC	Intergovernmental Panel on Climate Change
IPSA	Institute of Agricultural Protection and Health
IRR	Internal Rate of Return
KAP	Knowledge, Attitudes, and Practices
LAC	Latin America and the Caribbean
M&E	Monitoring and Evaluation
MAG	Ministry of Agriculture
MARENA	Ministry of the Environment and Natural Resources
masl	meters above sea level
MEFCCA	Ministry of Family, Community, Cooperative and Associative Economy
MFEWS	Mesoamerican Food Security Early Warning System
MHCP	Ministry of the Treasury and Public Credit
MIFIC	Ministry of Development, Industry and Commerce
MINIM	Ministry of Women
MINREX	Ministry of Foreign Relations
MINSA	Ministry of Health
mm	milimeter
MPG	Modalities, proceedures and guidelines
MTR	Mid-term Review
mz	Manzana (1 manzana = 0.7 ha)
NAP	National Adaptation Plan
NBS	Nature-Based Solution
NDCs	Nationally Determined Contribution
NDF	Nordic Development Fund
NGO	Non-governmental organisation
NICADAPTA	Project for the Adaptation to Market Changes and the Effects of Climate Change
NICAVIDA	Project for the Sustainable Development of Rural Families in the Nicaraguan Dry Corridor
NSA	Nutrition-Sensitive Agriculture
NPC	National Project Coordinator
NPV	Net present value
OHCHR	Office of the United Nations High Commissioner for Human Rights
OP	Operational Partner
OPIM	Operational Partners Implementation Modality
PAGRICC	Environmental Program for Disaster Risk Management and Climate Change
PAHO	Pan American Health Organisation
PMU	Project Management Unit
PNLCP-DH	National Plan to Fight Poverty and for Human Development
pp	percentage points
PPR	Project Performance Report
PSC	Project Steering Committee
RACCS	North Caribbean Coast Autonomous Region
RAMSAR	Convention on Wetlands of International Importance

RCPDCR	Common but Different Responsibilities According to their Respective Capacities
REDD	Reducing Emissions from Deforestation and Forest Degradation
SCCP	Climate Change Secretariat of the Presidency of Nicaragua
SDC	Swiss Agency for Development and Cooperation
SEPRES	Secretariat of the President´s Office
SINAPRED	National System for the Prevention, Mitigation and Attention to Disasters
SINIA	National System for Environmental Information
SLM	Sustainable Land Management
SNGCC	National System for Climate Change Management
SNPCC	National System of Production, Consumption and Commerce
TA	Technical Assistance
TRANSFORMAR+)	Project for the Resilience of Agricultural Systems in the Dry Corridor of Nicaragua
UDC	Capacity Development Units
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organisation
UNFCCC	United Nations Framework Convention on Climate Change
UNFPA	United Nations Population Fund
UNICEF	United Nations Children´s Fund
UNWOMEN	United Nations Entity for Gender Equality and the Empowerment of Women
UPA	Agroecological Promotion Units
WB	World Bank
WEF	World Economic Forum
WFP	World Food Programme
WHO	World Health Organisation

Project/Programme Background and Context:

Geography and climate context

1. Nicaragua has a territory of 130,373 km2, which stretches from the Caribbean Sea in the east to the Pacific Ocean in the west. It borders with Honduras to the north and with Costa Rica to the south. The country is divided into 15 provinces and two autonomous regions, and it has 153 municipalities.

2. The territory consists of three regions with well-defined features as regards soils, topography, and climate. The Pacific region takes up 15% of the land and its soils are very fertile, as they contain volcanic ash over extensive lowlands. The central region covers 35% of the surface and is mountainous, with small valleys and heights ranging from 400 to 1,500 meters. Finally, the Caribbean region is the largest, comprising 50% of the country.

3. Due to the winds and the landscape's geographic features, rainfall varies widely, ranging from 800 mm to over 5,000 mm. In the Pacific region there is a well-defined rainy season from May to October and a dry season that extends from November to April. Annual average rainfall ranges between 1,000 mm and 2,000 mm, with a dry spell known as the "*canícula*" at about mid-rainy season (MARENA, 2018)[1]. In the central region the rainy and dry seasons are also well-defined and take place during the same months as on the Pacific region. However, the mountainous landscape significantly reduces average yearly rainfall, which may vary from 800 mm in the valleys to 2,500 mm on the eastern slopes of the mountain range (MARENA, 2018)[2]. In the so called "Dry Corridor" – which is a stripe of the territory that extends from the north to the south of the Pacific Coast region and is characterised by its arid agroclimatic conditions - rainfall is particularly low. While the annual average stands at 800 mm, some areas register between 500 and 600 mm and during extreme El Niño Southern Oscillation events (ENSO) rainfall values fall by up to 40%.

4. As a result of its geographic features, Nicaragua's thermal regime also varies. Average annual temperature fluctuates from less than 23°C to over 29°C. Maximum temperatures reach between 30.6°C and 42°C, while the lowest are between 10°C and 18°C (MARENA, 2018)[3]. In the Pacific region, temperatures sometimes reach above 37ºC, but the average temperature is inferior to 35°C. In the central region, the temperatures range from 23°C to 36°C, the mean being 31°C, while on the Caribbean Coast temperatures may reach 34°C, with a mean of 31°C (Rodríguez, J. et. al, 2019)[4]. Due to its geographic location, Nicaragua receives a large amount of solar radiation, with relative humidity oscillating between 60% and 90%. The Pacific is the driest and hottest region, with minimum yearly values of 64% - 70%, while on the Caribbean region values reach 80% - 90% (MARENA, 2018)[5].

5. By the end of 2022, Nicaragua documented progress in national policies and strategies that suggest an enabling environment for national environmental and climate actions. Among the most important are the National Plan to Fight Poverty and for Human Development 2022-2026 (PNLCP-DH for its Spanish acronym) [6], the creation of the Climate Change Secretariat of the Presidency of the Republic (SCCP), and the National System for Climate Change Management and the National Climate Change Policy (Presidential Decree 04-2022, published in La Gaceta, Official Gazette, No. 35 of February 22, 2022[7]). The Government of Nicaragua is also in the process of developing the National Adaptation Plan (NAP) and will update the Nationally Determined Contributions (NDC) in 2023 to improve its ambition according to the Common but Differentiated Responsibilities in line with their Respective Capacities (CBDRRC). Furthermore, the 2023-2024 National Plan for Production, Consumption and Commerce

[1] MARENA (2018). Third National Communication to United Nations Framework Convention on Climate Change
[2] MARENA (2018). Third National Communication to United Nations Framework Convention on Climate Change
[3] MARENA (2018). Third National Communication to United Nations Framework Convention on Climate Change
[4] Rodríguez, J., Thomas, T. S., Cenacchi, N, Rios, A. R. (2019). Climate Change, Agriculture, and Adaptation Options for Nicaragua
[5] MARENA (2018). Third National Communication to United Nations Framework Convention on Climate Change
[6] https://www.pndh.gob.ni/documentos/pnlc-dh/PNCL-DH_2022-2026(19Jul21).pdf
[7] https://www.leybook.com/doc/27475

prioritises ten policies related to food systems[8]. These include the Policy for the Conservation and Protection of Mother Earth and the Forestry Policy. The first one emphasises the importance of establishing biological corridors and promoting adaptation capacities. The latter promotes the protection, conservation, and sustainable exploitation of forest resources, the restoration of degraded areas, and the recovery of forest ecosystems.

Socio-economic and environmental context

6. The National Plan for Production, Consumption and Trade 2023-2024[9] indicates that the Nicaraguan Government "has the inalienable commitment to achieve a resilient, prosperous, and sustainable rural development by promoting agricultural and livestock production; forestry; fishing; hunting; and the protection of Mother Earth. This prioritisation has allowed Nicaragua to increase its food self-sufficiency to approximately 90% in staple grains. The development model has focused on reducing poverty and inequalities, as well as progressively improving the living conditions of all Nicaraguan families. The Plan also indicates that "the evolution of GDP during 2012-2021 has shown sustained economic growth of 3.2% on an annual average and 35.3% accumulated growth. The contribution of agricultural, livestock and forestry activities to GDP growth went from 0.3 percentage points (pp.) in 2012 to 2.8 pp". Yet, according to the Nicaraguan Central Bank 202110 report, growth has suffered various shocks since 2018, including the COVID-19 pandemic at the beginning of 2020, and hurricanes ETA and IOTA in November 2020, which according to data from the Ministry of Finance, added USD 742 million in losses and damages, a figure equivalent to 6% of GDP. The pandemic generated stress on the economy, but thanks to the vaccinations, the favorable external context, public policies, and the constant promotion of production, the economic activity started recovering in 2021. Thus, growth reached 10.3% after registering -1.8% in 2020 and -3.8% in 2019. Economic growth is estimated to reach 3.4% in 2023, despite the increase in international oil prices and the climate crisis.

7. Agriculture is the economic sector with the third largest contribution to GDP, representing about 9% in 2022. Livestock ranks fifth with 6% and, together, they represent 15% of GDP (Nicaragua Central Bank, 2022)[11]. This data underscores the importance of the agricultural and livestock sectors for wealth and employment and imply an exposure of the national economy to the direct impact of climate change. Furthermore, 40% of the Nicaraguan population lives in rural areas and depends on these sectors[12].

8. According to the NDC of Nicaragua, the country still has extensive coverage of natural forests that represent 30% of the total area of the continental surface (3.9 million ha; INETER 2015[13]), which makes it the fourth largest country in Central America in terms of forest area. The forests are distributed in three main regions of the country. According to the 2015 land use map, they are found in a higher proportion in the Caribbean Coast region with 88% and 12% in the Pacific and Central - North regions, where the Dry Corridor is located (Figure 10). Despite this, the loss of natural forests continues to be a challenge for Nicaragua. The most recent report on land use change at the national level presented by MARENA (2018)[14], shows that during the period between 2000 and 2015 the country lost 100,815 ha of primary forest annually. However, the deforestation rate was reduced by 52% compared to the rate reported for the 1983 - 2000 period (208,303 ha).

9. According to the Nicaraguan Institute of Territorial Studies (INETER) (2022)[15] and MARENA (2023)[16], the national territory is exposed to six types of threats: excessive precipitation, meteorological drought, hurricanes, floods, sea-level rise, and landslides. Meteorological drought affects 5,631,378 ha, of

[8] Policies prioriticed in 2023-2023 include: Food Security and Sovereignty Policy; Production and Competitivity Policy; Innovation, Investigation and Production Technology Policy; Mother Earth Conservation and Protection Policy; Forestry Policy; Commercial Policy; Financing and Investment Policy; Agricultural Industrialization Policy; Field Security Policy; and Production Education Policy.
[9] https://www.el19digital.com/articulos/ver/titulo:129187-este-es-el-plan-nacional-de-produccion-consumo-y-comercio-2022-2023
[10] https://www.bcn.gob.ni/publicaciones/informe_anual
[11] Central Bank of Nicaragua (BCN, for its Spanish acronym) (2022). Annual Report
[12] Presidency of the Republico of Nicaragua, 2021. Statement by President Daniel Ortega.
[13] INETER (2015). Mapa de suelos de la republica de Nicaragua. Managua Nicaragua
[14] MARENA (2018). Third National Communication to United Nations Framework Convention on Climate Change
[15] Evaluation of Territorial Vulnerability of the Republic of Nicaragua to Climate Change, Managua, Nicaragua 2022
[16] Fourth National Communication on Climate Change, Republic of Nicaragua. Managua 2023

which 21% face a high threat, distributed across 1,533 communities. This is exacerbated by the loss of soil and water due to poor land use practices, which generates the contamination of water sources for human consumption and irrigation; the degradation of soil leading to increased pests, loss of nutrients, and decreased agricultural yields; among others. This directly impacts agricultural production, which could result in food shortages in the medium and long term, putting the country's future food security at risk. The loss of ecosystems and biodiversity, combined with landscape fragmentation, affects the loss of habitat and ecological connectivity, increasingly threatening species (MARENA, 2023).

Climate projections

10. The Sixth IPCC Report (2022) indicates that reduced precipitation and altered rainfall patterns, both at the beginning and end of the rainy season and during the dry spell, are affecting the region, especially in the Dry Corridor. It is likely that aridity and drought will intensify. Karmalkar *et al*. (2011[17]), cited by IPCC (2014) using a baseline run 1960–1990 and IPCC Scenario SRES A2 run 2070–2100 for climate change projections, project changes in rainfall ranging from between –24% to –48%, accompanied by a rise in temperatures of between +4°C and +5°C for the Central American countries, for a scenario 2 (PRECIS forced with HADCM3). Campbell *et al.* (2011[18]), using the same scenario and model (period 2071–2100), project changes in rainfall for Nicaragua at between -25% to -50% and +25% to +50%, with temperatures rising between +3°C and +6°C.

11. In line with the projections made by Campbell *et. al* (2011), a study commissioned by the Economic Commission for Latin America and the Caribbean (ECLAC) the same year pointed out that in a scenario of global emissions inferior to the current tendency and using the HADCM3 model, by the year 2100 (IPCC scenario B2), the average annual temperature in Nicaragua could increase 3.1%. In scenario A2, and at the current level of growth in emissions, the temperature could increase by 4.2%.

12. The expected trajectory of precipitation levels is more uncertain. In the B2 global emission scenario by the year 2100, precipitation is projected to decrease by 17%, and in the A2 scenario, a decrease of 35% is suggested (CEPAL, 2011)19. According to the IPCC report 'Impacts, Adaptation, and Vulnerability,' in the Central American Dry Corridor, seasonal droughts are projected to prolong between 12% and 30%, intensify between 17% and 42%, and increase in frequency between 21% and 42% under the RCP4 and RCP8.5 scenarios by the end of the century (Depsky and Pons, 2021). It is projected that bean production in El Salvador, Nicaragua, Honduras, and Guatemala will decrease by 19% by 2050 under the A2 scenario, while maize production, depending on soil water retention capacity, will decline between 4% and 21% by 2050 (CEPAL et al., 2018).

13. The regionalised projections[20] for mean air temperature in Nicaragua, made by INETER for scenario RCP4.5 and the 2021 – 2040 period, forecast a mean temperature of between 26°C and 28°C for most of the Caribbean Coast. For the period 2041 – 2060, warming is foreseen throughout the country, with the mean temperature rising from 28°C to 30°C. For scenario RCP8.5 in the 2081–2100-time horizon, warming can be observed across the country. These changes in mean temperature will lead to higher and more frequent extremes than those observed currently. Figures 1 and 2 show the yearly mean temperature and rainfall, respectively, both in the current countrywide scenario, based on average data for the 1970 – 2000 period.

[17] Karmalkar, A.V., Bradley, R.S. & Diaz, H.F. Climate change in Central America and Mexico: regional climate model validation and climate change projections. Clim Dyn 37, 605 (2011). https://doi.org/10.1007/s00382-011-1099-9
[18] Campbell, J. D., Taylor, M. A., Stephenson, T. S., Watson, R. A., Whyte, F. S. (2011). Future climate of the Caribbean from a regional climate model. Int. J. Climatol., 31, 1866—1878, https:// doi.org/10.1002/joc.2200
[19] CEPAL (2011). La economía del cambio climático en Centroamérica Reporte técnico 2011
20 Obtained from the regionalization of global GCM or regional RCM models

Figure 1. Mean yearly temperature in the current scenario

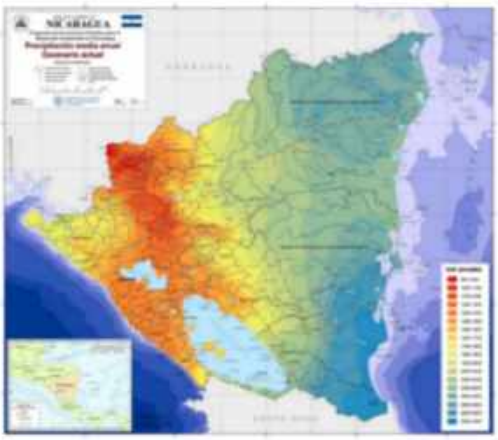


Figure 2. Mean yearly rainfall in the current scenario

14. Figure 3 shows a temperature projection to the year 2040 in a pessimistic scenario, while Figure 4 illustrates a pessimistic rainfall projection for that same year.[21]

Figure 2. Temperature forecast for the year 2040, pessimistic scenario.

Figure 1. Rainfall forecast for the year 2040, pessimistic scenario.

15. It is foreseen that, during the period 2018 – 2100, there will be a significant drop in accumulated rainfall. The Dry Corridor has an average yearly rainfall of 800 mm, which in some parts can be as low as somewhere between 500 and 600 mm. When there are *El Niño* years, for example, rainfall may drop by 30% to 40%, including long heat waves during which there is almost no rain at all. In such years, the Dry Corridor area can grow by as much as 8,000 additional km^2 and affect approximately 60 municipalities (MEFFCA, 2018)[22]. Figure 5 reflects the intensity of the dry spell (duration in days) for the entire country.

[21] Downscaled data of three models (CanESM5, MRI-ESM2-0 and CNRM-CM6-1) derived from the coupling of CMIP6 models. The data were calibrated with the WordClim v 2.1 baseline. The scenario used for the year 2040 is the SSP585

[22] Ministry of Family, Community, Cooperative and Associative Economy (MEFCCA, for its Spanish acronym) (2018). Climate Resilient Agriculture in the Dry Corridor of Nicaragua

Figure 3. Intensity of the dry spell nationwide (duration in days)

Country vulnerability to climate change

16. According to the Global Atmospheric Research Database, Nicaragua was responsible for 0.02% of global greenhouse gas emissions in 2018. However, it is also considered the 6th most vulnerable country to the consequences of climate change, according to the Global Climate Risk Index 2019 report (PNDHLCP, for its Spanish acronym)[23]. The main events that modulate climate variability and extreme events are the El Niño and La Niña phenomena, which cause severe impacts such as droughts during El Niño periods and floods and landslides during La Niña events. Each El Niño/La Niña event significantly affects precipitation, impacting rainfed agriculture, which is highly dependant on shallow and groundwater reserves for various uses. In other cases, severe flooding occurs in large parts of the national territory. El Niño-induced droughts damage crops; lead to livestock deaths; harm dry forest ecosystems; create water deficits (especially in the Dry Corridor); cause income losses; reduce yields in rainfed crops; trigger respiratory diseases; and affect food security. They also contribute to increased forest fires and are a driver of poverty (INETER)[24]. For the 2023-2024 period, INETER forecasted the incidence of the El Niño phenomenon[25], which will affect the populations and territories of the Dry Corridor, potentially having negative effects on food security and biodiversity.

17. According to the Fourth National Communication on Climate Change (MARENA, 2023)[26], future scenarios (2023-2100) presented in the IPCC's Fifth Assessment Report, adjusted to the country's conditions, indicate a reduction in rainfall patterns and an increase in maximum and minimum temperatures nationwide, with the region most affected being the Dry Corridor. The Third Communication (MARENA, 2018) indicated that out of the country's 153 municipalities, 48 are threatened by drought, 33 by floods, and 21 by hurricanes.

18. Weather-related events such as hurricanes, floods, and droughts have increased in frequency and intensity due to climate change. It is estimated that a total of 1.6 million people is exposed to hurricanes, while severe drought may affect 300,000 people, a number that could increase with the presence of the El Niño phenomenon. In addition to changes in rainfall patterns, events such as floods and landslides pose a high potential impact on rural populations. The levels of exposure of the rural population to these phenomena and their limited capacity to respond contribute to the country's high vulnerability (INETER, 2018)[27]. According to the Fourth National Communication on Climate Change

[23] National Human Development Plan to Fight against Poverty 2022 – 2026 Page 140.
[24] Nicaraguan Institute of Territorial Studies (INETER, for its Spanish acronym). Impact of Variability and Climate Change. https://cambioclimatico.ineter.gob.ni/impactopage.html
[25] Nicaraguan Institute of Territorial Studies (2023). Agrometeorological Bulletin covering the period between May 11-20 2023.
[26] MARENA (2023). Fourth National Communication to United Nations Framework Convention on Climate Change
[27] INETER. (2018). Geographic Data on Nicaragua. Direction of Geodesy and Cartography

(MARENA, 2023), analyses based on the Standardised Precipitation Index (SPI)[28] indicate that the threat of meteorological drought in the Dry Corridor is high for 76.96% of the territory, medium for 20.68%, and low for the remaining 2.36%.

Losses and damages

19. According to the Fourth National Communication on Climate Change (MARENA 2023), between 2000 and 2020, 38 extreme hydrometeorological events were registered in Nicaragua, 17 of which caused USD 995,041,439 in losses and damages.

20. During 2020, two hurricanes, Hurricane Eta (Category 4) and Hurricane Iota (Category 5), impacted Nicaragua. Both hurricanes hit the North Caribbean Autonomous Region (RACCN) with a 10-day difference. Over three million people across the country were affected, and the estimated economic losses and damages amounted to USD 990.1 million, equivalent to 7.84% of the nominal GDP of 2020[29]. The impact included damages to 45,523 homes, 261 schools, 95 health units, 201 bridges, 1,975 km of paved roads, 4,889 km of rural roads, 1,750 km of highways, 36 public buildings, and 2 docks[30]. These figures do not account for the damages to production and the environment. In 2022, Hurricane Julia (Category 1) impacted the entire country, entering through the South Caribbean Autonomous Region (RAACS), affecting the central part of the country, and exiting through the western region. The impacts were recorded in 96 municipalities and 445 neighborhoods. Hurricane Julia caused damages worth C$13,272.8 million (USD 367.8 million), representing 2.4% of the estimated Gross Domestic Product (GDP) for 2022 (Government of Nicaragua, 2022)[31].

Impacts of climate change on the agriculture sector

21. A study on the vulnerability to climate change and its economic impact on the agricultural sector in Latin America and the Caribbean (Prager *et. al.*, 2020)[32], evaluated future climate impacts, using nine general circulation models[33] selected for their robust performance in the region. In Nicaragua, projected changes in rainfall will vary considerably, depending on the season and part the country. A strong decrease in rainfall is projected for the summer months of June to August, with a less pronounced drop in September to November (see Figure 6).

22. High temperatures early in the rainy season, when farmers sow their seeds for the first agricultural cycle, tend to limit yields, a situation that may worsen as temperatures climb due to climate change. Further, the high temperatures found at less than 300 m.a.s.l. limit the sowing and harvesting of red beans (a staple food in Nicaragua). For its part, maize is notoriously sensitive to heat, and the temperatures in low-lying areas, which are already sufficiently high to cause a drop in yields, will exacerbate the situation as they continue to rise due to climate change (Rodríguez, J. *et. al,* 2019)[34].

23. Projections indicate that during the period from December to February there will be an increase in rainfall in the coastal zones on the Pacific side, in particular in the provinces of Chinandega and León, while decreasing in the interior and southeast of the Caribbean Coast. In the period from March to May, the pattern is inverted, with a drop in rainfall projected along the Pacific Coast and an increase

[28] The Standardized Precipitation Index (SPI) takes the SPI threshold as a reference to define the intensity of the phenomenon and then relate it to the probability of occurrence. The SPI was developed by Mckee and colleagues in 1993. It is based on the probability of precipitation for any time scale and is solely dependent on historical precipitation data, allowing the identification of drought impacts in short, medium, and long-term periods. The SPI was adopted by the World Meteorological Organisation in 2009.
[29] MARENA (2020). Updated Nationally Determined Contribution
[30] National Human Development Plan to Fight Against Poverty 2022-2026. https://www.pndh.gob.ni/documentos/pnlc-dh/PNCL-DH_2022-2026(19Jul21).pdf
[31] Hurricane Julia Impact Report, October 2023.
[32] Prager, S., Rios, A.R., Schiek, B., Almeida, J.S., Gonzalez, C.E. (2020). Vulnerability to climate change and economic impacts in the agriculture sector in Latin America and the Caribbean
[33] The nine general circulation models are as follows: BCC-CSM1, BNU_ESM, CCCMA_CANESM2, GFLD_ESM2G, INM-CM4, IPSL-CM5A-LR, MI- ROC-MIROC5, MPI-ESM-MR and NCC-NORESM1-M.
[34] Rodríguez, J., Thomas, T. S., Cenacchi, N, Rios, A. R. (2019). Climate Change, Agriculture, and Adaptation Options for Nicaragua

in the interior and southeast of the Caribbean side. Maximum and minimum temperatures will increase between 1° and 3°C throughout the year, particularly along the coastal areas (Prager *et. al*., 2020)[35].

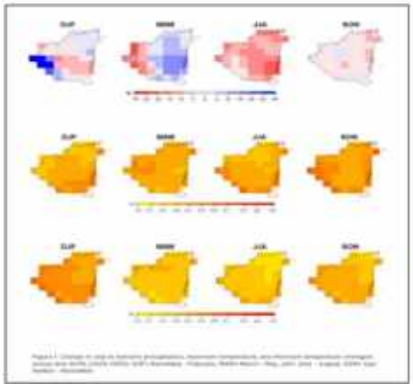


Figure 4. Future Climate Impacts (Prager et al., 2020)

24. Based on the projected changes, forecasts were modelled for maize, rice, red bean, and soybean yields, using the Decision Support System for Agrotechnology Transfers (DSSAT v4.5) at a spatial resolution of 0.5 degrees. The parameters for execution of the models for each crop were set by using genetic coefficients of varieties carefully selected by experts for their relevance in the region. The results of crop modelling in Nicaragua shown in Figure 7 suggest it is likely that both the rainfed and irrigated maize and beans systems will see a decline in average yields when compared to scenarios without further climate change (Prager et. al., 2020)[36].

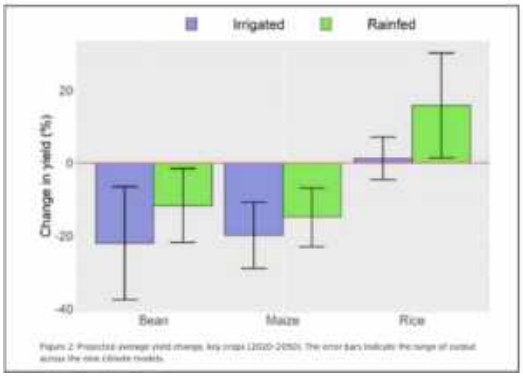


Figure 6. Projected average yield change, key crops (2020-2050). The error bars indicate the range of output across the nine climate models.

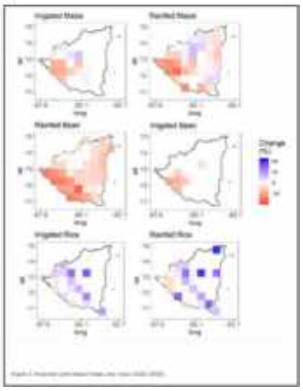


Figure 5. Projected yield impact maps, key crops (2020-2050)

25. The geographic view shown in Figure 8 indicates that the maize and beans systems in the north-western coastal region, specifically in the provinces of Chinandega and León, may find themselves particularly affected, with mean yields falling by 20% or more below a baseline without climate change. The higher decrease projected for irrigated as compared to rainfed crop yields is due to the concentration of irrigated agriculture in these vulnerable zones. The rainfed maize and beans systems are found mainly in the interior of the country, where it is considered that the impacts of climate change will be relatively less severe. Meanwhile, the potential yield for rainfed and irrigated rice shows relative resistance everywhere in the country, and it is in fact foreseen there may be an increase in yields in several areas, especially in the inland (Prager *et. al*., 2020)[37].

[35] Prager, S., Rios, A.R., Schiek, B., Almeida, J.S., Gonzalez, C.E. (2020). Vulnerability to climate change and economic impacts in the agriculture sector in Latin America and the Caribbean
[36] Prager, S., Rios, A.R., Schiek, B., Almeida, J.S., Gonzalez, C.E. (2020). Vulnerability to climate change and economic impacts in the agriculture sector in Latin America and the Caribbean
[37] Prager, S., Rios, A.R., Schiek, B., Almeida, J.S., Gonzalez, C.E. (2020). Vulnerability to climate change and economic impacts in the agriculture sector in Latin America and the Caribbean

26. Considering the population increase, the demand for water could grow by almost 300% by the year 2050 and 1,600% by 2100, according to a trend scenario with no saving measures and no climate change. However, considering climate change, the demand for water could increase by 20% more than in this baseline scenario (B2) and 24% more in scenario A2. Total availability of renewable water could diminish by 35% with B2, as compared to current availability, and by 63% with A2 in 2100. In those scenarios, Nicaragua would be one of the most affected countries in the region. The combination of changes in demand and availability on the one hand and climate change on the other generates a possible intensity in water use by 2100 of 36% for the region in a scenario without climate change, of 140% with B2 and of over 370% with A2 if no adaptation and saving measures are taken (CEPAL, 2011)[38]. This will affect the agricultural sector and human consumption.

Capacity to adapt to climate change in the agriculture sector.

27. Nicaragua's economy depends heavily on the agriculture sector. For this reason, it is important to begin adapting to changing conditions. Sensitivity to variation in patterns of temperature, humidity and rainfall may influence crop components such as soil fertility and its capacity to retain water. Additionally, changes in the suitability of specific locations for growing crops may also become an issue (CAF, 2014)[39].

28. The country produces a significant percentage of the food consumed by its population (mainly beans, maize, milk, beef, and poultry). Around 65% of the food grown depends on rainfall (rainfed agricultural systems). Maize yields, for instance, are less than 2 mt/ha, and many smallholder farmers produce only 1 mt/ha. The impact of droughts and floods on rainfed crops could have a substantial effect on food security, especially in the cases of smallholder farmers (Rodríguez, J. *et. al,* 2019)[40]. The changing conditions for growing crops could lead to the spread of pests and diseases. In this scenario, agricultural outreach services intended to improve knowledge and skills of smallholder farmers, while promoting sustainable soil and water management practices, as well as forest and biodiverisity conservation, which are critical to maintaining capacities in the sector.

The Nicaraguan Dry Corridor

29. The Nicaraguan Dry Corridor is part of the Central American Dry Corridor which extends from the Pacific Coast of Guatemala to Costa Rica and the so-called Dry Arch in Panama. The criteria used for its demarcation is based on zones where the dry season is longer than four months in a year (Rojas, O., 2020)[41]. In Nicaragua, the Dry Corridor comprises 21% of the national territory and most of the country's central region. It extends over a total of 8,666 km2 in 37 municipalities, where around 60% of the population live in conditions of extreme poverty (MEFFCA, 2018)[42].

30. In general, the people living in the Dry Corridor have limited levels of education, as 34% of households have not completed primary school, mainly among the older age groups (30 to 45 and 46 to 55 years of age), with no significant differences between men and women. This lag in education limits the possibilities of accessing better-paying jobs, particularly among the 30-45 age group. Only 9% of households have a member who has finished secondary school, which suggests there is a high percentage of the young population that is currently not in school. Data from the 2023 Nutritional Census[43] indicates that chronic malnutrition affects 7.8% of children between the ages of 0 and 6 and 6.7% of children between 6 and 14. The incidence of malnutrition is even higher in some municipalities of the Dry Corridor prioritised by this project.

[38] CEPAL (2011). La economía del cambio climático en Centroamérica Reporte técnico 2011.
[39] CAF (2014). Vulnerability Index to climate change in the Latin American and Caribbean Region
[40] Rodríguez, J., Thomas, T.S., Cenacchi, N, Rios, A.R. (2019). Climate Change, Agriculture, and Adaptation Options for Nicaragua
[41] Rojas, O. (2020). Agricultural extreme drought assessment at global level using the FAO Agricultural Stress Index System (ASIS). Weather Clim. Extreme
[42] Ministry of Family, Community, Cooperative and Associative Economy (MEFCCA, for its Spanish acronym) (2018). Climate Resilient Agriculture in the Dry Corridor of Nicaragua
[43] Ministry of Health (2023). 2023 Nutritional Census

31. Most of the project's intervention area is considered subsistence agriculture and alternative economies livelihoods area. Indeed, agricultural activities cover 58% of basic household needs, meaning smallholder farmers are vulnerable to the effects of climate change on agriculture. There are a total of 55,625 subsistence agriculture farms, which corresponds to 21% of the family productive units at the national level, with an average size of 1.19 hectares. The most cultivated crops are maize and beans. This area is home to 12.57% of the cattle population, with 700,233 head of cattle.[44] Only 19.6% of the territory in the Dry Corridor has tree cover.

32. Economic activities include intensive staple grain systems (corn, beans, and sorghum) as well as vegetable production; coffee production; extraction and sale of firewood; artisanal production of mud derivatives; and labor in agribusiness and agricultural companies to complement families' income. Small cattle are also raised, mostly for consumption and, in a lesser degree, to obtain additional income. Although the Pan-American Highway crosses the area, the distances from the most isolated parts to the markets are large, which limits the frequency with which farmers can attend them and makes them depend on intermediaries for the sale of their production surpluses. Similarly, they have limited access to financial resources, agricultural technologies[45] and lack the capacities to use these to and overcome the effects of climate change while contributing to ensure the sustainability of their livelihoods. There is, thus, a growing need to strengthen the capacities of farmers in the Dry Corridor.

33. The municipalities in the Dry Corridor have highly degraded natural ecosystems, caused mainly by the extraction of firewood (used by 75% of households); slash-and-burn agricultural practices or accidental fires; change of land use to carry out agricultural activities that cause degradation and loss of natural plant ecosystems; and climate variability that led to water scarcity or excessive rainfall. The increase in temperatures and droughts significantly reduce the availability of water resources for agricultural and livestock production, which in turn causes substantial economic losses to production, and to family farming. The shortage of rainfall and/or its irregular pattern, along with the limited coverage of irrigation systems, particularly in subsistence farms, limit productivity and reduce food availability for consumption.

34. The Dry Corridor in Nicaragua has been identified as the epicentre of the yearly dry spell (known as the "canicula") that affects agriculture and cattle-raising in Central America. There is a 25% probability, meaning once every four years, that crop losses due to drought exceed 20% in agricultural areas (Rojas, O., 2020)[46]. According to the National System for Disaster Prevention, Mitigation, and Response (SINAPRED) and INETER, the 2017-2018 agricultural cycle of the Nicaraguan Dry Corridor was affected by rainfall deficit, triggering impacts on the development of corn, rice, beans and sorghum and the emergence of pests, reporting a lower production during the mentioned period. The consequences of this phenomenon had a greater impact on subsistence agricultural activities and on the food security of these populations (WFP, 2018)[47]. While most farms have access to water by way of wells, rivers and streams, their access is neither permanently nor in the amounts required. Available water is used mainly for human consumption and irrigation. During the 2018-2019 agricultural cycle, drought conditions were experienced again, affecting approximately 53% of these farmers. This was followed by excessive rains that caused 62% of production to be lost. In 2021, another drought caused losses estimated at USD 49.1 million (ECLAC, 2011)[48]. INETER forecasted the incidence of the El Niño phenomenon for the 2023-2024 agricultural cycles, increasing the probability of drought in the Dry Corridor.

[44] Ministry of Finance 2022, National Resilience Plan
[45] The UNFCCC Adaptation Committee notes the lack of adequate access to financial resources, the insufficient legal and regulatory framework, inadequate capacity to prepare projects, barriers related to traditions and habits, and scarce knowledge about climate change and technological solutions as the main obstacles to the development and transfer of technology in Latin America and Caribbean (UNFCCC, 2020).
[46] Rojas, O. (2020). Agricultural extreme drought assessment at global level using the FAO Agricultural Stress Index System (ASIS).
[47] WFP (2018). Evaluación Inicial de Seguridad Alimentaria en Emergencia Nicaragua. Impacto del déficit de lluvias en 22 municipios del Corredor Seco 2018
[48] CEPAL (2011). La economía del cambio climático en Centroamérica Reporte técnico 2011

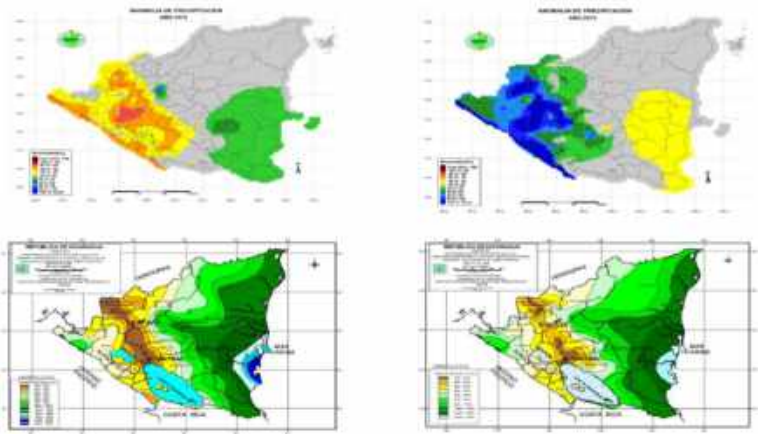


Figure 7. Precipitation anomalies in the Dry Corridor of Nicaragua

35. Nicaragua is part of the Mesoamerican Biological Corridor. In the North Central Pacific region, where the Dry Corridor is located, the pine-oak forest ecoregion stands out, making this area an important transit space for biodiversity in migratory processes and connectivity between patches of forests and degraded landscapes.

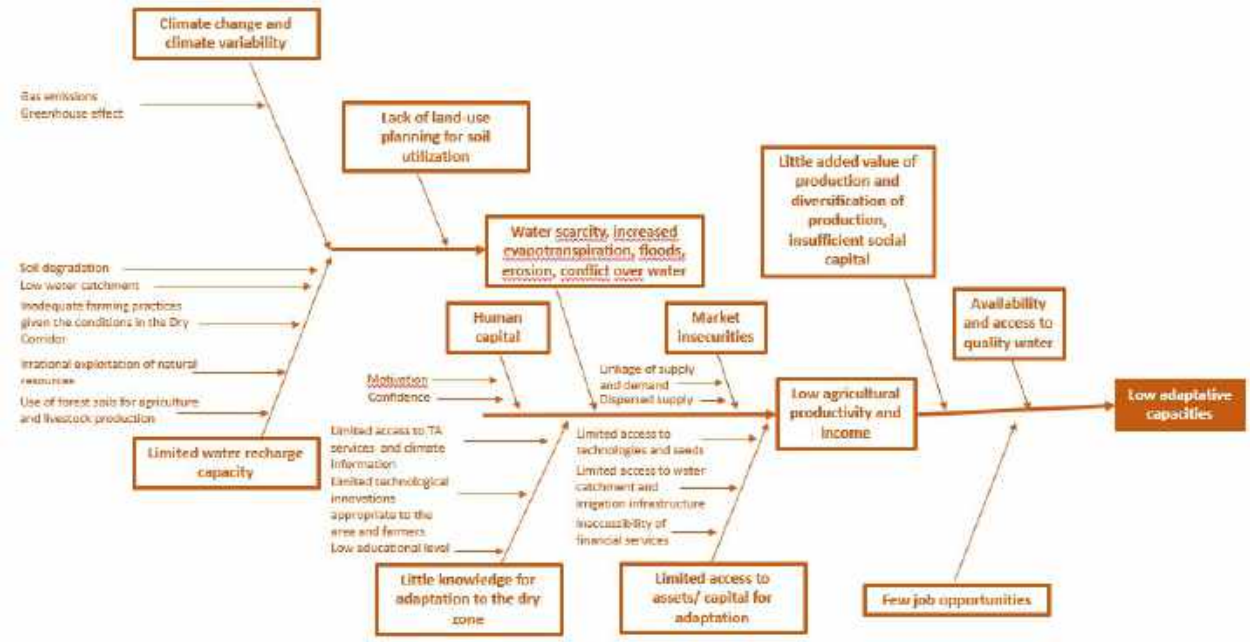
36. The Third National Communication on Climate Change, published in 2018 by MARENA, indicates that the measures contemplated in the National Development Strategy for Reducing Emissions caused by Deforestation and Forest Degradation, Conservation and Enhancement of Forest Carbon Stocks (ENDE-REDD+ for its Spanish acronym) contribute to adaptation to climate change. These measures are avoiding degradation and the loss of forest cover as they positively impact the availability of water in depleted sources, especially in areas with a rainfall deficit. Moreover, they also favour the reduction of the risk of erosion and landslides, protecting water sources from sedimentation and the mobility of pollutants. In addition, they contribute to the increase in biodiversity, which represents a source of food for families with low economic income, while and providing ecosystem services populations who depend economically on forest resources.

Identification of problems, causes and barriers in the Dry Corridor of Nicaragua

37. In line with the characterisation of the Dry Corridor presented above, the diagnostics carried out by the Nicaraguan Dry Corridor Rural Family Sustainable Development Project known as “NICAVIDA” [49] in municipalities in the targeted areas, identified a series of barriers that limit the adaptation of smallholder farmers to climate change. The main ones include droughts that affect agricultural production; scarce access to water for human consumption, irrigation, and livestock watering holes; limited capacity to implement sustainable land management practices; an increase in soil degradation and erosion due to loss of forest cover and inadequate agricultural production practices; and low levels of agricultural productivity. In addition, other socio-economic and climatic barriers identified are low level of schooling,

[49] Government of Nicaragua and IFAD (2016). Proyecto de Desarrollo Sostenible de las Familias Rurales en el Corredor Seco de Nicaragua - NICAVIDA

limited training opportunities and limited access to climate information.



38. The project seeks to address the barriers the agricultural sector is facing to adapt to climate change, specifically from smallholder farmers in 14 municipalities in the Dry Corridor. The 14 prioritised municipalities are: *Ciudad Darío, Condega, El Jicaral, La Trinidad, Palacagüina, San Isidro, San Juan de Limay, San Lorenzo, Santa Rosa del Peñón, Sébaco, Somoto, Telpaneca, Teustepe and San Francisco Libre. Ten of these municipalities are under serious threat of drought (Somoto, San Lorenzo, Teustepe, El Jicaral, Santa Rosa del Peñón, Telpaneca, San Francisco Libre, Ciudad Darío, San Isidro and Sébaco*). The municipality of San Francisco Libre is also at high risk of flooding (MARENA, 2018)[50]. Figure 10 maps out the project intervention area. These were selected based on a multi-criteria analysis that considered as variables soil coverage, poverty, population density, drought and variations in rainfall. Subsequently, areas where there is a larger presence of small and medium farmers, which are more sensitive to the effects of drought by climate change, were prioritised. Their susceptibility to climate change is also heightened by their limited financial resources to obtain adaptive technologies.

39. The project will focus on enhancing the adaptive capacities[51] of farmers to advance the restoration[52] of degraded landscapes in the Dry Corridor and promote the rehabilitation of agricultural livelihoods. The project will facilitate the adoption of environmentally sustainable and climate-resilient practices, aiming to reduce climate vulnerability of smallholder farming families and their agroecosystems.

Identification and description of the project area of intervention

40. The model for prioritising areas for project intervention was based on the Multiple Criteria Methodology designed by the Intergovernmental Panel for Climate Change (IPCC). This methodology involves carrying out an overall review of the situation in any given area of intervention, from an adaptive perspective based on multiple approaches (Table 1). Processes were established for the quantification

[50] MARENA (2018). Third National Communication to United Nations Framework Convention on Climate Change
[51] Adaptation capacity (in relation to the impacts of climate change) refers to the ability of a system to adjust to climate change (including climate variability and extremes) in order to mitigate potential damages, seize opportunities, or cope with consequences. This definition is sourced from the IPCC Fourth Assessment Report (AR4), published in 2007.
[52] In the environmental context, restoration refers to human interventions aimed at aiding the recovery of a previously degraded, damaged, or destroyed ecosystem. This definition is sourced from the Synthesis Report of the IPCC Sixth Assessment Report (AR6), specifically Annex I - Glossary, published in 2023.

and evaluation of the sensitivity of the municipalities to the effects of climate change, as well as the identification of places with the highest potential for carrying out actions keyed to increasing the resilience of smallholder farmers living in the project area of influence. According to the methodological design described in the foregoing, multi-criteria models were run in all municipalities located in the Dry Corridor. Using two categories – high (1) and very high (2), the model prioritised 14 municipalities in six departments (see Table 1 and 2).

Table 1. Criteria and Numerical Weighting for Multi-criteria Analysis

CRITERIA	WEIGHTING
Soil coverage	20%
Poverty	15%
Population density	15%
Drought	20%
Rainfall variation	30%
Total	100%

Source: MARENA 2021

Table 2. Municipalities Prioritised According to Multi-criteria Analysis

No	Municipalities	Total Population in 2020 (Inhabitants)	Urban (Inhabitants)	Rural (Inhabitants)
	MADRIZ	**79 535**	**33 224**	**46 311**
1	Palacagüina	15 389	5 601	9 788
2	Somoto	39 821	21 021	18 800
3	Telpaneca	24 325	6 602	17 723
	ESTELÍ	**68 679**	**29 591**	**39 088**
4	Condega	31 086	11 836	19 250
5	La Trinidad	22 521	12 852	9 669
6	San Juan Limay	15 072	4 903	10 169
	MATAGALPA	110 970	57 790	53 180
7	Ciudad Darío	53 268	22 918	30 350
8	San Isidro	19 995	9 300	10 695
9	Sébaco	37 707	25 572	12 135
	LEÒN	22 781	4 948	17 833
10	El Jicaral	11 833	1 577	10 256
11	Santa Rosa del Peñón	10 948	3 371	7 577
	BOACO	65 228	15 749	49 479
12	Teustepe	33 592	6 995	26 597
13	San Lorenzo	31 636	8 754	22 882
	MANAGUA	11 267	3 451	7 816
14	San Francisco Libre	11 267	3 451	7 816
	TOTAL	**358 460**	**144 753**	**213 707**

Source: MARENA 2021 for municipalities to prioritize. INIDE 2020 population estimates[53]

41. Two of the municipalities selected include IIndigenous Peoples' communities in the North and Central Region of the Country: i) in the Chorotega del Norte Indigenous town, which includes the municipality of Telpaneca in the department of Madriz and ii) in the Chorotega del Centro IIndigenous Peoples in the municipality of Sébaco in the department of Matagalpa. The foundation of the IIndigenous town of Telpaneca dates from the year 1626, it has an estimated population of 12,000 people, distributed in 39 rural communities and five urban areas. Agriculture activities in this area focuses on basic grains: corn, beans, sorghum, musaceae, and coffee, grown on a regular scale in mountainous areas, such as the El Malacate hills with 1,490 meters high, Santo Domingo with 1,348 meters and El Picacho with 1,343 meters. The Council of Elders, made up of an elder from each community, is the highest decision-making body and guardian of historical memory. The Board of Directors is the administrative and executive body subject to popular election. Other structures include the Youth Network, Women's Network, Community Mediators and Indigenous Communicators. The Indigenous town of Sébaco is characterised by intense industrial activity, such as rice and coffee processing, and trade. In addition

[53] INIDE (2020). Anuario Estadistico 2019

to the municipal government, there is an Indigenous community government, made up of members of the community through the Indigenous Assembly, the Council of Elders, the Administrative Board of Directors and the Electoral Directorate.

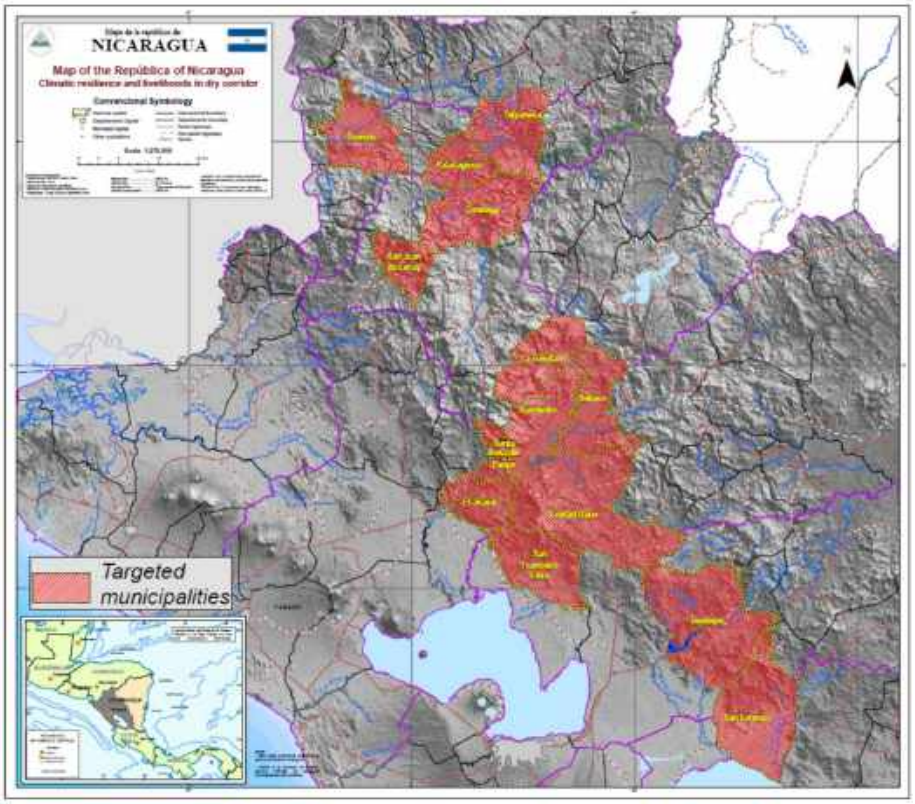


Figure 8. Project Area of Intervention

Project/Programme Objectives

42. The project's general objective is to reduce the climate vulnerability of smallholder farmers and their agro ecosystems in the Nicaraguan Dry Corridor by increasing their adaptive capacity through the rehabilitation of their agricultural livelihoods. This will be achieved through ecological transition practices and the restoration the forest landscape.

43. This objective is closely related to four outcomes of the Adaptation Fund: Fund Outcome 2. Strengthened institutional capacity to reduce risks associated with climate-induced socioeconomic and environmental losses; Fund Outcome 3. Strengthened awareness and ownership of adaptation and climate risk reduction processes at the local level; Fund Outcome 5. Increased ecosystem resilience in response to climate change and variability-induced stress; and Fund Outcome 6. Diversified and strengthened livelihoods and sources of income for people in a vulnerable situation in targeted areas.

44. The project has a strong focus on participatory planning processes and capacity transfer to farmers, technicians, and institutions involved in the project. This will enable the implementation of environmentally sustainable and climate-resilient practices in degraded productive landscapes to improve food security for the participating families and enhance landscape-scale ecosystem services such as increased soil moisture, organic matter, and wildlife flow, contributing to ecological transition.

45. To reach the objective, the project has four expected outcomes:
    - **Outcome 1**. Farming families in 14 municipalities in the Dry Corridor develop capacities for

planning and implementing practices that contribute to their food security and ecosystem services, with the participation and consultation of women, youth and Indigenous Peoples.

- **Outcome 2**. Forest landscapes are preserved and restored for the generation of ecosystem services.
- **Outcome 3.** The livelihoods of farming families are rehabilitated and diversified through climate resilient systems and practices for landscape restoration.
- **Outcome 4.** Adaptative and knowledge management approach applied during the implementation of project.

Through these outcomes, the project seeks to promote the restoration of landscapes[54]. Due to the prevalence of degraded landscapes in the Dry Corridor, their restoration[55] is a priority for rehabilitating livelihoods and improving ecosystem services, thus ensuring environmental sustainability, and reducing the vulnerability of farming families. This will be complemented by a resilient natural resource management approach in areas impacted by climate variability. Promoting environmentally friendly and climate-resilient practices in degraded productive ecosystems, such as agroecological practices, will help halt the process of soil, water, and biodiversity degradation in critical landscapes of the Dry Corridor. This project approach is aligned with ancestral practices traditionally employed by Indigenous Peoples. The impact of climate change and climate variability calls for the integration of these ancestral practices with scientific knowledge as complementary elements.

Project/Programme Components and Financing

Table 3. Project components and financing

Project Components	Expected Concrete Outputs	Expected Outcomes	Amount
1. Transfer of capacities to farming families leading to the implementation of resilient natural resource management practices and degraded landscape restoration in 14 municipalities in the Dry Corridor.	1.1 Capacity-building programme for SNPCC institutions and farming families is developed and implemented with the participation of women, youth and IIndigenous Peoples.	1. Farming families in 14 municipalities in the Dry Corridor develop capacities for planning and implementing practices that contribute to their food security and ecosystem services, with the participation and consultation of women and IIndigenous Peoples.	USD 959,887
2. Restoration of forest landscape to enable the generation of ecosystem services.	2.1 Farming families have adopted resilient natural resource management practices to restore the forest landscape and improving the flow of critical ecosystem services in drought periods, in 14 municipalities of the Dry Corridor.	2. Forest landscapes are preserved and restored for the generation of ecosystem services.	USD 2,005,955
3. Rehabilitation of agricultural livelihoods at farm level, using climate- resiliente and environmentally sustainable practices for landscape restoration.	3.1.1. Farming families have established and improved practices in agroecology, water and landscape management, crop production and income generation 3.2 The capacities of farming families to diversify and access markets using sustainable soil	3. The livelihood of farming families are rehabilitated and diversified through climate resilient systems and practices for landscape restoration.	USD 5,066,758

[54] MARENA, 2023. The restoration of degraded areas at the landscape level allows us to carry out activities in large areas, including buffer zones that impact connectivity zones. From this perspective, landscape-level restoration actions will improve environmental and productive conditions through forest rehabilitation and conservation, the application of agroforestry and silvopastoral production practices, and the vision of environmental and productive land management, aiming to improve the quality of life and increase the resilience of local families to climate change. Taken from the Degraded Landscape Restoration Strategy for MARENA-GEF Portfolio Projects. MARENA, 2023.

[55] The restoration of forest landscapes is the process by which the functionality and productivity of lands and forests that have suffered degradation are recovered. The presence of trees in agricultural landscapes increases food production and land resilience. Restored lands serve as a source of clean water supply, providing a suitable habitat for wildlife. Forests and trees mitigate the effects of climate change by absorbing carbon. The map of opportunities for forest landscape restoration can be found in the following link: https://www.fao.org/3/i2560s/i2560s08.pdf

Project Components	Expected Concrete Outputs	Expected Outcomes	Amount
	management practices, with the participation of women and IIndigenous Peoples' populations, are strengthened.		
4. Knowledge management including the capture and dissemination of knowledge and lessons from the project among assisted farming families to promote the sustainability of the project's impact on landscapes.	4.1 A knowledge management and communications strategy is developed and implemented with the participation of women and IIndigenous Peoples' populations. 4.2 Institutional capacities are strengthened to foster project monitoring and sustainability of the project's impact with a focus on gender, youth and IIndigenous Peoples	4. Adaptative and knowledge management approach applied during the implementation of project.	USD 504,000
6. Project/Programme Execution cost (9.5%)			680,000
7. Cost Total Project/Programme Cost (Project Components + Execution Cost)			9,216,600
8. Project/Programme Cycle Management Fee charged by the Implementing Entity			783,400
Amount of Financing Requested			**10,000,000**

Projected Calendar

Table 4. Projected schedule

Milestones	Expected Dates
Start of Project/Programme Implementation	January 2024
Mid-term Review (if planned)	June 2026
Project/Programme Closing	December 2028
Terminal Evaluation	March 2029

PART II: PROJECT 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.

46. The populations in the Dry Corridor face high environmental, social, and climate vulnerability. This results in low agricultural production, crop losses, water scarcity, and degradation of soils, water, and biodiversity. In this vulnerable area, loss of vegetation cover, and limited access to water for human consumption, irrigation, and watering during the dry season have reduced the adaptive capacity of farming families. This is compounded by low education levels, limited access to climate information, and few training opportunities.

47. With support from the Adaptation Fund, the project will implement an integrated approach where practices at landscape level[56] and practices at farm level – such as the establishment of agroforestry

[56] The WRI Report (2020) defines the landscape as a geographical space formed by various land uses (patches or fragments of forests, agriculture and pastures, urban areas, etc.) that are interrelated and provide different ecosystem services. Within this space, diverse groups, companies, organisations, or networks coexist with different interests, capacities, and decision-making power. The landscape also encompasses the social and economic dimensions, as well as the biophysical aspects of restoration. The report emphasizes the importance of monitoring the impacts of landscape restoration, both in terms of its ecological and socioeconomic outcomes. "Sustainability Index for Landscape Restoration: A tool for monitoring the biophysical and socioeconomic impacts of landscape restoration". Page 14

systems, silvopastoral systems, and the adoption of agroecological practices - are complementary to strengthen the resilience of families, rehabilitate their livelihoods, and improve ecosystem services[57]. The implementation of adaptation measures in productive areas and ecosystems can have broad benefits for food security, nutrition, health, populations' well-being, ecosystems, and biodiversity (IPCC, 2022) [58]. Thus, the project addresses the needs of the families in vulnerable situation in the Dry Corridor, considering those identified during participatory consultations - including focus groups involving women and IIndigenous Peoples' populations. It is expected that in the medium to long term, these practices at farm level will contribute to the ecological and hydrological functioning of watersheds in the landscape.

48. To reach its objective, the project consists of four interrelated components. The implementation of the project starts with capacity strengthening for farmers who will implement adaptation activities, described in Component 2 (conservation[59] and recovery of forest areas in landscapes) and Component 3 (restoration through agroforestry systems, silvopastoral systems, and agroecological practices), as well as for the technical teams who will support farmers and monitor the project. These capacity strengthening activities will be implemented under component 1 and will focus on the implementation of practices validated by previous projects as well as other identified topics of interest during territorial consultations. The participation of women farmers will be encouraged, aiming for women to make up at least 40% of project protagonists (except for Component 2, where the participation of women farmers may reach 30% due to land tenure barriers). Through Components 2 and 3, the project will implement resilient natural resource management practices in 18,119 ha distributed between forested areas and productive areas. To achieve this, the project will work in specific landscapes in coordination with different groups of farming families.

49. In total, the project will reach 9,730 direct beneficiaries, including farming families[60] and institution technicians:
    - Component 1 will benefit 9,730 protagonists, including 9,661 farming families and 70 institution officials responsible for strengthening the capacities of the targeted farming families. These include ,373 women, 1,932 youth, and 175 Indigenous Peoples.
    - Component 2 will benefit 3,079 farming families with between 3 and 10 ha of land, including forested areas. Of these, 924 will be women, 616 will be youth, and 175 will be Indigenous Peoples.
    - Component 3 will benefit various groups, including 4,441 farming families with 1 to 3 ha of productive land through the establishment of agroforestry and silvopastoral models; 1,150 beneficiaries of nurseries and family gardens; 640 protagonists of Community seed banks; and 350 farmers associated in 14 cooperatives who will benefit from capacity strengthening. Overall, 2,449 will be women, 1,316 youth and 990 protagonists from Indigenous Peoples.
    - Component 4 will directly reach 9,730 protagonists, including 9,661 farming families and 70 institution officials responsible for strengthening the capacities of the targeted farming families. These include ,373 women, 1,932 youth, and 175 Indigenous People. Additionally, this component will benefit the Nicaraguan population at large through its communication and outreach efforts, being this a knowledge management component that will generate content through various channels, including media.

50. The differentiated targeting strategy for farming families under Component 2 and Component 3 was

[57] Ecological processes or functions that have a monetary or non-monetary value to individuals or society in general. They are often classified as (1) supporting services, such as productivity or biodiversity maintenance, (2) provisioning services, such as food or fibers, (3) regulating services, such as climate regulation or carbon sequestration, and (4) cultural services, such as tourism or spiritual and aesthetic appreciation.

[58] Climate Change 2022: Impacts, Adaptation and Vulnerability. Working Group II Contribution to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change.

[59] Law 217. Chapter II, Article 5, defines conservation as "the application of necessary measures to preserve, enhance, maintain, rehabilitate, and restore populations and ecosystems without affecting their utilization."

[60] The term farming families is used in this proposal to highlight that the benefits that the project will provide to the direct beneficiaries will indirectly extend to his or her family members. This is in line with the rational and preferred language of the Government of Nicaragua.

specifically designed to enable the inclusion of some of farming families in situations of vulnerability in the project (under Component 3), who often only have land for basic food production. Through the rehabilitation of their livelihoods, the project will achieve the dual objective of landscape restoration and strengthening their capacities to continue producing food sustainably. To increase the impact on the landscape, efforts will be made to select geographically connected areas under Components 2 and 3. This way, the areas under restoration where agroforestry systems and silvopastoral systems will be established will serve as buffer areas to halt the expansion of the agricultural frontier. This will allow for the conservation of surrounding forest areas and contribute to the sustainability of the local livelihoods and the regeneration of ecosystem services in these landscapes.

51. The gender approach will be mainstreamed across the four project components and their activities, ensuring that actions respond to the context and interests of women and ensuring a greater direct impact on this population group. Through these actions, the project expects to enhance female farmers' economic empowerment and at strengthening their role in community-level decision making. Additionally, the capacities of the project's technical team will be reinforced on gender mainstreaming, Indigenous Peoples, and social equity.

52. To achieve the expected impact of the project, critical factors include the strengthening of capacities for farming families and participating institutions; technical assistance for farming families; the participation of women, youth, and Indigenous Peoples; the involvement of different actors in the selected landscape; the implementation of incentives; access to water for community nurseries; consideration of evidence and lessons learned from previous projects; and a transparent, collaborative relationship between MARENA and WFP. The project components are described below.

Component 1. Transfer of capacities to farming families leading to the implementation of resilient natural resource management practices and degraded landscape restoration in 14 municipalities in the Dry Corridor.

53. This component seeks to promote the adoption of best practices for management of natural resources, including agroecological practices and technologies to prevent, mitigate, or recover efficiently and sustainably from future climate impacts. To do so, it focuses on strengthening the capacities and transferring knowledge and tools to the farming families in the Dry Corridor targeted in the project. Efforts will be made to ensure that at least 40% of the beneficiaries are women. Additionally, the participation of youth will be at least 20%. The participation of Indigenous protagonist families will depend on free, prior, and informed consultations, but it is estimated that at least 175 families will participate in the project.

54. At the same time, this component will strengthen the capacities of technical teams from the National System for Production, Consumption, and Trade (SNPCC for its Spanish acronym), as they will be responsible for providing direct technical assistance to the project's beneficiaries. Overall, the capacities of 70 individuals from the technical teams will be enhanced.

55. Among the first activities of component 1, a **gender and women's empowerment strategy** will be developed through a consultation mechanism, to ensure that the specific needs of young, adult, and Indigenous female farmers are taken into consideration for the development of the training programme. This consultation will help incorporate the needs and interests of women in the design of training activities, including the methodologies, practices, and subjects. During the project proposal formulation, a Gender Analysis and Action Plan (Annex 2) was prepared, which indicated that **in recent years, climate events (droughts or storms) have caused crop losses for 38% of women consulted** in the municipalities included in the project intervention area. As for access to water, **only 42% of the informants answered that they had access to water sources**. These issues will be addressed by the gender strategy and action plan. These will address barriers for women to participate in trainings by considering aspects such as modalities, schedules, literacy or educational level, location of events, distances to their homes, among others.

Outcome 1.1 Farming families in 14 municipalities in the Dry Corridor develop capacities for

planning and implementing practices that contribute to their food security and ecosystem services, with the participation and consultation of women and Indigenous Peoples

56. This outcome is directly related to the Fund´s Outcome 3 “Strengthened awareness and ownership of adaptation and climate risk reduction processes at local level”.

Output 1.1.1 Capacity-building programme for SNPCC institutions and farming families is developed and implemented with the participation of women, youth and Indigenous Peoples.

57. This output intends to transfer theoretical and practical knowledge to the targeted farming families, both organised in associations and individual, as well as with other stakeholders present in the Dry Corridor. These include SNPCC, the National System for Climate Change Management, coordinated by the Climate Change Secretariat of the Presidency of Nicaragua[61], and the technical teams of the municipal governments, who will benefit from strengthened capacities to deliver technical assistance and agricultural and environmental extension services in the project area.

58. The design of the **capacity transfer program** for farmers and technical staff will include training topics identified during the territorial consultations as part of the formulation of the project proposal. In this process, the technical staff emphasised the need to strengthen their knowledge on training methodologies; management of water resources; climate change; monitoring systems; information and communication technology; gender and Indigenous Peoples; among others.

59. In terms of the **training subjects** for capacity strengthening of farming families, the main needs identified were: information on pests and diseases triggered by climate change; soil conservation; water-efficient irrigation techniques; water-harvesting systems; use of native and adapted seeds; production of organic fertiliser; and management of agroforestry, silvopastoral and forestry systems.

60. The consultation process additionally explored **training modality preferences** of farming families. These include farming field schools, demonstration plots and exchange of experiences. The training programme will include training modalities, tools, and norms and regulations to standardise the quality of the processes. Farmers suggested trainings should take place in their communities, or as near as possible and during the afternoon. These aspects will be considered to enhance the effectiveness of the outcomes and ensure activities are aligned to the needs identified during the consultation process and detailed in the gender action plan.

61. To strengthen its capacities, the SNPCC has developed a broad network of learning sites across the country through multiple projects, which will serve to implement these activities, thus benefiting from existing and available spaces and infrastructure. **An assessment of available learning spaces** in the project territory will be conducted, considering the preferred modalities. The training programme will enhance telecentres[62], Capacity Development Units (CDU)[63], Agroecology Promotion Units (APU)[64], learning paths in the Dry Corridor, Technological Research, and Innovation Farms (TRIF), and Community Seed Banks. These spaces will serve as platforms for knowledge transfer in the project implementation framework. Within these learning spaces, groups of farmers from a community will

[61]http://legislacion.asamblea.gob.ni/normaweb.nsf/b92aaea87dac762406257265005d21f7/f0e9cc51d3075639062587060060104e?OpenDocument

[62] Telecentres are learning spaces promoted by INTA to facilitate information and learning technologies for farming families through digital agriculture. There are 100 telecentres throughout the country, located in town halls (58), technology centres (9), INTA offices (31) and farmers’ organisations (2). Telecentres have virtual libraries with information classified per territory and crops, virtual training programmes, early warning systems, news bulletins, and real-time virtual conferences. Through telecentres farmers will reduce the digital gaps to access market information, agroexport procedures, among others. (INTA, Spot TeleCentros https://www.youtube.com/watch?v=itQ1OJr-1W8).

[63] CDUs are learning spaces in the communities, implemented by INTA and assisted by supervisors accompanying training processes or actions (sessions/meetings/workshops) for small groups. They are equipped with audiovisual materials (communication materials, e.g. banners, puzzles, posters, etc.). There are basic areas available for demonstrations and practices, for a better comprehension and assimilation of topics related to climate change adaptation (AGRIADAPTA Project, 2022).

[64] According to the operative manual of the Agroecological Promotion Units (APU), these learning spaces are equipped to promote and experiment with technologies for climate change adaptation with an agroecological approach (AGRIADAPTA Project, 2022).

carry out participatory practices to solve production problems. Farms that have already implemented soil and water management practices will be identified; and, in the case of maize and beans, farms using certified improved seeds and/or seed banks, as well as local varieties, will be be validated to improve productivity.

62. As a part of its exit strategy, the project aims for learning spaces to continue to serve as platforms for innovation, validation and transfer agricultural techniques under the Nicaraguan Institute of Agricultural Technology (INTA). In addition, the National Technological Institute (INATEC) and at least one university will provide assistance to strengthen farming field schools; an agreement will be signed with these entities. To build on previous experiences, this component will consider lessons learnt about learning spaces from other projects, such as INTA with the TRIFs and Seed Banks, AGRIADAPTA with the CDU and APU, and the learning pathways of MARENA's Water Harvesting Project.

63. **The design and production of educational material that will be provided through these capacity strengthening activities for the farming families will incorporate a gender perspective and cultural appropriateness for Indigenous Peoples.** It will encompass printed, audiovisual, and digital materials. Existing materials already developed and validated by SNPCC institutions, as well as successful experiences from programs such as CulturAgro TV and CulturAgro Mobile, among others, will be utilised. The project will also draw upon materials generated by projects such as AGRIADAPTA and PAGRICC, which have systematised agricultural practices, including ancestral practices of Indigenous Peoples in the Dry Corridor. These materials will be complemented with soil and water conservation practices, among others, that are part of the productive systems of Indigenous and non-Indigenous communities participating in the project. They will be rescued, incorporated, and promoted through the capacity-transfer program. In line with the findings of the consultations with Indigenous Peoples the language used in the educational material will be user-friendly and adequate for varying levels of education**.**

64. **Training on information and communication technologies (ICT) management** will also be conducted to ensure farming families have adequate access to knowledge and technology. This will enable them to gain a better understanding of climate change and to adopt sustainable initiatives in their farms and communities. The trainings will emphasise the use of digital technology for commercialisation and the development of value chains. The primary beneficiaries of this activity will be the young members of farming families.

65. With the aim of providing farming alternatives and livelihoods that are more resilient and improve the incomes of farming families, the project will **strengthen the capacities of entrepreneurs for agro innovation, including product transformation, packaging, and commercialisation of production** (including the production of biological inputs, organic fertilisers, and processing of agricultural products). Under this component, the project will **promote technological initiatives** with young entrepreneurs, to incentivise and strengthen their capacities for production, product design and commercialisation. Furthermore, the creation of **female empowerment groups** will be encouraged. These will serve as spaces where women are provided differentiated assistance in the development of their capacities to reduce the gender gap in the rural production sector.

66. **Trainings will be jointly developed and coordinated by the relevant institutions** following the capacity transfer programme. The Ministry of Women (MINIM) will provide assistance on subjects related to women's leadership, economic empowerment, gender roles and gender violence. Trainings will be held on gender equality and women's empowerment, aligning with the results of the territorial consultations conducted during the project formulation. The gender training will target men as well as women. The project will draw upon training material created by MINIM, including the following illustrated brochures: i) Let's learn about gender, ii) Women, climate change, food security and risk management, and iii) Women, dignity, and rights. The Gender Action Plan (GAP) (Annex 2) allocates funding for gender mainstreaming strategies and actions and details acitivites that will be performed in collaboration with MINIM. An agreement will be signed with MINIM to formalise this partnership.

67. During the territorial consultation process, the need to strengthen institutional capacities on matters

such as Indigenous Peoples' rights and the local organisation of Indigenous communities was identified. Thus, the project includes a **consultancy specialised on Indigenous Peoples** . Within this consultancy, trainings on Indigenous regulatory and legislative framework, as well as Indigenous rights, socio-economic situations, identity, and cultural diversity will be provided to technical staff who will facilitate project activities. In addition, the project will strengthen Indigenous organisational structures for them to liaise and become a communication channel between the project and Indigenous farming families. This will ensure that activities and processes under the project are culturally adequate.

68. The main activities for the achievement of this output are:
1.1.1.1. Design of the programme for capacity transfer to farming families and SNPCC technicians on subjects defined in the territorial consultation, with emphasis on aspects related to gender, generational and Indigenous Peoples.
1.1.1.2. Capacity assessment and enhancement plan of existing learning spaces in project territory.
1.1.1.3: Agreement with INATEC, MINIM and the university (or universities) to define coordination mechanisms, assistance for project implementation, and capacity-strengthening activities.
1.1.1.4: External specialised consultancy on Indigenous safeguards. The activities that the specialist will carry out include strengthening the capacities of Indigenous Peoples' on governance structures, as requested by these populations during the consultations, and strengthening the capacities institutional partners on Indigenous issues. The specialist will also support the generation of content and materials, as well as ensure that the Indigenous People Action Plan is mainstreamed across all components of the project.
1.1.1.5: Design and reproduction of learning materials (written, audiovisual and virtual) for farming families, incorporating a gender approach and cultural adequacy for Indigenous Peoples .
1.1.1.6: Training events for institutional staff in the territories and municipalities.
1.1.1.7: Training events for farming families, incorporating a gender approach, and ensuring cultural appropriatemess for the Indigenous Peoples of Sébaco and Telpaneca (workshops, exchange of experiences among farming families, demonstration plots, farming field schools).
1.1.1.8: Training events for women and men on the subjects included in the gender action plan.
1.1.1.9. Capacity-strengthening for institutions and stakeholders on Indigenous Peoples' rights, cultural heritage, and the dissemination of ancestral knowledge on sustainable agriculture.
1.1.1.10: Training on the development and management of ICT to disseminate learning contents, climate information and on product commercialisation.
1.1.1.11: Innovation and capacity strengthening for entrepreneurs to encourage agricultural product transformation, packaging, and commercialisation.
1.1.1.12: Overall coordination of the component conducted by the Capacity Building and Knowledge Generation Specialist, who will be responsible for ensuring that all the above listed activities are effectively planned and implemented.

Component 2: Restoration of forest landscape to enable the generation of ecosystem services.

69. Under Component 2, the project aims to promote resilient natural resource management practices in forest ecosystems, promoting forest management[65] through the conservation and restoration of forest areas in the Dry Corridor. The resilient practices include: living fences; windbreaks with tree species; shrub living barriers; living barriers with grasses; establishment of fruit trees, Musaceae, coffee; shade trees with coffee plantations and pastures; preparation and management of forest management plan; silvicultural works according to forest management plan (thinning, pruning, natural regeneration); establishment of forest, agroforestry and silvopastoral plantations; saving firewood in cooking; cover crops; soil conservation works; cropping on stubble bed; production of compost and/or worms; establishment of forage banks of trees, grasses or legumes; dual-purpose living barriers in crop plots

[65] Forest management is a process that involves a set of technical, institutional, and communication interventions aimed at the sustainable production of forest resources, the conservation of forest ecosystems and their capacity to provide environmental services, and the restoration or rehabilitation of forest areas that have been deforested or degraded. Source: Guide for Forest Management. Emission Reduction Program to Combat Climate Change and Poverty in the Caribbean Coast, BOSAWAS Biosphere Reserve, and Indio Maíz Biological Reserve. MARENA, 2020.

with forage grasses; establishment of more suitable pastures. Such practices have been tested by previous projects, particularly PAGRICC, which was implemented during 2010-2016, and verified the effectiveness of environmental restoration systems in the Dry Corridor, incorporating tree cover practices, eco-forestry management, soil conservation practices, and water harvesters. Part of the key conclusions of this project is that natural resource conservation, recovery, and restoration practices are compatible with agricultural production, and that they improve the productivity and resilience of agroecosystems. The main lesson learned is that technological options for farmers must meet both environmental sustainability and economic profitability within reasonable time frame. Buidling on this previous experience, the current project will adopt a differentiated approach based on the specific characteristics of the intervention areas. These actions will be supported by economic incentives, training, and technical assistance, among others.

70. The activities under this component respond to the problem caused by the increasing pressure posed by the expansion of the agricultural frontier in forest areas in the Nicaraguan Dry Corridor. Conserving and restoring forest areas is a crucial measure to promote the regeneration of ecosystem services, particularly in a context of high climate variability, degraded ecosystems due to land overuse and poor agricultural practices. Currently, the productive areas surrounding these forest areas demonstrate limited water recharge capacity; soil degradation; limited water-harvesting capacity; use of forested land for agricultural production; and inadequate production practices for the conditions of the Dry Corridor. Resilient natural resource management practices will contribute to address this.

71. Forest conservation and restoration through natural regeneration actions will be carried out with farming families who have or share forest use areas. These areas need to be conserved and well-managed due to their key role in the functioning of ecosystem flows within the landscape and in areas of ecological relevance (biological corridors, riverbanks, water recharge zones). This includes buffer zones around protected areas. In areas with community-based government structures and shared responsibility for conservation and management, the project will seek culturally appropriate mechanisms to promote sustainable forest management practices.

72. The restoration and management of forests contributes to the restitution of the rights of the Nicaraguan people to enjoy the benefits generated by forest ecosystems in an environmentally sustainable manner. This is in accordance with national norms and regulation, including the Political Constitution of Nicaragua; Law No. 217 (General Law on Environment and Natural Resources, Decree 01 2007); the National Climate Change Policy; the National Policy on the Prevention of Deforestation and Forest Degradation; the National Reforestation, Restoration, and Nature Protection Campaign “Verde que te Quiero Verde,” among other instruments.

73. Forest restoration in Nicaragua is also a national priority. The targeted municipalities under this project include forest use areas where management and restoration actions can be implemented. These actions will contribute to Nicaragua’s commitment in the 20x20 Initiative to restore nearly 2.8 million hectares and to the NDC target in the Forest Management, Land Use, and Land Use Change sector. Nicaragua has established productive strategies with a focus on climate change mitigation and adaptation, promoting best practices for crop establishment and management, and supporting low-emission production initiatives that also contribute to environmental restoration.

Outcome 2.1. Forest landscapes are preserved and restored for the generation of ecosystem services.

74. This outcome is directly linked to Outcome 5 of the Fund “Increased ecosystem resilience in response to climate change and variability-induced stress”.

75. This outcome will contribute to improve soil productivity and moisture retention during periods of drought, as well as generate ecosystem services such as pollination and pest and disease control, among others. Since forest areas are close to productive areas, their conservation and restoration will have a positive impact on diversifying crops, livelihoods, and increasing the resilience of farmers.

Output 2.1.1 Farming families have adopted resilient natural resource management practices to restore the forest landscape and improving the flow of critical ecosystem services in drought periods, in 14 municipalities of the Dry Corridor.

76. Under Component 2, the project will work with 3,079 farming families who own between 3 and 10 hectares of land for the conservation and restoration of 9,238 hectares of forest[66]. Within this area, an estimated 4,712 hectares will be conserved, and 4,526 hectares will be restored through natural regeneration management. For the hectares requiring restoration, 1,719,880 plants will be needed, which will be produced in 344 community plant nurseries supported by the project. These activities are among the needs identified during the participatory consultations performed in the project intervention area. The project will also provide economic incentives, vegetative material, technical assistance, and support the enforcement of existing regulations. The project estimates the participation of at least 30% of women in conservation and restoration activities of forest areas. The gender action plan included in the project proposal includes affirmative actions to promote greater women's participation in this component, recognising the challenges women face regarding land ownership.

77. The selection of farming families will be made based on an inclusive criterion with a view to achieve the highest benefits from the project: Criterion 1: The farmer lives in one of the Dry Corridor's communities in situation of vulnerability. Criterion 2: Presentation of holder title deeds for his/her property[67,] Criterion 3: Submission of application for forestry incentive, and Criterion 4: Presentation of farm plan prepared with technical assistance detailing the commitment to conserve and/or restore forest cover on their properties. Other basic eligibility criteria to be taken into consideration for the selection of protagonists in this component include being an active farmer over the past two years, farm size (between 3 and 10 hectares), willingness to contribute family labor, willingness, and availability to participate in training processes, and not participating in another government project that provides the same incentives or duplicates efforts in the agricultural or environmental sector. Explicit inclusion criteria will also address non-discrimination based on gender, age, ethnicity, religion, political affiliation, and disability.

78. A **participatory planning process for landscape restoration activities** will be carried out, led by the project's governance structures in conjunction with municipal governments and territorial leaders (including women, youth, and Indigenous Peoples). A mechanism will be established to ensure the participation of women and youth in landscape restoration actions. This participatory process will include six annual sessions conducted during years 1 and 2 of implementation, and three annual sessions in years 3,4 and 5 to plan and monitor the actions carried out under Component 2. The project will collaborate with local and Indigenous governance structures in the selection of specific areas to be intervenedunder this component, special attention will be put in water recharge areas, as well as to ensure the follow up of actions at local level.

79. To achieve the expected results, the project will **map out the conservation and restoration areas** in ecologically significant zones such as riverbanks, water recharge areas, and areas connecting forest patches, as well as develop agreements among stakeholders for implementation of activities. Conservation and restoration actions within the forest landscape will enhance the flow of ecosystem services in areas around water sources; water recharge zones; areas with timber and non-timber tree cover; connectivity zones for forest patches; and wildlife corridors.

80. The mapping of forest conservation and restoration areas, water recharge zones, and biological corridors will be based on the 2020 land use map published by INETER[68]. Forest areas located outside of protected areas will be prioritised, particularly in municipalities with conservation and restoration

[66] The National IATT indicates that the number of farming families assisted under component 2 is closely linked to the number of hectares each family owns. The target number of hectares could be achieved with the participation of more or less of the number of families stated in the text.
[67] Legal documents of the property have to be presented due to the need to draft and implement forest management plans and to register plantations in the National Forest Registry, and because the investments aim at the long-term use of land, thus a high security of tenure is required as a guarantee for these.
[68] National Territorial Studies Institute (2021). First National Atlas of Soil of the Republic of Nicaragua

potential, as well as ecologically significant zones such as water recharge areas, riverbanks, and biological corridors. Each year, the intervention areas will be reviewed and adjusted if necessary. A comprehensive map of the project area and maps for each department and municipality within the intervention area will be developed.

81. Within the project's target municipalities, there are agricultural properties located within the buffer zones of protected areas[69]. These buffer zones are an important part of biological corridors and provide ecosystem services of interest to communities, as such, they will be considered under Component 2. In accordance with Decree 01-2007, buffer zones are areas directly adjacent or surrounding protected areas of the National System of Protected Areas (SINAP for its Spanish acronym) that support sustainable development activities, align with management objectives, and minimize negative impacts within protected areas. Buffer zones facilitate connectivity and biological corridors, where sustainable productive models are implemented, and social and inter-institutional agreements are promoted. Activities such as the establishment of silvopastoral systems, agroforestry, and plantations with non-invasive species are permitted in buffer zones by national regulations.

82. The project foresees the provision of economic incentives to farming families for the conservation of forest areas and the management of natural regeneration in stable or recovering forest landscapes. The economic incentives amount USD 100 per hectare under conservation and/or restoration and will be delivered in two payments during the project implementation. The incentive for families engaging in forest conservation will be provided after a forest diagnosis-inventory, once it has been verified that a large percentage of ecologically valuable species, culturally significant species, endangered species, and species contributing to the protection of water sources have been conserved. The percentage of conservation of these species will be determined in conjunction with the families and reflected in a farm plan. The incentive for families engaged in restoration through natural regeneration will be provided once compliance with activities (area cleaning, digging, pest control, fertilization, establishment, and 70-80% plant survival) has been verified through technical assistance from MARENA or the National Forestry Institute (INAFOR, for its Spanish acronym). These incentives will be performance-based payments for forest area management. The incentive amounts were defined based on MARENA's experience with other projects[70].

83. To support protagonists implementing natural regeneration practices under Component 2, community plant nurseries must be established in the first year of project implementation. This will be done by MARENA and/or INAFOR to produce the plants that will be delivered to protagonists based on the number of hectares to be restored. Once a participant submits a letter of request to be eligible for the incentive, and eligibility criteria are verified, MARENA and INAFOR will sign an agreement with participating families, which will generally define the overall objective, specific objectives of the farm plan, incentive amounts, project commitments, participant commitments, coordination arrangements, termination of the agreement for non-compliance, verification, monitoring, and the duration of the agreement.

84. **Technical assistance, monitoring, and follow-up** to participanting families will be conducted through a technical monitoring committee comprised of, INAFOR, a representative of Indigenous communities (where applicable) and of women and youth organizations, the technical environmental unit from the Mayor or Vice-Mayor office (where it exists), and chaired by a MARENA delegate. Municipality Mayor and Vice-Mayor will participate in technical visits and and in biannual follow-up meetings. The monitoring committee will conduct technical assistance visits during which a form will be completed, which will become a part of a record, documenting progress on commitments, providing recommendations to assisted families, and providing geographic coordinates for georeferencing. Specific procedures will be detailed and established during the first six months of the project.

85. As defined in Component 1, the Gender Strategy, to be defined at the beginning of project

[69] Protected areas within the Project intervention area include: Tepesomoto, Lapastepe, Miraflor Mesas de Moroponte, Tomabu and Cerro Quiabuc- Las Brisas
[70] Projects currently being implemented under cycles 6 and 6 of the Global Environment Facility.

implementation, will ensure that gender mainstreaming aspects are considered, including the incorporation of affirmative actions to overcome women's limitations in participation.

86. The main activities to achieve the output are:
2.1.1.1: Participatory planning (with a special focus on gender, youth and Indigenous Peoples) of actions at landscape level to map forest restoration areas on the banks of water sources.
2.1.1.2: Creation of nurseries to provide the plants needed for the restoration of degraded land
2.1.1.3: Mapping of areas for forest restoration, water recharge zones and biological corridors.
2.1.1.4: Analysis for the prioritisation of intervention areas, using the GIS system, and the selection of farming families to be assisted for the project.
2.1.1.5: Cash incentives for the restoration of degraded land
2.1.1.6: Cash incentives for land conservation in opened forestry
2.1.1.7: Cash incentives transfer costs.
2.1.1.8: Technical assistance, monitoring and follow-up of farmers.
2.1.1.9: Overall coordination of the component conducted by the Forestry Restoration and Resource Management Specialist who will be responsible for ensuring that all the above listed activities are effectively planned and implemented.
2.1.1.10: Equiptment, tools and supplies

Component 3: Rehabilitation of agricultural livelihoods at farm level, using climate resilient and environmentally sustainable practices for landscape restoration

87. As described in the previous sections, high levels of land degradation resulting from the use of conventional practices such as land-use change from forested areas to pastures or crops; overgrazing; poor water management; among others, have reduced the adaptive capacities of families and increased risks of food insecurity. This is deeply exacerbated by the incidence of high climate variability, including extended droughts and floods caused by El Niño Southern Oscillation. This translates to low agricultural productivity and income; limited access to production technology; limited knowledge and resources for water management including water harvesting and irrigation; limited access to assets for adaptation; low value-added production and limited diversification; as well as limited access to markets. All of this affects the livelihoods of smallholder farmers, hindering their development potential and making them even more vulnerable to climate impact.

88. In this context, this component aims to tackle these barriers, promoting the adoption of environmentally sustainable practices by farming families for the restoration[71] of degraded productive areas in the Dry Corridor. It prioritises scaling up adaptation practices that have been validated and builds on the lessons learned of the AGRIADAPTA Project, which has identified technologies associated with successful climate change adaptation measures[72]. Some of these include: water and soil conservation; the establishment of micro irrigation and catchment reservioirs; the establishment of agroforestry systems (alley cropping, green manure, live fences, tree planting, fruit tree management); production of drough resistant seeds and vegetative material, silvopartoral systems (summer feeding practices and pasture management including alley pasture arrangement with leguminous plns every ten meters); diversification of production and crop rotation; incentives for the improvement of water wells for drip irrigation; and inventives for environmental initiatives for well improvement. The practed tested by AGRIADAPTA were also validated and tested by the PAGRICC project (2010-2016), as further described in Annex 6. In the context of the Dry Corridor, the most relevant practices are those that promote a transition towards better management of water, soils, and forests resources. In relation to forest management, AGRIADAPTA's experience also indicates that community management of natural regeneration needs to be accompanied by a communication strategy for behavioural change

[71] Forest Restoration Areas are those that, not being covered by forest vegetation, are naturally suitable for being incorporated into forest use for protection and conservation purposes. Law No. 462 on the conservation, promotion, and sustainable development of the forest sector. Gazette, official newspaper No. 168, 2003.
[72] Adaptation measures: increasing vegetation coverage, improving access to safe water, rainwater harvesting for domestic and agricultural use, diversifying production, implementing conservation and soil and water management measures, using more efficient techniques for crop management, preventing deforestation, planned, efficient, and sustainable use of water resources, reducing and preventing contamination of aquifers with domestic wastewater and solid waste.

to generate awareness on the co-responsibility of communities in the protection of water-forests resources. Another lesson is that community nurseries reduce losses due to transfers and lack of soil-plant compatibility which increases the percentage of plant seedlings; however, it requires constant technical support for an adequate agronomic management. Building on the experience generated through other projects, this intervention will particularly promote soil and water conservation measures (dead barriers, live barriers, infiltration trenches); increased tree cover and water harvesting; agroforestry systems; silvopastoral systems; improvement of vegetable gardens; family gardens with medicinal crops; biointensive crops; and agroecological practices. Other complementary practices include water systems, eco-stoves, the Drinking Water and Sanitation Committees strengthening, and the organization of young people. These investments alone or in combination allowed rural families to have greater access to better quality and quantity of drinking water and reducing time women used to get water; and thus for improving families capacities for climate change adaptation.

89. The restoration of degraded productive areas in landscapes of the Dry Corridor will contribute to diversification of production, food security, the resilience of food systems, and the regeneration of ecosystem services. The project will provide families with in-kind incentives such as packages with inputs and vegetative materials for the establishment of an appropriate system. This will benefit productive areas surrounding the forest areas that are conserved and restored in Component 2.

Outcome 3.1 The livelihood of farming families are rehabilitated and diversified through climate resilient systems and practices for landscape restoration.*.*

90. This outcome is directly linked to Outcome 6 of the Fund "6. Diversified and strengthened livelihoods and sources of income for vulnerable people in targeted areas". This will directly contribute to improve the resilience of the livelihoods of participating families, as well as to advance strategies, policies, goals, and government guidelines while promoting local, sustainable, and fair production. In contexts such as the Dry Corridor of Nicaragua, there is a need to transform degraded agricultural landscapes into multifunctional landscapes. The strength of these lies in their ability to meet the needs of various uses and provide multiple ecosystem services, including economic, environmental, and social services (SIWI; IWMI, 2020)[73].

Output 3.1.1. Farming families have established and improved practices in agroecology, water and landscape management, crop production and income generation

91. For the rehabilitation of livelihoods in degraded ecosystems at the farm level, the project will consider the use of climate change adaptation technologies in priority sectors. These are included in the Third and Fourth National Communications[74]. In addition, the project will consider adaptation technologies that have been piloted and systematised by other projects.

92. As initial activities for the implementation of this component, **visits to municipalities will be conducted to identify the communities that will be intervened by the project**. This will be carried out in conjunction with the mapping process for Component 2 to maximise cost and time efficiency and seek synergies between the two components. The selection of these areas will be supported by available tools from MARENA and WFP, including a study into the Typology of Crops in the Dry Corridor, which already defines priority areas for productive development and innovation in each territory (Third and Fourth National Communications). Furthermore, farms or production units will be identified using GIS tools, complemented with knowledge mapping, using a gender sensitive approach, and involving Indigenous Peoples and youth. At the beginning of the project, a set of additional gender-based criteria will be defined for the identification of areas to ensure the productive restoration systems established are in line with priorities identified through the gender analysis. The project will be inclusive and ensure that different types of families and actors can benefit from the activities to be carried out. It is estimated that 4,441 farming families will participate in activities under this output.

[73] Water productive and resilient landscape management technologies and approaches. Stockholm International Water Institute. 2020.
[74] https://cambioclimatico.ineter.gob.ni/Tercera%20Comunicaci%C3%B3n%20Nicaragua.pdf

93. During territorial, municipal, and national consultations, farming families, as well as technical staff from institutions, identified the need to implement validated adaptation practices and to rehabilitate prioritised crops, as well as a selection of tree species for different production systems that can improve their income, food security, and the resilience of both productive systems and rural families. This includes fruit trees, energy trees, and forage banks.

94. In line with the findings of the territorial consultations and good practices already validated in Nicaragua, the production models that will be established under this component are: **a) Silvopastoral systems**, characterised by a mix of trees and pastures. This system helps improve the microclimate for animals, contributes to carbon sequestration and to the improvement of other environmental services. It also has positive effects on drought resistance and high temperatures. Furthermore, it incorporates planting of improved pasture with high-nutritional-value grass for livestock, increasing productivity and farmers' income; **b) Agroforestry systems** using basic grains, sorghum, and fruit trees. This system involves incorporating agroecological production practices, such as using crop residues to conserve soil, increase soil moisture (green water), and prevent erosion, protecting it from solar radiation. Other practices include no burning; crop rotation; integrated pest management; production and application of bioinputs; and tree planting. Trees not only protect the soil but also contribute nitrogen and have a significant impact on agrobiodiversity and the production of environmental goods and services. **c) Family gardens** containing vegetables and irrigation systems. This model will primarily target women, in line with the findings of the participatory consultation process. It involves planting vegetables using improved bioinputs to ensure families have access to nutritious food and a diversified diet. The Ministry of Family, Community, Cooperative and Associative Economy (MEFCCA), INTA, and MARENA are the institutions that will provide technical assistance to farming families. They have a wide range of practices that will be evaluated for their suitability in degraded landscapes with water scarcity and will be integrated into the project if they meet the landscape's needs.

95. In addition, the project will establish and strengthen community seed banks[75] in Indigenous territories. Identified through an initial assessment, these seed banks will complement the establishment of production systems detailed above by enabling the production, collection, and preservation of drought-resistant seeds adapted to the context (native, local, or locally adapted). This will enhance the resilience of farming families and production systems. Based on the detailed information provided by the assessment, a plan will be developed to strengthen those that are already in place and for establishing new ones recognizing the knowledge and perspective of the Indigenous Peoples. Lessons learned from other projects suggest that this investment requires strong technical support to bring these community organizations to a minimum level of operation and sustainability. In all cases, these banks require an initial endowment of seeds to initiate seed sales, loans and seed replenishment. When these organizations are well-functioning, they grow in number of members, and in quantity and varieties of seeds. Farmers will then be able to continue to have access to all seeds in the future through the continuous production generated in the banks through their replenishment and ongoing activity, as the purpose of these structures is to provide sustainable solutions. Given the central engagement of MEFCCA and INTA in the project and their participation in inter-institutional coordination spaces and structures created under the intervention, the project will promote coordination between them to ensure follow-up plans are developed, as part of the exit strategy.

96. Seed banks will be accompanied with post-harvest management capacity strengthening, including the provision of metal silos to store grains and make them available for the next planting cycles or for commercialisation, enabling farmers to access better market prices throughout the year. Community seed banks are a widely accepted climate adaptation measure in communities as they provide them with the opportunity to secure the seeds they need to restore the landscapes they inhabit. There are successful experiences implementing seed banks in the project intervention areas.

97. The incentives system of this component includes the delivery of supplies, tools, and some materials to facilitate the development of each production model. This is in line with the findings of the

[75] Community seed Banks are an organized way for farmers to collectively administer locally produced seeds.

consultations, where farmers expressed that their preference for in-kind incentives, meaning basic supplies and inputs. Families will be selected according to previously defined procedures and criteria, including requirements[76] such as: submitting a letter of expression of interest and identification card; providing a commitment letter (agreeing to participate in activities organised to promote the exchange of experiences and knowledge, product exhibitions, training workshops, among others); developing a farm plan; registrating in municipal databases. The project will take the necessary measures to protect the data of the assisted farming families. This will be detailed in the standard operational procedures (SOPs) that will be created at the start of the project. Once this procedure is completed, the delivery of inputs will be carried out by the corresponding institutions through procedures established in agreements between MARENA and the respective institution, as well as in the operations manual, which will be developed within the first 6 months of the project. Furthermore, the delivery of inputs will be based on the farm plan prepared by farming families with the assistance of technical experts from the institutions. The incentives will be delivered to families in each territory before the onset of the rainy season for planting, in line with the planned schedule. In a context of reduced precipitation forecasted by INETER for 2023-2024, this allows farming families to plan for their productive cycle and prioritise needs, including the required labor.

98. This component will also work with women's smallholder farmers organisations. It will establish water harvesting structures in demonstration farms with agro-silvopastoral systems. Agroecological practices, including ancestral practices of Indigenous communities, which are systematised and promoted under Component 1, will contribute to the conservation of soil, water, biodiversity, forests, and the generation of environmental services[77]. Increased productivity will enable families to generate income from the sale of surpluses.

99. All production models to be established will be based on the use of on-farm resources, the in-kind incentives provided by the project, and the use of family labor. Therefore, the family's capacity to contribute their labor to the implementation of the adaptation measures is a key element. This will be a crucial criterion in the selection of beneficiary families to avoid risks in the implementation and management of the proposed systems. **The basic eligibility criteria to be considered for the selection of farming families under this component are**: i) the farming family must be located in communities in situations of vulnerability of the Dry Corridor: ii) be active farmers for the past two years; iii) have availability of 1 to 3 hectares (land use and/or possession) where the project will invest; iv) have the capacity to contribute labor; v) willingness and readiness to participate in training processes; and vi) not be an active participant in another government project in the agricultural or environmental sector that provides the same type of benefit. To promote community co-responsibility, a final validation of the criteria for selection of families will be carried out with the communities. The selection of families will be done in a participatory manner with national institutions, local government, community leaders, and Indigenous Peoples' organisational structures in the Indigenous territories of Sébaco and Telpaneca.

100. The main activities for the achievement of the output are:

3.1.1.1: In-kind incentives for families to improve their agroforestry systems for the development of resilient production systems, including Indigenous Peoples.
3.1.1.2: In-kind incentives for families to improve their silvopastoral systems for the development of resilient production systems, including Indigenous Peoples.
3.1.1.3: In-kind incentives for families to improve their mixed productive systems (silvopastoril and agroforestry) for the development of resilient production systems, including Indigenous Peoples.
3.1.1.4: In-kind incentives to strengthen/establish community seed banks for the targeted crops, with a focus on community resilience and food security (promoting participation of women through quotas).
3.1.1.5: Facilitate the establishment of gardens and nurseries to promote food security, with a gender perspective.

[76] The Project will consider the Presidential Decree 03-2019: "Decree regulating the procedure to aprove and implement forestry incentives" to comply with the regulatory framework and validate the incentive system.
[77] Data on climate-adapted sustainable agricultura was taken from technological cards published by CATIE-CCAFS-CIAT and from the sistematization of the AGRIADAPTA projects.

3.1.1.6: Selection and implementation of low-cost and proven effective water harvesting technologies for agricultural use during the dry season (summer).
3.1.1.7: Technical assistance, monitoring and follow-up of farmers.
3.1.1.8: Overall coordination conducted by the Livelihoods Specialist who will be responsible for ensuring that all the above listed activities are effectively planned and implemented

Output 3.1.2 The capacities of farming families to diversify and access markets using sustainable soil management practices, with the participation of women and Indigenous populations, are strengthened.

101. In the framework of this output, the project aims to support 14 farmers' organisations with initiatives to add value to crops (mainly beans due to its double role as a staple in family diets and as income generator with a high market value). This includes the provision of equipment (for vacum packaging, threshing, and sowing), and brand management. Organisations to be assisted group about 25 farmers each, thus 350 farmers will be assisted under this output, with emphasis on the participation of women.

102. These actions will benefit from the activities implemented under component 1, as this includes training to increase access to market and the sale of agricultural products. To this end, the project will coordinate with local actors, e.g. the National Technology Centers (which belong to INATEC) in Estelí, San Isidro, Matagalpa, Somoto, Boaco, León and Managua. The proposed project does not include actions to foster access to credit, as its main target group is smallholder farmers engaged in family-based economies. he project will support beneficiaries through the delivery of inputs and materials.

103. MEFCCA will be in charge of providing technical assistance to new or existing farmer organisations (cooperatives, associations and/or coporations). MEFCCA's mandate includes rural development, particularly the development of family and community-based agriculture, small rural enterprises, associations, and cooperatives. MEFCCA implements a development model based on family, micro, and small rural enterprises, and it is also in charge of the execution of key projects such as NICAVIDA and GAFSP. The General Department of Family-based Agriculture has the following tasks: enhancement of sustainable livelihoods of rural families; development of income opportunities; reduction of vulnerability and enhanced resilience through local and national fairs for smallholder farmers' goods; organisation of encounters among farmers at departmental and local levels for the exchange of experiences with technologies and adaptation practices that increase productivity; creativity and innovation contests for rural enterprises; and capacity-building and adoption of adaptation technologies in the development of creative enterpreneurships that contribute to family-based production. Thus, MEFCCA will be a strategic partner for component 3 and will contribute its experience in climate-change adaptation projects (NICAVIDA and NICADAPTA, among others). Specifically, it will be responsible for carrying out the following actions: planning; technical assistance and delivery of inputs for practices of adaptation and diversification of family-based production, with the participation of women, Indigenous Peoples, and cooperatives; and facilitation of access to markets for products of agricultural activities supported by the project.

104. The main activities[78] for the achievement of this output are:
3.1.2.1 Supporting 14 farmers' organisations in initiatives to add value to agricultural products, with an emphasis on the needs identified by women.
3.1.2.2: Strengthening the capacities and market access of the selected farmers' organisations and promote linkages and partnerships to support the commercialisation of products generated by project activities, with emphasis on women and Indigenous Peoples.
3.1.2.3 Holding events for the exchange of knowledge and experiences among farmers' organisations on how to tap into market opportunities (included under component 1 of the project)

Component 4: Knowledge management including the capture and dissemination of knowledge

[78] Capacity-building activities, although part of this component, are budgeted in component 1.

and lessons from the project among assisted farming families to promote the sustainability of the project's impact on landscapes

105. This component will carry out knowledge management through the systematisation of project experiences from the start of its implementation, the dissemination of information through the youth network and the network of community councils, with the support of digital tools.

Outcome 4.1 Adaptative and knowledge management approach applied during the implementation of project

106. This outcome is directly linked to Outcome 3 of the Fund "Strengthened awareness and ownership of adaptation and climate risk reduction processes at local level". It will provide significant information to facilitate the development of the project and the achievement of its proposed objective and outcomes. The results of this component will conttribute to reduce the challenges posed by limitations in access to information on adaptation practices, restoration of degraded landscapes and climate-resilient agriculture, among others.

Output 4.1.1. A knowledge management and communications strategy is developed and implemented with the participation of women and Indigenous Peoples.

107. The participatory formulation and implementation of a knowledge and communication strategy will allow to systematise and disseminate the project's main outcomes and lessons learnt. For the formulation of this strategy, meetings and workshops with key actors and target groups, including women, men, youth, and Indigenous Peoples, will be held to identify its messages, content and means of dissemination. Significant impact is expected from the communication products to increase the adoption of adaptation measures promoted under components 2 and 3. To deliver the communication strategy, the project will use relevant channels that might include virtual platforms, telecommunications, outreach visits, farming field schools and learning centers at community and municipal level, including telecenters ran by INTA. The coordination at municipal level to foster the generation and exchange of knowledge will be key for the project.

108. Under this component, the project will fund research efforts, systematisations, case studies, experience exchanges, dissemination of information through various communication channels, and visibility actions. These activities will support the transfer of knowledge and experiences to enable farming families to replicate the learnt resilient natural resource management practices and project messages. A wide range of information for knowledge transfer and awareness-raising will be offered to farmers and the general population topics addressed by the project: restoration of degraded landscapes; resilient natural resource management; climate-resilient livelihoods; climate information; among others. To achieve this, the component will make use of digital tools and explore synergies with other stakeholders to make climate information accessible for farmers to inform agricultural production.

109. The project's knowledge and communication strategy will highlight the role of women in the restoration of degraded landscapes and in the implementation of climate change adaptation measures. Other experiences of women's empowerment through family and association-based economic initiatives and entrepreneurship will also be highlighted. Communication materials and channels include conventional, as well as digital and audiovisual media, such as short documentaries about the successful experiences of women with sustainable agriculture. The project will also carry out and/or complement studies on the innovation of value chains with a focus on gender, age and Indigenous Peoples that will enable timely decision-making by farming families.

110. All communication materials generated in the project will be culturally adapted for their dissemination in Indigenous communities, and the communication strategy will include the dissemination of ancestral practices implemented by Indigenous farmers to conserve soils and water and contribute to the resilience of farming systems.

111. The main activities for the achievement of the output are:

4.1.1.1: Design of a knowledge and communications management strategy for development, with the participation of women and Indigenous Peoples.
4.1.1.2: Systematisation of project outcomes and lessons, including women's experiences and roles in the climate change adaptation processes.
4.1.1.3: Selection and design of means/tools to share and disseminate knowledge, highlighting those that have proven most effective.
4.1.1.4: Design of the project's graphic identity, dissemination materials, and promotional items.
4.1.1.5: Dissemination of information through communication channels used by Indigenous Peoples
4.1.1.6: Design of short documentaries about women farmers' successful experiences in sustainable agricultural production.
4.1.1.7: Research to innovate value chains.
4.1.1.8: Strategy to identify actions, practices, production alternatives for women in the Dry Corridor.

Output 4.1.2. Institutional capacities are strengthened to foster project monitoring and sustainability of the project's impact with a focus on gender, youth and Indigenous Peoples.

112. To reach this expected result, the project includes the design, setup, and operation of an automated system for project tracking, monitoring, and evaluation. This system will enable the teams working in the project to make informed and timely decisions, especially reviews and necessary adjustments based on reports. This system will also facilitate the flow of information and data from the technical teams of different institutions to the central system. Additionally, it will ensure timely and accurate reporting to ensure funding is disbursed according to schedule, while also helping strengthen institutional capacities and generating a robust monitoring system that can continue to track progress beyond the project for greater sustainability. An adaptive management approach will be utilised, based on lessons learned and adjustment to activities upon need.

113. The capacities of the technical team from institutions and municipal governments, as well as institutional coordination will be strengthened. Capacity strengthening will also extend to male and female stakeholders, Indigenous People, and traditional Indigenous authorities in Indigenous communities. This will facilitate decision-making processes during project implementation. Special attention will be given to promoting the participation of Indigenous Peoples in all planning processes within the territory.

114. The details of the monitoring, tracking, and evaluation arrangements, as well as the detailed budget, are presented in section D, Part III.

115. The main activities to achieve the deliverables are:
4.1.2.1: Strengthen institutional capacities on monitoring systems and information technologies.
4.1.2.2: Strengthen coordination among institutions and Indigenous authorities for field activity planning
4.1.2.3. Inception workshop: one national and one territorial
4.1.2.4: Establish automated project monitoring and tracking system.
4.1.2.5: Baseline assessment.

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.

116. This project is designed to bring ample economic, social, and environmental benefits that will directly impact **9,661 farming families**, who will participate in capacity strengthening processes under component 1, to implement the actions under component 2 and 3. Additionally, the capacities of 70

technicians from government institutions will also be strengthened. In addition, the project will indirectly favour other populations in the Dry Corridor and beyond, who will benefit from the improved environmental conditions and the innovative knowledge management and dissemination strategy that will be implemented under component 4. This strategy combines different media, methods, and resources to enable large-scale replicability. Information dissemination activities will ensure that ecosystem-based adaptation practices and sustainable and resilient agriculture are known to a wider audience beyond the direct and indirect beneficiaries of the project.

117. The **economic benefits** will be generated mainly through increased crop yields and livelihoods that become more resilient to climate change, which will help to minimise losses associated with prolonged droughts triggered by the climate change and El Nino phenomenon, while creating economic opportunities through diversification of production and increased access to markets and shorter value chains. To kick-start the transition towards ecological practices and sustainable models of production, the project will provide short term benefits, including in-kind and cash incentives, enabling these families to implement sustainable farming practices that will bring about changes in the landscape. Incentives are necessary due to the families' lack stable incomes, poverty, degraded natural resources, and limited knowledge to implement these changes independently. Yet, the rationale behind this is that once the adaptation practices and measures are implemented, families will obtain more benefits than if they did not implement them. Therefore, in the medium term, the returns and economic benefits obtained through the project activities will be the main incentive to continue with these practices. The project activities will also promote entrepreneurial initiatives with women and young people, including non-traditional and high-profit products. As a result, increased food availability and income are expected.

118. At the same time, the project will generate **direct and indirect environmental benefits** through Component 2, promoting a favorable local environment for the management and conservation of existing forest areas. It will also generate benefits through Component 3 through the restoration of degraded productive areas at the farm level in the surrounding landscape. Combining these two components, the project aims to advance the restoration of 18,119 hectares of landscape in the Dry Corridor, distributed between the conservation and restoration of forest areas and the restoration of productive areas. This will improve long-term ecosystem services, including better management of green water (soil moisture), rainwater harvesting, and drip irrigation made possible by the protection of water recharge zones in the project area. Additionally, there will be increased availability of medicinal plants and enhanced biodiversity movement in biological corridors. This will also have a positive impact on the production of staple grains and other foods, contributing to improving food security.

119. In terms of **social benefits**, the project will contribute towards enhanced human capital, generated through the knowledge, trainings, and technical assistance activities, benefiting the targeted farming families. The project also aims to empower women and Indigenous People, contributing towards inclusive development opportunities. The gender strategy that will be developed at the beginning of the project will promote actions to ensure that women farmers benefit from the activities of all project components. Through the Creative Economy Model, the project aims to involve more women in entrepreneurial initiatives and promote their representation in decision-making roles. Additionally, Component 1 of the project will include the promotion and consolidation of a culture of gender equality based on values and non-violence, fostering spaces for dialogue, awareness-raising, and training. Similarly, the participation of Indigenous Peoples in the project will contribute to the exchange of knowledge - both technical and ancestral Indigenous knowledge - for the implementation of adaptation measures in forests and the restoration of degraded productive areas.

120. As stated in the Indigenous Peoples Plan, the rescue and practice of Indigenous Peoples' knowledge is important, recognising their historically harmonious relationship with the environment and sustainable management of natural resources in their landscapes. Indigenous knowledge contains unique sources of information about past changes and possible solutions to current challenges (IPCC, 2022). Indigenous Peoples and those who more directly depend on the environment for their livelihoods are already experiencing the negative impact of ecosystem function loss, the replacement

of endemic species, and changes in land and marine landscapes[79]. Their participation in all participation processes and participatory territorial planning will also contribute knowledge that strengthens the capacities of the institutions involved in implementation.

121. **As core protagonists of all the components in the project, the intervention is expected to bring important benefits for Indigenous Peoples** that will stem from their engagement in the activities, which took under consideration the recommendations, interests and needs expressed by the communities in the Free, Prior and Informed Consultations. In the table below there is a summary of the benefits that the indigenous families will get out of the intervention.

Table 5. Expected Benefits

Economic benefits
The project will enable diversification in farms, improved water harvesting, improved yield of target crops, enhanced local resilience to drought and increased farming families' income**.** The rehabilitation of agricultural livelihoods will improve crop yields, reduce harvest losses, improve nutrition in households and create opportunities for beneficiary farming families to sell their agricultural products on local markets, thus contributing to reduce their vulnerability. According to a study by the Inter-American Development Bank, the main weakness of the maize value chain is low productivity: Nicaragua has the lowest maize yield in the region, with 1.3 t/ha. This low productivity is linked to drought vulnerability, poor technification and limited use of improved seeds. Beans are the second most cultivated crop in the area, constituting 65% of agricultural production during at least one season of the year (INIDE, 2011). Beans are the fourth most consumed plant product in the country, contributing 7.5% to per capita calorie intake and 18.5% to per capita protein intake, therefore being of high relevance for food security and the local diet. A recent study[80] by Catholic Relief Services (CRS), the International Maize and Wheat Improvement Center (CIMMYT), and the International Center for Tropical Agriculture (CIAT) analysed the impact of future weather conditions on the production of maize and beans in four Central American countries. The effects of climate change are expected to translate into significant losses for smallholder farmers whose livelihoods depend on these two crops. In this sense, the project will improve the availability of climate-adapted native seeds, cultivation will be improved by incorporating best agricultural practices, and soil conservation will increase fertility, which in turn is expected to increase yields. The project has the following quantifiable and non-quantifiable economic benefits for target groups: i) diversification of farming systems, which opens up market opportunities and possibilities for increased family income; ii) increased availability of water through water harvesting for agricultural use, nurseries and home gardens; iii) increased food availability, reducing dependency on markets and the effect of volatile market prices and inflation; and iv) access to knowledge on practices and technologies resilient to climate change, which could lead to better and more production, which also results in economic returns. These conditions will enhance the climatic and economic resilience of Families in situations of vulnerability and target groups of the project. The community seed banks will guarantee seeds for farmers and generate income opportunities for the indigenous families who will be able to sell the seeds produced during the life of the project and thereafter. Similarly, the livelihoods diversification promoted through vegetable gardens and plants nurseries including medicinal plants will also generate an important economic opportunity during and after the project and will contribute towards their food security. It is important to note that these will include low-cost water harvesting technologies. Additionally, - the incentives for the forest conservation and restoration will provide an economic transfer to the indigenous families participating in this component.
Social benefits
Improvement of livelihoods and food security: Climate resilient livelihoods will have a direct impact on the food security and nutrition of farming families, as it is expected to lead to better access to food and more diversified diets, since the production of staple grains will be complemented with agricultural diversification under the sustainable production model described in component 3. The vegetable gardens that will be established at the household level, prioritising women, are expected to contribute towards the incorporation of nutritious food in the regular household consumption, which in Nicaragua tends to relay heavily in carbohydrates. **Culturally appropriate climate resilient practices in productive systems*:*** The two Indigenous Peoples' population groups participating in the project, from the departments of Matagalpa (Sébaco) and Madriz (Telpaneca), are vulnerable to poverty and the climate crisis. The project will incorporate sustainable agriculture practices that facilitate the inclusion and exchange of resilient ancestral production practices for sustainable land management. This includes the use of traditional agricultural tools and the genetic conservation of maize varieties. Catalogues of

[79] Climate Change 2022: Impacts, Adaptation and Vulnerability Working Group II Contribution to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change. 2022.
[80] Tortillas on the Roaster. 2012.

ancestral practices identified by the PAGRICC project in the Dry Corridor will be complemented with other local ancestral and resilient practices that allow for an approach to resilient agriculture with Indigenous relevance. Their involvement in the restoration of degraded landscapes will help reduce losses from prolonged droughts, restore ecosystem services, and improve the management of water, forests, and biodiversity resources.

Training for increased resilience in agricultural livelihoods with a culturally differentiated approach: The population of the selected municipalities is characterised not only by high indices of poverty but also by low levels of formal education. Trainings for farming families will provide them with technical know-how about agriculture and value chains, as well as sustainable and resilient agricultural practices. The trainings will include a culturally differentiated approach, with the objective of preserving Indigenous culture and guaranteeing inclusiveness. The Chorotega Indigenous population in the northern region, which includes the municipality of Telpaneca in the department of Madriz, and the Chorotega Indigenous population in the central region in the municipality of Sébaco, department of Matagalpa, will obtain benefits from the dissemination of ancestral experiences and knowledge.

Specific benefits for women: Components 1, 2 and 3 have a great potential to enhance women's role in the Government's Creative Economy Model by actively and productively involving women in entrepreneurship initiatives and decision-making regarding their businesses, family, and community. This will contribute to closing income gaps between men and women, as female farmers gain more access to resources, education, and agricultural services. In component 1, the project will include the promotion of women's empowerment based on values and non-violence, by fostering spaces for dialogue, awareness-raising, and education.

Access to drinking water and time management for women: Additionally, to increase the resilience of smallholder farmers, water harvesting, and landscape restoration actions will be fostered to increase water availability in the territory and allow for better forest management. One of the roles of women and children in rural areas in the Dry Corridor is to collect of water[81] for human consumption and food preparation. As water scarcity increases, it becomes the more difficult for women to access water sources, forcing them to travel longer distances to satisfy their families' basic needs. The Global Water Partnership (GWP) indicates that the time cost for the collection of water in precarious conditions is calculated to take 2 hours for 1 cubic meter of water, which implies a high social cost[82]. In the case of children, this time can limit access to education. Recognising that water is a resource that is so essential for health and daily family activities, the project aims to help restore critical zones for water recharge and water source protection to improve the availability of quality water. In addition, the project considers the installation of small-scale irrigation systems (drip irrigation) that can considerably diminish efforts necessary to obtain water for agricultural activities, especially for garden crops.

Specific benefits for Indigenous Peoples: As requested by the consulted indigenous populations during the project design, the project seeks to strengthen indigenous organisational structures. This will be done through the support to the community seed banks to rescue native seeds and through the support provided by a specialized consultancy, which will provide assistance to indigenous populations on organisational aspects, all of which will translate into social benefits for the Indigenous communities. Additionally, the project will help enhance their capabilities on climate change adaptation through training on low-cost irrigation systems, organic agricultural inputs, systematisation of ancestral agricultural practices, inheritance rights, gender, forest restoration, among others, as indicated in the Indigenous People Action Plan. Finally, the project seeks to address the gender gap, promoting women's empowerment, which will bring benefits for all beneficiaries, including indigenous women.

Environmental benefits

The project will advance the restoration of landscapes in the Dry Corridor where natural ecosystems and degraded productive ecosystems coexist. This restoration will be carried out through two interventions: i) The first is the conservation and restoration of forest areas as an adaptation measure to maintain or increase current ecosystem services and biodiversity flows. This will have positive effects on the surrounding productive areas (increased soil moisture, pollination, among others); ii) The second is the restoration of degraded productive areas surrounding the forest areas, implementing agroforestry and silvopastoral systems. This will help contain the expansion of the agricultural frontier while diversifying and increasing the resilience of livelihoods for the population. According to the IPCC Report (2022) [83], these measures are essential for biodiversity conservation and the provision of ecosystem

[81] GWP. (2014). Socioeconomic analysis of the sectorial impact of drought in 2014 in CentralAmerica. Retieved from: https://www.gwp.org/globalassets/global/gwp-cam_files/impacto-sequia-2014_fin.pdf

[82] GWP. (2014). *Análisis socioeconómico del impacto sectorial de la sequía de 2014 en Centroamérica*. [Socioeconomic analysis of the sectoral impact of the 2014 drought in Central America]. Retrieved from: https://www.gwp.org/globalassets/global/gwp-cam_files/impacto-sequia-2014_fin.pdf

[83] The protection/restoration of natural systems, including the reduction of non-climatic stressors, and the sustainable management of seminatural areas emerge as necessary actions for adaptation in order to minimize species extinction, the reaching of tipping points that cause regime shifts in the natural system, and the loss of entire ecosystems and their associated benefits for humans.

goods and services in the face of climate change. These interventions, along with capacity strengthening, will help reduce the environmental impacts of exploitative activities in the Dry Corridor, such as land degradation, soil degradation, deforestation, and loss of biodiversity in the project area. Supporting local livelihoods and providing benefits to Indigenous and non-Indigenous communities, along with their active participation in decision-making, are crucial to ensure that the interventions have the expected impact (IPCC, 2022).

The progress achieved in the restoration of 18,119 hectares, resulting in enhanced forest landscapes, productive landscapes, and critical ecosystems (water recharge zones, riverbanks and water sources, areas for fuelwood production, production of medicinal plants, and areas to ensure biodiversity corridors) with active participation and consultation with local governments, Indigenous and non-Indigenous women and men, will be critical to continue the vision of transforming the Nicaraguan Dry Corridor into a Resilient Corridor. The impact assessment of Component 1 of PAGRICC[84]. indicates that the protection of water sources and the reduction of vulnerability to climate change were achieved through the implementation - at the farm level - of conservation, recovery, and restoration measures for natural resources, and the effects of droughts during the 2014-2016 period in the program intervention area in the Dry Corridor of Nicaragua were reversed. Improvements in soil health and fertility and associated ecosystem services are also expected, along with benefits associated with greenhouse gas emission reduction.

As indicated in Annex 3, the Indigenous Populations that participated in the FPIC consultations, indicated that this intervention could help reinforce current initiatives to promote environmental restoration, bringing environmental benefits to their communities. They also highlighted that the project could help raise awareness about the importance of avoiding deforestation and contamination of water sources at the community level, as well as contribute to recover ancestral practices for environmental-friendly farming. The project will also contribute towards the protection of water recharge areas and better soils for crops production and agroforestry systems.

Avoiding or mitigating negative impacts

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

- An environmental and social safeguards assessment has been conducted during the proposal formulation, in accordance with the Adaptation Fund's 15 principles, including an environmental and social risk screening to determine the categorization of the project (see Annex 4 for details).
- Based on the findings of the screening an environmental and social management plan (ESMP) was prepared to avoid and/or mitigate potential intended impacts during project implementation (included in Annex 4).
- The ESMP will be reviewed during project implementation for consistency and alignment of proposed mitigation measures with AF ESP.
- Project components once defined in detail will be screened prior to implementation by means of the Environmental and Social screening tool agreed to as per the AF ESP to ensure safeguarding against any potential negative impacts. This will be structured throughout the lifecycle of the project.
- The project will include a community feedback mechanism (CFM) as a measure to pre-empt rather than react to potential escalation of existing tensions within surrounding communities and/or among stakeholders. The CFM will be accessible and culturally appropriate to the interested parties and will consist of a accessible communication mechanism to respond to comments/complaints/grievances/accidents/incidents/compliments.The CFM messaging will be shared with protagonists in an accessible language, tailored to local custom and shared through preferred communication channels (based on preferences). The modalities of operationalizing the CFM will ensure visibility of the communication mechanisms and ensure appropriate reporting mechansisma re considered for critical issues reported should e.g. GBV. The project strives to ensure identification of corrective actions to prevent recurrences of grievances/complaints/accidents/incidents . The preferred communications channels will be consulted directly with protagonists, according to their preferences.
- Technical support will be sought especially in relation to sensitive or specialised services, including for gender analysis and mainstreaming and engagement with Indigenous Peoples.

[84] https://publications.iadb.org/publications/spanish/document/Evaluaci%C3%B3n_de_impacto_del_componente_1_del_programa_ambiental_de_gesti%C3%B3n_de_riesgos_de_desastres_y_cambio_clim%C3%A1tico_PAGRICC_es_es.pdf

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

123. The project will leverage experiences and lessons learned from previous and ongoing projects in the country to reduce the need for pilots, new tools, methodologies, and approaches that can be costly and time-consuming to adapt to successful models. Overall, the project will be cost-effective as to:

- Avoiding future costs associated to damages and losses from climate variability effects and change (especially droughts)
- Efficient project operations due to direct association with communities (thus strengthening their capacity and reducing costs)
- Participation of communities in the development/construction of concrete interventions, and the development of community capacities, contributing to its sustainability
- Technical options selected based on criteria of cost/feasibility and resilience/sustainability.
- The creation of long-lasting effects in the environment, related to maintaining/improving the soil erosion levels and its nutrients, as well as directly contributing to the maintenance of the hydric cycle in the intervention communities
- Overall cost-efficiency created by delivering support to farmers jointly with the improvement of their surrounding landscape via the same implementation actors.

124. The project's cost-effectiveness was analysed through an economic-financial assessment of the agricultural activities included in the productive models proposed and a projected calculation of the perceived benefits of conserving and naturally regenerating the land. Cost-effectiveness indicators used in the analysis were the Net Present Value (NPV), the Internal Rate of Return (IRR), and the Cost-Benefit-Ratio (CBR) for three farming models with different crops each. Also, the CBR was calculated for Component II of the project, focusing on the direct and indirect benefits and costs that will be perceived by the protagonists of this incentive scheme.

125. Farming Systems or Models The productive models selected for this project were chosen on the basis of three main criteria: i) crops demanded by farming families during a territorial consultation made in the 14 municipalities of the project area; ii) basic food patterns of farmer families and the general population, and iii) crops with guaranteed profitability so as to increase family incomes, which are cultivated with improved agricultural practices and – based on experience –are resilient to climate variability. In the project implementation, a mapping tool will be used to select areas within the project territory in the Dry Corridor of Nicaragua which are suitable for the defined farming systems. Also, they combine crops and agroecological practices that can improve productivity and, therefore, enhance marketing opportunities for surpluses. At the same time, they combine practices focused on soil conservation to prevent erosion; efficient water management; the use of organic inputs; and the use of drought-resistant and heat-tolerant seeds in the case of agroforestry systems, among others.

126. The area for each model has been determined considering the interests and priorities of women and Indigenous Peoples' communities. Cost estimates were made based on the cost of activities for each system, and income was estimated based on crop yields and market price on the field. Parameters were calculated based on the size of one "manzana" (0.70 hectares), and proposed areas were derived for each model accordingly.

127. The profitability projection is for 10 years with a discount rate of 9.5%, determined based on the average interest rates of the last three years according to the Central Bank of Nicaragua, as well as the rate used to evaluate similar projects. In all cases, costs are kept at constant prices. Models include support for a value-added initiative focused on the transformation and sale of beans, targeted at groups or farmers' organisation with an emphasis on the participation of women.

Table 6. Description of Models

	Model	Crops	Area
A	Agroforestry system	Staple crops: maize, beans, sorghum; fruit: citrus fruit (lime/orange) maracuya,musacea	Staple crops: 1 manzana (0.704 ha) Fruit trees: 1 manzana (0.704 ha)
B	Silvopastoral system	Improved pasture to increase milk yield per cow and scattered naturally growing trees	2.11 manzanas (1 ha)
C	Home garden + irrigation system	Vegetables: tomatoes and pepper Drip irrigation system	0.25 manzana (0.176 ha)

Agroforestry Model – staple crops and fruit trees

128. Maize and beans are the staple food of Nicaraguan families and the main crop of farming families. According to the results of consultations, in some territories sorghum has been added, mainly to feed backyard livestock, mostly bred by women. The project aims to include profitable fruit trees, such as citrus fruit and musacea, which have high yields. Citrus fruits are highly demanded on markets and contribute to a balanced diet. With improved seeds and healthy agroecological practices, the assumption is that there will be a moderate increase of the current yield of staple crops. Fruit trees maintain their yield due to their current profitability. Currently, farmers implementing this type of production system earn an average of USD 1,510 per ha. Additionally, according to official stadistics (2012 National Agricultural Census/CENAGRO), crop yields for maize and beans currently are 26.1 qq/ha and 19.3 qq/ha, respectively. The proposed model, including crop diversification, anticipates an increment of 81% in average income per ha (USD 2,740); and it also projects crop yield increases of 25%, in the case of maize (34.5 qq/ha), and 24% in the case of beans (24 qq/ha).

Silvopastoral Model

129. The silvopastoral model is highly relevant for the Dry Corridor. Farming families that own at least half a hectare of land tend to have at least 2 cows that are fed with crop waste or directly from their plot. Excessive grazing compacts the soil, hindering its agricultural productivity. This becomes a vicious cycle. This model proposes the restoration of degraded pasture lands, that are common on farms, causing low milk yield per cow combined with naturally growing scattered trees. Current average yield is three litres per cow. This currently generates an average income of USD 900 per farmer. The model assumes a possible increment of 2 litres per cow to reach **5 litres**, based on pasture restoration through seeds, as well as recommended agroecological practices. The model evaluates the profitability of the system based on an animal load of two cows per “manzana” (0.70 ha) as an ideal load value, versus one cow in the same area, and an increased weight of calves to 0.5 kg, versus a current 0.3 kg. The increment in milk yield signifies a projected increase in farmers´ income of 114% (USD 1,926).

Family/ Home Garden Model with Irrigation

130. The home garden model aims to diversify families’ diet. It is mainly targeted towards women-headed families, without representing an additional burden to their current labor load. The The production through these gardens is profitable on the market, and especially tomatoe production alone can sustain the costs of the system. In addition, a low-cost drip irrigation system will be provided. In the eyes of farmer families, sustained irrigation can significantly increase yields, but currently, it is not common at this level of production. There will be 0.25 manzanas per farmer destined to growing produce.

Cost-Benefit and Sensitivity Analysis for Farming Models

131. As mentioned before, the results of the financial analysis show growth of annual proceeds in the proposed models. The agroforestry system has shown an increase from USD 1,510 without the project to USD 2,740 with the project; the silvopastoral system, growth that goes from USD 900 to USD 1,926; and home gardens (0.25 manzanas = 0.14 ha), including two kinds of profitable vegetables (tomatoes

and peppers), have shown an increase from USD 867 to USD 921.

132. Indicators of cost-effectiveness as to costs and net benefits with the project versus without the project were estimated. In addition to these models, an initiative is supported to increase added value through bean transformation with brand and market management, aimed mainly at cooperatives of women. The results are presented in the following tables:

Table 7 Cost-effectiveness Indicators based on Net Benefits

Model	NPV	IRR	Cost/Benefit
Agroforestry	983	22%	1.34
Silvopastoral	1007	19%	1.28
Home garden	695	69%	1.06
Bean transformation	3719	23%	1.22

Silvopastoral Model

Table 8. Sensitivity Analysis of Silvopastoral Model

		Quantity of litres of milk/cow				
	NPV 1,007.50	2	4	5	6	8
Price of litre of milk	0.26	-3,230.8	-1,990.8	-1,370.74	-750.72	489.32
	0.36	-2,753.9	-1,036.9	-178.39	680.09	2,397.07
	0.46	-2,279.5	-88.17	1,007.50	2,103.16	4,294.50
	0.56	-1,799,9	870.87	2,206.29	3,541.72	6,212.56
	0.66	-1,799,9	870.87	2,206.29	3,541.72	6,212.56

133. In this combined analysis of the silvopastoral system, changes in the NPV are evaluated for variations of quantities of litres of milk per cow and the price of milk, and they are very sensitive variables. A reduction of 1 litre in yield at the current price of USD 0.46 will reduce the NPV of the system; moreover, the NPV will improve significantly if the price rises by USD 0.10 per liter of milk (to USD 0.56). This reflects the sensitive situation of dairy farmers who currently maintain a productivity of 3 litres per cow, which represents the baseline value without the project, used for the analysis.

Agroforestry and Home Garden Model

Table 9. Sensitivity Analysis of Home Garden Model
Production Costs of Tomatoes

			-20%	-10%		10%	20%
		NPV 695.08	1,377.13	1,549.21	1,721.34	1,893.47	1,852.53
Production costs of peppers	10%	782.05	3,627.65	2,692.66	1,757.40	822.12	1,044.61
	20%	879.80	3,096.53	2,161.54	1,226.28	291.01	513.49
		977.56	2,565.35	1,630.37	695.11	240.17	17.68
	-10%	1,075.32	2,034.20	1,099.22	163.96	771.32	548.83
	-20%	1,173.07	1,503.05	568.07	367.19	1,302.47	1,079.98

134. The sensitivity analysis shows the NPV changes in the case of a 10% or 20% increase or decrease of production costs of the two crops of these home gardens. The tomato crop is identified as the most profitable, which could sustain the system against climate risks that primarily affect vegetables.

Other Economic Benefits derived from the Agroforestry, Silvopastoril and Home Gardens Models

135. The silvopastoril model will be linked to the agroforestry model and the creation of home gardens. It is projected that another **economic benefit for the gardens** is to create more access to drinking water for livestock, which may result in more milk yield per cow. The link between the two models is created through the construction of harvesting reservoirs with a capacity of 900-1000 cubic metres. This has a cost-effectiveness ratio of 1.78 USD x m³ of harvested water. On average, water consumption of an adult cow is 50 litres per day, and 20 litres for a calf[85]. Materials specific to raising awareness among participating families and the general population about the importance of proper livestock management in a water scarcity context will be included in the knowledge management strategy. The materials will emphasise the reduction of pollution in rivers and water sources. These practices are part of the validated practices that will be promoted in the agro-silvopastoral systems.

136. The project will also implement *community seed banks*, benefiting an estimated 64 community groups with approximately 640 farmers (10 per group). Community banks will provide improved seeds that are resistant to drought and facilitate access to this resource for farmers. In connection with this action, post-harvest technology will be delivered in the form of metal silos with a capacity of 1,200 kilograms for seeds and grains, to protect these products and ensure availabilility, enabling farmers to wait out higher market prices.

Cost-Benefit Ratio for the Net Benefits of Conserving and Naturally Regenerating Degraded Land

137. The project foresees the conservation of 4,712 ha of open forest and the natural regeneration of 4,526 ha of degraded land in the intervention areas. This will be done through cash incentive payments to the farmers. To calculate the cost benefit ratio of this component, the major variables considered are:

- Direct Project Costs: Incentives and transfer costs, technical assistance costs, plant nurseries creation, selection and monitoring of protagonists and other-related costs.
- Indirect Project Costs (Farmers): No land usage costs, including the value of renting the land to tertiary parties. The rent value was obtained from a study[86] done in Costa Rica, which concluded that people are willing to rent land at a rate of USD 125 per ha to plant native tree species and USD 39 per ha to naturally regenerate degraded land; this information was verified with MARENA experts to see its applicability in the Nicaraguan context.
- Direct Benefits to farmers: Cash payments made in year 3 and 5 of the project, plants received for forest regeneration and trainings received through the technical teams.
- Indirect Benefits (Community-level Benefits): these benefits are expected to be received starting in year 3 of the project and to be extended to at least 10 years. Ten years is the time span needed for the plants to fully grow in the area. After the growing period ends, the monetary value assigned to these perceived benefits should be reassessed. The indirect benefits analyzed are:
  - ✓ Maintenance of soil erosion and recuperation of soil nutrients: It is assumed that after starting the process of conservation and restoration, at least 5 cms of soil coverage can be potentially recuperated. A study[87] done in the south of Mexico concludes that with this recuperation rate, the perceived economic value of maintaining soil erosion levels is of USD 16.2 per ha; the monetary value of recuperating soil nutrients is USD 32.4 per ha, in average. The area covered by the study has similar characteristics as the intervention areas in the Dry Corridor.
  - ✓ Rainwater harvesting to maintain the hydric cycle in the area: other experiences in the country informed that there can be potentially at least 225 metric cubes of water per day

[85] Proyecto Cosecha de Agua [Water Harvesting Project], CATIE, Nicaragua
86 Estudio del CIFOR, Porras y Chacón-Casante, 2018
[87] ¿Cuánto nos cuesta la erosión de suelos? Aproximación a una valoración económica de la pérdida de suelos agrícolas en México, Ávalos, Martínez-Trinidad y López-Morals, 2011.

retained, as a product of the conservantion and natural regeneration actions undertaken through the project. There are 90 days of annual rain projected for these areas, in average, and the economic value of the water is USD 0.27 cents [88].

Table 10. Cost Benefit Ratio Analysis Results

Description	Economic Value (Millions of USD)
Direct Project Cost	2.0
Indirect Project Cost	3.8
Total Costs	**5.8**
Direct Project Benefits	1.7
Indirect Project Benefits	5.1
Total Benefits	**6.8**

Cost Benefit Ratio	**1.2**

138. Lastly, during the project formulation phase, other alternatives were studied and consulted with protagonists to assess their feasibility and find the most adequate strategies to achieve the project objectives. In particular, two other strategies were analyzed: i) a scenario of inaction, where the behaviours continue the same path as at the time of the project design, and ii) another incentive scheme through the municipalities. In both cases, their costs were computed to compare with the project´s proposed strategies. The summary of this analysis is presented in Table 11.

Table 11. Cost Benefit Ratio Analysis Results for Other Alternatives

Type of Intervention	Economic Value (Million of USD)
Inaction Costs	
Soil loss due to erosion	0.7
Soil nutrient loss due to erosion and degradation	1.5
Disruption in the hidric cycle in the Dry Corridor	2.9
Loss in soil productivity	28.7
Total Costs	**33.8**
Total Benefits	**6.8**
Cost-Benefit Ratio	**0.2**
Tax Exepmtions given to farmers by Municipalities	
Tax Cost per ha	82.9
Total Intervention Area Sosts	3.8
Technical Assistance y Close Monitoring	4.0
Total Costs	**7.8**
Total Benefits	**6.8**
Cost-Benefit Ratio	**0.9**

88 Local cost of each metric cube of water according to Empresa de Acueductos y Alcantarillados de Nicaragua (ENACAL)

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

139. The project is aligned with all the major public policy instruments of Nicaragua, including the National Plan to Fight Poverty and for Human Development 2022-2026[89], which highlights that the measures to face the impacts of climate variability and climate change are a national priority. Relevant information on the alignment with other instruments is included in table 12.

Table 12. Project alignment with government priorities

Government Priorities	Project Contribution
National Plan to Fight Poverty and for Human Development 2022-2026	Actions to tackle the impacts of climate variability and climate change by sustainably managing natural resources (including forests), restoring degraded landscapes, fighting desertification, halting, and reversing land degradation, and halting the loss of biodiversity. It also contributes to reinforce the design and implementation of environmental policies, programs, and projects for the protection of natural resources, focused on adaptation and mitigation of the impact of climate change, with a livelihood, women's empowerment and Indigenous Peoples lens.
Creation of the National Climate Change Management System and establishment of the principles and guidelines of the National Climate Change Policy through Presidential Decree 15-2021	The policy contains a number of guidelines for climate change adaptation, some of which are aligned to the project proposal: i) low-carbon agricultural and animal husbandry development resilient to the impacts of current and future climate variability; ii) use and conservation of ecosystem services to achieve low-carbon economic development adapted to climate change; and iii) conservation, restoration and rational forest use, as well as the promotion of forest plantations in areas suitable for forestation.
Nationally Determined Contributions (NDC) MARENA (2020)	The project is aligned with the updated Nationally Determined Contributions (NDC) through the promotion of sustainable land management and reforestation; improved capacity strengthening for the development of a climate resilient agricultural sector; and the protection of ecosystem services provided by forests for the Indigenous communities and small forest farming families in the most vulnerable situations.
National Strategy for the Promotion of Family Agriculture Strategy for food and nutrition security (2019-2021)	Proposes strengthening family agriculture by diversifying crop production, promoting the use of technologies appropriate to each geographic area, promoting rural entrepreneurial initiatives by women and youth, the consumption of healthy and nutritious foods, and income generation based on the sale of surplus production.
The National Plan National Plan for Production, Consumption and Commerce 2023/2024	The project contributes to the objective of achieving prosperous, resilient, and sustainable rural areas by working with farming families who are small and medium-scale producers and small enterprises to restore degraded landscapes. It will contribute to increase food self-sufficiency, which stood at approximately 90% by the end of 2022, and reduce overall and extreme poverty. Actions and adaptation measures will be developed within the framework of the implementation of the National Climate Change Policy (PNCC) in the context of the 2023 climate scenario, where global and national climate forecasts project a year with precipitation patterns associated with the "El Niño" phenomenon. The government is creating material and organisational conditions for the three planting seasons to best support productive activities. It will contribute to the Policy of Conservation and Protection of Mother Earth, which prioritizes the establishment of biological corridors, as well as the promotion of resilience and adaptive capacity in the country. It also aligns with the Forest Policy, which promotes the protection, conservation, and sustainable use of forest resources, restoration of degraded areas, and recovery of forest ecosystems.
National Policy to avoid Deforestation and Degradation of	The project will contribute to the following strategic lines of the Policy: • Strengthening awareness, education, communication, promotion of values, and

[89] http://www.pndh.gob.ni/descargas.aspx

Government Priorities	Project Contribution
Forests Decree 06-2023. Gazete No. 104	information related to the protection of Mother Earth, taking into account the territorial identity and cosmovision of Indigenous and Afro-descendant populations (Article 4. Strategic Line No. 1). • Strengthening national, regional, and local coordination focused on the proper use of land and natural resources, considering environmental, forestry, and agricultural laws and policies. • Promoting the protection, conservation, and restoration of landscapes and biological corridors through reforestation and natural regeneration in the country. • Encouraging low-emission primary production models, as well as increased incomes for producers and employment opportunities.
Forestry Law, National Forestry Policy and the National Forestry Programme	The project contributes to the National Green Reforestation Crusade "Verde que te quiero Verde" through actions of adaptation, conservation, and restoration of forest areas to preserve and enhance ecosystem services, connectivity, and biodiversity. The project will require the implementation of mechanisms for community forestry development to achieve the restoration of 18,119 hectares in the Dry Corridor.
Law on the Promotion of Agroecological or Organic Farming (2011)	This project contributes to promoting the development of sustainable production systems through agroecological practices and agroforestry and silvopastoral systems. These practices can help reverse land and vegetation degradation, soil erosion, loss of topsoil, and the loss of fertile land in arid, semi-arid, and dry sub-humid areas, primarily caused by poor agricultural practices and climate variability. This change aligns with the capacities and vocations of ecosystems and agroecosystems.
Law 648 on Equality of Rights and Opportunities – 2008	This project contributes to promoting gender equality as established by national law, supporting affirmative actions to close gender gaps and promoting the empowerment of rural women through technical and technological assistance and comprehensive training opportunities without any form of discrimination. It also provides incentives for environmental management in projects focused on the protection, conservation, and sustainable management of natural resources, alleviating the workload of women and reducing poverty in families.
Policy of Generation and Transfer of Technology as defined in the National Plan to Combat Poverty 2022-2026[90].	The project promotes the participation of farming families in identifying solutions to the challenges of climate change through agricultural research technologies, agri-food research, and the production of superior seed categories. The Nicaraguan Institute of Agricultural Technology (INTA) participates in the project. It is responsible for the development of new agricultural research that allows for adaptation to the agroclimatic conditions of the Dry Corridor, especially resistance to drought, high temperatures, pests, and diseases, tolerance to salinity and flooding, and increased productivity.

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.

140. The project is aligned with and will adhere to Nicaragua's national regulations and technical standards (as detailed in Tables 13), as well as the Environmental and Social Policy of the Adaptation Fund (see summary of ESP risk assessment in section II-K and Annex 4), the Gender Policy (see Gender Analysis and Action Plan in Annex 2), and WFP's Social and Environmental Safeguards. During the formulation phase of the project proposal, extensive consultations were held with protagonists and national institutions involved, to ensure that the project does not deepen inequalities, or have a negative impact on marginalised populations or the environment. The project has been designed in a way that it generates net environmental and social benefits, as shown in section II-C. MARENA as lead agency with WFP's support, together with the institutions involved in the project, in coordination with municipal governments, will help to ensure compliance of the relevant legislation. These include:

- Law No. 648 (2008) on the Equality of Rights and Opportunities, which promotes equality and equity

[90] Government of Reconciliation and National Unity. (2021). National Plan to Fight Poverty and for Human Development 2022-2026.Retrieved from: http://www.pndh.gob.ni/documentos/pndhActualizado/07_LINEAMIENTO_VII_(19jul21).pdf

between men and women in exercising their human, civil, economic, social, and cultural rights.

- Law No. 763 (2011) on the Rights of Persons with Disabilities. This law establishes the legal framework and guarantees the promotion, protection, and full realization of the human rights of persons with disabilities without discrimination.
- Law No. 757 (2011) for Dignified and Equitable Treatment for Indigenous Peoples and Afro-descendants. The law in Nicaragua aims to ensure equal treatment for Indigenous and Afro-descendants in the Costa Caribe, Alto Wangki, Central, Norte, and Pacífico regions.
- Law No. 462 (2003) Forestry Law and its regulation Executive Decree No. 73-2003. This law establishes the rules and regulations for the forestry sector's conservation, promotion, and sustainable development based on the management of natural forests, promotion of plantations, protection, conservation, and restoration of forest areas.
- Law No. 765 (2011) on promoting Agroecological or Organic Farming. The law aims to promote the development of agroecological or organic production systems, promoting environmental, economic, social, and cultural sustainability and good production practices.
- Law No. 1020 (2020) on the Protection of Plant Health in Nicaragua. This law establishes provisions to protect, maintain, and increase plant health in the Republic of Nicaragua to prevent the introduction or fight the dissemination or settling of pests.
- Law No. 217 (2014), General Law of the Environment and Natural Resources and its regulation Executive Decree No. 9-96, which establishes regulations for conserving, protecting, improving, and restoring the environment and natural resources, ensuring their rational and sustainable use.
- Law No. 620 (2007), General Law on National Waters and its regulations, which establishes the institutional framework for the administration, conservation, development, sustainable and equitable use, and preservation of the quantity and quality of this country's water resources.
- Executive Decree 1-2007 Regulations on Protected Areas in Nicaragua. This decree establishes the necessary regulations for protected areas, defining their buffer zones as adjoining or surrounding areas with direct influence on the protected areas of the National System of Protected Areas (SINAP).
- Technical Norm No. NTON 11 037 – 12 Nicaraguan Mandatory Technical Norm for characterization, regulation, and certification of agroecological production unit. This standard establishes guidelines and procedures for characterizing, verifying, regulating, and certifying agroecological production units throughout the country.
- Technical Norm No. NTON 11 010 – 03 Nicaraguan Mandatory Technical Norm for Ecological Agriculture. This standard establishes provisions to regulate the production, classification, fabrication, transportation, storage, marketing, and certification of ecological products in Nicaragua.
- Technical Norm No. NTON 11 011-03: Nicaraguan Mandatory Technical Norm for the Production, Certification, and Marketing of Forage Grasses and Legumes Seeds, which outlines requirements for the production, export, import, and marketing of certified seeds of forage grasses and legumes, covering fields, inspections, commercialization, processing areas, forages, and storage facilities.
- Technical Norm No. NTON 16 002-00 for bean seeds. This standard establishes the terminology, characteristics, and qualities of bean seeds and testing and analysis methods for their marketing.
- Strategy for Reducing Emissions from Deforestation and Forest Degradation (ENDE – REDD+) 2008 – 2040. Based on the National Constitution, this strategy aims to reduce deforestation and forest degradation emissions, protect ecosystems, develop sustainable energy, and implement climate change adaptation.
- National Strategy for The Development of Bovine Livestock, which aims to enhance livestock productivity and exports through genetic improvement, improved cattle breeds, nutrition, market expansion, growth of the meat industry, quality assurance, and strengthening of producer capacity.
- National Strategy for Increased Productivity of Bean Crops 2019-2023. The strategy aims to boost national production by enhancing productivity, adding value, improving marketing channels, and increasing exports under favourable conditions.
- National Strategy for Promoting Family Farming for Food and Nutritional Security 2019 – 2021. The strategy aims to expand production, promote healthy food consumption, generate income, and promote entrepreneurship by comerciliazing surpluses from nutritious crops.
- National Strategy to Promote the Commercialization of Agricultural Products in the National and International Market 2020 – 2023. As part of the National Human Development Plan, the strategy

aims to diversify exports, expand trade, attract investments, and promote an organized internal market. It also focuses on increasing agricultural production and export value.

- National Plan for Production, Consumption, and Trade 2022-2023. The plan outlines production growth projections, strategies, policies, guidelines, goals, and promotion actions implemented by the National System of Production, Consumption, and Commerce, with producer participation.

141. The System of Environmental Assessment of Permits and Authorizations for the Sustainable Use of Natural Resources in Nicaragua, created by Executive Decree Nº 20-2017, is applicable to all sector and national investment plans, and establishes the Strategic Environmental Assessment as an environmental management tool which incorporates procedures to weigh environmental impacts of plans and programmes at the highest decision-making levels. This System is administered by MARENA. Considering that the environmental impacts and risks are minimal, the specific project activities are not subject to any permit and authorisation procedures. For compliance with the guidelines of national legislation, and in alignment with the WFP Framework for Environmental and Social Sustainable Management and the AF Environmental and Social Policy, the project includes a risk assessment and the assessment of the environmental and social impact, based on the AF ESP, as well as an Environmental and Social Management Plan, included in Annex 4. The project will also respect and adhere to all other applicable national regulations, and the project activities will comply with the following laws, codes, and technical standards:

Table 13. Regulations, standards, and relevant procedures for project activities

Outcomes / specific expected outputs	Regulations, standards and procedures relevant to compliance with AF principle 1	Compliance, procedures, authorized offices
Outcome 1.1. Farming families in 14 municipalities in the Dry Corridor develop capacities for planning and implementing practices that contribute to their food security and ecosystem services, with the participation and consultation of women, youth and Indigenous Peoples 1.1.1. Capacity-building programme for SNPCC institutions and farming families is developed and implemented with the participation of women, youth, and Indigenous Peoples.	**Law No. 648 (2008) on Equality of Rights and Opportunities** The project implementation will consider the following principles and general dispositions: • Incorporating a gender approach that guarantees the participation of both women and men in public policy is guaranteed. Through its institutions, the state will develop plans, programmes, and projects to ensure equal participation of men and women in decision-making, production distribution, and economic development. Sectoral and global strategies will be established to facilitate women's access to resources, loans, and opportunities, boosting competitiveness.Labour policies must always include provisions to achieve real equality between men and women in exercising labour rights, access to work, labour relations, and conditions. **Law No. 763 on the Rights of Persons with Disabilities** The project will prioritize non-discrimination based on disability as a selection criterion for protagonists in all components. This effort is per the Law's general disposition on non-discrimination, which mandates that the State ensure and promote the full exercise of all human rights and fundamental freedoms without discrimination based on disability. **Law No. 757 (2011) Law Dignified and Equitable Treatment for Indigenous Peoples and Afro-descendants.** The implementation of the project will recognize the Law's specific goal of adopting efficient	These efforts will be closely coordinated with the Ministry of Women (MINIM),the National Technological Institute (INATEC), and MARENA. In addition, it will be achieved through the project's stakeholders' full and active participation and with the guidance of the Nicaraguan Women's Ministry in coordination with the National Council for the Promotion and Application of the Rights of Persons with Disabilities. Finally, this effort will involve cooperation with the Indigenous Authorities to align the project with the Indigenous Peoples Action Plan, the Adaptation Fund's Gender Policy, WFP's Gender Policy, and national policies, ensuring its compliance and responsiveness to the specific needs of Indigenous communities while promoting gender equity. The project will ensure participation and stakeholder engagement with the Ministry of Women (MINIM) to ensure compliance with the regulations and standards aiming to ensure equal and just participation of all protagonists before and during implementation of the project. National Council for the Promotion and Application of the Rights of

Outcomes / specific expected outputs	Regulations, standards and procedures relevant to compliance with AF principle 1	Compliance, procedures, authorized offices
	measures, in consultation with Indigenous communities, to fight against bias and discrimination, promote tolerance, and ensure the effectiveness of their economic, social, cultural, and linguistic rights. Please refer to the Indigenous Peoples Action Plan for more information.	Persons with Disabilities. At the beginning and during the implementation of the project, MARENA, together with the co-executing institutions, will consult with the Indigenous Peoples to adjust the activities to comply with Article 8 (Food self-sufficiency) of Law 445. The State undertakes to support indigenous and Afro-descendant peoples in the exercise of their right to define their own sustainable strategies of production, distribution and consumption of food, which guarantee the right to food, respecting their own cultures, their forms of organization and the diversity of their modes of agricultural production and marketing. In addition, to encourage women food producers to have access to technical and financial resources.
Outcome 2.1: Forest landscapes are preserved and restored for the generation of ecosystem services.. 2.1.1. Farming families have adopted resilient natural resource management practices to restore the forest landscape and improving the flow of critical ecosystem services in drought periods, in 14 municipalities of the Dry Corridor.	**General Law No. 217 on the Environment and Natural Resources, and its Regulations Decree 9-96** In consideration of the legal dispositions, the project implementation will consider the following: • National, regional, and municipal development planning must integrate environmental elements in economic and social plans, programmes and projects and respect principles of disclosure and citizen participation. • To effectively control, monitor, and follow-up buffer zones of protected areas, the necessary instruments would be created with the participation of and coordination with institutions or actors that influence the region to ensure sustainable development. • The activities for sustainable use of natural resources and environmental preservation of Indigenous Peoples and communities.. **Executive Decree 1-2007 Regulations on Protected Areas in Nicaragua.** The Executive Decree aims to promote sustainable development activities within protected areas, focusing on creating biological corridors, implementing sustainable farming models, and fostering social and inter-institutional consensus-building in buffer zones. The project will carry out silvopastoral and agroforestry activities as plantations with non-invasive species, all permitted activities in the buffer zones of protected areas.	As the country's environmental policy regulator, MARENA will oversee and ensure compliance with these Law's provisions. Oversight and coordination will be carried out in collaboration with the National Forestry Institute (INAFOR), the executive body responsible for implementing the Forestry Law. INAFOR will extend coordination to State and municipal entities with jurisdiction in the forestry sector. Furthermore, INAFOR will issue forest certificates for domestically sold wood originating from registered forest plantations and natural forest areas under management. Compliance with these provisions will be guided by the procedures set forth by the National Water Authority (ANA) and closely coordinated with the MARENA. Finally, in coordination with MARENA, efforts will be made to ensure that project activities align with the strategic guidelines to support the advancement of the

Outcomes / specific expected outputs	Regulations, standards and procedures relevant to compliance with AF principle 1	Compliance, procedures, authorized offices
	Law No. 462 (2003) Forestry Law and its regulation Executive Decree No. 73-2003. The following considerations will guide the implementation of forest restoration actions in component 2 of the project. As per the legal provisions, the landowner has the right to the airspace above the forest, its benefits, and the responsibility for its management. The State will actively support and incentivize the restoration of protected and conserved forests while establishing necessary rules and regulations for preserving conservation areas. Moreover, the Law mandates that forest plantations for domestically sold wood from registered forest plantations and naturally managed forest areas be recorded in the National Register of Forest Areas by INAFOR. **Law No. 620 (2007), General Law on National Waters and its regulation Executive Decree 44-2010**. As part of the project's implementation considerations, we will ensure compliance with and incorporation of the following legal provisions. The Law designates riverbanks and areas along watercourses and national vessels or deposits as state-owned properties. It strictly prohibits the cutting or felling trees or plants of any species within a two-hundred-meter wide zone from the riverbanks. Additionally, the Law stipulates that individuals or legal entities who own properties registered in areas identified as recharge zones or water production zones must allocate 25% of these properties for reforestation projects to ensure the preservation of water resources. **Strategy for Reducing Emissions from Deforestation and Forest Degradation (ENDE – REDD+) 2008 – 2040.** Component 2 is in line with the broader goals of the strategy. The ENDE-REDD+ initiative aims to promote sustainable forest production, food security, and water conservation. It prioritizes partnerships, coordination, and effective forest governance. This approach supports sustainable land use improvements for forestry and recognizes the crucial role of indigenous and Afro-descendant communities in achieving the strategy's objectives.	ENDE-REDD+ Implementation.
Outcome 3.1: The livelihood of farming families are rehabilitated and diversified through climate resilient systems and practices for landscape restoration. 3.1.1. Farming families have established and improved	**General Law No. 620 (2008) on National Waters and its regulations** ***Please refer to the description above***	Compliance with these Laws provisions will be guided by the procedures set forth by the Agriculture and Forestry Ministry (MAG) and the Institute for Protection and Agricultural Health (IPSA) and closely coordinated with the Ministry of Environment and Natural Resources (MARENA).

Outcomes / specific expected outputs	Regulations, standards and procedures relevant to compliance with AF principle 1	Compliance, procedures, authorized offices
practices in agroecology, water and landscape management, crop production and income generation n. 3.1.2. The capacities of farming families to diversify and access markets using sustainable soil management practices, with the participation of women and Indigenous Peoples, are strengthened		For the Technical Norms, the compliance procedure will ensure adherence to the technical standards directed by the Ministry of Agriculture and Forestry through the General Directorate of Agricultural and Livestock Protection and Health (DGPSA/MAGFOR), the Competent Authority for the enforcement of agroecological or organic production standards. It would also ensure adherence to the technical standards directed by the Ministry of Agriculture (MAG) through the General ***Directorate of Seeds, in coordination with MARENA and the technical advisory from representatives of NTA for the enforcement of seed-related standards.*** WFP will actively collaborate with MARENA to ensure that the project activities align closely with national strategy guidelines. This alignment will support the progression of national strategies, spearheaded by key entities such as the Ministry of Family, Community, Cooperative, and Associative Economy (MEFCCA), the Ministry of Development, Industry, and Commerce (MIFIC), and the National System of Production, Consumption, and Commerce (SNPCC). This coordination ensures that our project contributes effectively to these ministries and institution'' overarching national goals and objectives
Outcome 4.1: Adaptative and knowledge management approach applied during the implementation of project 4.1.1. A knowledge management and communications strategy are developed and implemented with the participation of women and Indigenous Peoples	Law No. 648 (2008) on the Equality of Rights and Opportunities–- ***Please refer to the description above.***	These efforts will be closely coordinated with the Ministry of Women (MINIM), INATEC, and the Ministry of the Environment and Natural Resources.

Outcomes / specific expected outputs	Regulations, standards and procedures relevant to compliance with AF principle 1	Compliance, procedures, authorized offices
4.1.2. Institutional capacities are strengthened to foster project monitoring and sustainability of the project's impact with a focus on gender, youth, and Indigenous Peoples		

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

142. During the consultation with the Inter Agency Task Team, the interventions implemented, and ongoing projects were reviewed to ensuring that activities in this project are complementary to and do not duplicate or overlap with those in coinciding municipalities. The idea is to expand the impact of the actions taken to build resilience in the Dry Corridor. Considering lessons learnt as well as good agricultural, environmental and resilience practices generated by other projects will significantly reduce the need for piloting in this project, which will speed up the onset of its implementation. The representatives of the institutions that will participate in the project have stated that they have a mandate, based on the executive branch, to avoid duplicating benefits accruing to beneficiares of government projects. For the same purpose, an additional criterion has been added to the beneficiary's selection process, namely that a project beneficiary must not have participated in any other government project in the agricultural or environmental sectors receiving the same benefit. Additionally, implementers of AGRIADAPTA and PAGRICC will also be invited to contribute lessons learnt and best practices during the project inception phase; this will ensure these valuable experiences are integrated into the project and help guide the targeting strategy, avoiding duplication and enabling synergies across project.

143. The multi-criteria analysis carried out to select the area of intervention for this project showed that several municipalities are already being served by several projects and programmes. This is an opportunity for the government of Nicaragua to scale up its current investments by increasing the generation of benefits for rural families, as well as reaping multiple environmental benefits by ensuring there are synergies between the various initiatives.

Table 14. Complementarity and synergies between related projects

Projects and timeframes	Description	Points of entry for project coordination and additionality
Nicaragua Programme for Disaster Risk and Climate Change Management (NI–- L1048 /PAGRICC) (IADB, NDF and SDC) / (2010-2016)	This project ended in 2016, having supported the adoption of environmental restoration systems. Activities included the establishment of agroforestry and silvopastoral systems, as well as forest management and their natural regeneration on farms belonging to 4,895 protagonists. There were interventions in the management of the Río Viejo sub-basin in nine municipalities (Ciudad Darío, La Trinidad, Estelí, Sébaco, San Isidro, San Rafael del Norte, El Jicaral and La Concordia), as well as in the Lake Apanás watershed in the province of Jinotega. Other components focused on building structures to prevent or mitigate	The PAGRICC project worked to restore forests on productive farms in nine Dry Corridor municipalities. It recovered 22,480 ha of tree, equivalent to 20% of the river basin and sub-watershed.[91] It developed seven low-cost restoration alternatives, all tested locally. The project concentrated on local institutional strengthening as concerns adaptation to climate change and helped smallholder farmers take specific actions affecting their crops and ecosystems to improve productivity and livelihoods through crop diversification and the sale of surplus products. **Synergies:** This project will take the seven low-cost, locally tested restoration alternatives as the basis for the related actions being proposed. The lessons learnt regarding the mitigation of the negative effects of the 2014-2016 drought will be used to reduce smallholder vulnerability vis-à-vis climate change and restore natural resources to recover ecosystemic services. Likewise, the ancestral practices of Indigenous

[91] https://www.iadb.org/projects/document/EZSHARE-915164154-6?project=NI-L1048

Projects and timeframes	Description	Points of entry for project coordination and additionality
	floods in the urban and rural areas of the municipalities.	Peoples, the expanded use of which is promoted by this project, will be considered, as will the exchange and conservation of climate-resilient local practices. **Actions to avoid duplication:** PAGRICC and the Climate Resilience and Livelihoods in the Nicaraguan Dry Corridor Project coincide in five municipalities: La Trinidad, El Jicaral, San Isidro, Sébaco and Ciudad Darío. The geographic overlap is because both projects prioritized areas highly affected by climate variability, poorly adopted natural resources management practices, environmental degradation, high risk of droughts, floods, and low forest coverage in critical areas such as water recharge areas, basins, sub-basins or micro-basins. This project will consider the past investments to promote synergies in coinciding municipalities. This information is available, as MARENA was the executing agency for that project. As noted earlier, PAGRICC covered only 20% of the area in which it intervened. The continuation of this work in the Río Viejo sub-basin (which is where the five municipalities are) is of strategic importance for Nicaragua and Central America, because they are in the upper part of the basin formed by the Great Lakes and the San Juan River (Basin 69), the second largest in Central America. This is what makes it so important to continue contributing to introduce measures for its protection and restoration. Despite the geographical convergence, this project will not result in duplication, but will rather complement and build on the previous experiences. To ensure this, during the inception phase the project will conduct a detailed mapping of the participants of the AGRIADAPTA and PAGRICC project (as well as other relevant projects that in the intervention areas). This will help guide the targeting strategy, avoiding duplication and enable synergies across project.
Innovation and Dissemination of Technologies for the Adaptation of Agriculture to Climate Change (AGRIADAPTA) (SDC/FAO) (2016-2022).	The project supported ten Dry Corridor municipalities, as follows: Ciudad Darío, Teustepe, El Jicaral, La Concepción, Nagarote, Nindirí, San Francisco Libre, Santa Rosa del Peñón, Villa El Carmen and El Crucero. It implemented sixty community-based initiatives to build soil and water conservation works, increase tree cover and water harvesting.	**Synergies:** The project will consider the agroecological practices carried out by AGRIADAPTA as good practices related to the establishment of areas for forest regeneration or reforestation, with the aim of reducing the vulnerability of farming families facing climate change. AGRIADAPTA's approach has focused on the identification and assessment of agroecological and social practices, albeit in a demonstrative manner. This brings an opportunity for the current project to scale up these good practices. **Actions to avoid duplication:** AGRIADAPTA emphasises the transfer of capacities to local technical staff and promoters, as well as generating knowledge by establishing pilot sites. This means that local coverage of real investments for the implementation of technologies and climate change adaptation practices is limited. This project and AGRIADAPTA coincide geographically in five municipalities. INTA and MARENA are the AGRIADAPTA implementing institutions, which will facilitate putting into practice the coordination necessary to avoid duplicating capacity development efforts, as concerns the training of local promotors of both sexes in these municipalities. Just as described in the case of PAGRICC, despite the geographical convergence, this project will not result in duplication, but will rather complement and build on the previous experiences. To ensure this, during the inception phase the project will conduct a detailed mapping of the participants of the AGRIADAPTA and PAGRICC project (as well as other relevant projects that in the intervention areas). This will help guide the

Projects and timeframes	Description	Points of entry for project coordination and additionality
		targeting strategy, avoiding duplication and enable synergies across project
Adaptation of Agriculture to Climate Change Through Water Harvesting in Nicaragua (SDC/CATIE) (2019-2022)	The project-built structures in which to store water coming from rainfall runoff as a way to transform agriculture and livestock production systems in ten municipalities in the Dry Corridor in Las Segovias: Ciudad Antigua and Mozonte (Nueva Segovia); Somoto, Totogalpa, Telpaneca, Palacagüina, Yalagüina and San Lucas (Madriz); and Pueblo Nuevo and Condega (Estelí). In addition, the project included the design of a methodological strategic framework that strengthened agribusinesses and inclusive product sales by linking small-scale farming families to better market opportunities.	The project-built rainwater-harvesting systems and in doing so benefited 1,720 smallholder farmers through rainwater-harvesting works, irrigation systems and capacity-strengthening. This project coincides with the SDC/CATIE project in three municipalities: Palacagüina, Telpaneca and Somoto. **Synergies:** The project will take advantage of the efforts already made to promote associative models useful in component 3 (sales of smallholder production). The incorporation of staple crop farming families to this project will be encouraged. Actions linked to rainwater harvesting will be identified for the purpose of generating additional actions to protect recharge zones and thus increase water availability. According to Inter-American Development Bank (2019) "only 5% of subsistence farmers in the Nicaragua Dry Corridor irrigate [their crops]", for which reason an increase in investments continues to be pertinent. **Actions to avoid duplication:** The rainwater harvest project has its interventions clearly georeferenced, and the information is public.[92] The Climate Resilience and Livelihoods in the Nicaraguan Dry Corridor Project will focus expanding the coverage.
Sustainable Development Project for Rural Families in the Nicaragua Dry Corridor (NICAVIDA) IFAD-CABEI[93] (2017-2023)	NICAVIDA intervenes in the area by means of territorial investment plans, family-based plans and business plans that involve small-scale subsistence farmer families in transition to commercial family farming. The project has concentrated its actions on water, sanitation, and hygiene systems, as well as seed banks and school gardens. It covers 58 municipalities in the Dry Corridor, among which Somoto, San Juan de Limay, Teustepe and San Lorenzo are some of those that coincide with this project.	**Synergies:** The Project can support NICAVIDA protagonists in matters related to association and the selling of their farm products at local markets. The work done with seed banks is one of the elements to be considered, as its protagonists can be linked among themselves, thus increasing benefits, and strengthening the resilience of their crops. The infrastructure created by the NICAVIDA project, mainly improved access roads, will support the actions proposed, namely, to link smallholder farmers, improve access to markets, and thereby increase their income. **Actions to avoid duplication:** The diversification of staple crops, as well as the promotion and incorporation of ancestral agricultural practices, the exchange of knowledge and marketing of farm crops are some of the elements that differentiate this project from others. NICAVIDA, for its part, has no ecosystem restoration actions, while this Project is pertinent to water recharge in the area and will improve water availability, thus ensuring food security.
Nicaragua Dry Corridor Nutrition-Sensitive Agriculture Project (WB-P164134[94]-FUNICA) (2021-2025)	The project objective is to strengthen agricultural productivity, climate resilience and nutrition security of 1,500 families in six selected municipalities in the Dry Corridor, by means of two components: (i) strengthening of productive capacity of farmers and agricultural food processors using improved agricultural technologies, and (ii) Promoting food and nutritional security by furthering NSA approaches through an information campaign.	**Synergies:** The necessary coordination will take place to link local staple crop farming families benefiting from the project to the seed banks developed by FUNICA to conserve local genetic resources will be considered. In the two coinciding municipalities (Condega and San Juan de Limay), the Nutrition-Sensitive Agriculture (NSA) project has georeferenced all farmers it works with. The project is present in twenty of the 64 communities in the Condega municipality, while in San Juan de Limay it intervenes in 21 of the 54 communities. The Nutrition-Sensitive Agriculture project finances technical assistance, assets, training, and operational costs to develop and promote the use of communications tools, such as

[92] https://cosechadeagua.org/
[93] https://www.ifad.org/documents/38711624/39485445/Nicaragua+2000001242+NICAVIDA+Interim+Mid-term+Review+Report+April+2021.pdf/086aee15-8ef2-66c9-86e4-5cff1e923d58?t=1622631057760
[94] https://documents1.worldbank.org/curated/en/975401593033707130/pdf/Project-Information-Document-PID-Nicaragua-Dry-Corridor-Nutrition-Sensitive-Agriculture-Project-P164134.pdf

Projects and timeframes	Description	Points of entry for project coordination and additionality
		information campaigns, training materials, workshops and focus groups, in order to promote food and nutritional security. These include i) helping households in the Dry Corridor identify nutritional deficiencies and how to satisfy their families' minimum nutritional demands; ii) promote the intake of food varieties with high nutritional value. These actions could complement the intervention of the Climate Resilience and Livelihoods in the Dry Corridor Project in these two municipalities, while the ecosystem-based adaptation approach promoted by this proposal could in turn escalate benefits in the NSA project. It is important to note that the Nutrition-Sensitive Agriculture project is at early stages of implementation. By the start of the project, there will be more opportunities for learning and synergies, thanks to the results on investments in climate-resilient, nutrition-sensitive agriculture that include community seed banks for drought resistant and biofortified seeds, biointensive gardens, water technologies such as tanks for rainwater collection, and investments in small agri-food processing technologies. This could be an opportunity to learn from the results of these technologies and investments to improve the livelihoods of people in other areas of the Dry Corridor. These activities coincide with some of the activities in the proposal to the AF. Relevant coordination would be established for farmer-to-farmer exchanges and demonstrations. However, it will be based on the recommendations of the farmers during the consultations. **Actions to avoid duplication:** The incorporation of sustainable climate-resilient farming practices, including ancestral tools such as spikes and *guasayas* (a maize harvesting technique), as well as ecosystem restoration actions are some of the complementary elements to be applied by the project. It will therefore focus on new farming families in the coinciding municipalities, to scale up coverage of farmer families in the Dry Corridor by using good practices linked to restoration and climate resilient agriculture.
Resilient Landscapes Management 2020-2025 (GEF ID 9579)[95] GEF/FAO	The project objective is to strengthen the National System of Protected Areas and support sustainable land use and the restoration of selected areas in the Dry Corridor and the North Caribbean, with the aim of promoting biodiversity conservation, resilient landscapes, and local livelihoods. It improves the effectiveness of protected areas management and the generation of biological corridors for better connectivity. Th56ulfilsct's components 1 and 2 include a pilot project paid for by environmental services (ENDE-REDD+ and sustainable land management) in the Pine Corridor. It works with pine producers to promote the conservation and restoration of species.	No duplication has been identified, as this GFE project works mainly in protected areas that are not part of this proposal. **Synergies:** Notwithstanding the foregoing, Climate Resilience and Livelihoods Project may consider lessons learnt from its component 2 in two prioritised municipalities, namely Somoto and La Trinidad. This project will leverage the mapping of existing local organizations in the intervention zones carried out by GEF projects. The mapping includes information on the existence of, Community Water and Sanitation Committees (CAPS); micro-watershed committees; agroforestry, forestry, and artisanal cooperatives; organized youth and wome''s groups; organized non-formal community groups; wome''s associations or collectives; and organized mestizo and Indigenous communities. The lessons learned from the community agroforestry approach will be key to optimizeing project resources, especially the viability of community forest nurseries to guarantee the production of plants for the implementation of agroforestry, silvopastoral, and forest management systems. Another learning from these projects to be considered is the types of incentives, practices and systems farmers prefer when dealing with forest management and restoration. For instance,

[95] https://www.thegef.org/project/resilient-landscapes-management-project

Projects and timeframes	Description	Points of entry for project coordination and additionality
		farmers participating in GEF projects prefer to receive fence wire and other key tools; the installation of water systems for livestock or irrigation; economic incentive to cover the cost of their work in the agronomic management practices of the areas; and resources and technical assistance to develop effective agroforestry and silvopastoral systems, and forest management. **Actions to avoid duplication:** Given that the projects are being carried out in geographies that do not coincide, there is no risk of duplication. Still, they do have similar expected results: to increase forest conservation and reduce degradation. For this reason, those experiences which may prove useful when implementing this Project will be considered, given that MARENA is the main implementing agency for both and proposal and PRODOC were validated with GEF projects teams
Strengthening Resilience in Protected Areas 2020-2025 (GEF ID 5277)[96] GEF/FAO	The project focuses on multiple global environmental benefits generated by Sustainable Forest Management and Sustainable Land Management outside of protected areas. Protected area management aside, the project's work is related to the creation of consolidated biological corridors intended to improve connectivity between existing protected areas and habitats in tropical forests which are under threat in productive landscapes.	There is no possible duplication with this project, since geographically the overlapping is very limited and in fact restricted to a biological corridor that runs through two of the 14 selected municipalities (Teustepe and San Lorenzo). **Synergies:** Although the project stresses the protection of biodiversity, good restoration practices applicable to municipalities with similar features can certainly be considered.
Strengthening Institutional and Technical Capacities in the Agricultural and Forestry Sectors of Nicaragua to Respond to the Requirements of the Enhanced Transparency Framework under the Paris Agreement 2020-2022 (GEF ID 10118)97 GEF/FAO	This project seeked to comply with the requirements of the Enhanced Transparency Framework (ETF) under the Paris Agreement and contains no field activities. Work took place only at central level, mainly on planning and articulation between different actors and stakeholders. The project included strengthening institutional capacities at INTA, INAFOR, MARENA, INETER and MEFCCA as concerns requirements for modalities, procedures, and guidelines (MPGs) in the agricultural and forestry sectors. This took place by strengthening the interinstitutional coordination mechanisms found in the ETF, which in turn is part of the National System for Climate Change Management; training on ETF contents regarding adaptation; NDC and the transfer of the technology received and required by the MPGs. Component 3. Outcome 3. Educating, sensitizing, and strengthening human and institutional capacities in improved and priories sectors will strengthen the dissemination of good adaptation practices and information regarding climate change. This will strengthen the	**Synergies:** In this case there is no duplication possible, because the CBIT project contains no field activities and works strictly on institutional strengthening at central level to ensure the country complies with the commitments made in the UNFCCC. The project can generate inputs on good practices and lessons learnt in the adaptation to climate change, and these can be taken by the Capacity-Building Initiative for Transparency (CBIT) to strengthen the SINIA platform and support environmental education activities. Furthermore, CBIT can include information on institutional coordination generated by project activities and report these to SINIA.

[96] https://www.thegef.org/project/strengthening-resilience-multiple-use-protected-areas-deliver-multiple-global-environmental
[97] https://www.thegef.org/project/strengthen-institutional-and-technical-capacities-agricultural-and-forestry-sectors

Projects and timeframes	Description	Points of entry for project coordination and additionality
	National System for Environmental Information (SINIA) platform and support environmental education activities.	
Bio-CLIMA: Integrated Climate Action to Reduce Deforestation and Strengthen Resilience in the BOSAWÁS and San Juan River Biosphere Reserves 2021-2027 / FP146[98] GCF / CABEI	The project objective is to introduce comprehensive climate action to reduce deforestation and strengthen resilience in the BOSAWAS and San Juan River biosphere reserves. Among the most pertinent actions are the restoration of land degraded by the introduction of silvo-pastoral farming and agroforestry; conserving, managing and restoring natural forests; improving access to the high-value markets of farmer cooperatives and community enterprises; and strengthening institutional capacities among environmental authorities, Indigenous territorial governments, local inhabitants and ensuring participation by stakeholders.	The two projects have no geographic coincidence, as BIOCLIMA works on the Caribbean Coast, which is not part of the Dry Corridor. The market component is related to products such as coffee, cacao, beef, and milk. **Synergies:** The project can consider those ancestral and resilient practices identified in the work with Indigenous Peoples and that are applicable to farming systems in the Dry Corridor.
Ecosystem-based Adaptation to Increase Climate Resilience in the Central American Dry Corridor and the Arid Zones of the Dominican Republic GCF / CABEI-FP174[99] (2022-2028)	This project aims to strengthen climate resilience and adaptation capacity among rural communities in situation of vulnerability, including farmers and businesspersons in the Central American Dry Corridor region and arid zones in the Dominican Republic. Through financing and technical assistance, the project will promote participation by the private sector and create a propitious setting for investment and the large-scale adoption of ecosystem-based adaptation technologies that encourage efficient water and energy use. In Nicaragua it will be implemented in the upper basin of the Coco River, comprising the municipalities of Somoto, Yalagüina, Palacagüina, Telpaneca and El Jícaro.	This project was only recently approved. It is estimated it will take one year to set up and no field activities are expected before 2023. Once such operations are underway there will be coordination to ensure the activities are complementary in the three coinciding municipalities, thus expanding resilience actions in the Dry Corridor. This regional project's main component is the establishment of financial mechanisms (loans and guaranties) for large-scale adoption of ecosystem-based adaptation activities and technologies that use water and energy in an efficient manner. The project will work through the financial institutions of the National Financial System. **Synergies:** This new GCF proposal will allow for the scaling-up of the results of the Climate Resilience and Livelihoods in the Nicaraguan Dry Corridor Project. While the GCF project is geographically limited to adaptation pilots in a few watersheds, the mechanisms that may be designed have the potential to be extended to the rest of the country where its outputs are applicable, including those selected for intervention by this project, but untouched by that of the GCF. This project will design financial mechanisms with which to implement the adaptation methods developed in the Dry Corridor. This is an opportunity for additional funding and the scaling-up of project benefits. It will also consider climate change adaptation practices for agricultural production that could complement the climate resilient approach to farming it will be fostering. Likewise, it will consider good forest restoration practices, the planting of sustainable firewood and timber species and efficient water use, linked to small-scale family agriculture systems on 900 ha and agroforestry systems on 330 ha. **Actions to avoid duplication:** The regional project includes 12 demonstrative activities in ecosystem-based adaptation in the selected municipalities and another four on efficient water and energy use. These activities will serve as examples that can be funded by the financial mechanisms once these are in place. To

[98] https://www.greenclimate.fund/project/fp146
[99] https://www.greenclimate.fund/project/fp174

Projects and timeframes	Description	Points of entry for project coordination and additionality
		avoid duplication, the regional project in the four coinciding municipalities will prioritise financing those activities that are not part of the Climate Resilience and Livelihoods in the Nicaraguan Dry Corridor Project.

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

144. The project will promote learning, knowledge management and lessons learned through activities under components 1 and 4. It will develop a knowledge management and communication strategy (output 4.1) to capitalise on lessons learnt, knowledge and experiences through documentation, systematisation, and dissemination, to incorporate these into future work strategies in the Dry Corridor in Nicaragua and Central America.

145. Since the knowledge management activities and the empowerment of actors will lie in the hands of the technical team, specific knowledge and skills are required. Therefore, the strategy will include an assessment of the existing gaps that need to be addressed. In this regard, under Component 1, a capacity-transfer program will be designed and implemented to equip team members with the necessary expertise in knowledge management, gender approaches, social equality, communication, and actor participation. Knowledge management will include the dissemination of climate information and adaptation measures, using locally relevant media channels such as virtual platforms, electronic media, telecommunications, outreach visits. Technological Research and Innovation Farms, and Capacity Development Units in the communities. Other spaces include telecentres. The participatory formulation and implementation of a knowledge and communication strategy will help to first systematise and then disseminate the main project outcomes and lessons learnt. To formulate this strategy, it will be necessary to hold meetings and workshops with the project's key actors and target groups, i.e., men, women, youth, and Indigenous persons, to identify messages, content, materials (documents, reference information, photographs, digitised materials, publications, news, infographics, and blogs) and means of dissemination.

146. In addition to the inputs obtained during the drafting of the gender approach mainstreaming strategy at the outset of the project, it will be necessary to define which knowledge, attitude, and practices (KAP) need to be modified to be able to comply with the project objectives. The KAP analysis will also establish the strategies to be applied with each target audience (awareness-raising, persuasion, sensitisation, motivation) to facilitate participation and empowerment regarding adaptation measures and actions, the capacity development programme, incentives, adaptation technologies, strengthening of sales and market access, and affirmative action to promote gender equality.

147. Another key aspect for knowledge management will be the implementation of governance agreements and investment plans for the restoration of forest landscapes, including incentives for the adoption of sustainable natural resource management practices. The strategy will include activities to access relevant information and generate knowledge about the positive impact the improvement of soil productivity, regeneration and restoration of forest cover and sustainable production have on ecosystems and the well-being of humans.

148. The strategy will determine the knowledge and communication outputs to be generated to collect existing knowledge about adaptation measures, and to fill the information gaps. These outputs, in their different formats, will have to be generated in accordance with the communication guidelines to be established. In addition to training materials, the project is intended to produce publications on climate resilient adaptation measures, and best practices, short documentaries about women with successful experiences in sustainable agriculture, documentation of traditional Indigenous knowledge for adaptation to climate change, and different case studies.

149. At the same time, the project will document the experiences and select relevant learning sites and farming families' experiences to demonstrate the application measures for climate change adaptation

and forest landscape restoration, and sustainable farming practices in the Dry Corridor, which could be valuable for the country, for other projects, and for the Adaptation Fund.

150. Systematisation processes will serve two purposes: a) gather information and analyse experiences to detect which changes have been produced, what actors have been involved, what strategies were implemented, and what results were obtained; b) know about the lessons learnt, success factors and practical recommendations for the replication or scaling up of this experience.

151. Additionally, based on the project experience, a series of research studies will be conducted to innovate value chains in the context of smallholder farmer'' production in the Corredor Seco, which will generate valuable information on marketing strategies and the integration of their products into local markets. This knowledge management product is considered of special importance, as the link of commercialisation and market chain is identified as one of the weakest elements in development initiatives implemented in the project area.

152. As to the transfer and exchange of knowledge, in addition to communication channels and spaces defined by the strategy, the project will take the opportunity to use those belonging to WFP, MARENA and the Adaptation Fund that can increase the scope of dissemination and open opportunities for exchange at the national and international level. In case of the Adaptation Fund, its web site has a knowledge and learning section promoting knowledge products, events and even scholarships that could enhance the impact of actions.

153. Besides the dissemination of knowledge generated by project experiences for other development actors to use and replicate it, as well as for farming families not benefited by the project, it will generate information to encourage the use of implemented strategies, modalities of intervention and practices in the design and of local and national government policies, programmes, and plans.

154. On the other hand, the project will establish a dynamic monitoring and evaluation system (output 4.2), with gender approach and the participation of youth and Indigenous persons, to facilitate evaluation, adaptative management, understanding of the impact and dissemination of results.

155. The monitoring and evaluation system must reflect:

- Proposed indicators and the percentage of annual compliance.
- Means of verification as proof each indicator is monitored.
- Alerts on the advance or halt of outcome achievement
- Achievement of project milestones
- Lessons learnt and associated adaptative management measures.

156. The system will require a software or web application (preferably open sourced or with free access), which will be fed regularly and provide the required information for the preparation of the reports requested by the Adaptation Fund, which will be processes by the Monitoring and Evaluation Specialist ahead of the following reports:

- Annual project performance report
- Mid-term review and final evaluation
- Knowledge products for the AF – studies, analysis and reports of lessons learnt, articles, videos, and stories for publication on its webpage.

Table 15. Expected Outcomes and outputs of Knowledge Management

Expected outcomes	Stakeholders and learning objectives	Knowledge product
Outcome 4: Adaptative and knowledge management approach applied during the implementation of project	• For the project team: • Strengthening capacities in strategic topics for the project. • For the project team and decision-makers:	• Training materials • Analysis of Knowledge, attitudes and practices (KAP) • Policy brief with evidence of the impact and public policy

4.1. A knowledge management and communications strategy is developed and implemented with the participation of women and Indigenous Peoples	• Capturing and sharing knowledge gathered through the rehabilitation of agricultural livelihoods and their impact on the restoration of ecosystems and their functions, and valid for decision-making • Facilitating decision-making for adaptative management • Regular systematisation and sharing of information, experiences and lessons learnt for internal and external learning processes • For beneficiary farming families: • Enhancing capacities and empowering actors to implement sustainable productive practices based on solid consensus and shared knowledge. • For decision-makers, beneficiary farming families and donors: • Visibilising knowledge about the skills and changes achieved through learning processes with gender approach and participation of youth and Indigenous People.	recommendations. • Publication on the impact of the project • Best practice guides for farming families • Learning materials for training programmes • Short documentaries about women with successful experiences in sustainable agriculture • Empowerment networks of women • Documentation of traditional Indigenous knowledge for climate change adaptation. • Policy brief to reduce the development opportunity divide between gender and ethnic groups • Document on lessons learnt in the project • Webinar series • Study on successful cases • Case study about a successful marketing alliance forged by women (Indigenous or non-Indigenous) or an association • Research for value chain innovation.
4.2. Institutional capacities are strengthened to foster project monitoring and sustainability of the project's impact with a focus on gender, youth, and Indigenous Peoples	For the project team: • Showcasing the impact achieved For donors: • Report on the impact and outcomes achieved	• Project performance Reports (PPR) • Annual publication of milestones • Mid-term review • Final evaluation

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

157. The formulation of the project was conducted in close coordination with FAO in the first stage and WFP in the second stage of the process. Most consultation had already been completed when WFP joined. Throughout the national consultation process, the Inter Agency Task Team, and other institutions such as the Nicaraguan Institute of Territorial Studies (INETER), the Nicaraguan Institute for Municipal Development (INIFOM), the Ministry of Women (MINIM), the Climate Change Secretariat of the Presidency of Nicaragua (SCCP), the National Water Authority (ANA) and the Secretariat of the President's Office (SEPRES) actively participated. At the territorial level, the SNPC''s Institutional Territorial Technical Teams participated with representatives of 14 municipal governments, farming families, farmers' organisations, the private sector, local organisations, women, and Indigenous Peoples. A total of 621 people participated, 267 of whom were women.

Table 16. Distribution of consulted participants

Categories of informants	Number of participants	Men (%)	Women (%)
Inter Agency Task Team (National IATT)	45	69%	31%
Mayors' Offices	17	65%	35%
Territorial Institutions	148	66%	34%
Farmers' organisations	7	43%	57%

Farming families	198	61%	39%
Private sector	4	-	100%
Local organisations	5	60%	40%
Women's organisations	182	46%	54%
Indigenous Peoples	15	40%	60%
TOTAL	**621**	**57%**	**43%**

158. The consultation process for the formulation of the Concept Note was carried out between December 2020 and July 2021, with nine participatory meetings and three local consultation workshops: in Estelí on May 19, in Managua on May 21, and in Estelí on July 7, 2021; the latter specifically targeting the two municipalities with presence of Indigenous Peoples: i) the Chorotega of the northern region in the municipality of Telpaneca in the department of Madriz and ii) the Chorotega of the central region in in the municipality of Sébaco, in the department of Matagalpa. The process also addressed gender equality as a high priority. Women represented at least 50% of the attendees. The entire process was carried out under the leadership of MARENA with the participation of public servants from the following institutions: MAG, MEFCCA, INTA, INAFOR and IPSA.

159. A second phase of consultations for the project's full proposal formulation took place between October 2022 and July 2023, starting with the National IATT Workshop on 6-7 November 2022. During this workshop, the methodology of the formulation process was presented and validated. The institutional competencies and roles were discussed, and the content of Part I of the project document was reviewed and validated.

160. The territorial stakeholder consultation took place between November 28 and December 16, 2022. Fourteen municipal territorial workshops were held (1 per municipality). The consultation process was organised by categories of informants, addressing specific objectives and methodologies:

- SNPCC Institutions and others: MARENA, MEFCCA, MAG, INTA/UDC/UPAs, INAFOR, IPSA, MHCP, INATEC and MINIM, SCCP, INETER, ANA, representatives of Mayors' offices and representatives of local organisations.
- Farming families and representatives of farmers' organisations.
- For the gender consultations, three sub-groups were formed according to sex, age and ethnicity: a group of adult women farmers, a group of young women (mestizo and Indigenous) and a group of adult and young male farmers (mestizo and Indigenous).
- The consultation with Indigenous Peoples was organised in two sub-groups: a group of farmers and a group with the Community Board.

161. These workshops focused on the validation of problems and needs in the Dry Corridor, as well as the identification of activities or actions to be developed in each component, aspects of sustainability and social and environmental risks. The gender and Indigenous Peoples' consultation process was also carried out. For the gender consultation, in addition to the workshops with groups of male and female farmers, information was collected through a survey and interviews were conducted with representatives of the Ministry of Women who participated in the territorial workshops. The territorial consultation was based on the identification of problems during the drafting of the Concept Note.

162. During the territorial consultations the following aspects were identified as the main problems of families in the Dry Corridor municipalities: reduced water availability and access; poor knowledge of adaptation; flooding; soil erosion; limited water recharge capacity; deforestation; low yields; low seed quality; lack of organisation and access to markets; little opportunity to sell at fair prices; and others. The identification of problems, causes, and barriers confirmed that droughts and extreme rains have a negative impact on the livelihoods of rural families living in the Dry Corridor. As the magnitude, frequency and impact of weather events increase and are aggravated by climate change, peopl"s vulnerability increases due to overexploitation of soil, water, and forest resources; and increasingly more households have less resilience, understood as the capacity to assimilate, recover, and adapt, becoming more vulnerable to future climate events.

163. In terms of capacity building, farming families identified the following as the main areas of interest:

pests and diseases arising because of climate change; soil conservation; irrigation technologies for efficient water use; water harvesting systems; use of adapted seeds; production of organic fertilisers; and management of agroforestry, silvopastoral and forestry systems. The technical staff pointed out as training demands: water resources management and administration, climate change, monitoring systems and ICT management, among others. The consultation process inquired about the most preferred training modalities, as well as convenient schedules, for each type of consulted actor.

164. Actions for forest landscape restoration indicated by farming families include: reforestation with wood and fruit species adapted to each territory; management of natural regeneration; establishment of nurseries; strengthening the application of environmental laws; technical assistance; support for the registration of plantations; among others. The types of incentives mentioned by farmers for restoration activities are supplies and materials, and economic incentives for the care and maintenance of reforested areas during the first years of establishment. The technical staff pointed out the need to strengthen actions that institutions are already being developed, such as: promoting the establishment of plantations, reinforcing the application of existing regulations, conservation of forests remnants and management of natural regeneration, among others.

165. The main actions mentioned to improve the livelihoods of farming families were: soil conservation practices, crop diversification, seed banks, home gardens, creation of better marketing opportunities. The main crops mentioned as priorities for strengthening production systems were: vegetables, maize, beans andmusaceae, as well as the raising of large and small livestock. Farming families proposed complementing production systems with water technologies and irrigation systems, and the establishment of agroforestry and silvopastoral systems.

166. The findings of the territorial consultation indicated that the vulnerability of households, and especially women, is complex in nature. The gender consultation found that the main problems associated with the climate crisis are prolonged droughts, periods of flooding, and natural hazards, which have negative effects on families, and have repercussions on deepening gender gaps and poverty, the most significant of which are crop losses, food and water shortages, reduced purchasing capacity, and damage to housing infrastructure.

167. Gender gaps in access to productive resources and income were identified. One of the main challenges for wome''s performance in agricultural activities is that women often do not own productive land, and therefore have no access to loans to promote agricultural activities. This situation limits the opportunities for women to develop their autonomy and empowerment. In addition to limited access to resources, there is still little recognition of wome''s participation in the productive sphere. The consultation also emphasised that wome''s situation of vulnerability is aggravated by low access to income, inputs, credit, and opportunities for training on equal terms.

168. Climate change affects livelihoods, and because of the weakening of the economic capacity of families, a gradual process of migration has taken place, mainly of young men, thus increasing the workload and the role of women in the productive sphere, as women have directly taken over the work that men used to do. However, the impact of the phenomenon on long-term gender gaps is not yet conclusive for this consultation process.

169. The Indigenous Peoples in the project intervention area in the municipalities of Telpaneca and Sébaco consider direct communication and coordination of project actions between their own authorities and the executing institutions to be a high priority. They do not consider that they are considered in the implementation of projects in the territory, and they positively valued the Free, Prior and Informed Consent (FPIC) process developed for the Project for Climate Resilience and Livelihoods in the Nicaraguan Dry Corridor.

170. To include Indigenous issues in the projec''s actions, the consulted Indigenous farmers and traditional authorities expressed the need to strengthen community organisation and leadership, so these can participate in the projec''s decision-making process and act as a communication channel between the project and Indigenous families.

171. The representatives of the Indigenous communities identified as priorities the training and provision of materials for the construction of low-cost irrigation systems; preparation of organic fertiliser; pest management; and dissemination of ancestral agricultural practices, such as irrigation before the heat wave, incorporation of stubble, reforestation with emphasis on soil conservation and improvement; and promoting generational change and the inclusion of young people in conservation processes.

172. Regarding the land inheritance system, Indigenous women indicate that the cultural tradition of granting inheritance rights only to men is a problem, as it limits access to land ownership for wome''s economic empowerment. Therefore, addressing and raising awareness of gender equality to promote behavioural changes, valuing the role of women in agricultural activities, could contribute to the process of achieving equal opportunities and closing gaps in access to goods and resources.

173. Based on the findings of these territorial consultations the process with the National IATT continued to present the results between 25-27 January 2023. The aspect of duplicity and complementarity was reviewed and completed, as well as the sustainability of the projec''s actions. An additional session was held on 23 February 2023 to focus on the budget and budget notes and validate the financial risks. Finally, on 23 March and 13 April 2023 working sessions were held with the National IATT for the presentation, review, and validation of the project document.

174. In May 2023, MARENA requested a change of agency, bringing WFP to the formulation process. WFP and MARENA conducted another extensive consultative review process. During these sessions, the concepts, assumptions, components, activities, budget, monitoring arrangements, and environmental and social frameworks deployed for the formulation were analysed with the technical and managerial team of MARENA. The results of the territorial consultations and working sessions with the National IATT were carefully considered and remained the primary input to ensure that any adjustment to the proposal was in close alignment with the findings, needs, and preferences expressed during the consultations. Thus, the project proposal is a strong reflection of these prior analyses, which placed the people at the centre. On 19 July, a final workshop was held with other participating institutions to present changes and perform a final validation of the proposal document. Different members of the 10 institutions involved in the project designed participated (IPSA, MAG, INATEC, INETER, MHCP, SCCP, INAFOR, ANA, MEFCCA, MINIM). The next steps were also discussed.

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

175. Although Nicaragua and the other Central American countries are part of one of the most climate change-affected regions in the world, the level of international climate funding destined to adaptation and mitigation actions in this region is clearly insufficient, and additional funding is needed to satisfy urgent requirements. A study published by the Central American Institute for Fiscal Studies (ICEFI, 2018), based on statistics by Climate Funds Update (CFU), showed that between 2003 and 2018 only USD 243.3 million had been approved from the largest international climate fund for Central America. This constitutes only 1.5% of total approved funds worldwide. Of these, 55% are destined to mitigation actions, 25% to adaptation, 11% to REDD, and 9% to multiple goals. The most recent CFU numbers available (March 2021) show how Nicaragua has only received USD 33.2 million of the USD 118.5 million approved funds.

176. Furthermore, the recession suffered by Nicaragua over the last 5 years and the crisis caused by the COVID-19 pandemic has reduced the government’s capacity to push forward its climate change adaptation and mitigation agenda in a scenario of increasingly restricted resources. The scarcity of water and associated crop losses during the dry season, faced by farming families in the Dry Corridor, are high-priority concerns for the government. However, due to limited human and financial resources, the challenges in addressing this problem are increasing.

177. This project is transformative because of its integrated approach, where the proposed strategies at

the landscape and farm levels are complementary. The project addresses the specific needs of vulnerable farming families by utilising a combination of traditional and innovative climate resilience techniques for agricultural production. Farm management will contribute to the ecological and hydrological functioning of the entire watershed. This represents an innovative model for rural development in Nicaragua that combines livelihood rehabilitation and agroecosystem-based adaptation. This will allow to speed up national efforts to provide solutions through a solid intervention framework that will deliver social, environmental, and economic learnings, with potential lessons that could be implemented in other regions of the country.

Table 17. Cost of adaptation reasoning

Project outcomes / outputs	Baseline scenario (without AF project)	Additionality (with AF project)
Component 1. Transfer of capacities to farming families leading to the implementation of resilient natural resource management practices and degraded landscape restoration in 14 municipalities in the Dry Corridor 1.1.1 Capacity-building programme for SNPCC institutions and farming families is developed and implemented with the participation of women, youth, and Indigenous Peoples	Scarcity of water and harvest losses during the dry season, and the challenges these represent for smallholder farmer families living in the Dry Corridor constitute a government priority, but its human and financial resources to address the problem are limited, and the effects of climate change increase every year. In a scenario without a project, there are interventions in various municipalities that include some elements to address climate change, such as risk planning and restoration packages. However, the scale of climate change effects makes it necessary to increase the coverage of these interventions, and to include elements that promote food security and resilience in rural areas of the Dry Corridor.	The project will address the needs to build capacities for adaptation to climate change at the national, subnational, and local level, as well as for farmers and vulnerable groups (women and IndigenousPeoples). As a result of the project, the following capacities will improve: Technical and operational capacities of the national government for comprehensive territorial planning and outreach services that are re-established after the economic and COVID-19 crises. New approaches will be introduced to include a climate change adaptation perspective. Capacities will be transferred to at least 70 public servants. National capacities to analyse long-term impacts of climate change on agricultural productivity, ecosystem services and rural livelihoods will be reinforced. Capacities at the subnational level in associations of multiple existing stakeholders will be improved, so that they can orient and inform climate change adaptation efforts through environmentally sustainable and resilient productive practices. The transfer of skills to smallholder farmers in the 14 municipalities will eliminate knowledge gaps on technologies and environmentally sustainable practices, which will help to reduce their vulnerability.
Component 2: Restoration of forest landscape to enable the generation of ecosystem services 2.1.1 Forest landscape preserved and restored for the generation of ecosystem services	The municipalities in the Dry Corridor have highly degraded natural ecosystems, mainly due to the extraction of firewood (used by 75% of households), slash-and-burn agriculture, accidental agricultural fires, and climate variability that cause either scarcity of water or excessive rainfall. Increased temperatures and droughts significantly reduce the availability of water for farming and animal husbandry, leading to considerable losses in economic production, particularly in family agriculture. Under a scenario without the	Improvement of the comprehensive territorial planning capacities in component 1 will allow to: i) define areas for the protection of recharge zones in relevant watersheds of the Dry Corridor, such as the Río Coco, Río Grande de Matagalpa, Río San Juan and Pacific Region watersheds; ii) the creation of biological corridors between forest patches; and iii) the definition of areas for the generation of non-timber forest products, with a gender and ethnic approach. In consequence of the establishment of restoration areas through investment plans at the farm level, the deterioration of the forest landscape will be halted, and the flow of ecosystem services (particularly water, but also supply of food, pollinization and prevention of soil degradation) that sustain the farming system

Project outcomes / outputs	Baseline scenario (without AF project)	Additionality (with AF project)
	project, only existing efforts of the PAGRICC project will achieve some advances (20% of forest cover) in the restoration of agricultural forests of the Río Viejo upstream watershed and Apanás watershed in the Dry Corridor. The traditional livelihoods-based ecological practices and other efforts to catalise the restoration of the ecosystem services and limit economic losses continue to be insufficient to revert the situation due to increasing climate-change effects.	in the municipalities of the project intervention will improve. As a result, rural livelihoods and food security will be stabilised and strengthened. Maps will be available for planning the location or targeting of areas to restore, as indicated in the description of component 2.
Component 3: Rehabilitation of agricultural livelihoods at farm level, using climate-resilient and environmentally-sustainable practices for landscape restoration 3.1.1 Farming families have established and improved practices in agroecology, water and landscape management, crop production and income generation 3.1.2 The capacities of farming families to diversify and access markets using sustainable soil management practices, with the participation of women and Indigenous Peoples are strengthened	Agricultural activities cover 58% of the basic household needs, which means that families are vulnerable to the effects of climate change in agriculture. In a scenario without the project, only a minority of smallholder farmers in the selected municipalities of the Dry Corridor has incentives and the capacity to adopt resilient and sustainable agriculture practices. Assessments made by the NICAVIDA Project in the municipalities of the Dry Corridor indicate the following main barriers to climate-change adaptation of smallholder farmers: droughts affecting agricultural production; limited access to water for human consumption, irrigation and livestock; limited capacity to implement sustainable land management practices; increasing soil degradation and erosion; low agricultural productivity; low levels of education and very few training opportunities.	As a result of adopting technologies and capacities for improved livelihoods at the farm level: • Smallholder farmers will improve their resilience to climate change, which will lead to a sustainable improvement of food security and quality of life. • The solutions to capture water and sustainable production practices will be transferred and disseminated, including those that have been systematized and adapted to the context of the Dry Corridor in projects such as PANGRICC, FUNICA, AGRIADAPTA. • Diversification of agricultural livelihoods will offer an opportunity to distribute the climate risk among different activities, thus minimising general impacts and providing a security network in case of extreme drought. With more diverse production and activities, smallholders will have more options and strategies to overcome prolonged droughts, thereby increasing their resilience. • The project will strengthen community organisations, e.g. cooperatives, microenterprises and farmers' associations, so as to help link small-scale rural entrepreneurs with private sector actors throughout the value chains in the long term. • A culturally differentiated approach will be applied in the engagement with Indigenous farmers that considers traditional crops for diversification, and ancestral practices.
Component 4: Knowledge management including the capture and dissemination of knowledge and lessons from the	In a scenario without the project, the best practices developed by communities and other development initiatives in the country are neither capitalised on nor disseminated to inform other local actors facing similar	The project will address the need for capacity-building in national, subnational, and local institutions, to systematise and bring to scale successful existing practices for climate change adaptation. With this AF intervention, communities and local smallholder farmers will i) obtain better

Project outcomes / outputs	Baseline scenario (without AF project)	Additionality (with AF project)
project among assisted farming families to promote the sustainability of the project's impact on landscapes 4.1.1 A knowledge management and communications strategy is developed and implemented, with the participation of women and Indigenous Peoples 4.1.2. Institutional capacities are strengthened to foster project monitoring and sustainability of the project's impact with a focus on gender, youth, and Indigenous Peoples.	challenges.	information about technologies and practices for climate change adaptation; ii) have clear guidelines establishing procedures and requirements to access project benefits, and iii) will be empowered as rights holders through consultation processes and capacity development. The project will enhance knowledge exchange and capacities on climate-resilient agricultural strategies at multiple levels by establishing channels to optimise information flow between the regional and local institutions and smallholder farmers. Strengthening of available learning spaces in the project intervention territory (FIIT, CSB, UDC, UPAs, Telecentres) to continue offering services under SPNCC management once the project is finalised. In Output 4.1, relevant efforts will be made to disseminate information about how to respond to climate change locally and institutionally. The target audience at the local level will include at least the local decision-makers, local farmers, women, youth, and Indigenous Peoples.

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

178. This project aims to ensure sustainability in the long-term so that the positive impacts are preserved even it ends. To do so, the project has sought to create appropriation and active engagement from the families, Indigenous communities, and national and local institutions from the onse. Their considerations were included from the formulation process and jointly defining goals, approaches, and activities. The participatory planning and monitoring of activities and outputs with families, women, youth, and Indigenous Peoples will ensure their ownership of the roles required to achieve the goals.

179. The proposal also integrates the medium and long-term vision of the Government of Nicaragua regarding the development of the Dry Corridor and its national strategy. MARENA, given its mandate and future vision, commits to institutionalising and strengthening the approaches, tools, lessons learned, institutional linkages generated by the project, and the coordination with other present and future projects to ensure long-term monitoring. The project also engages government institutions, particularly MAG, MEFCCA, INTA, IPSA, MINIM, and INAFOR, which are part of the National System of Production, Consumption, and Trade, as well as the 14 participating municipal governments. This will guarantee the commitment of the Government of Nicaragua to continue working on climate change adaptation beyond the projec"s lifespan and contribute to the development of the National Climate Change Adaptation Plan, with an emphasis on issues related to the agricultural sector. The lessons learned and approaches implemented can be shared and replicated in other regions of the country.

180. Besides these elements, the project addresses the sustainability of its outcomes from three perspectives: environmental, social, and economic. The **environmental sustainability** will be reflected in the lasting impact of landscape restoration activities, which will contribute to the generation of ecosystem services such as improved hydrological flows, soil fertility, carbon sequestration, and the production of goods such as fruits, timber, and firewood. The restoration of agricultural and forestry livelihoods agroecological practices, primarily focused on soil and water conservation, will contribute

to improving environmental quality at the micro-watershed, community, farm, and plot levels, while reducing greenhouse gas emissions. The project will work to ensure that current practices leading to ecosystem degradation are not continued through the following actions: i) raising awareness among all stakeholders through capacity-building processes and technical assistance, as well as public awareness campaigns aiming behavioral change; and ii) demonstrating the benefits of sustainable environmental management and how it can provide sustainable livelihoods and reduce vulnerability to climate change. The project aims to overcome barriers that hinder the adoption of these practices, which are often linked to a lack of assets, knowledge, skills, information, and technical assistance.

181. Additionally, the project incorporates measures to ensure that investments in environmental landscape restoration are sustained over time. The project understands that forest conservation and restoration will require changes in practices, which means longer-term behavior changes. To achieve this, care needs to be taken in the phasing of support, beginning with economic incentives but moving to internalized incentives. As such, the economic incentives provided in the initial phase of the project will play an important role to encourage beneficiaries to engage in landscape restoration. As the project progresses, it is expected that the training, capacity strengthening, and other activities carried out in components 1 and 4 will allow the protagonists to increase their awareness of the benefits of these practices and will be motivated to maintain these behaviors. This will allow beneficiaries to better recognize the value of the ecosystem services being provided from conservation and restoration activities. 68hat will create internalized, non-economic incentives that form the basis of deeper behavior change, allowing for sustainable adoption of these adaptive practices in the longer-term.

182. They will also have economic incentives to continue the landscape restoration practices. The executing partners in the project will design a sustainability strategy during the first year of the project, which will build on existing structures, national and local initiatives, and existing activities to maximize beneficiaries´ economic gains. For instance, the project will explore the possibility of linking the protagonists to the Community Drinking Water and Sanitation Committees (CAPS), a community organization regulated by Law 722 that ensures water supply for rural communities. The CAPS generate income from family water consumption fees and part of the income is re-invested for environmental purposes. Building on this, the project will seek to connect the protagonists to these community organizations so that farmers protecting the forest in water recharge areas upstream continue to receive an economic compensation from the communities consuming water downstream. There are some successful experiences of this win-win relationship at the community or territorial level in Nicaragua. The main national entity responsible for this is the National Water Authority (ANA), who is part of the PMU of this project and will be able to provide support towards these efforts. Additionally, the project will leverage the institutional support of MARENA, MEFCCA, INAFOR, and ANA for livelihoods diversification, including forest areas for firewood production (energy corridors), and non-farm livelihoods to expand opportunities for sustainability. These actions will provide economic benefits for the protagonists. Given that the project will be executed by institutions within the National System of Production, Consumption, and Trade (SNPCC), the monitoring and follow-up plans will be ensured in the SNPCC''s Annual Operational Plans, with their corresponding budgets. Lastly, these activities should be connected with national and municipal strategies.

183. **Social sustainability** will be reflected in the social benefits that the project will bring to farming families, smallholder farmers, and other participating actors. The project will also generate social capital through knowledge generation and dissemination, capacity-building, and the creation or strengthening of organisational structures (e.g. women groups). The active participation of women, youth, Indigenous Peoples, and other vulnerable groups in project activities will contribute to improving their livelihoods, social security, and food security, leading to positive social impacts. It is expected that the project interventions will also contribute to reducing disagreements and conflicts related to resource use by increasing water availability and soil fertility.

184. The institutional benefits will be sustained over time through the political support and governmental and institutional commitment provided by the National Climate Change Management System and its coordination with the SNPCC. Community organisation strengthening will continue, focusing on topics of interest even after the project is implemented, to ensure long-term sustainability.

185. During implementation, the selection of protagonists will be ensured based on inclusive criteria and with a view to achieving the effectiveness of actions, so that they can assume the commitments associated with the project and facilitate its sustainability. For Indigenous Peoples, the application of relevant laws and norms will be guaranteed, and the effective participation of their governance structures, boards of directors and traditional organisations will be ensured, respecting their rights and worldview, starting from the initial stages of project formulation through the application of the principle of Free, Prior, and Informed Consent.

186. The **economic sustainability** will be possible if the delivered in-kind incentives and the work of farming families increase resilience of the communities, their livelihoods, and agroecosystems in the Dry Corridor. This resilience will prevent (totally or partially) future costs of climate change and its impacts, in addition to generating income through increased agricultural productivity and access to markets, potentially improving the quality of life for families. Due to the application of low-cost ecosystem-based adaptation technologies, the cost of these activities is relatively low compared to the benefits generated, creating a positive cost/benefit ratio and, therefore, more capacity to make such investments in the future. Once the project is completed, the learning sites will continue to function as spaces for innovation incorporated into the national system of farms for innovation, validation, and transfer of agricultural technologies. Agreements will be signed with the Nicaraguan Institute of Agricultural Technology (INTA) to ensure their continuity, thus becoming institutionalised spaces that provide training and exchange services for th69ulfilsit of the participating families.

187. During the consultation process for the project proposal formulation, farmers were consulted regarding the challenges of achieving economic sustainability. They indicated that collective organisation for production and marketing is a key requirement. They also highlighted the need for new skills to negotiate with an equal footing with input suppliers, intermediaries, and other private sector actors involved in direct marketing to consumers (supermarket chains). The project will promote entrepreneurship for value addition. Similarly, by facilitating post-harvest technologies (storage silos), the families will have the opportunity to obtain better prices. This income generation for families will serve as an incentive to ensure the continuous implementation of resilient practices. In this way, families will have evidence that the implementation of climate-resilient agriculture and landscape management practices generates economic benefits in the rural areas of the Nicaraguan Dry Corridor, even under changing climate conditions. All these actions represent a win-win situation for the beneficiary families, contributing to ensuring the sustainability of the proposed outcomes in the medium and long term. The project will prioritise the demand expressed by farming families during the consultation process regarding the importance of new crops–- agricultural, livestock, or forestry (through agroforestry and silvopastoral systems)–- contributing to achieving two objectives: restoring ecosystem services and improving food security and income for vulnerable families.

188. Considering that the main benefits of landscape restoration are medium and long-term, monitoring is important for evidence generation key for improving the effectiveness of other projects in the Dry Corridor. The successful execution of the project, including any necessary adjustments along the way, ensures that farming families can witness the economic benefits, food security, and resilience of their livelihoods, as well as ecosystem services at the landscape level resulting from restoration. The project will develop a participatory medium to long-term sustainability plan with assigned responsibilities and identified outcomes in collaboration with the participating families and institutions. Where feasible, a plan for integrated water resource management will be promoted.

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

189. The project is expected to result in a net positive environmental and social impact, as it improves the generation of ecosystem services, and reduces the vulnerability of families in the Dry Corridor, increasing their food security. The consultations conducted during the project proposal preparation stage made it possible to compile information on the environment and to identify and assess the

potential environmental impacts and risks of the projec''s planned activities. Table 18 provides a summary of the risk identification detailed in Annex 4 and shows that the environmental and social risks associated with the implementation of the project are negligible or non-existent, after designing measures to avoid or minimise them in accordance with the WFP Environmental and Social Sustainability Framework and the AF guidelines[100].

190. Based on the above, the project has been classified in Category B (project with medium risks). The project will comply with applicable national legislation, respecting the environment and the human rights of women, men, Indigenous Peoples, and youth. The implementation of the gender plan and affirmative actions in favour of women are expected to contribute to the reduction of gaps and the empowerment of women. The project incorporates measures to ensure that women, youth and vulnerable or minority groups are not excluded from its benefits. Similarly, the project will ensure pollution prevention, conservation, efficient use, and equitable access to resources. Ultimately, it is expected that investments in adaptation measures in agriculture and environmental restoration will lead to reduced climate vulnerability and conflicts over resource use.

Table 18. Environmental and social checklist.

Checklist of environmental and social principles	No further assessment required for compliance	Potential impacts and risks – further assessment and management required for compliance
ESP 1 Compliance with Law	X	**No Risk.** As detailed in section II.E, **the project will comply with pertinent rules, decrees, and legislation**. WFP, its partners, and contracted service providers strictly adhere to international and national laws and regulations. We worked closely with national, regional, and municipal authorities during the proposal development phase. We will continue to do so throughout the implementation process to ensure compliance with all relevant laws. As detailed in section II-E and Annex 4, MARENA as the lead executing agency, supervised by WFP, will ensure that regulations are enforced throughout the project implementation process, and that they are respected by national co-executing entities, contractors and other actors involved in the project.
ESP 2 Access and Equity		**Low Risk. The project will not prevent communities in the targeted areas from accessing basic services nor reduce their access**. The project is expected to have a **positive impact** by facilitating access to resources, means, information and training for people in vulnerable populations in the Dry Corridor, improving their climate resilience and livelihoods. During the proposal development process, it was identified that there were gaps in access to knowledge, goods, resources, and services between men and women, particularly in communities in vulnerable situations. In addition, land ownership and tenure limitations could hinder wome''s participation in component 2. The project will take transparent measures outlined in the GAP, IPAP, and ESMP to ensure that project benefits are distributed fairly, without discrimination or favouritism. Beneficiaries will be selected using inclusive criteria that will be validated with communities, and gender, age, and Indigenous Peoples' quotas. Wide dissemination of project information, trained staff and collaboration with stakeholders will be key to ensuring equitable access to project benefits. Additionally, the project adopts flexibilise protagonist selection criteria regarding land title ownership, to favour female farmers who do not own land.
ESP 3 Marginalized and Vulnerable Groups		**Low Risk.** The project will have a **positive impact** by directly benefiting vulnerable populations such as farmer families in the Dry Corridor. There is a low risk of excluding groups in

[100] WFP ESS Screening Tool_ADAPTATION FUND

Checklist of environmental and social principles	No further assessment required for compliance	Potential impacts and risks – further assessment and management required for compliance
		marginalised and vulnerability situations, especially women and young people due to existing inequalities in the context where the project would be implemented. To avoid the risk of exclusion, measures have been designed in the GAP, IPAP, and ESMP and measures were incorporated in the criteria for selecting the project protagonists (including the flexible criteria regarding land tittles, recognizing that this could be a barrier for women's participation). Furthermore, groups in vulnerable sitauations, including Indigenous Peoples, women, the elderly, and youth have been consulted during the formulation of the project proposal, to ensure that the project considers their needs and leads to their empowerment in decision-making. During project implementation, the flow of information, consultation and meaningful participation of the target groups will be ensured. The project will also guarantee that mechanisms are in place for groups or individuals who feel affected, excluded, or marginalised to lodge complaints.
ESP 4 Human Rights	X	**No Risk.** The project affirms the rights of all people and does not violate any human rights pillar. All project interventions will respect and promote the human rights of vulnerable populations, as recognised by national legislation and international instruments. The consultations, proposal design, and project implementation have focused and will continue to focus on the promotion of human rights, especially the rights of women, girls, youth, and support for Indigenous Peoples. No risks compromising human rights compliance have been identified. The project is expected to have a positive impact on the realisation of human rights by helping to address disparities in living standards, the right to food and nutrition, and access to employment, among others, for women, youth, and Indigenous Peoples.
ESP 5 Gender Equality and Women's Empowerment		**Low Risk.** The project is expected to have a **positive impact** on the empowerment of women and the promotion of gender equality in the communities of the Dry Corridor. However, a low risk exists that participating women do not benefit from project actions aiming at women´s empowerment and equality related to the implementation context where gender inequality is prevalent. To mitigate this risk, a **Gender Analysis and Action Plan** has been developed during the formulation of the proposal, which is presented in Annex 2. Through specific consultations, it has been ensured that the project addresses the main constraints to wome''s equal participation, needs and interests, and that gender considerations are integrated into each project activity. The project's targeting strategy set out in the Gender Action Plan defines a quota of at least 40% of female direct protagonists for Components 1 and 3 and of 30% to Component 2. It also includes actions specifically aimed at promoting entrepreneurship and the insertion of women in productive activities. Constraints to wome''s participation will be addressed through different strategies, e.g.: invitations and explicit calls for participation, awareness-raising efforts with families on gender roles and division of labour in the household, and the definition of appropriate schedules and modalities. The knowledge management component will incorporate the dissemination of information with a gender perspective, making the role of women in agriculture more visible.
ESP 6 Core Labour Rights	X	**No Risk. No risks are identified** that would compromise compliance with labour rights in the project. **The project will**

Checklist of environmental and social principles	No further assessment required for compliance	Potential impacts and risks – further assessment and management required for compliance
		comply with national, international and WFP standards in relation to fundamental labour rights. Nicaragua has been a member of the ILO since 1957 and has ratified the eight core conventions on: Forced Labour; Freedom of Association; Right to Organise and Collective Bargaining; Equal Remuneration; Abolition of Forced Labour; Discrimination (Employment and Occupation); Minimum Age; and Child Labour.
ESP 7 Indigenous Peoples		**Low Risk.** The project will have a **positive impact** on Indigenous Peoples as it contemplates activities to be developed in Indigenous territories. The consultation during the proposal development process allowed for an in-depth determination of the environmental, social, economic, and cultural aspects of the setting where the project will be implemented, leading to early identification of the possible risks associated with the design and implementation of appropriate measures to avoid them. During the consultations, the Indigenous communities expressed that the proposed actions would bring various benefits to their communities.The project will involve at least 175 Indigenous households in the municipalities of Telpaneca and Sébaco in the training and adoption of environmentally sustainable and resilient practices, productive diversification, and water harvesting, among other adaptation measures. These trainings will incorporate a culturally differentiated approach to promote knowledge and exchange resilient ancestral practices, to preserve their culture and ensure an inclusive approach. In the formulation of the project proposal, extensive consultations and participatory planning sessions have been conducted with a representative sample of Indigenous Peoples, including territorial leaders, women, youth, and elders. Through a consultation process enabling the application of **Free, Prior and Informed Consent– - FPIC and the development of the Indigenous Peoples Action Plan**, the priorities and needs of the Indigenous Peoples' population groups were identified and incorporated into the project in all relevant activities. During project implementation, the information flow will be maintained, and the Indigenous community leadership and authorities will be involved in decision-making.
ESP 8 Involuntary Resettlement	X	**No Risk. The project will not engage in involuntary resettlement**. Should a resettlement or economic displacement situation arise during project implementation that was not anticipated during design, then the executing agency and WFP will ensure that a process of consultation and negotiation with potentially affected persons takes place in accordance with FPIC and Do No Harm principles. In case no agreement is reached, project implementers will modify the specific interventions associated with the affected persons or halt them if changes are not possible. If project implementers fail to carry out a process of consultation and negotiation with affected people in accordance with FPIC and the Do-No-Harm principles, the project will respect land ownership and land use rights, as well as customary law.
ESP 9 Protection of Natural Habitats		**Very Low Risk. The project is not expected to have any negative impact on critical natural habitats**, including those that are (a) legally protected; (b) officially proposed for protection; (c) recognised by authoritative sources for their high conservation value, including as critical habitat; or (d) recognised as protected by local traditional or Indigenous

Checklist of environmental and social principles	No further assessment required for compliance	Potential impacts and risks – further assessment and management required for compliance
		communities. Although the project intervention zone includes areas within the buffer zones of protected areas where there are concerns about the use of natural resources further exacerbated by climate change, the project will establish a mechanism to ensure that natural habitats are not negatively impacted. In addition, Article 54 of Nicaragua's Protected Areas Regulations could be used to define, with the communities and experts, a sub-zoning of the buffer areas intervened by the project to restore areas of the forest landscape that in the past were natural habitat for some endangered species. It is expected that the project will have a **positive impact** on the protection of natural habitats through the restoration of ecosystems in the buffer zones of protected areas and other areas of ecological importance, where the connectivity of biological corridors and other environmental services such as water recharge will be enhanced.
ESP 10 Conservation of Biological Diversity		**Very Low Risk. The project will not affect critical areas for biodiversity conservation**. The project intervention area does not contain UNESCO Biosphere Reserves or RAMSAR sites, nor species listed by IUCN or protected by national legislation. Although there is a low risk of impacting natural habitats during environmental restoration activities, the project will have a **positive impact** on biodiversity conservation by incorporating agroforestry and silvopastoral systems, as well as other agroecological practices, using native species. To ensure that local biodiversity is not negatively impacted, the sites to be restored will be selected by INAFOR in consultation with municipal governments, community organisations, and Indigenous authorities (where applicable), following local development plans and national legislation.
ESP 11 Climate Change	X	**No Risk. The project will not have any negative impact on climate change**, as it does not promote any AF climate change drivers (energy, transport, heavy industry, construction materials, large-scale agriculture, large-scale forestry products and waste management). The project will have a **positive impact on** reducing the vulnerability to climate change of families in the Dry Corridor, through the incorporation of adaptation measures in their productive systems, improving their water and food security. The project will conduct ecosystem and forest landscape restoration activities that will enhance environmental services, including carbon fixation. None of the activities in the project is expected to increase greenhouse gas emissions or reduce carbon sinks.
ESP 12 Pollution Prevention and Resource Efficiency		**Very Low Risk.** ' The project aims to reduce air, land, and water pollution without significantly increasing it. It will adopt a sustainable approach, utilising resources and ecosystem services, in line with WF"s Environmental and Social Sustainability Framework and AF policy. **The project activities will not pose any significant pollution risk**. The project will adopt a sustainable approach, increasing productivity through a balanced use of resources and inputs, and taking advantage of the potential benefits of ecosystem services. The project will promote **water-efficient** alternatives for agricultural activities, through rainwater harvesting and small-scale irrigation systems (drip irrigation), reducing pressures on resources. The project will promote sustainable agricultural practices, applying integrated pest control and soil management, including agroforestry, crops association, and composting. The project

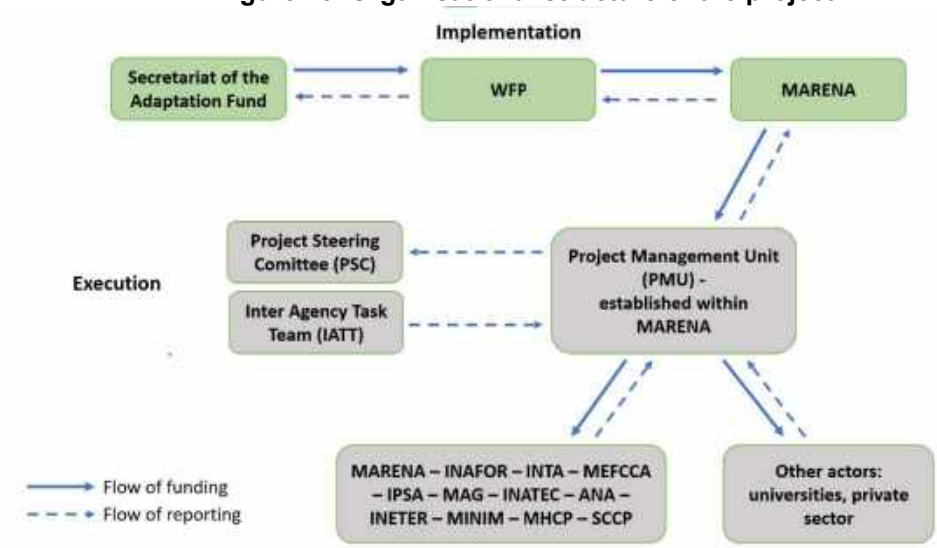
Checklist of environmental and social principles	No further assessment required for compliance	Potential impacts and risks – further assessment and management required for compliance
		will not provide pesticides or inorganic fertilisers. Appropriate waste management in agricultural practices will be incorporated into the training and follow-up activities for farmers. While there is a low risk of abandoning household or community-level assets or inputs, these will be natural, local materials with no environmental impact. Waste management will be incorporated into training and follow-up activities for farmers.
ESP 13 Public Health	X	**No Risk. The project is not expected to cause adverse effects on public health**. The project will have a **positive impact** on improving the quality of life of families in the Dry Corridor, through the rehabilitation of agricultural livelihoods, and alternative income-generating activities, improving their access to water for agriculture and food production, while reducing their vulnerability to the effects of climate change. Water harvesting and storage activities will be emphasised, and communities will be sensitised on how to use and store water safely and efficiently. During project implementation, eventual health alerts will be monitored, and measures will be taken to prevent staff from compromising the health or safety of rural communities and Indigenous Peoples involved in the project.
ESP 14 Physical and Cultural Heritage	X	**No Risk. No risks of the project that could adversely affect physical and cultural heritage have been identified.** Nicaragua ratified the Convention Concerning the Protection of the World Cultural and Natural Heritage in 1979. From the early stages of its formulation, the project has contemplated broad consultations, including with authorities and representatives of Indigenous Peoples through the FPIC process, which will be continued during its implementation, ensuring the right to recognition, ownership, control, and protection of cultural heritage. The project will have a **positive impact** on rescuing and disseminating Indigenous knowledge and ancestral practices with the potential to promote climate resilience in their production systems. During the project implementation, engagement with stakeholders and communities will ensure that any physical cultural heritage present on project sites is identified and potential negative impacts are avoided.
ESP 15 Lands and Soil Conservation		**Very Low Risk.** The project will have a **positive impact** on **land and soil conservation, since p**roject activities are unlikely to threaten land and soil conservation. However, there is a very low risk of inadvertently stimulating land use changes in order to capitalise on project benefits. Through component 2, this project will aim to restore forest landscapes and degraded soils through natural regeneration, and planting of native nitrogen-fixing plants. Through component 3, the project will promote practices that will improve overall soil fertility and soil conditions. The project will incorporate measures to avoid the risk of land use changes to access project benefits, as well as monitoring to ensure that farmers maintain or increase the areas of forest cover on their farming plots.

PART III: IMPLEMENTATION ARRANGEMENTS

A. Describe the arrangements for project/programme implementation.

191. MARENA will be responsible for the general implementation and technical aspects of the project, working under the close supervision and advice of WFP as an accredited Multilateral Implementing Entity (MIE) of the Adaptation Fund (see diagram below). WFP will assume financial oversight of the project and report to and be accountable to the Adaptation Fund Board, to ensure that the project measures and achieves expected results, fulfills all reporting functions, and meets WFP and Adaptation Fund rules and regulations. MARENA will act as the lead Executing Entity and will be responsible for the daily management of project outcomes, in full compliance with the terms and conditions of the Memorandum of Understanding that will be signed with WFP. MARENA will be responsible, and accountable to WFP for the timely implementation of the outcomes agreed under the project, the operational supervision of the activities, the timely presentation of reports and the effective use of AF funds for the intended purposes and in accordance with WFP and AF policy requirements.

Figure 13. Organisational structure of the project



192. **Project Steering Committee (PSC).** As the agency with the main responsibility, MARENA will chair the Project Steering Committee (PSC). Each year, the PSC will approve the annual work and budget plans and will offer strategic guidance to the Project Management Unit (PMU) and all implementation partners. The PSC will be comprised of representatives of MARENA, MAG, SCCP, MEFCCA, INTA, IPSA, INAFOR, ANA, INETER and WFP, who will serve as Focal Points on behalf of their respective institutions, thus ensuring participation of all the involved institutions. As focal points, the PSC members will be in charge of (i) providing technical supervision of the activities; (ii) ensuring the smooth flow of information and knowledge between their institution and the project; and (iii) providing coordination and linkages between project activities and the institutional work plan.

193. **The Project Steering Committee (PSC)** is the decision-making entity; it will meet at least twice a year to (i) supervise and guarantee the technical quality of the outcomes; (ii) approve the annual workplan and budget, as well as the progress reports and project reports; (iii) strengthen linkages between this project and other ongoing and relevant projects and programmes; (iv) obtain knowledge of and inform about joint financing by each of the parties; (v) ensure the achievement of key outcomes of the project, including sustainability, expansion and reproduction; and (vi) effectively coordinate the work of the governmental partner in the framework of this project. The PSC will also monitor the

progress in the implementation, seeking to anticipate risks and possible factors that could result in a delay. In case this occurs, the PSC will carefully evaluate the barriers and constraining factors and will provide solutions that will be collectively endorsed. Timelines for resuming delayed tasks will be established and monitored. WFP will be part of this structure, as well as the Project Management Unit, which will operationalize the decisions of the PSC. WFP will stand ready to provide strategic advice and possible ideas and solutions that could help expedite implementation. Finally, this will be timely reported to the Adaptation Fund through the reporting tools. Additional ad-hoc sessions may be held as needed.

194. **Inter Agency Task Team (IATT):** MARENA will chair the IATT, which oversees the preparation of the annual work plans and budgets and provides support to the Project Management Unit (PMU) and all implementing partners. The IATT will consist of representives of MARENA, MHCP, SCCP, MEFCCA, MAG, INTA, IPSA, INAFOR, ANA, INETER, MINIM, INATEC, and WFP.

195. **The Project Management Unit (PMU)** will be cofinanced by the AF and established within MARENA, directly reporting to its executive management. A WFP representative will also be part of the PMU and join for all relevant meetings, discussions, and decision-making processes. Under the direction of the Project Steering Committee, the PMU's main functions are to ensure efficient project management, coordination, implementation, and follow-up through annual work plans and budgets. It will also ensure the preparation of the Standard Operational Procedure (SOP), which will serve as the defining instrument for establishing planning processes, budget formulation, the terms for acquisitions and hiring procedures, guiding tools for administration, financial and budget management, monitoring and evaluation procedures, and the communication and visibility targets of the project. The PMU will be placed in MARENA's Directorate General for Natural Heritage and Biodiversity, which will collaborate closely with the National Project Coordinator (NPC), who will have a full-time contract for the duration of the project. In addition, the PMU will include: a financial specialist, an M&E specialist, a specialist for components 1 and 4 (Capacity Building and Knowledge Generation), one specialist for component 2 (Forestry Restoration and Resource Management Specialist), one specialist for component 3 (Livelihoods), and one specialist on Indigenous Peoples. Their salaries will be paid through project funds.

196. **The four thematic specialists mentioned above will be part of the PMU (Capacity Building and Knowledge Generation; Forestry and Resource Management, Livelihoods, and Indigenous Peoples) and are budgeted under each project component. They will be specifically hired to support the implementation from start to end**. Their responsibilities will include coordinating the implementation of the project components, working directly with the national institutions that are involved in each respective area. They will also work closely with the project manager, who will ensure overall cohesion and coherence, particularly supporting the preparation of the annual plans, the implementation of the activities established in these plans, the coordination with the different national institutions that have a role in the implementation of their respective components and will provide the corresponding inputs for the preparation of reports. The Indigenous Peoples Specialist (consultant) will be hired for a specific time during the project to strengthen the capacities of the institutions and support the design of the activities and the creation of content. Below is a more detailed description of the responsibilities for each one of the specialists:

I. Capacity Building and Knowledge Generation Specialist (Components 1 y 4):

- In coordination with the project manager, coordinate the process to sign agreement with INATEC, MINIM and the university (or universities) to define coordination mechanisms, assistance for project implementation, and capacity-strengthening activities
- Design and help implement a knowledge management and communication strategy for development, with participation of women and Indigenous Peoples. This will include dissemination channels, taking into account the preferences indicated during consultations.
- Identify and propose knowledge sharing strategies and tools.
- In coordination with the relevant national institutions, asses the capacities of the learning sites available in the territories where the project will be implemented (FIIT, BCS, UDC, UPAs, Telecentres).
- In coordination with the other specialists and national institutions, prepare a training and

capacity strengthening plan for the different audiences and planned activities under targeted by the component, with emphasis on aspects related to gender, generational and intercultural aspects. This will focus on the topics defined in the territorial consultations with emphasis on aspects related to gender, generational inclusion and Indigenous Peoples and will consider adequate methodologies, adapted to the needs and realities of the different populations that will be participating. The plan will include training events on the topics identified in the Gender Plan, development and management of ICT, innovation for entrepreneurs, Indigenous Peoples' rights and cultural heritage, amongst others. The plan will include the contents, requirements and roll out strategy.

- In coordination with the other specialists, particularly the Indigenous Peoples Specialist, and the Project Manager, propose products, content, and learning materials for the different audiences, with special lens on the needs and preferences of women, Indigenous Peoples, and youth (printed, audiovisual, and digital material).
- Prepare a plan for the systematization of lessons learned, including innovations, successes, failures, stories, practices, etc.
- Design of the project's graphic identity, dissemination materials, and promotional items.

II. Forestry Restoration and Resource Management Specialist (Component 2):

- Support the project manager in the development and implementation of the participatory planning process with a special focus on women, youth, and Indigenous Peoples that will take place at the beginning of the project. This process will determine the actions that will be implemented at landscape level and to map forest reforestation areas that will be included.
- In coordination with the GIS experts, support the project manager in the mapping and prioritization of areas of forest restoration, water recharge, and biological corridors, clearly defining the implementation areas of the project and protagonists. The technical criteria described in the project document will be used as guidance for these processes.
- Prepare conservation and forest restoration plans for each landscape, developed together with technical teams and farmers.
- Prepare a landscape restoration plan in critical "upstream" areas of high social importance and vulnerability, such as water sources, rivers, recharge areas, among others, developed jointly with the technical teams and farmers.
- Develop specific plans for forest conservation and regeneration for the areas of intervention where there are Indigenous People, developed in consultation with them.
- Determine the action plan and oversee the implementation and roll out of the incentives (cash) for restoration and conservation.
- Prepare a training plan and didactive material for forest landscape restoration (FLR) and assisted natural regeneration in dry and degraded landscapes for technical staff and farmers.
- Support the preparation of monitoring plans (with the M&E Specialist) for each farmer/community implementing conservation or natural forest regeneration.

III. Livelihood Specialist (component 3):

- In coordination with the Forestry Restoration and Resource Management Specialist, support consultation processes that will take place at the beginning of the project to determine the intervention area, protagonists and to inform the content of the activities.
- Develop plans for livelihood diversification in a context of high climate variability with a strong gender and youth lens, in collaboration with the Ministry of the Family Economy (MEFCCA for its acronym in Spanish) and other relevant stakeholders.
- Together with the relevant national institutions that participate in the implementation of the project, oversee the coordinate the process to support farmers in the development of farm plans and the technical assistance required for this activity.
- In coordination with the technical teams of the involved implementing institutions and with the input of the protagonists, prepare a procurement plan of the inputs that will be required for the implementation, including for the in-kind incentives/production models. This should pay special attention to the needs of women, Indigenous Peoples and youth, adopting differentiated approaches.
- Determine the action plan and oversee the implementation and roll out of the incentives (in-kind) for the adoption of resilient and sustainable practices.

- Develop a training plan to enhance the capacities of technical staff and farmers on livelihoods diversification and market access.
- In coordination with the technical teams, guide and oversee the set up the gardens and nurseries to promote food security with a gender perspective.
- Together with the technical teams of the national institutions, assess the conditions in the farmer organizations that will participate in the project and prepare a plan for the establishment of water harvesting structures and develop a plan for the implementation of the technical assistance, using existing ancestral practices and all the knowledge systematized under component 1.
- Under the leadership of MEFCCA, develop a plan for the 14 farmer organizations to improve their capacities to produce products with added value and their access to markets, placing strong gender emphasis.
- Coordinate knowledge exchanged between the farmer organizations so they can improve their capacities to tap into market opportunities.
- Support the monitoring plans (together with the M&E Specialist) for this component.

IV. Indigenous Peoples Specialist

- IWill ensure the project is implemented successfully with the participation of Indigenous Peoples and assess the learning needs of the institutions participating in the implementation of the project, as well as the specialists hired, on matters such as Indigenous Peoples' rights, cosmovions, socioeconomic situations and the local organization of Indigenous communities.
- Based on the results of this assessment, an Indigenous Peoples Action Plan will be prepared addressing the requirements established in the regulatory frameworks, policies, and environmental and social sustainability safeguards,
- Pprepare a capacity strengthening plan for the key implementing partners, particularly MARENA. This will include trainings on Indigenous regulatory and legislative framework, as well as Indigenous identity and cultural diversity, among other areas.
- Share methodologies, content, and reference material to enable those who received training to further share this with other members of their technical teams.
- Support the Capacity Building and Knowledge Generation Specialist (Components 1 y 4) in the preparation of content, products, materials for training and knowledge sharing.
- In consultation with the Indigenous communities, design and implement a plan to strengthen their organizational structures to help them liaise and enhance communication channels between the executing institutions such as MARENA, MEFCCA and the Indigenous families.
- Ensure that the PMU has a plan to implement the Indigenous Peoples Action Plan

197. With regards to the implementation of the Indigenous Peoples Action Plan, this will be a joint responsibility of the Project coordinator and the four project specialists. The Indigenous Peoples Specialist will particularly provide guidance and ensure that the measures included in the Indigenous Peoples Action Plan are integrated into the operational plans and programming of all components, while the operationalization will be then responsibility of the other specialists. It will also support the implementation of specific actions of the plan, such as the strengthening of organizational structures (output 4.2 of the Indigenous Peoples Action Plan). WFP's Project Coordinator will also provide oversight and follow up on the implementation of the plan, requesting regular updates at the working sessions, PMU meetings, and reports.

198. The Indigenous Peoples' councils/leaders will have an active role in the project. As recommended by the protagonists during the FPIC consultations, traditional representatives will be involved throughout the execution of the project, starting in the planning phase, and extending to their participation in the monitoring and follow-up of the implementation. They will be engaged in the process of selection of the protagonists to conduct this process in a consensual manner with the authorities of the Indigenous communities. Similarly, the actions and activities will be coordinated with their respective authorities and Council of Elders and the Community Board. The mechanisms for coordinating this engagement will be established at the beginning of the project, in consultation with the targeted Indigenous Peoples' communities. These stakeholders will also be included in the territorial structures that will be set up at the local level for the implementation of the project, which

will connect with the other structures set up as part of the implementation arrangements.

199. Furthermore, to ensure the compliance with the Adaptation Fund Gender Policy, the project will count with the support and leadership of the Ministry of the Woman (MINIM), who is a key stakeholder in the Project Management Unit that will be directly involved across the board in the implementation. As per its mandate, MINIM is the national instance responsible for ensuring that all programmes, projects, and plans are designed and implemented in line with the gender practices and requirements established in Nicaragua's policies and laws and it does so by working with the different national institutions through coordination spaces. Therefore, based on its experience, MINIM will ensure that the project is implemented in line with Gender Policy of the Adaptation Fund and of WFP, as well as national policies. To do so, it will work in close coordination with the other implementing national institutions and with the project coordinator, ensuring that needs, rights, choices, and preferences of women are adequately reflected and protected and will ensure that the Gender Action Plan is implemented by the Project Management Unit. At the same time, MINIM will strengthen the capacities of other national institutions, particularly the Gender Unit within MARENA, so that they can also ensure that the activities are gender-responsive. MINIM also has presence in the territories and will use its reach to address the barriers that hinder women's participation in the project. To further reinforce the work of the national institutions, WFP will also provide oversight and advice, with the support of its gender specialist, who is an integral part of the team of WFP's country office in Nicaragua and has vast experience overseeing the inclusion of gender sensitive and transformative approaches in projects.

200. This project's financial execution will be guided by the management tools approved for the project (ProDoc, MoU, Procurement Plan, and Monitoring and Evaluation Plan). As Executing Entity, MARENA will be in charge of the general implementation and have the technical responsibility for the project, under the supervision of WFP as Multilateral Implementing Entity (MIE). Following the results of the capacity assessment, finalised in January 2020, MARENA is in the process of developing and implementing a plan to strengthen its capacities for the management of subpartners and secondary partners. While this process is ongoing, other subpartners are included in the project budget (MEFCCA, INTA and specialised entities), to carry out certain activities that fall under their area of expertise. WFP also reviewed of MARENA's capacities and procedures related to procurement and human resource management. This revision showed that MARENA's policies and procedures are in line with the standards required by WFP's policies and regulation and therefore with those of the Adaptation Fund. The implementing subpartners will report to MARENA and WFP to ensure the correct administration and execution of funds, in accordance with the Letter of Agreement that will be signed with these subpartners (INTA, MEFCCA, and specialised entities).

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

201. The financial and project/programme risk assesment has been done using WFP methodology. Additionally, WFP Risk Catalog has been utilized to classify the identified risks into fiduciary, financial, operational, and strategic risks. Using this methodology, risks are assessed depending on their likelihood of occurrence and their impact to the overall success of the project. The product of the likelihood and impact of each risk results in the overall risk level (seriousness) of the project, in each of the above-mentioned areas. Table 19 summarized the methology and scale applied to each of the risks when being evaluated:

Table 19. Financial and Project/Programme Risk Assesment Methodology and Scales

Likelihood	Impact	Seriousness (Overall Risk Level)
When assessing likelihood, a combination of future probability and frequency of past ocurrences is considered.	When assessing the potential impact of a risk, what it mainly consider is the Implementing (IE) and Executing Entities (EE) ability to deliver, continue operations, mitigate substantial financial and resource losses and protect the fund´s credibility	The seriousness rating is calculated by multiplying the impact risk ranking and the likelihood risk ranking
Scale		
Very Unlikely (1): The event has never happened or is very unlikely to happen more than once in 20 years.	Negligible (1): The IE and EE can still achieve its objectives and the overall project implementation with limited constraints.	**a. Low**: 1-7 **b. Medium**: 8-14 **c. High:** 15-25
Unlikely (2): The event has only happened once in the last 5-10 years or is unlikely to happen in the next ten years.	Minor (2): The IE and EE can still achieve its objectives and the overall project implementation, but not fully or in a timely manner.	
Moderately Likely (3): The event has happened once in the last 2-4 years or is likely to happen in the next 2-4 years	Moderate (3): The event hinders the IE and EE objectives and the overall project implementation.	
Likely (4): The event has happened once in the last year or is likely to happen in the next 1-2 years.	Severe (4): The event significately hinders the IE and EE objectives and the overall project implementation.	
Very Likely (5): The event has happened on a regular basis over the last year or is likely to occur in the next year.	Critical (5): The IE and EE may be unable to operate, or the event could paralyze the overall project implementation	

202. The overall financial risk ranking for the project, without any mitigation/remedy strategy, is medium. Table 20 summarizes the major risks evaluated for this project:

Table 20. Financial and Project/Programme Risks

Risk	Likelihood		Impact		Seriousness (Overall Risk Level)	
	Ranking	Description	Ranking	Description	Ranking	Description
Fiduciary Risks						
Non compliance with the Adaptation Fund policies and standards during project implementation	2	Unlikely	5	Critical	10	Medium
There is misappropiation of cash by the Project Implementing Agency	1	Very Unlikely	5	Critical	5	Low
Financial Risks						
Financial underutilisation by the Project Implementing Entity.	2	Unlikely	2	Minor	4	Low
There is misutilization of assets by the beneficiaries and the Implementing and Executing Agencies	2	Unlikely	5	Critical	10	Medium
Delay in activities onset caused by late disbursements	4	Likely	3	Moderate	12	Medium
Significant changes in input prices decrease the funds ability to purchase all required elements for successful implementation	3	Moderately Likely	3	Moderate	9	Medium
Operational Risks						
Poor germination of forest species seeds.	2	Unlikely	3	Moderate	6	Low
Plant losses due to climate variability	4	Likely	3	Moderate	12	Medium
Few farmers opt for the incentives offered by the project	2	Unlikely	4	Severe	8	Medium
Quotas for the number of beneficiaries in each group are not met (women, youth, indigenous persons)	4	Likely	3	Moderate	12	Medium
The project is not able to achieve early coordination among implementing institution	3	Moderately Likely	3	Moderate	9	Medium
Low participation at training events	2	Unlikely	4	Severe	8	Medium
Adverse agroclimate conditions make it difficult to introduce the technologies promoted	3	Moderately Likely	4	Severe	12	Medium
Strategic Risks						
Controversy because of the processes associatted to the selection of beneficiaries	2	Unlikely	3	Moderate	6	Low
The political climate in the country limits the ability to implement the project successfully	2	Unlikely	2	Minor	4	Low
The project implmentation raises concerns with different stakeholders, especially overall project beneficiaries	2	Unlikely	3	Moderate	6	Low
Project Total	**3**	**Moderately Likely**	**3**	**Moderate**	**9**	**Medium**

203. To implement mitigation/remedy strategies associated with these risks, there will be strong management measures throughout the project implementation. These measures will be evaluated periodically through the technical oversight missions conducted by WFP. Furthermore, the Project Coordinator will verify possible risks on a quarterly basis and report on their status to the Project Steering Committee (PSC), which is in charge of risk management and the effective introduction of mitigation measures. With the monitoring and evaluation (M&E) system, the Implementing and Executing Entities will supervise the outcome and output indicators, risks, and mitigation measures to implement timely corrective actions. The PSC will oversee the effectiveness of these or any mitigation measures put in place and adjust its strategies accordingly. In collaboration with project partners, it will identify and manage any new risk which may have gone unidentified during the project formulation.

Table 21 summarizes the mitigation/remedy mechanisms already identified during the project formulation phase, for the medium-ranked risks:

Table 21. Mitigation/Remedy Mechanisms for Medium-Ranked Risks

Risk	Seriousness	Mitigation/Remedy Mechanisms	Seriousness after Mitigation Strategy
Operational Risks			
Poor germination of forest species seeds.	Low	No need for a mitigation/remedy strategy for now.	Low
Plant losses due to climate variability	Medium	Plant nurseries will be created at the community level to minimize travel time, and in places where there is sufficient water to irrigate the plants (green water). Additionally, the seeds used for these nurseries will be native and adapted, so they are stronger and much more resistant to climate variability. It is key to note that native seeds have high germination rates. Lastly, close technical assistant will be provided to beneficiaries to take timely corrective actions when needed.	Medium
Few farmers opt for the incentives offered by the project	Medium	The project considers an incentives strategy that includes different types of incentives given to beneficiaries (payments for enviromental services, technical assistance, trainings, inputs and equiptment needed for the implementation of adapted productive systems, among others). Also, prior consultations have informed this strategy, thus guaranteeing that the incentive scheme introduce in the project reflects the needs of the intervention communities.	Medium
Quotas for the number of beneficiaries in each group are not met (women, youth, indigenous persons)	Medium	There are strong action points described in the Gender Action Plan and the Indigenous Peoples Action Plan to guarantee that quotas are met.	Low
The project is not able to achieve early coordination among implementing institution	Medium	There are frequent working sessions will be held between MARENA, INTA and MEFCCA planned for the project implementation, and whenever needed, with the other SNPCC institutions.	Low
Low participation at training events	Medium	Beneficiaries will be selected in close coordination with the communities, so they vouch for the selected participants and their commitment to this type of projects.	Low
Adverse agroclimate conditions make it difficult to introduce the technologies promoted	Medium	The project will take into account agroclimate reports for informing decisions and change plans if needed. It will also introduce measures for diversification of agricultural production to mitigate risks.	Medium
Strategic Risks			
Controversy because of the processes associatted to the selection of beneficiaries	Low	No need for a mitigation/remedy strategy for now.	Low
The political climate in the country limits the ability to implement the project successfully	Low	No need for a mitigation/remedy strategy for now.	Low
The project implmentation raises concerns with different stakeholders, especially overall project beneficiaries	Low	No need for a mitigation/remedy strategy for now.	Low

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

204. The entire proposal was screened for environmental and social risks against the 15 principles outlined in the adaptation Find's Environmental and Social Policy, as set out in Section II K. The results of the screening classify the project as Category B or medium risk and an ESMP is prepared as per also Annex 4. The project follows the guidelines set forth in the WFP Environmental and Social Sustainability Framework, which aims to ensure that people and the environment are protected from any possible adverse effect caused by its programmes and projects. It also seeks to guarantee that all stakeholders have numerous opportunities to actively participate in the activities included in programs and projects and have access to effective channels to express their concerns in this regard. As shown in Annex 4 (ESMP), the project design was evaluated also in accordance with the AF Gender Policy. Based on the environmental and social risk screening exercise shown in section II K, the classification for this project is Category B.

205. In keeping with the AF Environmental and Social Policy, the project has been designed to reduce the likelihood of any risk related to its 15 principles, by incorporating good practices and implementation arrangements that avoid or minimise risks. In the project components 1 and 4 the identified risks are minimal. However, measures have been incorporated to ensure that vulnerable groups such as women, youths and Indigenous Peoples are not excluded from the benefits. In the activities of components 2 and 3, which consist of environmental restoration and conservation, and agricultural livelihoods rehabilitation activities, the project will ensure the protection of natural habitats and biological diversity, pollution prevention and efficient resource use, including water. The project will also comply with national environmental laws and regulations, and this will be ensured by its implementing entities. It is expected that project investments will contribute to reduce the vulnerability to climate change of productive systems and families who live in the Dry Corridor, while simultaneously restoring degraded soils and areas of ecological importance in the forest landscape. The introduction of environmentally sustainable and resilient practices will have a positive impact on land and soil conservation by improving their fertility.

206. The project will not implement activities with high environmental or social risks and will comply with all national, regional, as well as Adaptation Fund's ESP and WFP's ESS. During the implementation of the project WFP and its partners are to ensure compliance with the requirements as set out in this agreement. The National Environmental Authority will provide clearance for screening of each activity before signing of Field Level Agreements (FLAs) to duly comply with national, regional, AF's and WFP's environmental and social safeguards requirements.

207. **Community Feedback Mechanism (CFM).** The project will also comply with WFP's CFM, which will ensure that grievances/complaints/incidents from affected are responded to and managed in a culturally appropriate manner (for example. in local languages). CFM will be a mechanism of communications to respond to interested and affected parties with transparency and through communications channels that are familiar and accessible to all parties. During stakeholder engagement to identify participating families with relevant national government institutions and community stakeholders, WFP and MARENA will ensure preferred and accessible communication channels are determined, taking into consideration women, people with disabilities and local languages. Based on this consultation, Standard Operating Procedures SOPs and mechanisms will be developed, including resources and mechanisms to act and solve issues. Technical units will be trained on how to respond according to the severity of the reported grievances and identify the correct resolutions within a proper timeline. WFP's ready-to-use CFM toolkit will be made available and resources to collect, process, respond and inform feedback on grievances will be assigned. Feedback will be used to inform project activities adapting and better programming. Messaging related to CFM mechanism will be shared in every stage of the project, particularly during direct contact with protagonists. The modalities for the CFM for this project, includes but it is not limited to a toll-free

number, grievances boxes with instruction in local languages understood by protagonists, on how to log a grievance, and posters with contact information about how to report urgent and critical issues. The SOPs will ensure that everyone can access to every communication channel, including women, people with disabilities and local languages speakers.

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

208. The Project Management Unit (PMU) and its coordinator will be responsible for the project's monitoring and evaluation, which is to be undertaken directly by the specific person in charge of M&E. WFP will supervise these activities as needed and will have access to the data collected during the M&E field exercises, if required. The M&E system must (i) collect data dissagregated by gender, in compliance with WFP Gender Policy; collect data on the AF indicators described in section III-E; and produce, organise and disseminate the information needed for strategic project management; (ii) document the outcomes and lessons learnt for internal use, and make project achievements public; and (iii) satisfy AF, WFP and government information needs regarding project activities, immediate outcomes and impact. In the first six months, a Standard Operational Procedure (SOP) will be prepared to guide the implementation of the project, which will include monitoring and evaluation, and will describe a simple and effective system for data collection, processing, analysis, and dissemination.

209. A computerised and georeferenced data base will be set up to generate an M&E system which is to be fed regularly with data collected on the ground by project technical staff and SNPCC technical teams in each municipality. Staff will be trained to strengthen their capacities in the use of the system and the collection of the data. The project teams will be responsible for the daily follow-up on the implementation progress, in accordance with institutional arrangements and with the Annual Work Plan and its indicators. They will work under the supervision of the M&E expert and the component specialists or coordinators and will make sure that gender disaggregation of data is taken into consideration into the design of the system data structure.

210. The system of performance reports and the evaluations described below will be adjusted to track the implementation of the Environment and Social Risk Management Plan detailed in Annex 4 to ensure minimisation of identified risks. This mechanism will be the channel for risk evaluation and monitoring, sharing findings and mitigation measures progress internally and and the project's stakeholders. All planning, monitoring, and reporting templates shall be validated during the inception workshop and endorsed by the PMU. The gender and M&E specialists will oversee all monitoring and reporting exercises, ensuring consideration over gender data and analysis is incorporated into data collection tools and reports.

211. **Project inception workshop**. There will be a national and a territorial inception workshop in the first six months of the project, which will gather the entire project team, the relevant government counterpart institutions, and WFP representatives. This is crucial to promote ownership, as well as to formulate the Annual Work Plan for the first year. It will also serve to introduce the implementation modalities, how it intends to implement activities, and to help the project team understand and adopt its goals and objectives. Furthermore, the grievance mechanism for the project will be revised.

212. Immediately after the inception workshop, a Project Report will be prepared. It will contain: (i) a detailed Annual Work Plan for the first year, divided by quarters, with detailed description of the activities indicators that will guide implementation during the first year; (ii) the detailed budget for the first full year, based on the Annual Work Plan; (iii) a detailed description of institutional functions, responsibilities, coordination and feedback mechanisms for project partners; (iv) a section on the advances made to date in setting up the project, the activities underway, and an update on any change in external conditions that may affect project implementation.

213. **Baseline study**. A baseline study will be conducted to collect data and serve as a basis for

evaluating the effectiveness of project implementation and the results achieved, with data disagregatted by gender of the protagonist. The baseline will only include the target group, with data collection conducted both before and after the project with the same group. This approach will measure how protagonists change over time, due to limited resources available for setting up and sampling a control group. The baseline will ensure gender disaggregated data will be collected and gender-analysis variables related to the project are integrated in the questionnaires.

214. **Progress Project Reports**. The Project Management Unit (PMU) will prepare quarterly progress reports, to inform on project activities and the monitoring of its indicators, as well as to identify challenges to adopt any necessary corrective measures in due time. These project reports will be sent to WFP and the relevant government authorities. Results reported on the documents will be disaggregated by gender of the protagonists where relevant.

215. **Annual Progress Report**. The PMU will prepare a yearly report to reflect the progress achieved in terms of compliance with the Annual Work Plan and to evaluate project performance and progress towards the expected outcomes. The report format will include the following: (i) an analysis of project performance in the report period, including outputs, and whenever possible, information on the state of outcomes and gender related data and analysis; (ii) limitations and constraints encountered in the efforts to make progress towards outcomes (iii) the annual work plan and other expenditure reports; (v) lessons learnt; (vi) clear recommendations for tackling the key reasons for any delays in Implementation; and (vii) compliance with the requirements of the environmental and social assessment and management frameworks; and viii.

216. **Project Performance Report (PPR).** The PPR will examine all environmental and social risks identified during project formulation, design, and implementation, and will report on the objectives presented in the AF results and indicators framework shown in section III-F. The annual PPR will contain a section on the state of implementation of the environmental and social management plan, including the measures necessary to avoid, minimise or mitigate environmental or social risks. The reports will also include a description of any corrective measures undertaken, if necessary. The PPR will also present information related to financial data, procurements, risk assessments, classification, indicators, and lessons learnt, as well as the monitoring of results. This is to be done i) at the project outset to present the baseline information, along with the objectives expected to be reached by the end of the project; ii) at its mid-term point; and iii) when the project comes to an end, at which time the PPR will be the Final Report.

217. WFP will be responsible for the project oversight and will conduct a supervisory mission at least once a year. If WFP considers it necessary, this may be complemented with additional missions. The tasks of the supervisory mission will be established in an annual supervision plan. The plan will also determine other routine oversight tasks (fiduciary, compliance, and project implementation) and performance-related tasks that need strengthening.

218. **Mid-term review and final evaluation**. An external mid-term review will be carried out halfway through project implementation and will provide an overview of the state of project implementation, effectiveness of implementation arrangements, findings on preliminary results and recommendations for project modifications, if any. An independent final evaluation will be completed within nine months after project termination. The PMU will ensure both exercises are conducted with a gender lens.

219. Finally, a financial audit will be provided by WFP to the AF Secretariat six months after the end of the fiscal year in which the project ended.

E. The M&E plan and budget is shown in the table below.

Table 22. M&E Budget

M&E Activity	Person/s in Charge	Timeframe	Budget (USD)	Source
Inception workshops	Project Coordinator M&E expert	In the first two months after project approval	10,000	Activity 4.1.2.3
Automatised M&E system	Project Coordinator M&E expert	First year	75,000	Activity 4.1.2.4
Baseline	External Project Evaluator Project Coordinator M&E expert	First year	80,000	Activity 4.1.2.5
Mid-term Review	External Consultant Project Coordinator M&E expert	2.5 years after project inception (3 months after data collection)	50,000	MIE
Final External Evaluation	External Project Evaluator Project Coordinator M&E expert	End of project (within 9 months of project completion)	100,000	PEC
Progress Reports	Project Coordinator M&E expert	Quarterly	-	-
Annual Progress Report	Project Coordinator M&E expert Financial Admin. Expert	Annual	4,600	MIE
Project Performance Reports (PPR)	Project Coordinator M&E expert Financial Admin. Expert	Annual	4,600	MIE
Final Report	Project Coordinator M&E expert	End of project (6 months after end of project)	-	-
Audit	Auditors	End of project (within 6 after the end of the fiscal year in which the project ended)	40,000	PEC
Total			364,200	

F. Results Framework

Project Strategy	Project Objective Indicators	Baseline	Target	Means of verification	Assumptions
Objective: Reduce the climate vulnerability of smallholder farmers families and their agro ecosystems in the Nicaraguan Dry Corridor**.**	Climate Resilience Capacity Score at household level (disaggregated by gender of household head) [101]	TBD[102]	Decrease of 25% in the number of households with low baseline scores.	Baseline report and project impact evaluations.	High participation and involvement of protagonists
Component 1. Transfer of capacities to farming families leading to the implementation of resilient natural resource management practices and degraded landscape restoration in 14 municipalities in the Dry Corridor.					
Outcome 1.1. Farming families in 14 municipalities in the Dry Corridor develop capacities for planning and implementing practices that contribute to their food security and ecosystem services, with the participation and consultation of women and Indigenous Peoples.	Percentage of families applying adaptation practices to climate change [103]	TBD	75% of families trained implementing adaptation practices to climate change (7,245 families, 2,530 women-headed, 131 indigenous families, 1,449 youth, 36,224 indirect protagonists)	Semiannual and annual reports Mid-term review and final evaluation Reports and evaluation of the training program Attendee lists	High participation of protagonist families and effectiveness of knowledge Farming families facilitate the participation of women and young people. Institutions are involved in an articulated way in the development of project activities
Output 1.1.1. Capacity-building programme for SNPCC institutions and farming families is developed and implemented with the participation of women, youth and Indigenous Peoples.	Number of capacity transfer programs designed with a gender perspective Number of learning sites created and/or strengthened in the municipalities. Number of public staff trained (disaggregated by gender)[104] Number of men and women farmers trained to respond to climate change events (disaggregated by gender).	0 0 0 0	One capacity transfer program designed 28 learning sites operating during project implementation 70 public employees (35 women, 14 youth) trained 9,661 men and women farmers trained (3,373 women-headed, 175 indigenous families, 4,932 youth, 48,305 indirect protagonists)	Monitoring reports with gender-disaggregated data Agreement document signed by the holders Institutional supervision reports Activity evaluation reports. Lists of participants in events.	
Component 2. Restoration of forest landscape to enable the generation of ecosystem services.					
Outcome 2.1. Forest landscapes are preserved and restored for the generation of ecosystem services.	Area of forest landscape conserved and recovered under local governance (ha) [105]	0	9,238 ha conserved and recovered	Semiannual and annual reports	Adequate readiness of the protagonists in the restoration plans

[101] AF Results Framework Indicator: 6.1 Percentage of households and communities having more secure access to livelihood assets
[102] It is excpecte to be determined during year 1 after incepction phase of the project.
[103] AF Results Framework Indicator: 3.1 Percentage of targeted population aware of predicted adverse impacts of climate change, and of appropriate responses
[104] AF Results Framework Indicator: 2.1.1. No. of staff trained to respond to, and mitigate impacts of, climate-related events
[105] AF Results Framework Indicator: 5.1. Number and type of natural resource assets created, maintained, or improved to withstand conditions resulting from climate variability and change

Project Strategy	Project Objective Indicators	Baseline	Target	Means of verification	Assumptions
				INAFOR monitoring reports Mid-term review and final evaluation	and adequacy of the necessary resources The minimum climatic conditions for the implementation of the activity are adequate
Output 2.1.1. Farming families have adopted resilient natural resource management practices to restore the forest landscape and improving the flow of critical ecosystem services in drought periods, in 14 municipalities of the Dry Corridor.	Area of forest and/or woodland recovered through natural regeneration and preserved (ha) Number of community plant nurseries created and/or strengthened	0	4,712 ha conserved and 4,526 ha recovered 344 municipal and community plant nurseries created and/or strengthened	Progress reports Annual Report Photographic report	
Component 3. Rehabilitation of agricultural livelihoods at farm level, using climate- resiliente and environmentally-sustainable practices for landscape restoration.					
Outcome 3.1. The livelihood of farming families are rehabilitated and diversified through climate resilient systems and practices for landscape restoration.	Percentage of targeted farming households that have adopted climate-resilient and environmentally sustainable practices [106].	**TBD**	80% of targeted farming families (5,264 families, 1,959 women-headed families, 700 indigenous, 1,053 youth, 26,322 indirect protagonists) have adopted climate-resilient and environmentally sustainable practices	Baseline, mid-term review and final evaluation report	Seeds for new crops are available Farmers actively participate in agroecological practices Families promote the participation of women and young people Natural water sources can supply irrigation systems
Output 3.1.1. Farming families have established and improved practices in agroecology, water and landscape management, crop production and income generation	Number of families with productive models to rehabilitate livelihoods (disaggregated by gender)[107] Community seed banks established and operating Number of water harvesting systems and/or irrigation systems installed.	0	4,441 families (1,332 women-headed, 888 youth, 22,203 indirect protagonists) with productive models; 1,150 protagonists (575 women, 5,750 indirect protagonists) with plant nurseries and family garden. 64 seed banks with operating seed banks and availability of drought-tolerant basic grains seeds.	Follow-up and monitoring reports with data disaggregated by gender, ethnicity, and age range. Annual project report.	

[106] AF Results Framework Indicator: 6.2. Percentage of targeted population with sustained climate-resilient alternative livelihoods.

[107] Contributes to AF 6.1.1 Results Framework Indicator: No. and type of adaptation assets (physical as well as knowledge) created in support of individual or community livelihood strategies

Project Strategy	Project Objective Indicators	Baseline	Target	Means of verification	Assumptions
			14 water harvesting and/or irrigations systems installed.		
Output 3.1.2. The capacities of farming families to diversify and access markets using sustainable soil management practices, with the participation of women and Indigenous Peoples, are strengthened.	Number of organisations of farming families trained to add value to agricultural products (maize and beans).	0	14 organisations trained	Monitoring reports Annual project report	Good market opportunities for established crop products Farmers achieve good market negotiation skills
Component 4. Knowledge management including the capture and dissemination of knowledge and lessons from the project among assisted farming families to promote the sustainability of the project's impact on landscapes.					
Outcome 4.1. Adaptative and knowledge management approach applied during the implementation of project.	Percentage of communication products contained in management strategy, containing practices of adaptation to climate change promoted by the project that are published. [108] [109]	TBD	100% of information products disseminated and published	Semiannual and annual reports Mid-term review and final evaluation	Good participation and availability of the groups involved in the project for monitoring. Relevant information is obtained for decision making and adjustments over time.
Output 4.1.1. A knowledge management and communications strategy is developed and implemented with the participation of women and Indigenous Peoples.	Number of knowledge management and communication strategies developed and implemented with participation of women and Indigenous Peoples. Studies and/or systematisations for the management and dissemination of knowledge.	0	One knowledge management and communication strategies 6 studies and one sistematisation conducted	Knowledge strategy document Follow-up and monitoring reports Annual report	
Output 4.1.2. Institutional capacities are strengthened to foster project monitoring and sustainability of the project's impact with a focus on gender, youth and Indigenous Peoples.	Number of institutional staff trained in M&E topics[110] (disaggregated by gender) Number of M&E system with a gender, IP and youth perspective, established and/or strengthened in the project's lead institution.	0	70 personnel trained (35% women, 14 youth) One M&E system developed and operational	Monitoring reports with gender-disaggregated data Institutional supervision reports Lists of participants in events.	

[108] Massive dissemination of adaptation measures in mass media such as radio, television, graphic and audiovisual products, web pages, etc.
[109] AF Results Framework Indicator: 3.1.2. No. of news outlets in the local press and media that have covered the topic
[110] Contributes to AF Results Framework Indicator: 2.1.1. No. of staff trained to respond to, and mitigate impacts of, climate-related events

G. Alignment with Adaptation Fund Result Framework

Project Outcome(s)	Project Outcome Indicator(s)	Fund Outcome	Fund Outcome Indicator	Grant fund
Objective: Reduce the climate vulnerability of smallholder farmers families and their agro-ecosystems in the Nicaraguan Dry Corridor.	Climate Resilience Capacity Score at household level (disaggregated by gender of household head).	**Fund Outcome 6**. Diversified and strengthened livelihoods and sources of income for vulnerable people in targeted areas	6.1 Percentage of households and communities having more secure access to livelihood assets	
Outcome 1.1 Farming families in 14 municipalities in the Dry Corridor develop capacities for planning and implementing practices that contribute to their food security and ecosystem services, with the participation and consultation of women and Indigenous Peoples.	Percentage of protagonist families applying adaptation practices to climate change	**Fund Outcome 3.** Strengthened awareness and ownership of adaptation and climate risk reduction processes at local level	3.1. Percentage of targeted population aware of predicted adverse impacts of climate change, and of appropriate responses.	USD 959,887
Outcome 2.1. Forest landscapes are preserved and restored for the generation of ecosystem services.	Amount of area of forest landscape conserved and recovered under local governance	**Fund Outcome 5**. Increased ecosystem resilience in response to climate change and variability-induced stress	5.1. Number and type of natural resource assets created, maintained, or improved to withstand conditions resulting from climate variability and change	USD 2,005,955
Outcome 3.1. The livelihood of farming families are rehabilitated and diversified through climate resilient systems and practices for landscape restoration.	Percentage of targeted farming households that have adopted climate-resilient and environmentally sustainable practices.	**Fund Outcome 6**. Diversified and strengthened livelihoods and sources of income for vulnerable people in targeted areas.	6.2. Percentage of targeted population with sustained climate-resilient livelihoods	USD 5,066,758
Outcome 4.1 Adaptative and knowledge management approach applied during the implementation of project.	Percentage of communication products contained in management strategy, containing practices of adaptation to climate change promoted by the project that are published.	**Fund Outcome 3**. Strengthened awareness and ownership of adaptation and climate risk reduction processes at local level.	3.1.2. No. of news outlets in the local press and media that have covered the topic	USD 504,000
Output 1.1.1 Capacity-building programme for SNPCC institutions and farming families is developed and implemented with the participation of women, youth and Indigenous Peoples.	• Number of capacity transfer programs designed with a gender perspective • Number of learning sites created and/or strengthened in the municipalities.	***Output 2.1***: Strengthened capacity of national and regional centres and networks to respond rapidly to extreme weather events	2.1.1. No. of staff trained to respond to, and mitigate impacts of, climate-related events	USD 959,887

Project Outcome(s)	Project Outcome Indicator(s)	Fund Outcome	Fund Outcome Indicator	Grant fund
	• Number of public staff trained (disaggregated by gender)[111]. Number of men and women farmers trained to respond to climate change events (disaggregated by gender).			
Output 2.1.1 Farming families have adopted resilient natural resource management practices to restore the forest landscape and improving the flow of critical ecosystem services in drought periods, in 14 municipalities of the Dry Corridor.	• Amount of area of forest and/or woodland recovered through natural regeneration and preserved • Number of community plant nurseries created and/or strengthened	***Output 5.1:*** Vulnerable physical, natural, and social assets strengthened in response to climate change impacts, including variability.	5.1.1. Ecosystem services and natural assets maintained or improved under climate change and variability-induced stress.	USD 2,005,955
Output 3.1.1 Farming families have established and improved practices in agroecology, water and landscape management, crop production and income generation	• Number of families with productive models to rehabilitate livelihoods (disaggregated by gender) • Community seed banks established and operating • Number of water harvesting systems and/or irrigation systems installed.	***Output 6:*** Targeted individual and community livelihood strategies strengthened in relation to climate change impacts, including variability	6.1.1. Number and type of adaptation assets (physical as well as knowledge) created in support of individual or community livelihood strategies	USD 4,867,121
Output 3.1.2 The capacities of farming families to diversify and access markets using sustainable soil management practices, with the participation of women and Indigenous Peoplespopulations, are strengthened.	Number of organisations of protagonist families trained to add value to agricultural products (maize and beans).			USD 199,637
Output 4.1.1 A knowledge management and communications strategy is developed and implemented with the participation of women and Indigenous populationsPeoples.	• Number of knowledge management and communication strategies developed and implemented with participation of women and Indigenous Peoples. • Studies and/or systematizations for the management and dissemination of knowledge.			USD 284,000
Output 4.1.2 Institutional capacities are strengthened to foster project monitoring and sustainability of the project's impact with a focus on gender, youth and Indigenous Peoplespopulations	• Number of institutional personnel trained in M&E topics (disaggregated by gender) • M&E system with a gender, IP and youth perspective, established and/or strengthened in the project's lead institution.	***Output 2.1***: Strengthened capacity of national and regional centres and networks to respond rapidly to extreme weather events	2.1.1. No. of staff trained to respond to, and mitigate impacts of, climate-related events	USD 220,000

[111] AF Results Framework Indicator: 3.1.1 No. and type of risk reduction actions or strategies introduced at local level

H. Budget

Description	Activity	Measurement Unit	Unitary Cost USD	Financial Execution					Total Budget USD
				Year 1	Year 2	Year 3	Year 4	Year 5	
Component 1. Transfer of capacities to farming families leading to the implementation of resilient natural resource management practices and degraded landscape restoration in 14 municipalities in the Dry Corridor									
Outcome 1.1. Farming families in 14 municipalities in the Dry Corridor develop capacities for planning and implementing practices that contribute to their food security and ecosystem services, with the participation and consultation of women and indigenous peoples									
Output 1.1.1. Capacity-building programme for SNPCC institutions and farming families is developed and implemented with the participation of women, youth and indigenous peoples	1.1.1.1: Design of the programme for capacity transfer to farming families and SNPCC technicians on subjects defined in the territorial consultation, with emphasis on aspects related to gender, generational and indigenous people.	Number of Consultants	10,000	10,000	-	-	-	-	**10,000**
	1.1.1.2:Capacity assessment and enhancement plan of existing learning spaces in project territory (FIIT, BCS, UDS, UPAs, Telecentros)	Number of Capacity Building Plans	8	75,000	-	-	-	-	**75,000**
	1.1.1.3: Agreement with INATEC, MINIM and the university (or universities) to define coordination mechanisms, assistance for project implementation, and capacity-strengthening activities	Number of Signed Aggrements	385	385	-	-	-	-	**385**
	1.1.1.4: External specialised consultancy on indigenous safeguards.	Number of Consultants	2,000	-	16,000	-	-	-	**16,000**
	1.1.1.5: Design and reproduction of learning materials (written, audiovisual and virtual) for farming families, incorporating a gender approach and cultural adequacy for indigenous populations.	Number of Plans Designed and Broadcasted	40,000	40,000	40,000	40,000	40,000	40,000	**200,000**
	1.1.1.6: Training events for institutional staff in the territories and municipalities.	Number of Workshops	1,920	5,760	5,760	5,760	5,760	5,760	**28,798**
	1.1.1.7: Training events to build capacities among target beneficiaries on climate solutions that are culturally appropriate for the indigenous peoples of Sebaco and Telpaneca (includes workshops, exchange tours between producers, demonstrative land plot exhibitions, among others)	Number of Training Workshops	1,500	36,000	36,000	54,000	72,000	18,000	**216,000**
	1.1.1.8: Training events for women and men on the subjects included in the gender action plan.	Number of Training Workshops	1,063	25,512	25,512	38,268	38,268	12,756	**140,316**
	1.1.1.9:Capacity-strengthening for institutions and stakeholders on indigenous population's rights, cultural heritage, and the dissemination of ancestral knowledge on sustainable agriculture.	Number of Plans and Broadcasting Strategies Designed	2,898	8,694	8,694	-	-	-	**17,388**
	1.1.1.10: Training on the development and management of ICT to disseminate learning contents, climate information and on product commercialisation	Number of Training Workshops	2,000	8,000	-	8,000	-	-	**16,000**
	1.1.1.11: Innovation and capacity strengthening for entrepreneurs to encourage agricultural product transformation, packaging, and commercialisation.	Number of Training Workshops	5,000	-	50,000	50,000	50,000	-	**150,000**
	1.1.1.12: Capacity Building and Knowledge Generation Specialist	Number of Consultants	18,000	18,000	18,000	18,000	18,000	18,000	**90,000**
Subtotal				**27,351**	**199,966**	**214,028**	**224,028**	**94,516**	**959,887**
Total Component 1 Budget				**227,351**	**199,966**	**214,028**	**224,028**	**94,516**	**959,887**
Component 2. Forest landscapes are preserved and restored for the generation of ecosystem services.									
Outcome 2.1. Farming families have adopted resilient natural resource management practices to restore the forest landscape and improving the flow of critical ecosystem services in drought periods, in 14 municipalities of the Dry Corridor.									
Output 2.1.1. Forest landscape conserved and restored for the improvement of ecosystem services	2.1.1.1: Participatory planning (with a special focus on gender, youth and indigenous peoples) of actions at landscape level to map forest restoration areas on the banks of water sources.	Number of Trainings and Workshops	3,000	18,000	18,000	9,000	9,000	9,000	**63,000**
	2.1.1.2: Creation of plant nurseries to provide the plants needed for the restoration of degraded land	Number of community gardes	800	275,181					**275,181**
	2.1.1.3: Mapping of areas for forest restoration, water recharge zones and biological corridors.	Number of beneficiaries	10	16,550	16,550	-	-	-	**33,100**
	2.1.1.4: Analysis for the prioritisation of intervention areas, using the GIS system and the selection of farming families to be assisted under the project	Number of Consultants	10,000	60,000					**60,000**
	2.1.1.5: Cash incentives for the restoration of degraded land	Number of hectares of land	100	-	-	226,300	-	226,300	**452,600**
	2.1.1.6: Cash incentives for land conservation in opened forestry	Number of hectares of land	100	-	235,600	-	-	235,600	**471,200**
	2.1.1.7: Cash incentives Transfer Costs	Number of beneficiaries	5	-	7,853	7,543	-	15,397	**30,793**
	2.1.1.8: Technical assistance, monitoring and follow-up of farmers.	Number of hectares of land	11	97,016	97,016	97,016	97,016	97,016	**485,081**
	2.1.1.9: Forestry Restoration and Resource Management Specialist	Number of Consultants	18,000	18,000	18,000	18,000	18,000	18,000	**90,000**
	2.1.1.10: Equiptment, tools and supplies	Number of vehicles	45,000	45,000	-	-	-	-	**45,000**
Subtotal				**529,747**	**393,020**	**357,860**	**124,016**	**601,313**	**2,005,955**
Total Component 2 Budget				**529,747**	**393,020**	**357,860**	**124,016**	**601,313**	**2,005,955**
Component 3. The livelihood of farming families is rehabilitated and diversified through climate resilient systems and practices for landscape restoration.									
Outcome 3.1. Farming families have established and improved crops, silvopastoral and agroforestry systems combined with agroecological practices and of sustainable soil and water management practices for landscape restoration and income generation									
Output 3.1.1. Farming families have established and improved practices in agroecology, water and landscape management, crop production and income generation	3.1.1.1: In-kind incentives for families to improve their agroforestry systems for the development of resilient production systems, including indigenous peoples.	Number of hectares of land	434	382,367	637,278	254,911			**1,274,556**
	3.1.1.2: In-kind incentives for families to improve their silvopastoral systems for the development of resilient production systems, including indigenous peoples.	Number of hectares of land	505	512,858	854,764	341,905			**1,709,527**
	3.1.1.3: In-kind incentives for families to improve their mixed productive systems (silvopastoril and agroforestry) for the development of resilient production systems, including indigenous peoples .	Number of hectares of land	770	260,202	433,670	173,468	-	-	**867,340**

	3.1.1.4:In-kind incentives to strengthen/establish community seed banks for the targeted crops, with a focus on community resilience and food security (promoting participation of women through quotas).	Number of community seed banks	64	136,704					**136,704**
	3.1.1.5: Facilitate the establishment of gardens and nurseries to promote food security, with a gender perspective.	Number of vegetable nurseries and gardens	470		132,692	132,692			**265,385**
	3.1.1.6: Selection and implementation of low-cost and proven effective water harvesting technologies for agricultural use during the dry season (summer).	Number of water reservoirs	2,200	15,400	15,400				**30,800**
	3.1.1.7: Technical assistance, monitoring and follow-up of farmers.	Number of hectares of land	11	98,562	98,562	98,562	98,562	98,562	**492,809**
	3.1.1.8: Livelohoods Specialist	Number of Consultants	18,000	18,000	18,000	18,000	18,000	18,000	**90,000**
Subtotal				**1,424,093**	**2,190,366**	**1,019,539**	**116,562**	**116,562**	**4,867,121**
Output 3.1.2. The capacities of farming families to diversify and access markets using sustainable soil management practices, with the participation of women and indigenous populations, are strengthened.	3.1.2.1: Supporting 14 farmers' organisations in initiatives to add value to agricultural products, with an emphasis on the needs identified by women.	Number of cooperatives/local organizations	7,800	-	109,200	-	-	-	**109,200**
	3.1.2.2: Strengthening the capacities and market access of the selected farmers' organisations and promote linkages and partnerships to support the commercialisation of products generated by project activities, with emphasis on women and indigenous populations	Number of initiatives		-	90,437	-	-	-	**90,437**
Subtotal				**-**	**199,637**				**199,637**
Total Component 3 Budget				**1,424,093**	**2,390,003**	**1,019,539**	**116,562**	**116,562**	**5,066,758**
Component 4. Knowledge management including the capture and dissemination of knowledge and lessons from the project among assisted farming families to promote the sustainability of the project's impact on landscapes									
Outcome 4.1. Adaptative and knowledge management approach applied during the implementation of project									
Output 4.1.1. A knowledge management and communications strategy is developed and implemented with the participation of women and indigenous populations.	4.1.1.1: Design of a knowledge and communications management strategy for development, with the participation of women and indigenous populations.	Number of Consultants	15,000	15,000					**15,000**
	4.1.1.2: Systematisation of project outcomes and lessons, including women's experiences and roles in the climate change adaptation processes	Number of Consultants	20,000		5,000	5,000	25,000	5,000	**40,000**
	4.1.1.3: Selection and design of means/tools to share and disseminate knowledge, highlighting those that have proven most effective	Number of Consultants	25,000		50,000				**50,000**
	4.1.1.4: Design of the project's graphic identity (graphic line and colour line), dissemination materials, and promotional items.	Number of Consultants	15,000	15,000					**15,000**
	4.1.1.5: Support the dissemination of information through communication channels used by indigenous peoples	Number of meetings and materials made	6,000	6,000	6,000	6,000	6,000	6,000	**30,000**
	4.1.1.6: Design of short documentaries about women farmers' successful experiences in sustainable agricultural production.	Number of documentaries	3,000		3,000	3,000	3,000		**9,000**
	4.1.1.7: Research to innovate value chains.	Number of Consultants, materials and tools	20,000	20,000	20,000	20,000	20,000	20,000	**100,000**
	4.1.1.8: Strategy to identify actions, possible practices, production alternatives etc. for women in the Dry Corridor.	Number of Consultants	25,000	25,000					**25,000**
Sub-total				**81,000**	**84,000**	**34,000**	**54,000**	**31,000**	**284,000**
Output 4.1.2. Institutional capacities are strengthened to foster project monitoring and sustainability of the project's impact with a focus on gender, youth and indigenous populations	4.1.2.1: Strengthen institutional capacities on monitoring systems and information technologies.	Number of Consultants	35,000	35,000					**35,000**
	4.1.2.2: Strengthen coordination among institutions and traditional indigenous authorities for planning of field activities.	Number of Meetings	1,000	4,000	6,000	4,000	3,000	3,000	**20,000**
	4.1.2.3: Inception workshop: one national and one territorial.	Number of Workshops	5,000	10,000					**10,000**
	4.1.2.4: Establish automated project monitoring and tracking system.	Number of Monitoring Systems	75,000	75,000					**75,000**
	4.1.2.5: Baseline assessment.	Number of Consultants	80,000		80,000				**80,000**
Subtotal				**124,000**	**86,000**	**4,000**	**3,000**	**3,000**	**220,000**
Total Component 4 Budget				**205,000**	**170,000**	**38,000**	**57,000**	**34,000**	**504,000**
Total Project Budget				**2,386,190**	**3,152,988**	**1,629,426**	**521,606**	**846,390**	**8,536,600**

Project Execution Costs

Description	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Staff Costs						
Project Coordinator	24,000	24,000	24,000	24,000	24,000	**120,000**
Financial Specialist	13,200	13,200	13,200	13,200	13,200	**66,000**
M&E Specialist	18,000	18,000	18,000	18,000	18,000	**90,000**
Staff Costs Subtotal						**276,000**
Reporting						
Final Evaluation Consultancy (External)	0	0	0	0	100,000	**100,000**
Financial Audit (Final)	0	0	0	0	40,000	**40,000**
Reporting Subtotal						**140,000**
Monitoring and Evaluation						

Monitoring and Evaluation Missions	32,869	37,603	43,017	49,212	56,298	**219,000**
Monitoring ad Evaluation Subtotal						**219,000**
Materials and Equiptment						
Computers	9,000	0	0	0	0	**9,000**
Copiers	12,600	0	0	0	0	**12,600**
Office Supplies	4,680	4,680	4,680	4,680	4,680	**23,400**
Materials and Equiptment Subtotal						**45,000**
PEC Total (Execution Costs)						**680,000**
Project Total Costs						**8,536,600**
MIE Fee						**783,400**
Total						**10,000,000**

MIE Breakdown

Description	Measurement Unit	Unitary Cost	Project Execution Years					Total (USD)	Notes
			Year 1	Year 2	Year 3	Year 4	Year 5		
Monitoring and Evaluation									
Mid-term Review Consultancy	Report	50,000	-	-	50,000	-	-	50,000	External Consultancy
Staffing Costs									
Staff Costs for Project Coordination and Oversight	Staff costs	1,971	23,649	24,122	24,605	25,097	25,599	123,071	CO staff time costs. This is to cover for staff time dedicated to project development, monitoring and supervision
Subtotal			**23,649**	**24,122**	**74,605**	**25,097**	**25,599**	**173,071**	
Indirect Support Costs									
Programme and Performance Management Support and Supervision, including ESS monitoring									
Evaluation and Knowledge Management Advice								610,329	Services covered by the ISC include finance and budget support and supervision, programme and performance management supervision, information and telecommunications support, and monitoring and evaluation activities described on this project M&E Budget.
Finance & Budget Support									
M&E Advice and Support									
Legal Support									
Audit and Inspection Support									
Project Completion Summary Report									
Total MIE			**47,298**	**48,244**	**149,209**	**50,193**	**51,197**	**783,400**	

Budget Observations

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Description	Activity	Observations	Beneficiaries
Component 1. Transfer of capacities to farming families leading to the implementation of resilient natural resource management practices and degraded landscape restoration in 14 municipalities in the Dry Corridor			
Outcome 1.1. Farming families in 14 municipalities in the Dry Corridor develop capacities for planning and implementing practices that contribute to their food security and ecosystem services, with the participation and consultation of women and indigenous peoples			
Output 1.1.1. Capacity-building programme for SNPCC institutions and farming families is developed and implemented with the participation of women, youth and indigenous peoples	1.1.1.1: Design of the programme for capacity transfer to farming families and SNPCC technicians on subjects defined in the territorial consultation, with emphasis on aspects related to gender, generational and indigenous people.	The programme will be designed using inputs already provided through the preliminary consultations; then, the plan will be validated at the municipal level through territorial consultation workshops. This process will be carried out after the selection of the project´s intervention communities. The budget planned under this activity include the following costs: travel costs for participants and facilitators for the consultations, materials needed, food that will be provided in the events, events facilities rent, among others.	9,730
	1.1.1.2: Capacity assessment and enhancement plan of existing learning spaces in project territory (FIIT, BCS, UDS, UPAs, Telecentros)	The budget planned for this activity include: 1. External consultancy to lead and develop a capacity assessment of current learning facilities (Capacity Development Units/CDU) on the intervention communities. This includes an assessment of new equiptment needed in each community (for example, printers, computers, chairs, etc). 2. Budget required by the Minisitry of Women (USD 5k aprox) to conduct a diagnosis, in coordination with the consultants, to identify the specific needs of women to participate in the training and capacity building activities planned for the life of the project. 3. Some CDUs already have basic equipment; therefore, the budget here is only to finish the equiping process, which is proyected to not be expensive. After the assesment, it might also be necessary to create and equip new CDUs.	9,730
	1.1.1.3: Agreement with INATEC, MINIM and the university (or universities) to define coordination mechanisms, assistance for project implementation, and capacity-strengthening activities	The budget here is for the refreshments, travel costs and materials required at the moment of elaborating and signing the agreements between the institutions.	9,730

	1.1.1.4: External specialised consultancy on indigenous safeguards.	Budget for local consultant hired in year 2, for a total of 8 months, with a total salary of USD 2K per month (local market prices). This person´s hiring is part of Activity 3 of the Indigenous Peoples Action Plan-IPAP. Its major functions are: 1. An assessment to identify the learning needs of the institutions participating in the implementation of the project to include the Indigenous Peoples' rights, socioeconomic situations, worldviews, vulnerabilities to food insecurity and climate variability, among others. 2. Based on the assessment, prepare a capacity strengthening plan for the key implementing partners, particularly MARENA. This includes trainings on Indigenous regulatory and legislative frameworks, rights, Indigenous knowledge systems and practices as well as Indigenous identity and cultural diversity. Lastly, this will also include trainings on how information is communicated and participatory processes and methodologies. 3. Share methodologies, content, and reference material to enable those who received training to further share this with other members of their technical teams. 4. Support the Capacity Building and Knowledge Generation Specialist (Components 1 y 4) in the preparation of content, products, materials for training and knowledge sharing. 5. In consultation with the Indigenous communities, design and implement a plan to strengthen their organizational structures to help them liaise and become communication channels between the project and the participant Indigenous families. 6. Ensure that the PMU has a plan to implement the Indigenous Peoples Action Plan and that the implementation of all activities under the four components of the project is designed in a manner that a) respects and recognizes the needs, priorities, experiences, preferences, and rights of the Indigenous communities; and b) ensures their participation throughout the project cycle and in accordance with the principle of FPIC.	175
	1.1.1.5: Design and reproduction of learning materials (written, audiovisual and virtual) for farming families, incorporating a gender approach and cultural adequacy for indigenous populations.	The budget planned here includes the reproduction of at least 600 copies of each gender primer already designed in coordination with MINIM (1,800 copies). These would be distributed to the participants. There is also budget planned for the reproduction of 22 additional illustrative primers that will respond to the institutional need to have these specific primers related to specific activities in each municipality and component. The budget for this printed material is an estimate, and if funds are enough, audiovisual material can also be made. Lastly, it is imortant to note that: 1. Activity 6 of the Gender Action Plan (GAP) is included here. 2. Funds needed for Activity 2 of the IPAP is also planned here.	9,730
	1.1.1.6: Training events for institutional staff in the territories and municipalities.	Budget planned here includes the materials, event planning and development and travel costs associated with the training events for the 70 technicians and monitors that will be doing direct implementation of the project. The trainings will be developed in a joint and coordinated manner between institutions, considering the issues mentioned in the territorial consultations previously made. Also, budget for activities 1 and 2 of the GAP has been included here.	70
	1.1.1.7: Training events to build capacities among target beneficiaries on climate solutions that are culturally appropriate for the indigenous peoples of Sebaco and Telpaneca (includes workshops, exchange tours between producers, demonstrative land plot exhibitions, among others)	The number of workshops is arranged in the following way: a. Year 1 and 2: Two workshops are held in each municipality b. Year 3: Three workshops in each municipality c. Year 4: Four workshops in each municipality d. Year 5: One workshop per municipality The budget includes travel costs, materials and planning for the workshops. These will be focused on production issues, with a gender focus (MINIM will provide support), especially on issues of women leadership, asset control and economic empowerment. Also, the budget includes expenses related to exchange tours between producers (travel and accomodation costs+food), demonstrative land plot exhibitions (travel and accomodation costs+food). Lastly, activities 3 and 4 of the GAP and activity 1 of the IPAP are included here.	9,730
	1.1.1.8: Training events for women and men on the subjects included in the gender action plan.	The number of workshops is arranged in the following way: a. Year 1 and 2: Two workshops are held in each municipality b. Year 3: Three workshops in each municipality c. Year 4: Four workshops in each municipality d. Year 5: One workshop per municipality The budget here includes materials, event planning expenses, travel and accomodations costs,a mong others for trainings where beneficiaries will learn about the governmental approach to climate adaptation and gender policies. For these trainings, primers will be printed out, and the content of each primer will be explained.	9,730
	1.1.1.9: Capacity-strengthening for institutions and stakeholders on indigenous population's rights, cultural heritage, and the dissemination of ancestral knowledge on sustainable agriculture.	The budget here includes materials, event planning expenses, travel and accomodations costs, among others, needed by the Indigenous Affairs Consultant. He/she will create a training plan that is focused on learning more about practices used by the indigenous peoples to help in the design of a culturally appropriate intervention in their territories.	175
	1.1.1.10: Training on the development and management of ICT to disseminate learning contents, climate information and on product commercialisation	The budget here is to cover the materials, event planning expenses, travel and accomodations costs, among others, for the trainings in relevant ICTs. These trainings will be received by technicians and monitors, in charge of direct implementation on the ground, at the beggining of the project and in year 3.	70
	1.1.1.11: Innovation and capacity strengthening for entrepreneurs to encourage agricultural product transformation, packaging, and commercialisation.	The budget here is to pay for materials, event planning expenses, travel and accomodations costs, among others, for the trainings and workshops on specific product diversification and value chains topics. The trainings will be especially focused on the diversification of beans, expecially with the cooperatives assisted through Activity 3.1.2.1. This is a key part of the analysis done to design component 3 of this project. As explained These trainings will be done in coordination with the Ministry of Cooperative, Associative Communal Economy (MEFCCA).	600

	1.1.1.12: Capacity Building and Knowledge Generation Specialist	A local consultant will be hired. The budget here is to cover his/her salary for 5 years, at a rate of USD 1.5K per month. This specialist will serve as the manager for Component 1 and 4 of the project, and its major duties are: 1) In coordination with the project manager, coordinate the process to sign agreement with INATEC, MINIM and the university (or universities) to define coordination mechanisms, assistance for project implementation, and capacity-strengthening activities. 2) Design and help implement a knowledge management and communication strategy for development, with participation of women and Indigenous Peoplespopulations. This will include dissemination channels and formats, considering the preferences indicated during the consultations. 3) Identify and propose knowledge sharing strategies and tools. 4) In coordination with the relevant national institutions, assess the capacities of the learning sites available in the territories where the project will be implemented (FIIT, BCS, UDC, UPAs, Telecentres). 5) In coordination with the other specialists and national institutions, prepare a training and capacity strengthening plan for the different audiences and planned activities under targeted by the component, with emphasis on aspects related to gender, generational and intercultural aspects. This will focus on the topics defined in the territorial consultations with emphasis on aspects related to gender, generational inclusion and Indigenous Ppeoples and will consider adequate methodologies, adapted to the needs and realities of the different population groupss that will be participating. The plan will include training events on the topics identified in the Gender Plan, development and management of ICT, innovation for entrepreneurs, Indigenous Peoples' rights and cultural heritage, amongst others. The plan will include the contents, requirements and roll out strategy. 6) In coordination with the other specialists, particularly the Indigenous Populationseoples Specialist, and the Project Manager, propose products, content, and learning materials for the different audiences, with special lens on the needs, experiences, priorities, and preferences of women, Indigenous peoples, and youth (including addressing the intersectionality of these identities) (printed, audiovisual, and digital material). 7) Prepare a plan for the systematization of lessons learned of the interventions with famers, women, youth, and Indigenous Peoples, including innovations, successes, failures, stories, practices, etc. 8) Design of the project's graphic identity, dissemination materials, and promotional items.	9,730
Component 2. Forest landscapes are preserved and restored for the generation of ecosystem services.			
Outcome 2.1. Farming families have adopted resilient natural resource management practices to restore the forest landscape and improving the flow of critical ecosystem services in drought periods, in 14 municipalities of the Dry Corridor.			
Output 2.1.1. Forest landscape conserved and restored for the improvement of ecosystem services	2.1.1.1: Participatory planning (with a special focus on gender, youth and indigenous peoples) of actions at landscape level to map forest restoration areas on the banks of water sources.	Each workshop is being budgeted at USD 3k each. There will be 6 workshops in year 1 and 6 in year 2; 3 workshops are budgeted for the subsequent years. For the workshops, the budget planned is for the materials, event planning expenses, travel and accomodations costs, among others. Furthermore, activities 7 and 8 of the GAP are being budgeted here.	9.661
	2.1.1.2: Creation of plant nurseries to provide the plants needed for the restoration of degraded land	Each plant nursery is budgeted a USD 800 and is expected to produce 5 thousand plants. These costs were shared by MARENA and include the seed needed to harvest the plants, the bags, nursery care and maintanance costs and the travel expense to locate the plants where the farms are.	9.661
	2.1.1.3: Mapping of areas for forest restoration, water recharge zones and biological corridors.	Local consultant hired to do the mapping using the GIS system during year 1 and 2 of the project; the budget covers the consultant´s salary for 6 months each year, at a rate of USD 2k per month. It also includes the costs associated with traveling to these areas.	9.661
	2.1.1.4: Analysis for the prioritisation of intervention areas, using the GIS system and the selection of farming families to be assisted under the project	GIS software and local consultant expenses to develop geographical information and maps relevant to the intervention communities. This information is key to identify the protagonists; it is expected to have protagonists selected in the first 6 months of the Project.	9.661
	2.1.1.5: Cash incentives for the restoration of degraded land	A monetary incentive in the amount of USD 100 per hectare will be given. This will be provided for the restoration of degraded land in year 3. The needed plants will be provided to producers. Here,175 incentives will be given to indegenous protagonists (Activity 4 of the IPAP).	1,509
	2.1.1.6: Cash incentives for land conservation in opened forestry	A monetary incentive in the amount of USD 100 per hectare will be given. This will be provided for the conservation of opended forestry in year 2 and 5 (USD 50 in year 2 and USD 50 in year 5). This incestive mechanism follows the logic of performance-based incentives.	1,571
	2.1.1.7: Cash incentives Transfer Costs	USD 5 for each transfer is budgeted to cover the incentives transfer costs.	3,079
	2.1.1.8: Technical assistance, monitoring and follow-up of farmers.	Close assistance will be provided to the 3,079 protagonists of this component; weekly visits are planned to each of the farming families, for the duration of the project. Besides the visits, forest management plans will be provided to each of these farming families.	3,079
	2.1.1.9: Forestry Restoration and Resource Management Specialist	A local consultant will be hired. This specialist will serve as the manager for Component 2 of the project. Its major functions are: 1) Support the project manager in the development and implementation of the participatory planning process with a special focus on women, youth, and Indigenous populations Peoples that will take place at the beginning of the project. This process will serve to determine the actions that will be implemented at landscape level and to map forest reforestation areas that will be included. 2) In coordination with the GIS experts, support the project manager in the mapping and prioritization of areas of forest restoration, water recharge, and biological corridors, clearly defining the implementation areas of the project and portagonists. The technical criteria described in the project document will be used as guidance for these processes. 3) Prepare conservation and forest restoration plans for each landscape, developed together with technical teams and farmers. 4) Prepare a landscape restoration plan in critical "upstream" areas of high social importance and vulnerability, such as water sources, rivers, recharge areas, among others, developed jointly with the technical teams and farmers. 5) Develop plans for forest conservation and regeneration for the areas of intervention where there are Indigenous people, in consultation with them. 6) Determine the action plan and oversee the implementation and roll out of the incentives (cash) for restoration and conservation. 7) Prepare a training plan and didactive material created for forest landscape restoration (FLR) and assisted natural regeneration (ANR) in dry and degraded landscaped for both technical staff and farmers. 8) Support the preparation of monitoring plans (together with the M&E Specialist) for each farmer/community implementing conservation or natural forest regeneration, allowing for timely adjustments.	3,079
	2.1.1.10: Equiptment, tools and supplies	The budget is for the purchase of a vehicle needed to transport equiptment, tools, supplies, plants, monitoring and technical experts who will provide technical assitance, among other activities.	3,079
Component 3. The livelihood of farming families are rehabilitated and diversified through climate resilient systems and practices for landscape restoration.			
Outcome 3.1. Farming families have established and improved crops, silvopastoral and agroforestry systems combined with agroecological practices and of sustainable soil and water management practices for landscape restoration and income generation			

Output 3.1.1. Farming families have established and improved practices in agroecology, water and landscape management, crop production and income generation	3.1.1.1: In-kind incentives for families to improve their agroforestry systems for the development of resilient production systems, including indigenous peoples.	A kit of supplies and tools will be given to protagonists. The kit includes fence wire, vegetation material and diverse farming supplies. Also, 30% of the total amount required to provide the kits to all protagonists are budgeted in year 1; this is important to guarantee that the inputs and tools that will be delivered to the producers in year 2 are purchased and delivered before the beggining of the productive cycle in Nicaragua (May of every year). Purchasing processes in the country can take between 8 to 10 weeks, approximately. In year 2, 50% of the total budget required is budgeted, and in year 3 only the remaining 20%. This budgeting schedule tries to ensure that the funds are available to start the procuring processes with enough time to guarantee the supplies and tools needed before the production cycle starts. In terms of beneficiaries, 50% of the total number of beneficiaries will be served in year 2 and 50% in year 3.	1,470
	3.1.1.2: In-kind incentives for families to improve their silvopastoral systems for the development of resilient production systems, including indigenous peoples.	A kit of supplies and tools will be given to beneficiaries. The kit includes fence wire, vegetation material and diverse farming supplies. Also, 30% of the total amount required to provide the kits to all beneficiaries is budgeted in year 1; this is important to guarantee that the inputs and tools that will be delivered to the producers in year 2 are purchased and delivered before the beggining of the productive cycle in Nicaragua (May of every year). Purchasing processes in the country can take between 8 to 10 weeks, approximately. In year 2, 50% of the total budget required is budgeted, and in year 3 only the remaining 20%. This budgeting schedule tries to ensure that the funds are available to start the procuring processes with enough time to guarantee the supplies and tools needed, before the production cycle starts. In terms of beneficiaries, 50% of the total number of beneficiaries will be served in year 2 and 50% in year 3.	1,971
	3.1.1.3: In-kind incentives for families to improve their mixed productive systems (silvopastoril and agroforestry) for the development of resilient production systems, including indigenous peoples.	A kit of supplies and tools will be given to beneficiaries. The kit includes fence wire, vegetation material and diverse farming supplies. Also, 30% of the total amount required to provide the kits to all beneficiaries is budgeted in year 1; this is important to guarantee that the inputs and tools that will be delivered to the producers in year 2 are purchased and delivered before the beggining of the productive cycle in Nicaragua (May of every year). Purchasing processes in the country can take between 8 to 10 weeks, approximately. In year 2, 50% of the total budget required is budgeted, and in year 3 only the remaining 20%. This budgeting schedule tries to ensure that the funds are available to start the procuring processes with enough time to guarantee the supplies and tools needed before the production cycle starts. In terms of beneficiaries, 50% of the total number of beneficiaries will be served in year 2 and 50% in year 3.	1,000
	3.1.1.4: In-kind incentives to strengthen/establish community seed banks for the targeted crops, with a focus on community resilience and food security (promoting participation of women through quotas).	There is budget to construct 64 seed banks that will benifit 10 beneficiaries per bank. Seed and storage silos are included in the budget. Budget for activity 11 of the GAP is planned here. Additionally, budget for activity 5 of the IPAP is budgeted here.	640
	3.1.1.5: Facilitate the establishment of gardens and nurseries to promote food security, with a gender perspective.	The incentives are delivered in the form of inputs, tools, and materials. The individual cost of each home garden is USD 564; half of the beneficiaries will be assisted in year 2 and half in year 3. Budget for activity 12 of the GAP and activity 6 of the IPAP are planned here.	1,150
	3.1.1.6: Selection and implementation of low-cost and proven effective water harvesting technologies for agricultural use during the dry season (summer).	14 water harvesting reservoirs are going to be made. The budget planned here includes all the materials needed to install and mantain the reservoirs. Budget for activity 7 of the IPAP is planned here.	6,581
	3.1.1.7: Technical assistance, monitoring and follow-up of farmers.	Close assistance will be provided to the 6,581 beneficiaries of this component; weekly visits are planned to each of the farming families, for the duration of the project. Besides the visits, forest management plans will be provided to each of these farming families.	6,581
	3.1.1.8: Livelohoods Specialist	A local consultant will be hired. This specialist will serve as the manager for Component 3 of the project, and its major duties will be: 1) In coordination with the Forestry Restoration and Resource Management Specialist (Component 2), he/she will support consultation processes that will take place at the beginning of the project to determine the intervention area, beneficiaries, identification of livelihoods, and to inform the content of the activities. 2) Develop plans for livelihood diversification in a context of high climate variability with a strong gender, and youth and Indigenous lens, in collaboration with the Ministry of the Family Economy (MEFCCA for its acronym in Spanish) and other relevant stakeholders. 3) Together with the relevant national institutions that participate in the implementation of the project, oversee the coordinate the process to support farmers in the development of farm plans and the technical assistance required for this activity. 4) In coordination with the technical teams of the involved implementing institutions and with the input of the beneficiaries, prepare a procurement plan of the inputs that will be required for the implementation, including for the in-kind incentives/production models. This should pay special attention to the needs, experiences and priorities of women, Indigenous Peoplespopulations, aand youth, adopting differentiated approaches. 5) Determine the action plan and oversee the implementation and roll out of the incentives (in-kind) for the adoption of resilient and sustainable practices. 6) Develop a training plan to enhance the capacities of technical staff and farmers on livelihoods diversification and market access. 7) In coordination with the technical teams, guide and oversee the set up the gardens and nurseries to promote food security with a gender perspective. 8) Together with the technical teams of the national institutions, assess the conditions in the farmer organizations and Indigenous Peoples communities that will participate in the project and prepare a plan for the establishment of water harvesting structures and develop a plan for the implementation of the technical assistance, using existing ancestral practices and all the knowledge systematized under component 1. 9) Under the leadership of MEFCCA, develop a plan for the 14 farmer organizations to improve their capacities to produce products with added value and their access to markets, placing strong gender emphasis. 10) Coordinate knowledge exchanged between the farmer organizations so they can improve their capacities to tap into market opportunities. 11) Support the preparation of monitoring plans (together with the M&E Specialist) for the activities in this component.	6,581
Output 3.1.2. The capacities of farming families to diversify and access markets using sustainable soil management practices, with the participation of women and indigenous populations, are strengthened.	3.1.2.1: Supporting 14 farmers' organisations in initiatives to add value to agricultural products, with an emphasis on the needs identified by women.	Each cooperative/local organization is expected to have 25 members; the project expects that most of these organizations are led by women. The budget planned here is to provide equiptment to the cooperatives, so they can start engaging in product diversitfication and value adding practices, especially beans diversification activities. Activity 13 of the GAP is been planned here.	350
	3.1.2.2: Strengthening the capacities and market access of the selected farmers' organisations and promote linkages and partnerships to support the commercialisation of products generated by project activities, with emphasis on women and indigenous populations.	The budget included here corresponds to activity 13 of the GAP. The budget planned includes trainings and workshops focused on product diversification and business strategies.	350
Component 4. Knowledge management including the capture and dissemination of knowledge and lessons from the project among assisted farming families to promote the sustainability of the project's impact on landscapes			
Outcome 4.1. Adaptative and knowledge management approach applied during the implementation of project			

Output 4.1.1. A knowledge management and communications strategy is developed and implemented with the participation of women and indigenous populations.	4.1.1.1: Design of a knowledge and communications management strategy for development, with the participation of women and indigenous populations.	External consultancy. This consultancy will be focused on how best transmit the objectives of the project and what each component is about, especially considering the needs of women and indigenous people. The consultancy is budgetted considering local prices.	9,730
	4.1.1.2: Systematisation of project outcomes and lessons, including women's experiences and roles in the climate change adaptation processes	A consultancy and 3 assembly events at the community level are budgeted; the major expenses planned here are travel costs, event planning costs, materials + the cost of an external consultancy. The budget also includes what is needed for Activity 18 of the GAP.	
	4.1.1.3: Selection and design of means/tools to share and disseminate knowledge, highlighting those that have proven most effective	Two consultancies are budgeted to generate lessons learned; each is budgeted at USD 25 thousand (market price for this type of consultancy in Nicaragua). One of this consultancies is focused on how lessons learned can be used to create an effective gender strategy that ensures that the specific needs of female farmers and transformative women are met, including training modalities, working hours, material and methodologies adapted to the level of literacy or schooling, locations where farmers work, among others; this consultancy corresponds to Activity 5 of the GAP. Lastly, it also includes part of the budget for Activity 8 of the IPAP.	
	4.1.1.4: Design of the project's graphic identity (graphic line and colour line), dissemination materials, and promotional items.	This is the budget for the creation of stickers, t-shirts, caps, flyers, among other things. The budget for activity 14 of the GAP and activity 8 of the IPAP is also budgeted here.	
	4.1.1.5: Support the dissemination of information through communication channels used by indigenous peoples	This is the budget needed to complete activity 8 of the IPAP.	
	4.1.1.6: Design of short documentaries about women farmers' successful experiences in sustainable agricultural production.	External consultancy. This includes the printing and creation of successful female farmer stories so that they can be reproduced in the intervention communities.	
	4.1.1.7: Research to innovate value chains.	Five value-chain-focused external consultancies are planned here (one consultancy per year).	
	4.1.1.8: Strategy to identify actions, possible practices, production alternatives etc. for women in the Dry Corridor.	External consultancy; a firm will be hired for this. Budget for activity 14 of the GAP is budgetted here.	
Output 4.1.2. Institutional capacities are strengthened to foster project monitoring and sustainability of the project's impact with a focus on gender, youth and indigenous populations	4.1.2.1: Strengthen institutional capacities on monitoring systems and information technologies.	The budget includes costs associated with trainings focused on digital literacy, use of ICTs, knowledge, and use of Government Systems as a working tool for beneficiaries. The major expenses planned here are materials, event planning costs, travel and accomodation costs. etc.	
	4.1.2.2: Strengthen coordination among institutions and traditional indigenous authorities for planning of field activities.	This is the budget for Activity 10 of the IPAP.	
	4.1.2.3: Inception workshop: one national and one territorial.	Two workshops are being budgetted here. The workshops will be to kickstart the project. The costs planned here include event planning expenses, travel and accomodation costs, materials, among others.	
	4.1.2.4: Establish automated project monitoring and tracking system.	Budget to hire a local consultant to build a dynamic monitoring and evaluation system, which facilitates evaluation, adaptive management, understanding of the impact and dissemination of results for the project, focusing especially on gender and indigenous people´ issues.	
	4.1.2.5: Baseline assessment.	External consultancy to identify baseline conditions for all protagonists.	

I. Disbursement schedule

Include a disbursement schedule with time-bound milestones

	Upon signature of Agreement	One year after Project starts	Two years after Project stars	Three years after Project stars	Four years after Project stars	Total
Scheduled date	**mar-24**	**mar-25**	**mar-26**	**mar-27**	**mar-28**	
Project Funds	2,500,540	3,250,470	1,732,323	630,698	1,102,569	9,216,600
Implementing Entity Fees	143,197	138,440	194,150	150,388	157,225	783,400
Total	**2,643,737**	**3,388,910**	**1,926,473**	**781,086**	**1,259,794**	**10,000,000**

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

A. Record of endorsement on behalf of the government

Heyddy Calderón Palma Minister of the Environment and Natural Resources Ministry of the Environment and Natural Resources	Date: 17 July 2023

B. Implementing Entity certification

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 and subject to the approval by the Adaptation Fund Board, commit to implementing the project/programme in compliance with the Environmental and Social Policy of the Adaptation Fund and on the understanding that the Implementing Entity will be fully (legally and financially) responsible for the implementation of this project/programme.	
Giorgia Testolin Implementing Entity	 Country Director
Date: 14 July, 2023	Tel. and email: +505 7872 1896 giorgia.testolin@wfp.org
Project Contact Person: Elsa Aburto	
Tel. And Email: +505 7656-7956, elsa.aburto@wfp.org	

ANNEX

Annex 1: Endorsement Letter from the Designated National Authority

Annex 2: Gender Analysis and Gender Action Plan

Annex 3: Free, Prior, and Informed Consent and Indigenous Peoples' Action Plan

Annex 4: Screening and Environmental and Social Management Plan

Annex 5: List of consulted stakeholders and meeting summary

Annex 6: Productive Practices

Annex 1: Endorsement Letter from the Designated National Authority

Gobierno de Reconciliación y Unidad Nacional
El Pueblo, Presidente!

2023 TODOS JUNTOS Vamos Adelante!

July 17, 2023
Managua, Nicaragua
Ref.: HLCP/141/07/2023.

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

Subject: Endorsement for "Climate Resilience and Livelihoods in the Nicaraguan Dry Corridor" (AFB/PPRC.29/22)

In my capacity as the designated authority for the Adaptation Fund in Nicaragua, I hereby confirm that the national grant proposal mentioned above aligns with the government's priorities for implementing adaptation activities aimed at reducing the adverse impacts and risks posed by climate change in the Nicaraguan Dry Corridor.

Therefore, I am pleased to endorse the aforementioned grant proposal, which seeks support from the Adaptation Fund. If approved, the project will be implemented by the UN World Food Programme (WFP) and executed by MARENA.

Sincerely,

Heyddy Loredana Calderón Palma
Minister
Ministry of Environment and Natural Resources
Nicaragua

Cc: Iván Acosta, Minister of Finance and Public Credit
Arlette Marenco, Deputy Minister of the Ministry of Foreign Affairs
Georgia Testolin, WFP Country Director Representative.
File.

TOD@S JUNT@S, VAMOS ADELANTE !
CON DANIEL... ADELANTE !
CON EL FRENTE... ADELANTE !
TOD@S JUNT@S, PORQUE HAY PATRIA,
Y TOD@S JUNT@S, PORQUE HAY PAZ !

FE, FAMILIA Y COMUNIDAD!

CRISTIANA, SOCIALISTA, SOLIDARIA!

Ministerio del Ambiente y los Recursos Naturales MARENA
Managua, Km 12 ½ Carretera Norte,
Fte. Coorporación Nacional Zona Franca Las Mercedes.
Telf: 22331323 22331112 223311113
www.marena.gob.ni

Annex 2. Gender Analysis and Gender Action Plan

1. The Gender Action Plan (GAP) appearing below was formulated for the purpose of ensuring that gender-related issues are mainstreamed in all components of the project ***"Climate Resilience and Livelihoods in the Nicaraguan Dry Corridor".*** A gender analysis/assessment was carried out to establish a baseline for preparing the GAP and better understand the context and gender relations in the rural communities and territories where it will be implemented. The information was obtained from secondary sources, provided by stakeholders, and gathered through interviews, surveys, and focus groups at the territorial consultation workshops. This was analysed and used to define guidelines, actions, and indicators specific to the GAP, as well as the allocation of resources, in an effort to effectively contribute to women's empowerment, in line with Adaptation Fund policies.

2. The consultation process took place as part of the formulation of this proposal. It involved applying a variety of methodologies and holding consultations in each municipality, including two special events with Indigenous Peoples in the municipalities of Telpaneca and Sébaco. To address gender-specific matters during the consultations, three focus groups were created at each event. The methodology deployed allowed for learning the opinions, experiences, needs and priorities disssagregated by sex, age, and ethnic group in each municipality. A total of 182 persons participated in the focus groups (46% male, 54% female), among which were farmers, adults, and young persons, representatives of community organisations and government institutions, leaders and Indigenous authorities, the latter including the Council of Elders in those areas where Indigenous Peoples are present. In total, 151 interviews were conducted (58% female, 42% male).

Socioeconomic context and cultural setting in the area of intervention

3. **Demography.** The population of Nicaragua in 2021 was 6,664,364 people, of which 50.6% were women and 49.4% were men (INIDE, 2020).[112] The same source indicates that women were a majority in urban areas, at 51.8%, dropping to 48.8% in the countryside. Nicaragua is a multi-ethnic, multi-cultural nation, as 8.2% of the population consider themselves to be Indigenous or Afro-descendant. The project's geographic area of intervention encompasses 14 municipalities, located in the Dry Corridor, where the population is preponderantly rural. There are Indigenous Peoples in two of them: i) the Chorotega of the northern region in Telpaneca and ii) the Chorotega of the central region in Sébaco.

4. **Gender equality and human development.** According to the World Economic Forum's "Global Gender Gap Report" (2022), Nicaragua is in position 7 of 146 countries, and the only one in Latin America which is in the top ten of the ranking (FEM, 2022[113]). Out of the four dimensions evaluated, Nicaragua stands out in *Educational Attainment,* having achieved gender parity and is thus ranked number 1; under *Political Empowerment*, Nicaragua is in the fifth position worldwide, with parity in ministerial posts and seats in the National Assembly (parliament). However, under Health and Survival it placed in position 36, and in *Economic Participation and Opportunity,* Nicaragua was number 100.

Table 1. Nicaragua in the Global Gender Gap Index

Dimension	Ranking (of 146 countries)	Points (maximum:1)
Economic Participation and Opportunity	100	0.637
Educational Attainment	1	1
Health and Survival	36	0.978
Political Empowerment	5	0.626

Source: World Economic Forum. Global Gender Gap Report 2022.

5. As concerns the UNDP Human Development Index, Nicaragua was in position 126 of 191 countries measured at 0.667, thus fitting into the Medium Human Development category. This index is slightly higher among men (0.678) than women (0.648). In the Gender Inequality Index, Nicaragua's score

[112] INIDE (2020). Statistical Yearbook 2020. National Development Information Institute (INIDE, acronym in Spanish)
[113] WEF (2022). Global Gender Gap Report 2022. World Economic Forum (WEF)

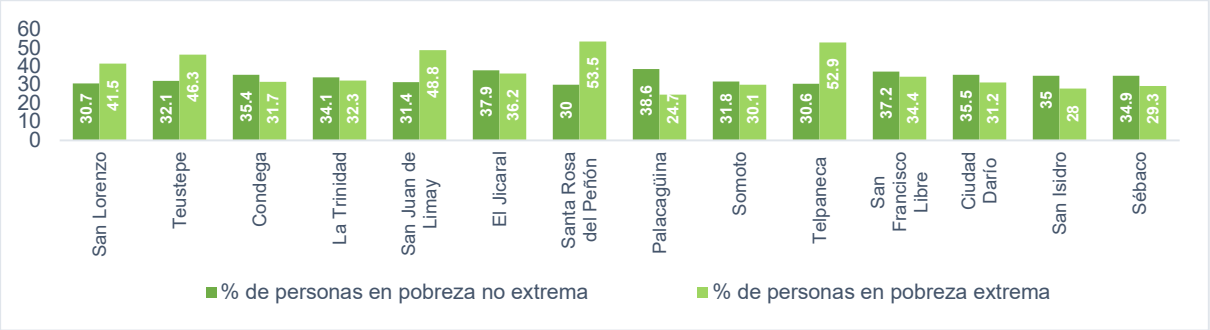
was 0.424, and it was ranked at position 102 of 170 countries evaluated (UNDP, 2021).[114]

6. **Health.** The Ministry of Health (MINSA, acronym in Spanish)[115] reports that maternal mortality in 2021 was of 31.4 for every 100,000 live births, down 68% from where it stood in 2006. The same source states that infant mortality in 2021 also saw a significant drop to 12.6 for every 1,000 live births. According to ECLAC,[116] average life expectancy for the years from 2020 to 2025 is of 75 years, at 79 years for women and 72 for men. The total fertility rate in Nicaragua is of 2.4 children per woman.

7. **Education.** According to UNESCO[117], in 2015 the literacy rate among adults was 82.6%, and practically equal among women (82.8%) and men (82.4%). INIDE[118] reports that in 2020 enrolment in early education was 50.2% boys 49.8% girls; in primary school 51.5% boys and 48.5% girls; and in secondary school, an even 50-50 split between male and female adolescents.

8. **Poverty.** In the past few years there has been a reduction in levels of poverty. However, Nicaragua continues to be one of the least developed countries in Latin America.[119] In 2016, 24.9% of the population lived in poverty, with 6.9% in conditions of extreme poverty. Of the 14 municipalities in the project, people living in extreme poverty are to be found mainly in the municipalities of Santa Rosa del Peñón (53.5%) and Telpaneca (52.9%). See Graph 1, below.

Graph 1. Poverty indicators by municipality



Source: Municipal figures, INIDE 2008

9. **EAP and employment.** Data from the Employment Report published by Continuous Household Survey (INIDE, 2021) show that in 2021 average participation in the national labour market was 67.4%, with women at 56.3% and men at 79.7%. In rural areas, participation by men rises to 87.5% and drops to 52.3% for women. In the project municipalities women represent less than 30% of the workforce, while men are at 88.7%. Further, the percentage of women working in agricultural activities (between 11% and 36%) is significantly lower than among men (between 64% and 89%).

Table 2. EAP indicators broken down by sex in project municipalities

			EAP		% FARMERS	
	PROVINCE	**MUNICIPALITY**	**MEN**	**WOMEN**	**MEN**	**WOMEN**
1.	Boaco	San Lorenzo	77.5%	22.5%	75.6%	24.4%
2.	Boaco	Teustepe	82.7%	17.3%	78.2%	21.8%
3.	Estelí	Condega	75.4%	24.6%	82.3%	17.7%
4.	Estelí	La Trinidad	71.7%	28.3%	75.9%	24.1%
5.	Estelí	San Juan de Limay	83.0%	17.0%	82.3%	17.7%

[114] UNDP. (2021). Human Development Report 2021/2022
[115] http://mapasalud.minsa.gob.ni/mapa-de-padecimientos-de-salud-de-nicaragua/
[116] https://statistics.cepal.org/portal/cepalstat/perfil-nacional.html?theme=1&country=nic&lang=es
[117] http://uis.unesco.org/en/country/NI
[118] INIDE. (2020). Statistical Yearbook 2020. National Development Information Institute (INIDE)
[119] Nicaragua Overview (worldbank.org)

			EAP		% FARMERS	
	PROVINCE	MUNICIPALITY	MEN	WOMEN	MEN	WOMEN
6.	León	El Jicaral	75.5%	24.5%	64.0%	36.0%
7.	León	Santa Rosa del Peñón	82.3%	17.7%	83.3%	16.7%
8.	Madriz	Palacagüina	69.4%	30.6%	76.7%	23.3%
9.	Madriz	Somoto	81.2%	18.8%	83.4%	16.6%
10.	Madriz	Telpaneca	88.7%	11.3%	84.2%	15.8%
11.	Managua	San Francisco Libre	82.5%	17.5%	75.8%	24.2%
12.	Matagalpa	Ciudad Darío	79.1%	20.9%	88.8%	11.2%
13.	Matagalpa	San Isidro	71.8%	28.2%	69.0%	31.0%
14.	Matagalpa	Sébaco	71.7%	28.3%	77.9%	22.1%

Source: Municipal figures INIDE 2008 and IV Agriculture Census INIDE 2011

10. **Gender-based violence.** Violence affects all women. However, those living in rural and Indigenous communities are particularly vulnerable (IFAD, 2022[120]). Violence against women and girls is one of the most oppressive manifestations of gender inequality and is a fundamental barrier to equal participation of women and men in social, economic, and political spheres (WB et al, n.d.[121]). According to the Statistical Yearbook of the Supreme Court of Justice,[122] in 2021 there were 4,803 investigations into cases of sexual violence, of which 88% were perpetrated against females, with most cases involving girls from the ages of 0 to 17 years. The same source indicates there were 8,829 cases of domestic violence, of which 80% were attacks on women between the ages of 18 and 59 years. The National Police Yearbook[123] (2021) records 15 femicides, most committed against women from 18 to 45 years. A recent FAO study[124] undertaken in the Dry Corridor shows that the percentages of violence in the territories[125] analysed are high, with almost seven of every ten women having witnessed or experienced a situation of violence toward other women or herself.

11. **Women and poverty in the Dry Corridor.** Women and children are among those most likely to be poor and lack access to education, health, assets, and other essential services, while suffering most from the effects of climate change (UNWOMEN, 2018[126]). In the Central American Dry Corridor, some 60% of the population lives in conditions of extreme poverty (WFP, 2016[127]). Notwithstanding efforts made to reduce these levels of poverty in Nicaragua, they continue high and are particularly harsh in rural areas. Rural poverty affects 50.1% of the population, compared to 14.8% in urban areas (INIDE, 2014[128]). However, it is estimated that rural women in the Dry Corridor live in the harshest conditions, especially women who head households, which in 2016 was the case in 25.3% of all rural homes (FAO, 2017).[129] The 2016 Living Standards Measurement Survey[130] found that, although women reported a lower occurrence of general poverty in all age groups, extreme poverty is most intense among the age groups from 13 to 17 and 46 to 55 years. Elderly women in these territories face challenges such as low schooling levels, a lack of economic alternatives, difficulties gaining access to information and ICT. The information obtained from the consultations held as part of the formulation of this gender analysis, Indigenous women in particular consider that the training processes are a challenge because of the technical language used and because the events are held far away from their communities. For their part, adolescent and young women have less access to resources,

[120] IFAD. (2022). Es hora de poner fin a la violencia contra las mujeres rurales [Time to Put an End to Violence Against Rural Women]. International Fund for Agricultural Development (IFAD).
[121] WB, IADB, GWI. (n.d.) Guía de recursos sobre la violencia contra las mujeres y las niñas [Resource Guide on Violence Against Women and Girls] World Bank (WB), InterAmerican Development Bank (IADB) and the Global Women's Institute (GWI)
[122] CSJ, IML. (2021). Yearbook 2021. Supreme Court of Justice (CSJ, acronym in Spanish) and Forensic Medicine Institute (IML, acronym in Spanish).
[123] PN. (2021). Statistics Yearbook 2021. National Police (PN, acronym in Spanish).
[124] FAO. (2021). Characterization and Socioeconomic and Cultural Analysis of Rural Women, Youth and Indigenous Populations in Eight Dry Corridor Provinces: Challenges and Opportunities for their Economic Empowerment and Expansion of Social Capital.
[125] Fifteen (15) municipalities in the provinces of Madriz, Chinandega, León, Estelí, Matagalpa, Masaya, Boaco and Managua.
[126] UNWOMEN. (2018). Photo report: Rural women, human rights. Retrieved from: https://www.unwomen.org/es/digital-library/multimedia/2018/2/photo-rural-women-human-rights
[127] WFP (2016). To Reduce El Niño's Impact on the Central American Dry Corridor: Strengthening Resilience and Investing in Sustainable Agriculture. World Food Programme (WFP), retrieved from: WFP To Reduce El Niño's Impact on the CADC
[128] INIDE. (2014). National Household Livelihoods Survey (EMNV, acronym in Spanish) 2014. National Development Information Institute (INIDE).
[129] FAO. (2017). Rural Women in Nicaragua: Between Heterogeneity, Continuity and Change. Country Reports Series; Rural Women in Latin America and the Caribbean. United Nations Food and Agriculture Organisation (FAO).
[130] INIDE (2016). Report on Poverty and Inequality (EMNV 2016

housing and productive land tenure, and less opportunities than men to obtain education and training that leads to working in the agricultural sector or getting involved in entrepreneurship.

12. **Situation of girls and adolescents in the Dry Corridor.** A PAHO/WHO report[131] (2018) shows that in in the last few decades the adolescent pregnancy rate has diminished worldwide. However, the countries with the highest estimated birth rates among adolescents in Latin America and the Caribbean are in Central America, and headed by Guatemala, Nicaragua, and Panama. ENDESA 2011/12[132] indicates that in Nicaragua 24.4% of women between the ages of 15 and 19 years of age have been pregnant at some point in their lives. A phenomenon linked to early pregnancy are early unions. UNICEF[133] estimates that one in every four young women in Latin America and the Caribbean (LAC) got married or began an early union before reaching the age of 18. Child marriage in LAC occurs more frequently as an informal but stable union ("living together") and it is more likely that these girls live in rural areas, come from poor homes, and have low schooling levels. Child marriage being defined as getting together before the age of 18, the rate in Nicaragua is of 35%[134], one of the highest in LAC. UNFPA[135] reports that the negative effect of such unions on education is higher among women, and that beginning "married life" at 15 years or less makes it 27 times less likely that the woman will reach higher education. Furthermore, the rural population has less access to secondary or higher education to begin with, meaning that girls living in rural areas find themselves in an even more precarious situation. Likewise, early pregnancy hinders the possibilities of achieving *economic empowerment* by placing them in a situation of exclusion and stagnation. A FAO study (2021) undertaken in the Dry Corridor[136] considers this problem one of the challenges.

13. **Food security in the Dry Corridor.** As an outcome of the consultations, food insecurity has increased throughout the territory, albeit in a differentiated manner. Survey results gathered from farmers in the 14 municipalities showed that in 10% of homes the family was forced to skip at least one meal in the month prior to the survey. However, food crisis modalities can vary. Among other factors affecting food security in the Dry Corridor are high food and input prices, unemployment, migration, and the low income received for sales of harvest surpluses. At the consultations, farmers mentioned that the following affect their livelihoods: *storms, droughts, crop losses, floods, access roads in poor condition, increased points at risk of mudslides, the use of agrochemicals and crop pests.* Food insecurity worsened after hurricanes Eta and Iota in late 2020, as they led to lost harvests and thus reduced incomes. Food scarcity affects mainly women, who are those charged with reproductive tasks and household care.

Regulatory and institutional framework as regards gender

14. Nicaragua's highest-ranking document on matters concerning equality is the Constitution, which has been in force since 1987. It establishes the equality of all citizens before the law and the right to protection and enjoyment of their political rights, without discrimination for reasons of nationality, political beliefs, race, or sex. The country is signatory to numerous international conventions on the equality and rights of women, including the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW), which it ratified in 1981;[137] the Inter-American Convention to Prevent, Punish and Eradicate Violence Against Women (Convention of Belem do Pará) ratified in 1995; and the UN General Assembly Resolution on Crime prevention and criminal justice measures to eliminate violence against women (1998).

[131] PAHO/WHO, UNICEF, UNFPA (2018). Accelerating Progress Toward Reducing Pregnancies Among Adolescents in Latin America and the Caribbean. Pan American Health Organisation / World Health Organisation (PAHO/WHO), United Nations Children's Fund (UNICEF) and the United Nations Population Fund (UNFPA).
[132] INIDE-MINSA (2014). Nicaraguan Demography and Health Survey (ENDESA 2011/12). National Development Information Institute (INIDE) and Ministry of Health (MINSA).
[133] UNICEF (2019). Profile of Child Marriage and Early Unions in in Latin America and the Caribbean. United Nations Children's Fund (UNICEF).
[134] UNFPA. (2022). State of the World Population 2022. United Nations Population Fund (UNFPA).
[135] UNFPA (2019). Situation Regarding Early Unions in Nicaragua. United Nations Population Fund (UNFPA).
[136] FAO (2021) Characterization and Socioeconomic and Cultural Analysis of Rural Women, Youth, and Indigenous Populations in Eight Dry Corridor Provinces: Challenges and Opportunities for their Economic Empowerment and Expansion of Social Capital.
[137] However, according to the ECLAC Gender Equality Observatory, Nicaragua has neither signed nor ratified the CEDAW Optional Protocol.

15. The state of Nicaragua has strengthened the legal and regulatory framework intended to protect human rights and ensure gender equality by writing and passing several laws and formulating different policies and programmes. As concerns the institutional framework, Nicaragua has a Ministry of Women (MINIM, acronym in Spanish), whose function is to formulate, promote, coordinate, execute and evaluate government policies, plans, programmes, and projects that ensure the participation of women in the nation's process of economic, social, cultural, and political development. Policies and strategies linked to the country's social and economic development, as well as several programmes, in particular the 2022 National Climate Change Policy, have among their fundamental principles *gender equity* and an *intergenerational approach*. The most pertinent instruments in Nicaragua's legal framework as regards gender and equality are to be found in the table below.

Table 3. Gender and Equality Legal and Regulatory Framework

Legal and Regulatory Framework	Comments
Nicaraguan Constitution (1987) and its reforms (2014)	Ensures that Nicaraguan citizens enjoy political, social, cultural, and economic rights. Article 27 establishes that all persons are equal under the law and have equal rights to protection. Article 48 describes the duty of the state to take affirmative actions to ensure equal conditions for all.
Law 648 - Equal Rights and Opportunities Law (2008)	Propitiates gender equality, with equity, justice, non-discrimination and non-violence, as well as respect for the dignity and lives persons; a gender perspective in all public policies; equal human, civil, political, economic, social and cultural rights for both women and men. The law is mandatory and contains sanctions for failure to comply.
Law 717 - Law to Create a Fund for Rural Women to Purchase Land with Gender Equity (2010)	Creates a fund for the purchase of land by rural women, based on gender equality. This law is intended to benefit poor, landless women living in any rural area of the country.
Law 790 - reform to Law 331 - Electoral Law (2012)	The law establishes quotas for lists of candidates in municipal and parliamentary elections, half of whom must be women.
Law 786 reform to Law 40 - Municipalities Law (2012)	Orientates the incorporation of gender practices to public policy, with an equal rights approach between women and men (50% / 50%), as regards decision-making with specific functions that give female mayors and deputy mayors greater participation in decision-making in their municipalities.
Law 779 - Comprehensive Law Against Violence Towards Women and Reforms to Law 641, the Penal Code (2012)	Takes up many aspects of the Belem do Pará Convention; describes violence in both the public and private spheres; includes new types of crimes, such as femicide and economic violence; sets forth that violence against women is a form of discrimination and inequality that women experience in power relations; and creates courts specializing in violence against women.
Law 832 - reform to Law 290 – Law of Executive Branch Organisation, Competencies and Procedures (2013)	Elevates the Nicaraguan Women's Institute (INIM) to the rank of Ministry of Women.
Law 757 - Law on Decent and Equitable Treatment of Indigenous and Afro-descendant Peoples (2011)	The law is intended to ensure fair and equal treatment to aboriginal peoples regarding opportunities and access to employment and all rights.
Law 471 - reform to Law 212, Law of the Office of the Human Rights Ombudsman (2003)	Its article 18 mandates the creation of position of Women's Ombudsman at the Office of the Human Rights Ombudsman.
Law 392 - Law to Promote the Comprehensive Development of the Young (2001)	Has for its goal to promote the human development of young women and men.
Law 896 - Law Against Human Trafficking (2005)	Acknowledges gender equality and interculturality.
Law 870 - Family Code (2014)	Among its governing principles are the prioritised protection of women-headed households as well as the rights, duties, and opportunities in relations between women and men by means of the joint assumption of family responsibilities.
Ley 1034 - Law on the Nicaraguan Legal Digest for Matters Regarding Family, Women, Children, the Young,	The law's aim is to gather, organise, refine, and consolidate the existing legal framework on the matter, in conformity with Law 963 - Nicaraguan Legal Digest Law, published in *La Gaceta*, official government

Legal and Regulatory Framework	Comments
the Elderly and Gender Equity (2020)	publication, No. 203, on 25 October 2017.
National Plan to Struggle Against Poverty and Promote Human Development (2002-2026)	Contains the transformative policies, strategies and actions that ratify the road to economic growth and the defence and restitution of the rights of Nicaraguan families by reducing poverty and inequalities. It includes a ***Gender Policy*** that promotes the participation of women and their socioeconomic development.

Source: prepared by the authors

Situation of women and men in the Dry Corridor

16. Broad-based consultations and the gathering of primary information, allowed for delving further into several aspects of the situations lived by women and men in the communities and municipalities in the Dry Corridor. The most important findings regarding gender roles, access to and control of resources, participation in decision-making and the effects of climate change are described below.

17. **Division of labour.** As is common in rural Nicaragua, there is a clear division of gender roles in the territory and communities where the project is to intervene, by which the men mainly grow crops and produce dairy merchandise (if there is livestock on the farm unit), while women are charged mostly with household tasks and caring for the family. Among families in the Dry Corridor, women must carry out double and even triple burden, since in addition to household tasks, they are expected to tend the kitchen garden and domestic animals, care for and raise the children, and participate strongly in agricultural production. The raising of poultry and pigs is a task confined almost exclusively to women, female adolescents, and girls, both in Indigenous and non-Indigenous communities. However, only a small percentage of women identified themselves as farmers, since they concentrate more on the production of staple foods and cattle-raising. The consultations held to prepare this gender analysis evidenced the excessive workload and long working days put in by rural women (sometimes up to 14 hours a day).

18. **Use of time.** As concerns how women and men make use of their time, gender differences were also found to follow the traditional distribution of labour. On average, women spend 3.64 hours daily on farm work, while men do so for 7.24 hours. When it comes to community work, couples usually work together, and estimate each spends some two hours a day on these activities. The widest gap in time use between women and men is on housework, where women spend on average 9.88 hours, but in some cases up to 12 hours, while the men dedicate on average two hours daily (children contribute less than an hour). It is important to note that at the consultations it became clear that women tend to embark upon economic activities to obtain an additional income for their households, for instance by the sale of "*aranceles*", preparing food, making clothes, in a manner that is barely to be differentiated from their domestic activities.

19. **Generational changes in the gender gaps.** The consultations showed that in the communities subject to project interventions, significant progress has been made regarding the raising of awareness on certain aspects related to gender and the emergence of new masculinities. These have led to changes in gender relations and a gradual transformation of the old *machista* culture among the young. Some of the processes undertaken in the communities have contributed to gender equality, among them advocacy by women's networks, individual organisations and the work undertaken by government institutions.

20. **Youth participation in agricultural activities.** In general, the young participate in farming activities, but in some municipalities, there are difficulties to integrate the young population to the productive sphere. Young women and men are an important source of support in agriculture, as well as the raising of livestock, small and large. In particular, young Chorotega women in Telpaneca and Sébaco play a significant role in agricultural work, kitchen gardens, and coffee nurseries. On the other hand, the consultations made clear that young males are not motivated to work in agriculture, for which they show little interest. This is so because of the few employment opportunities and the scarce incentives to engage in family farming. Migration has also been a factor leading to the low number of young adults

in agriculture. The farmers consulted pointed to this difficulty, lacking access to resources and support groups. For young women the gaps are even wider, because they face more serious obstacles in terms of access and opportunities to obtain the assets and resources needed to work on the family farms.

21. **Access to land.** According to the consultations and primary information gathered, access to, and use of, resources and productive assets such as land, forests or the income generated on the parcels are for the most part controlled by men. Land tenure carries implicit the control of other assets and resources such as cattle, tools, and bank loans. One of the main challenges faced by both young and adult women in agriculture is that they are usually not the title holders of arable land and are thus not eligible to receive bank loans with which to undertake farming activities. A considerable part of the crops that they grow, and gardens tended to by women are on farmable land surrounding their homes. The inheritance system was originally set up to benefit men in property succession. In some municipalities, such as San Lorenzo, the government of Nicaragua has begun the legalisation of parcels with a gender approach, thus contributing to the land tenure process by women. The focus groups mentioned that there are men and women who sow crops on land belonging to a relative (parents, in-laws), but there are also experiences of women who work with their husbands or sons on rented or "borrowed" land. Another feature found in Dry Corridor municipalities such as San Lorenzo, Telpaneca and Sébaco is land grabbing, which affects mainly smallholders, who are left without land on which to sow staple foods and are forced to become wage earners or to rent the land they work. This change in farming patterns makes it more difficult for farmers to produce their own food.

22. **Access to and control of income.** According to those consulted in the Dry Corridor it is common practice that adult rural women generate their own income by making and selling certain products, including fruits and cereals, as well as dairy processing, but the income obtained from their harvests or other activities are for the most part managed and controlled by men. However, there are cases of young and adult women that have developed capacities to manage family or own businesses and have been able to achieve a certain level of economic empowerment. In fact, women are an important source of income for the family economy, since when harvests are poor, they become involved in off-parcel activities. These sporadic economic activities include the raising and selling of chickens and pigs to meet local demands. However, any money earned is used to meet the families' food needs, which often limits the working capital needed to develop the commercial activity they carry out.

23. **Access, use, and control of assets and resources.** In the surveys held to prepare this gender analysis, roughly half the women stated they had access to housing and land. Compared to the men, a slightly higher percentage declared they had access to forest resources (31%), water (42%), housing (51%), land (48%) and loans (14%). As regards land and housing, the women explained that although oftentimes the property may not be registered in their name, they still have access to it whenever their partner or another family member owns it and is not merely renting or being allowed to use the land free of charge. Men reported having access only when the land is registered in their name. Although the percentage of women with access to financing (14%) is higher than that of men (7%), it is in practice limited to small loans for small businesses owned by women that are made available by government programs, NGOs or microfinance institutions, frequently by means of associative credit in order to compensate for the lack of collateral. For their part, men tend to obtain larger loans through commercial banks for the purpose of making investments on their farms. While technical assistance (TA) is provided equally to men and women, the type of TA differs, as for women it is aimed mainly to help them with their backyard economy and small businesses. As concerns access to natural resources, women make use of the goods and resources found in the ecosystem, mainly fuelwood and coal, both of which are essential to the household's energy needs. Water likewise is used by women to carry out their household chores and they are charged with fetching it when there is no piped water. Simply having access to water is a priority for Indigenous women as easier access improves their standards of living and saves time. Equality in property inheritance processes was also noted as being important to women.

Table 4. Access by women and men to assets and resources (survey results)

	WOMEN	MEN

FORESTS	31%	28%
WATER SOURCES	42%	35%
HOUSING	51%	40%
LAND	48%[138]	41%[139]
LOANS	14%	7%
TA	23%	23%

Source: prepared by the authors

24. **Access to training and benefits derived from projects.** During the consultations both women and men acknowledged that over the years women have not had the same access to training in agricultural activities as the men. This places them at a clear disadvantage regarding performance in the sector. The women said the projects they participated in were useful as concerns starting small businesses that process raw materials, backyard farming and pig and/or poultry farms. However, they do not always have control over any profits earned and often women lack knowledge on certain facets of product marketing and sales, and the use of technology to increase the latter.

Participation in decision-making (governance)

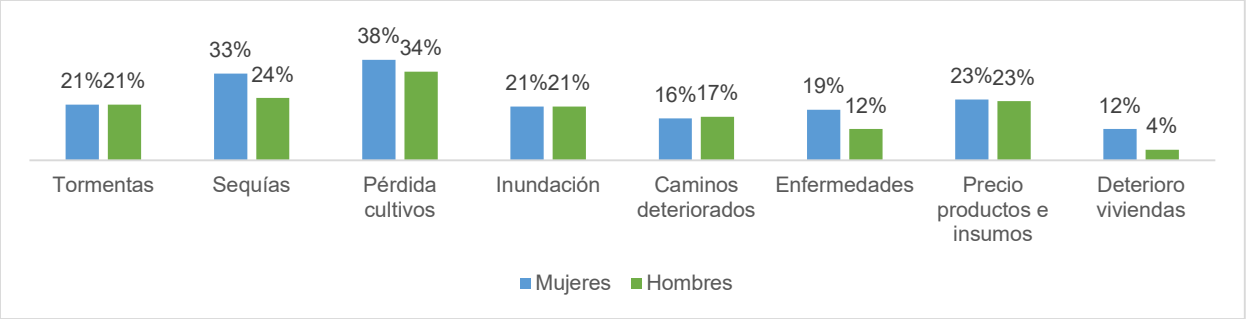
25. The presence of women's organisations promoted by outside groups and institutions in some of the municipalities encourages their participation in the community and municipal spheres. Government policy intended to further encourage leadership and empowerment has achieved significant changes in the past decade, as can be seen by the inclusion of women in the public and collective spheres, as well as in participatory structures and government. However, those consulted pointed out that although they are represented, women are not always among decision-makers and their participation is often reduced to belonging to a gender commission or other structure lacking decision-making power. The following are the main limitations to women's participation in collective and decision-making spaces:
    - Work overload in household activities;
    - Men have more access to and control over resources;
    - Lack of access to information and education; and
    - Lack of community organisations that promote the equitable participation between men and women in agricultural production.

Effects of climate change on men, women, and girls in the Dry Corridor

26. In the Dry Corridor climate change has negative effects on the quality of life of farmer families, but these are distributed differently among men, women, and children. Survey results among farmers participating in this gender analysis indicate that over the past few years climate-related events have led to the **loss of crops and harvests** among 38% of the women and 34% of the men surveyed. Damages caused by **storms**, including hurricanes Eta and Iota in 2020 were mentioned by 21% of those queried (both sexes). **Drought** affected a higher percentage of women (33%) than men (24%). According to these results, women are also more affected when **a family member falls ill** and **housing conditions deteriorate as a result of climate change**. See Graph 2, immediately below.

Graph 2. Main effects of climate change on women and men

[138] Rented; owned by the couple; owned by the woman; other types of access.
[139] Formally owned and registered.



Source: prepared by the authors

27. **Water scarcity.** Access to water is limited by both pollution and scarce rainfall. Drinking water wells are gradually drying up, and in the municipalities of Ciudad Darío and San Francisco Libre some communities face serious problems. Water scarcity affects women and children directly because they carry water from the source to their homes. During the consultations it was noted that the distances to be covered are becoming longer, meaning that the time and effort needed is greater than it was in the past. Difficulties with access to water also affect food production, especially in the municipalities in which droughts are most acute. The situation is worsened by the lack of alternatives to irrigation.

28. **Migration.** Men who live in Dry Corridor rural communities find that the effects of climate change motivate them to migrate as a solution to the insuperable difficulties encountered to earn an income. Migration by the men obviously has an impact on their families, to which must be added the food insecurity caused by higher prices for agricultural inputs and the cost of food. Although all municipalities have seen men migrate, it is most noticeable in Ciudad Darío, San Francisco Libre and Telpaneca, with the result that workloads for women have increased, since now, in addition to the regular household chores, women must take on the farm work as well.

29. **Emotional health and well-being among men, women, and girls.** Consultation results showed that climate change has become a factor that affects the emotional health of both women and men, above all when there is a loss of production due to floods or droughts. The breaking up of families caused by migration leads to emotional and affective problems, and places additional pressure on the need for child labour, given that in the absence of the father and husband, the farmwork must be done by the women and children if they are to subsist. In addition to the impacts mentioned earlier, the risk that women and children will suffer some type of violence increases, given unsatisfied material needs, stress and lack of options.

Needs and Priorities

Table 5. Needs and priorities of women and men by project component (identified during the consultations)

Project component	Needs and priorities	Recommendations for implementation
Component 1. Transfer of capacities to farming families leading to the implementation of resilient natural resource management practices and degraded landscape restoration in 14 municipalities in the Dry Corridor.	The groups consulted prioritised the following topics for inclusion to the capacities transfer component: ***Topics prioritised by young and adult women and men:*** 1. Gender equity and equality 2. Prevention of violence 3. Awareness-raising on gender-based division of labour 4. Forest and water sources management and protection ***Topics prioritised by young and adult women:*** 1. Female leadership and empowerment 2. Kitchen gardens (vegetables and medicinal plants) 3. Climate change with a gender and generational approach 4. Food security ***Topics prioritised by young women:*** 1. Soil and water sources conservation practices. ***Topics prioritised by adult women:***	The preferred modalities are exchanges ***of experiences***, with emphasis on ancestral knowledge and good agricultural and nature conservation practices. The young women proposed the creation of a ***network/groups of women trained on gender and climate change issues,*** and that there be intermunicipal exchanges between the networks once these are established. It was recommended to design and develop theoretical and practical knowledge transfer methodologies: demonstrative parcels, exchanges of experiences at community level, field schools, theoretical-practical workshops. Hold training events upon issuing prior ***notice*** and taking into account afternoon ***hours*** so as not to interfere with the women's household chores and farm work. Furthermore, in the afternoons there

Project component	Needs and priorities	Recommendations for implementation
	1. Access to technology, land and technical assistance. 2. Seed banks with a gender approach. 3. Natural resources and environmental conservation. ***Topics prioritised by young and adult men:*** 1. Seed banks with a gender approach 2. Irrigation systems and water harvesting 3. Natural resources and environmental conservation 4. Use of organic fertiliser/insecticides 5. Soil and water sources conservation practices Additionally, farmers in most of the municipalities stated that they lack organisations ***to represent them.*** Persons in the focus groups showed interest in organisational strengthening, including government structures and Indigenous authorities, respecting their identity and leadership.	are only ***limited public transport services*** to the communities. It is recommended that for training events at least five additional meals/refreshments be budgeted in, considering that some women must bring their children along. Likewise, there needs to be an area where these can play while their mothers participate in the training. Requests for meetings must be channelled through ***various types of leadership*** to ensure a diversity of protagonists. In the Indigenous communities it is important to obtain the ***authorization of traditional authorities and that they participate.***
Component 2: Restoration of forest landscape to enable the generation of ecosystem services.	Promote knowledge, practices, and techniques to ***restore degraded land*** through soil conservation. Put into practice ***ancestral knowledge and practices*** to restore the landscape. Facilitate resources to establish ***nurseries with forest and fruit species native to the area***, so families can plant these near their homes and in the communities. Given women's participation in community work and care, they are interested in holding special **community and water sources clean-up days**, with the participation of men, women, and children. The consultations showed it is necessary to raise awareness and exercise greater ***institutional control, oversight, and follow-up, enforcing laws and applying regulations*** to offenders, without distinction.	Female and male farmers referred to the need to include ***incentives to encourage environmental restoration activities.*** Identify ***water recharge areas*** and **biological *corridors***, to guide the restauration actions in each municipality, prioritizing vulnerable areas. The focus groups proposed the establishment of ***nurseries and seed banks for reforestation purposes*** at community and farm levels, and that these be run by women. **Water harvesting works** were mentioned to ensure the **irrigation of reforested areas.** Restoration activities are to be accompanied by **environmental *education campaigns***, with the participation of municipal authorities, groups of children adolescents and adults, incorporating gender equity to environmental care and conservation.
Component 3: Rehabilitation of agricultural livelihoods at farm level, using climate-resiliente and environmentally-sustainable practices for landscape restoration.	The groups consulted prioritised the following actions to be carried out under Component 3: ***Actions prioritised by young and adult women and men:*** • Facilitate access to the municipal market, including for organic products. ***Actions prioritised by young and adult women:*** • Kitchen gardens to grow vegetables, medicinal and ornamental plants. ***Actions prioritised by young women:*** • Training in digital marketing. ***Actions prioritised by adult women:*** • Raising livestock, small and large. • Gaining knowledge about technologies and markets. ***Actions prioritised by young and adult men:*** • Diversification of staple foods and vegetables. In most municipalities female farmers would like to have more access to agricultural knowledge and technologies. Women are also interested in ***processing products and selling in additional markets.*** There is a great deal of interest in ***access to loans for women***, especially among those living in conditions of vulnerability, and in receiving support for the ***establishment of small businesses*** to bolster their autonomy and control over income earned. ***Barriers pointed to by women that limit the improvement of their economic activities and livelihoods:***	It is suggested that the project should support the creation of **groups of female farmers** and promote the leadership of women at the ***seed banks***. It was recommended to consider the experience derived from initiatives already undertaken in the area: • There are groups of young women in some municipalities, such as Condega, La Trinidad, Somoto and San Juan de Limay that know how to prepare saleable products (sauces, fruit-flavoured wines, jams, condensed milk, pickled peppers), which they take to farmer's fairs and local markets. • In the municipalities of San Juan de Limay, San Lorenzo and the Indigenous communities in Sébaco and Telpaneca, there are young and adult female farmers, involved in the recovery of native seeds and the conservation of native species that are on the verge of becoming extinct. As concerns the diversification of their staple foods (maize and beans), young and adult women prioritized diversification by suggesting the planting of ***tubers and legumes.*** The men propose to diversify further by planting ***sorghum and musaceae***, as well as ***citrus and other fruits and vegetables.***

Project component	Needs and priorities	Recommendations for implementation
	• The barriers to improving their agricultural practices are related to lack of access to resources such as improved seeds, loans and an organisation bringing together female farmers to help facilitate the processes. • The establishment of silvopastoral systems is hampered by lack of land. The same goes for reforestation. as the arable land is used to grow crops. • The following are obstacles to selling their products: little knowledge of markets; no means of transport; poor road conditions; many communities are in remote places; no organisation represents their interests.	
Component 4: Knowledge management including the capture and dissemination of knowledge and lessons from the project among assisted farming families to promote the sustainability of the project's impact on landscapes.	According to the adult women, there is a generational gap in the dissemination of knowledge regarding access to technology and ICT. Because of their low levels of schooling, they face serious difficulties understanding information if it is expressed in technical language. The Indigenous groups described the need to do more to recover and disseminate ***knowledge of their Indigenous roots and history***, and to incorporate aspects of interculturality. The latter is a topic of interest to the Board of Directors and Council of Elders in the municipalities of Telpaneca and Sébaco. Indigenous women and men think that spreading information by using communications materials and exchanges at community and municipal level helps to strengthen not only knowledge and learning, but also ***Indigenous identity and the sense of belonging to a community and territory***, and would serve to foster rootedness, above all among youngsters, thus contributing to mitigate migration. The women believe that **making their role *in rural areas and agricultural activities* visible and disseminating information** on the topic is important. They propose systematising and disseminating the women's knowledge about natural resources and their role in environmental conservation, the impact of climate change on families and the measures taken by women to adapt to it. It is considered important to ***disseminate the successful experiences of persons of different ages and both sexes***. For women it is relevant that the experiences of empowered rural women be made known, to encourage and inspire others, both within and outside the municipalities benefiting from the project.	To spread information throughout the communities the most frequently mentioned methods were the use of social network platforms such as WhatsApp and Facebook, followed by traditional mass media such as radio and local TV programmes (keeping in mind target audiences such as the elderly and areas or groups with limited access to the internet). Another option is printed publicity, such as posters and illustrated primers. WhatsApp was mentioned as the ideal medium for calling meetings. The focus groups suggested making short documentary videos about the experiences of women in cooperatives and projects, considering that many adult farmers, both male and female, face limitations regarding literacy, and would benefit more from audio-visual material. Other methods by which to disseminate knowledge are exchanges of experiences, community replicas of lessons learned, vehicle-mounted loudspeakers, murals, and visits to schools. The women showed interest in holding exchanges on demonstrative parcels. However, they also noted there are difficulties as concerns transport to these events, both in terms of the cost and the time needed to leave and return to their communities.

Conclusions

30. In the past decade, Nicaragua has made significant progress towards gender equality. It is now one of the least unequal countries in Latin America, mainly due to the achievements in education and political empowerment. However, gaps persist between women and men in access to resources, goods and services, workforce participation, economic opportunities, and income. The Dry Corridor is marked by poverty, degraded ecosystems and climate events that range from long droughts to flooding. These affect the quality of life and productive systems on which the population depends. Women living in the Dry Corridor, whether Indigenous or not, face very harsh conditions, especially when they are heads of households. Girls and women face constraints to development, as many barriers prevail that hinder their participation and empowerment. Indigenous women have less access to resources and find themselves hemmed in by cultural patterns.

31. In the communities where the project will be implemented their division of roles is marked by tradition, whereby men do the farm work and raise cattle, while women spend their time on household chores and family care. In the Dry Corridor women must often bear a double or triple burden, since in addition

the housework, they are expected to work in family garden, care for and raise the children, and still participate actively in agricultural production and other economic activities that generate an income for their families. The excessive workload constitutes a barrier to participation in educational processes, business initiatives and community organisation spaces.

32. Even when women play an important part in agricultural production, their role is hardly visible. At the consultations, only a small percentage identified themselves as “farmers”. Women have less access to opportunities for training, the transfer of capacities, receiving a loan or carrying out their own farm-related activities. They tend to benefit from projects involving vegetable gardens, the processing of agro-ecological products and small commercial activities. Even so, they rarely exercise financial control over any profits derived from these activities, and lack knowledge concerning certain aspects of business, marketing and the use of technologies to improve sales and grow their enterprises.

33. Climate change has differentiated consequences for women and men. Water scarcity affects women and children more directly, as they fetch it from ever-longer distances. Difficulties obtaining water also has repercussions in food production, in particular in the municipalities most affected by drought. Men in Dry Corridor rural communities are often forced to migrate because their livelihoods are impacted, and economic alternatives are lacking. This too ends up increasing the women’s workload, since in addition to their household chores, they must take over the farm work.

34. Both men and women are open to the idea of raising awareness on gender equality in the workplace, community, and family settings. It is crucial to specifically target males to promote gender equity and a fairer distribution of productive and reproductive work. Opportunities were identified in other projects and institutional efforts that can be used to generate synergy and promote gender equality and the empowerment of women. During the consultations, women showed interest in acquiring knowledge and carrying out agricultural and other economic activities. The project will design measures to ensure the participation of women in all activities. Their valuable contributions will be highlighted, emphasizing the significance of women's role in agriculture, and promoting their empowerment.

How does project design address / reflect gender issues?

The project clearly addresses the needs of men, women, children, the elderly, and the Indigenous Peoples as they forge the path toward a resilient Corridor in Nicaragua. Based on all the elements identified in the gender evaluation/analysis and the robust legal framework on the matter, the project proposes the following actions:

- To define gender indicators in the results framework.
- To establish quotas that help reduce gender gaps, accompanied by transformative actions that increase women’s participation and their access to and control over benefits froimplementation, by means of a process of individual and collective reflection that contributes to the empowerment of women and their families and allows for training and raising awareness on gender equality at various levels, while creating capacities in topics pertinent to the intervention.
- To undertake affirmative actions that counteract those gender gaps
- To propitiate female farmer empowerment groups.
- To create a gender mainstreaming strategy, including tools, instruments and mechanisms that facilitate the participation, access and decision-making by women and men in the project.
- To incorporate gender and communication tools to the project.
- To create a monitoring and evaluation system with a gender lens.
- To draw up a Gender Action Plan (see below).

35. Lastly, the project will engage the **Ministry of Women (MINIM)**, which will play an essential part by providing technical assistance. MINIM will contribute through its presence in the territory, facilitating transformative processes that help eliminate systemic barriers that prevent women and minorities from fully participating in development projects, while ensuring the incorporation of a gender perspective to the activities. The project will also strengthen the Gender Unit at the executing agency (MARENA).

Table 6: GENDER ACTION PLAN

GENDER ACTION PLAN							
Project: Climate Resilience and Livelihoods in the Nicaraguan Dry Corridor							
Strategic Gender Objective: Ensure participation, access, and decision-making of women in the project and contribute to gender equality, women's empowerment and the reduction of gender gaps in the agricultural sector in the Nicaraguan Dry Corridor							
Component 1. Transfer of capacities to farming families leading to the implementation of resilient natural resource management practices and degraded landscape restoration in 14 municipalities in the Dry Corridor							
Output 1.1. Capacity-building programme for SNPCC institutions and farming families is developed and implemented with the participation of women, youth and Indigenous Peoples.							
Activities	**Indicators**	**Goal**	**Timeline**	**Implemented by**	**Cost (USD)**	**Follow-up mechanism**	**Comments**
1. Awareness-raising sessions on gender equality with emphasis on a climate change and livelihoods approach for the Implementation Unit and benefiting institutions.	Number of male and female civil servants sensitised.	Forty (40) people from the PMU, benefiting institutions, municipal staff.	Year 1 and 3	MINIM TA	USD 1,000 for MINIM transport expenses (included under A 1.1.1.6 of the overall budget).	Project reports and Attendance List, (disaggregated by gender).	It is necessary to ensure an awareness-raising process takes place at the PMU and benefiting institutions at the outset of project implementation, as well as a space to explain this GAP. Likewise, A1.1.1.1. must include the methodologies and offer guidance to the consultants charged with designing the training programme.
2. Support the creation or strengthening of *female farmer empowerment groups* (with emphasis on the most vulnerable), for the purpose of generating spaces for support and discussion of topics that contribute to their individual and collective development, facilitate their insertion in the Project and reduce gender gaps in the agricultural production sector.	Number of female farmer empowerment groups established; percentage of project beneficiaries belonging to a group.	Four (4) groups per municipality or territory - At least 50% of female farmers have joined these spaces.	Year 1 and 2	PMU, territorial technicians and MINIM TA	USD 10,000 for transport of MINIM staff and beneficiaries, notifications and refreshments (included under A 1.1.1.6 of the overall budget).	Project reports	

3. Formulate and implement an individual and collective empowerment strategy for the women and their families that help to strengthen and make visible their participation and protagonism in project activities, along two lines of action: i) Female farmer empowerment groups implement aprocess for developing associative capacities that reflect their needs and priorities and allows for increasing the spaces for community representation, participation and autonomy, as well as strengthening the leadership of women and their role in decision-making. ii) Roll out an awareness raisingand training process aimed at farmer families, women, men, mixed and young adult groups on gender topics such as women's rights, the prevention of violence and early unions, joint responsibility in the home and new masculinities.	One strategy formulated and implemented by holding events with the beneficiaries and their families.	At least 50% of female Project beneficiaries and their families have been benefited by the strategy and barriers to participation and access to project benefits have been overcome.	Years 1 through 5	MINIM TA	USD 158,044 (included under A 1.1.1.7. of the overall budget).	Project reports, Mid-term Report and MINIM TA Final Evaluation	The process will use material already existing at MINIM, such as the primers on Women's Dignity and Rights. Climate Change, Food Security and Risk Management. These will be underpinned by complementary materials to be developed by MINIM, for the purpose of facilitating a process of reflection and transformation. It will be important to prepare a proposal for the creation of Gender Commissions (GC). These can build on the women's empowerment groups. The GC will play a relevant role in the dissemination of knowledge **It is recommended to link the training processes in activities 1.1.1.1 and 1.1.1.6 of the project with activity A1.1.1.7 (of which this strategy is a part) for the purpose of optimising the time of protagonists attending events.** It is important to provide illustrated materials for those who cannot read.
4. Contribute to the formulation of ToRs (gender-related aspects) with *gender perspective* in the design **of the capacity strengthening programme** for farmers, based on a gender analysis /assessment	Support to include gender aspects in the ToRs and quality control of the capacities programme.	Support to take place at two points in time.	Year 1	MINIM TA	USD1,000 (included under A 1.1.1.7 of the overall budget)	Project reports and MINIM TA Final Evaluation	Item line A1.1.1.1. must include the methodologies and offer guidance to the consultants charged with designing the training programme
5. Develop a **gender strategy** to ensure that the specific needs of female farmers and transformative women, as well	Strategy to facilitate that 40% of protagonists and public servants in the	A gender strategy is institutionalised at the project.	Year 1	MARENA GENDER UNIT; Project coordinator;	Included in the budget of GAP Activity 14 (Output	Project reports	It is important to base the work on gender analysis/ evaluation.

as young, adult, and Indigenous entrepreneurs are taken into consideration when implementing the project, including training *modalities, working hours, material and methodologies adapted to the level of literacy or schooling, locations where farm work takes place (distances from home)*. The same goes for the needs of female technical staff who benefit from training.	territories are female (30% for componenent 3).			M&E expert; benefiting institutions	4.1)		
6. External review of the quality and appropriateness of the *gender perspective* in the **design of didactic material** for protagonists (written, audio-visual, virtual).	Quality control with a gender approach is assured.	One (1) review by material generated.	Years 1 through 5	MINIM TA	USD 2,000 (included under line A 1.1.1.5 of the overall budget)	Project reports and MINIM TA reports	It is important that all didactic material additional to the MINIM primers mainstream the gender perspective and be reviewed/validated by MINIM
Activities	**Indicators**	**Goal**	**Timeline**	**Implemented by**	**Cost (USD)**	**Follow-up mechanism**	**Comments**
Component 2. Restoration of forest landscape to enable the generation of ecosystem services							
Output 2.1. **Farming families have adopted resilient natural resource management practices to restore the forest landscape and improving the flow of critical ecosystem services in drought periods, in 14 municipalities of the Dry Corridor.**							
7. Define a mechanism to ensure the participation of women, with the objective of including and prioritising the interests and issues faced by women in relation to environmental restoration in the participatory planning of actions at landscape scale, to define the areas for forest restoration along the banks of water sources (CN) and to provide incentives (35% women, 65% men).	Mechanism created	A mechanism is institutionalised	Year 2	MARENA GENDER UNIT; Project coordinator; M&E expert; benefiting institutions	Included in the time budgeted for the PGU team	Project reports	The women's priorities must be clearly defined in the gender analysis /evaluation.

8. Hold events to reflect on and analyse the topic of environmental education with municipal authorities, groups of children, youngsters and adults, to raise awareness on the need to incorporate gender equity to environmental care and conservation.	Number of days	To take place as part of the 75 days with activities called for in the strategy (see Component 1)	Year 1 and 2	MINIM AT PMU	Included in the budget for this GAP strategy, under Component 1.	Project reports	This action is implemented in the framework of Component 1, but also contributes to Component 2.
Component 3. Rehabilitation of agricultural livelihoods at farm level, using climate- resiliente and environmentally-sustainable practices for landscape restoration							
Output 3.1. Farming families have established and improved practices in agroecology, water and landscape management, crop production and income generation							
Activities	**Indicators**	**Goal**	**Timeline**	**Implemented by**	**Cost (USD)**	**Follow-up mechanisms**	**Comments**
9. Define gender criteria to identify agricultural, agro-silvo-pastoral and agroforestry systems, and the selection and implementation of practices.	A set of criteria is validated.	1	Year 1	Individual consultant	Included in expenditures allocated under A 3.1.1.1 in the overall budget.	Consultancy ToRs Consultancy Report	The gender analysis/ evaluation must be taken into account .
10. Establish gender-based quotas for the capitalisation of farmer families, in particular those led or jointly led by women.	A total of 720 farmer families are led or jointly led by women receive are capital with which to work on their productive, silvopastoral and agroforestry systems.	40%	Years 2, 3 and 4	PGU and participating institutions	Included in expenditures allocated under A 3.1.1.2 and A 3.1.1.3 in the overall budget.	Project reports Mid-term and Final Evaluation	The mechanism must be linked to the women's empowerment groups furthered under Component 1.
11. Define a mechanism to further access and participate in the creation and establishment of seed banks.	Female protagonists participate fully in the creation and strengthening of seed banks.	40%	Year 1	MINIM and PGU, MARENA Gender Unit	Included in costs allocated under A 3.1.1.4 in the overall budget.	Project reports	

12. Promote joint responsibility in the process of establishing family orchards, vegetablegardens, and nurseries, taking into account the proposals made by the men and women involved in the gender analysis/evaluation.	At least 50% of beneficiaries are women.	50%	Year 1 and 2	PGU, MEFFCA, MAG, MINIM	Included in expenditures under A 3.1.1.5 in the overall budget.	Project reports Mid-term and Final Evaluation	It is important to promote this shared activity with family members (joint responsibility approach).
Output 3.2. The capacities of farming families to diversify and access markets using sustainable soil management practices, with the participation of women and Indigenous populations, are strengthened							
Activities	**Indicators**	**Goal**	**Timeline**	**Implemented by**	**Cost (USD)**	**Follow-up mechanism**	**Comments**
13. Take affirmative actions based on the needs for gender analysis/evaluation, in order to support women in value-adding efforts, the growing of vegetables and the provision of technical assistance.	Number of young, adult and Indigenous women benefiting.	At least 140 women.	Year 1 and 2	PMU, MEFFCA, MAG	USD 193,760 (included under A 3.1.2.1 and A 3.1.2.2 in the overall budget.		Take for a reference the gender analysis/evaluation
Component 4. Knowledge management including the capture and dissemination of knowledge and lessons from the project among assisted farming families to promote the sustainability of the project's impact on landscapes							
Output 4.1. A knowledge management and communications strategy is developed and implemented with the participation of women and Indigenous populations							
Activities	**Indicators**	**Goal**	**Timeline**	**Implemented by**	**Cost (USD)**	**Follow-up mechanism**	**Comments**
14. Consult with adult, young and Indigenous women and develop a gender mainstreaming strategy for the project that includes tools, instruments and mechanisms to facilitate the participation in and access to decision-making by women on Project-related matters.	Number of tools, instruments and mechanisms useful to the mainstreaming of gender in the project	All tools, instruments and mechanisms generated are applied to the mainstreaming of gender in the project.	Year 1	MARENA GENDER UNIT; Project coordinator; M&E expert; benefiting institutions	USD 15,000 (included under activity 4.1.1.8)	Project reports Mid-term and Final Evaluation	This activity will take place before project onset, in order to ensure that all other activities take into account the needs and interests of women, and that the limitations they face regarding participation are addressed.

15. Formulation of a gender and communications toolkit (in checklist format) with emphasis on resilient livelihoods, for the purpose of mainstreaming the gender approach to the communications outputs and reports generated by the project.	Number of communications outputs that include gender-inclusive language and contribute to challenging gender stereotypes and/or transmit clear messages with a gender perspective.	All sub-products of component 4 and consultancy reports include the gender perspective.	Year 1	Consultancy	USD 1,500 (included in expenditures under A 4.1.1.4 and A4.1.1.8 in the overall budget.	Consultancy ToRs Project reports Mid-term and Final Evaluation	The toolkit must ensure the following, for instance: ✓ The scripting of short documentaries for the women on topics germane to the Project that challenge traditional gender roles and display the potential women have throughout the value chain. ✓ The use of inclusive language in all project documents, among them communication outputs, calls for consultancies, contracts, consultancy reports, monitoring reports, evaluation reports, interinstitutional communications, etc.
Activities	**Indicators**	**Goal**	**Timeline**	**Implemented by**	**Cost (USD)**	**Follow-up mechanism**	**Comments**
Output 4.2. Institutional capacities are strengthened to foster project monitoring and sustainability of the project's impact with a focus on gender, youth and Indigenous populations							
18. Include gender variables/indicators to the software module in order to gather information related to the project.	Number of gender-related variables with early warning mechanisms on possible failure to meet project gender quotas.	One or more variables for each activity that has a gender quota assigned.	Year 1	Consultancy	Cost included under A 4.1.2.1	Project reports	It is important to disaggregate the information by sex, age, and ethnic group. Likewise, the monitoring should show the increase of women in leadership positions in the communities in which the project has been active.
19. Devise a mechanism that ensures the egalitarian participation of men and women in the strengthening of capacities at the monitoring and information technology system.	Mechanism is devised and implemented.	Participation of 50% women and 50% men.	Year 1	Project coordinator; M&E expert; benefiting institutions	Included in the time budgeted for the PMU team.	Project reports	
GENERALITIES							
Define 50-50 gender quotas for the PMU team							
Flexibilise protagonist selection criteria regarding land title ownership, to favour female farmers who do not own land							
The ToR for engaging an expert in monitoring and evaluation must include experience in gender-related matters.							

Annex 3: Free, Prior and Informed Consent and IP Action Plan

36. The implementation area of the project includes 2 groups of Indigenous Peoples:
- ***Indigenous People of Sébaco***, living in the municipalities of Sébaco in the department of Matagalpa, who grow rice and staple crops. In addition to the municipal governments, these populations have an Indigenous community government, made up of members of the community from the Indigenous Assembly, the Council of Elders, the Administrative Board of Directors and the Electoral Directorate.
- **Indigenous People of Telpaneca**, who belong to Chorotega, in the department of Madriz. Their main economic activity is the production of staple crops: corn, beans, and sorghum, frequently in combination with musaceae. Coffee is cultivated in the mountainous areas. Livestock-breeding is also an important economic activity. The Indigenous People of Telpaneca have a royal title granted by the Spanish crown in the year 1622, for the total extension of the municipality.

37. The municipal territorial consultation process of both Indigenous Peoples was carried out in 2 consultation events for each territory. In Sébaco, the first event was held on December 7, 2022 and the second consultation event was held on January 20, 2023. Both events were held in the Auditorium of the Casa de la Praderas Restaurant and Hotel located in Sébaco, Matagalpa. In the case of Telpaneca, the first event was held on November 28, 2022, and the second consultation event was held on December 19, 2022.

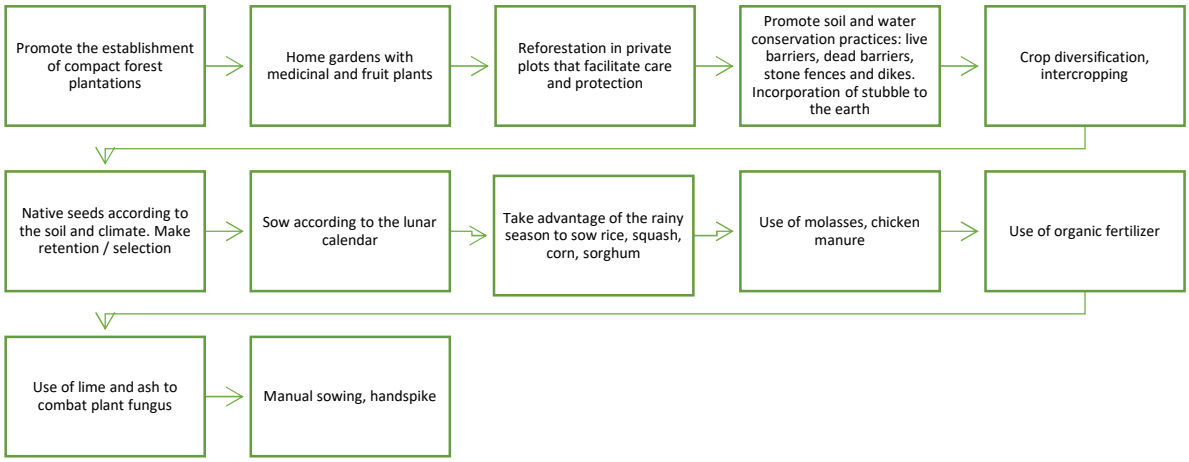
38. During the consultations, the objectives, scope, components, expected outcomes, budget and stakeholders involved in the project were presented. The process also served to discuss other initiatives promoted by the government in these territories as input. The results of prior consultations were used to draft the concept note. Through a participatory methodology, the opinions, interests, needs and recommendations for the project were collected from women, men and youth of the Indigenous communities who participated in the process, and from representatives, men, and women, of the Indigenous authorities.

39. The people of the Indigenous communities agreed that the direct coordination and communication of project actions between the authorities of the Indigenous Peoples and the executing institutions was of utmost priority. The people stated that the activities within the Indigenous territory must be presented to the community board and receive the support of the council of elders of each Indigenous community. To include Indigenous issues in the project, they also proposed to strengthen community organisation and the leadership of Indigenous organisational structures through project activities.

40. The people consulted have high expectations of the project because it addresses chronic needs in rural communities such as access to water, access to improved seed, pest management and the need to increase productive yield. They identified topics of interest for the generation of solutions to the problems mentioned, such as training and supply of materials for the construction of low-cost irrigation systems (drip irrigation), preparation of organic fertilizer, pest management, dissemination of ancestral agricultural practices such as: irrigation before the midsummer drought, incorporation of stubble, restauration with an emphasis on soil improvement and conservation. They consider it necessary to promote generational succession and the involvement of youth and generational change in conservation efforts.

41. The project expects to identify together with the Indigenous Peoples and under their consent, cultural practices in sustainable agriculture. The people consulted consider the following agricultural practices and customs of the Indigenous communities that the project can recover are:

Figure 1. Ancestral agricultural practices and customs carried out by Indigenous communities



42. With regards to Component 1, the topics of interest prioritised in the consultation were:
- **Training for the establishment of soil and water conservation works**, construction of live barriers, dead barriers, stone fences, water retention dikes.
- **Techniques for the construction of efficient irrigation systems** for areas without water for the dry season.
- **Ancestral practices** applied to agriculture such as irrigation before midsummer drought, incorporation of stubble.
- **Reforestation** with emphasis on soil conservation and improvement.
- Training for families on **inheritance rights**, so that women have equality and equity in obtaining property inheritance.
- Education and training to improve **crop yields**, preparation of organic fertilizer and pest management.
- Gender training and awareness for the families involved, in order to promote respectful and complementary relationships for the common good.
- **Environmental education** at the community level.

43. The preferred training modalities are exchanges of experience in the communities on Fridays or Saturdays. Hours: 9:00 am to 1:00 pm, bimonthly meetings. For the **transfer of capacities**, they included among their needs, the support of the project for activities with logistical expenses (food and transportation).

44. Under **Component 2**, the people of the Indigenous communities who participated in the consultations expressed the following priorities:

Table 7. Component 2 consultation results

Actions that would be implemented to restore the landscape	***Type of support or incentives needed***
• Consult the authorities of the Indigenous Peoples to request permits for the use of forest resources • Incorporate young people to continue implementing climate change adaptation practices • Reforestation on the banks of rivers and springs • Reforestation in areas where the survival of the plants can be guaranteed (plots) • Use of native seeds • Avoid the use of fungicides • Organic farming	• Training with incentives in the form of tools such as picks, shovels, bars(tools that cannot be sold) • Provide water tanks for irrigation • Bags for plants • Germplasm for seeds, as a continuation of a project carried out in the municipality of Telpaneca • Financing for purposes

45. With regards to **Component 3,** the Indigenous People consulted exposed the following needs and priorities:

Table 8. Component 3 consultation results

Technologies and practices to rehabilitate agricultural livelihoods	Crops selected to diversify the farming system
• The Indigenous Peoples point to productive diversification for the enhancement of livelihoods, and indicated that the incentives should include seeds and plantations for intercropping purposes • Planting of staple grains with legumes • Establishment of home gardens (with medicinal and fruit plants) • Ordering of backyards (provide materials such as mesh, seeds) • Crop diversification to guarantee family nutrition • Tanks, barrels for storing water in homes, promoting the best standard of living and use of women's time • Organic agriculture	• Agroforestry plantations, with timber or fruit trees native to the area • Intercropping of staple crops (sorghum, corn, beans) • Home gardens (with medicinal and fruit plants). • Produce

46. In **Component 4,** related to the capturing and dissemination of learning processes, the consulted populations mentioned that according to the experience of the Indigenous community, the most widely used media includes: WhatsApp groups/social networks, radio programmes, community visits, exchanges of experience and assemblies of the Indigenous People. They also mentioned that they expect this component to share information on the culture and worldview of the Indigenous Peoples of the Pacific region.

Findings and recommendations

47. The Indigenous community considers this project to be beneficial, because they consider that it will support the livelihoods of families, improve the economy of the municipality, and favour the environment.

48. The consulted groups considered it especially important for the project to take into account the Indigenous community and women, because previous initiatives in the municipality have only included them in training and not in investment projects or activities. They emphasised that the project should involve the traditional representatives of the Indigenous Peoples throughout the execution of the project, from planning to monitoring and follow-up. The consulted populations also requested complete information on the project activities and the direct benefits to the Indigenous communities.

49. The groups consulted emphasized the selection of protagonists in a consensual manner with the authorities of the Indigenous community, to allow the selection of people who are engaged in agricultural activities, even if they produce on rented or borrowed land.

50. They believe that it is important to prioritize the Indigenous communities in the most vulnerable situations, promoting irrigation systems for the development of agriculture, because these groups experience the greatest harvest losses due to drought and lack of resources and tools, such as pipes for the installation of irrigation systems. It is also necessary to plan timely support for groups in vulnerable situations so that they can participate in project activities, particularly poor women and single mothers who must bring food to their children.

51. The also requested support with tools and techniques for some areas that require water containment and retention works to protect orchards, as well as incentives through tools and inputs for the adoption of agricultural practices to prepare the soil, environmental conservation, such as delivery of picks, machetes, shovels, etc.

52. Similarly, they highlighted that the project could strengthen organisational aspects that could

help them negotiate benefits for Indigenous farmers in their territory. This could have an impact on: supporting Indigenous People's institutions (statutes, organisation), analysis of development options with a gender approach, promotion of alternatives so that Indigenous women can develop agricultural production. They also highlighted that component 4 should share information on the culture and history of Indigenous Peoples, as well as ancestral agricultural practices.

53. In order to enhance the environmental restoration activities proposed in the project, there are initiatives in the territory that can be reinforced with the project. The project also brings an opportunity to raise awareness about the importance of avoiding deforestation and contamination of water sources at the community level. It can also contribute to recoveringancestral practices for environmental-friendly farming through the creation and strengthening of seed banks, and the preparation of the land.

54. In the consultation process, the Indigenous Peoples emphasized that in their opinion the project is in line with their reality and it is adjusted to their needs in terms of forest recovery, and the establishment of agricultural systems in combination with plantations, such as silvopastoral and agroforestry systems, considering the participation of youth to ensure the sustainability of the actions.

Measures to minimize impacts

55. Below are the measures proposed in the consultations by the people of the Indigenous communities to minimise negative impacts during the execution of the project:

- Coordinate and communicate project actions directly with the authorities of the Indigenous Peoples and the implementing institutions
- Project activities in the communities must be supported by the Council of Elders and the Community Board of each Indigenous People
- Guarantee the consultation process during the execution of the project, with the participation of the authorities of the Indigenous Peoples in planning, monitoring and evaluation
- Promote spaces for dialogue, participation,support and feedback with traditional grassroots authorities and organisations of Indigenous farmers to maintain a flow of information and active collaboration on the different activities within the framework of the project
- Provide support to cover logistical costs such as transportation and food. The people consulted consider that a stipend is ideal to compensate protagonists when working days are affected.
- Convene meetings in advance to guarantee that a broad and representative number of people are invited. Summons should be made by traditional authorities of the Indigenous Peoples
- Technical assistance and monitoring of the project should be adapted to the culture so that the Indigenous farmers acquire the knowledge and techniques of environmentally sustainable and resilient production
- The technical staff must provide the information in an easy to understand language to facilitate understanding, given that sometimes people become discouraged by trainings and consider that they learn very little, because they do not understand the information.
- Carry out an assessment per community.
- Provide incentives for tools in order to construct conservation works

Dissemination and communication mechanisms

56. The FPIC document for each Indigenous People included the communication, monitoring, and complaint mechanisms preferred by Indigenous Peoples. A copy of the document, signed by the respective representatives, is included at the end of this section.

57. The Communication and Dissemination Mechanism is the result of the consultation, respecting the Free, Prior and Informed Consent of the Native Indigenous Peoples of the Pacific. During the consultation process, most people agreed that the State of Nicaragua has currently recognised the rights of Indigenous Peoples, through the ratification of ILO Convention 169, and is working on strengthening processes in their communities. They are including them in entrepreneurship programs and have recognized their possession of the land through the legitimacy of their royal titles.

58. The ***communication and dissemination mechanisms of the project take into account the following points:***

- The coordination and communication of project actions will be carried out directly with the authorities of the Indigenous Peoples and the executing institutions.
- At the community level, they will convene community leaders and the Council of Elders of each Indigenous people.
- It must be guaranteed that the communities are constantly informed of the process and each of the stages of the project. For this purpose, the Assemblies of Indigenous People may be used. These meetings could be held internally on a monthly basis. A biannual visit to the communities will be carried out, and a quarterly evaluation session will be held with the institutions.
- The activities carried out within the framework of the project (encounters, meetings, and talks) may be scheduled on a monthly basis in the target communities. The community must be kept informed. The problems encountered during the implementation of the project should be expressed in order to find solutions, with the participation of stakeholders.
- Visits should be made to the communities to learn about their reality and hear from them about their most important needs for support.
- The activities (workshops, meetings, talks) must be supported by tangible and adequate material to disseminate the information.
- The communication and dissemination mechanism must maintain the approach of promoting their ancestral practices based on respect for Mother Earth.

Community Feedback t Mechanism (CFM)

59. The purpose of the mechanism is to guarantee that the complaints, claims and suggestions of the different actors receive a response and are handled appropriately. Steps to Manage Complaints, Claims and Suggestions:

- A format or letter will start the process of the mechanism.
- The letter or format must be presented in the office of the Indigenous Peoples, to any member of the community board.
- The formal and traditional Indigenous authorities, such as the Community Board will assess the complaint's relevance, at the beginning of the monthly meeting.
- The complaints, claims and suggestions considered pertinent will be presented to the Municipal Delegation of MARENA as the executing agency.
- The Indigenous authorities must keep a copy of the form with the signature of the technical staff and the date it was received.
- MARENA will assess the type of requirement and will inform the institution concerned with the complaint, claim or suggestion.
- The response to the complaint, claim and/or suggestion will be communicated to the Indigenous community through the municipal MARENA delegation.

60. There must be an option to appeal when the evaluation of the Indigenous community disputes the resolution. Additional evidence may be provided in the appeal. In the appeal the Council of Elders will join the process.

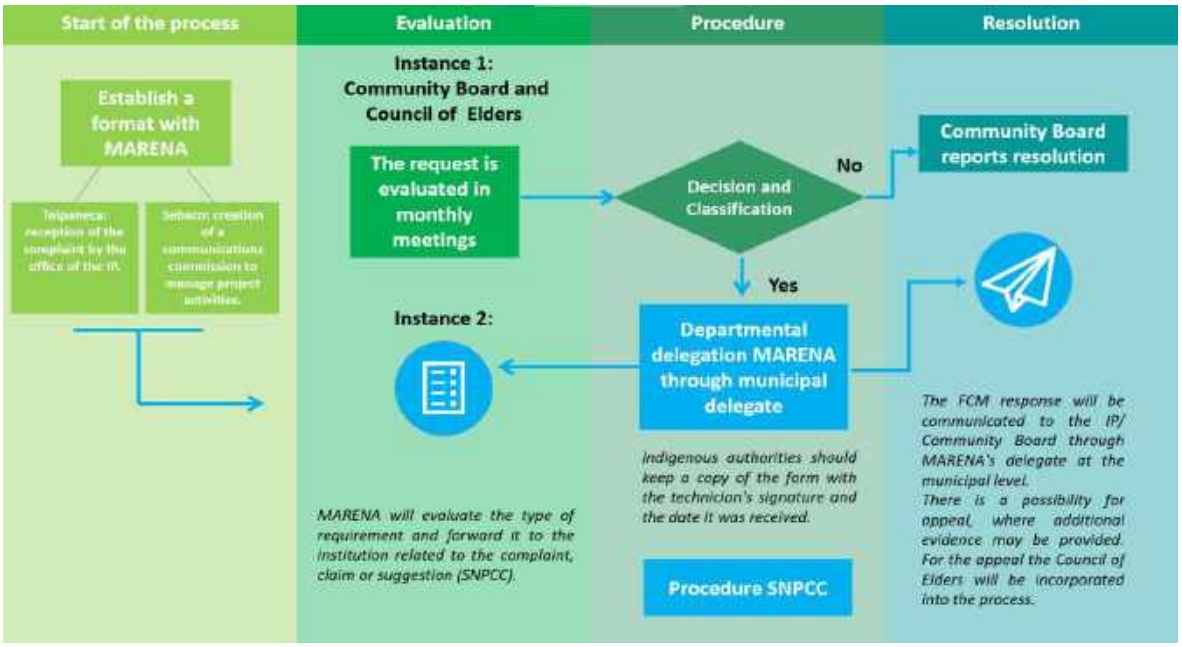

Start of the process
Evaluation
Procedure
Resolution
Establish a format with MARENA
Instance 1: Community Board and Council of Elders
The request is evaluated in monthly meetings
Decision and Classification
No
Community Board reports resolution
Yes
Instance 2:
Departmental delegation MARENA through municipal delegate
MARENA will evaluate the type of requirement and forward it to the institution related to the complaint, claim or suggestion (SNPCC).
Indigenous authorities should keep a copy of the form with the technician's signature and the date it was received.
Procedure SNPCC
The FCM response will be communicated to the IP/ Community Board through MARENA's delegate at the municipal level.
There is a possibility for appeal, where additional evidence may be provided. For the appeal the Council of Elders will be incorporated into the process.

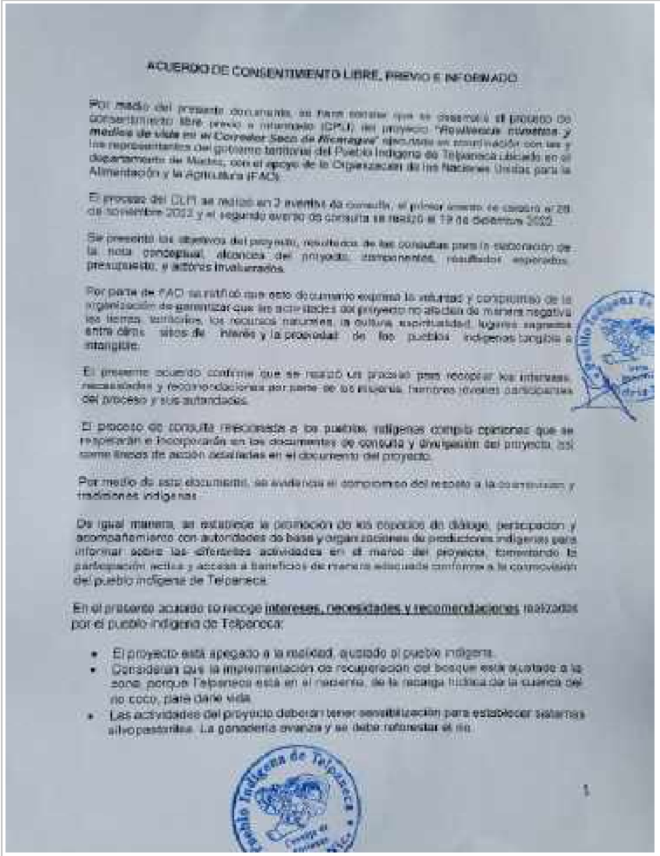
Table 9: Indigenous Peoples Action Plan

INDIGENOUS PEOPLES ACTION PLAN							
Project Climate resilience and livelihoods in the Nicaraguan Dry Corridor							
Strategic Objective: Guarantee the effective participation of the Indigenous peoples in Madriz and Matagalpa, and guarantee Free, Prior and Informed Consent in accordance with the National Climate Change Policy, Decree 04-2022, for the implementation of the project.							
Component 1. Transfer of capacities to farming families leading to the implementation of resilient natural resource management practices and degraded landscape restoration in 14 municipalities in the Dry Corridor							
Output 1.1. Capacity-building programme for SNPCC institutions and farming families is developed and implemented with the participation of women, youth and Indigenous Peoples.							
Activities	**Indicators**	**Goal**	**Timeline**	**Responsible**	**Cost (USD)**	**Follow up mechanism**	**Observations**
1. Training for farmers with a gender perspective and adapted to the culture of the Indigenous Peoples of Sébaco and Telpaneca. (includes workshops, exchange tours to demonstration plots, field schools, feedback from evaluations, among others).	- Number of male and female farmers elders, youth, people with disabilities trained • Number of training events	175 (7 events)	Year 2	PMU, servants and public servants	USD 13,434	• Project reports with data disaggregated by sex, age, disability status, and Indigenous group • Minutes of trainings • Lists of protagonists in events	Cost Integrated in A 1.1.1.7
2. Design and reproduce educational material for beneficiaries (written, audiovisual and virtual) adapted to the culture of Indigenous Peoples and co-created by Indigenous Peoples representatives in the intervention zones.	With the consent of the indigenous peoples consulted, an informative brochure will be developed. on ancestral agricultural practices for community and farmers use in the Dry Corridor, given that there are no major cultural differences. An informative brochure on the identity and worldview of the Indigenous Peoples of the North Pacific region. Approved communication products	1000 copies of each informative brochure	Year 2 and 3	PMU, territorial public servants, consultant on Indigenous affairs, boards of directors of Indigenous Peoples	USD 5,000	• Dissemination plan • Project reports • Illustrative primers	Cost Integrated in A 1.1.1.5

3. External consultancy specialized in work with Indigenous Peoples, safeguards, and capacity building for the organisational strengthening of Indigenous Peoples.	Consultancy	Authorities of Indigenous Peoples trained on organisational aspects Technical personnel with information and knowledge of Indigenous affairs and how to further collaborate	Year 2	PMU, territorial public servants, consultant on Indigenous affairs, boards of directors of Indigenous Peoples	USD 16,000	• Consulting report which also includes a guide of best practices for technical staff.. • Project reports • Minutes of activities • MT and Final Evaluation Report	Cost Integrated in A 1.1.1.4
Component 2. Restoration of forest landscape to enable the generation of ecosystem services							
Output 2.1. Farming families have adopted resilient natural resource management practices to restore the forest landscape and improving the flow of critical ecosystem services in drought periods, in 14 municipalities of the Dry Corridor							
Activities	**Indicators**	**Goal**	**Timeline**	**Responsible**	**Cost (USD)**	**Follow up mechanism**	**Observations**
4. Incentives for the conservation and recovery of forest areas using traditional practices and knowledge	Forest areas conserved and recovered in Indigenous territory of both municipalities	175 subsidies to farmers	Year 2 and 3	PMU, territorial public servants, consultant on Indigenous affairs, boards of directors of Indigenous Peoples	USD 17,500	• Progress reports • Annual report • EMT and Final Evaluation Report	Cost Integrated in A 2.1.1.6
Component 3. Rehabilitation of agricultural livelihoods at farm level, combining climate- resiliente and environmentally-sustainable practices with Indigenous practices for landscape restoration							
Output 3.1. Farming families have established and improved practices in agroecology, water and landscape management, crop production and income generation							
Activities	**Indicators**	**Goal**	**Timeline**	**Responsible**	**Cost (USD)**	**Follow up mechanism**	**Observations**
5. Strengthen and create community seed banks, for the promotion and rescue of native seeds of traditional crop varieties, with the participation of Indigenous People, and with a focus on community resilience and food security	30 community seed banks under the administration and control of the Indigenous communities, and with a special focus on the participation of Indigenous women.	30	Year 2 and 3	PMU, territorial public servants, consultant on Indigenous affairs, boards of directors of Indigenous Peoples	USD 64,080	• Progress reports • Annual report	Cost Integrated in A 3.1.1.4
6. Facilitate the establishment of vegetable gardens and plant nurseries with medicinal plants and crops to promote food security working with Indigenous women and youth in each community to promote gender inclusive and intergenerational participation	Vegetable gardens and nurseries for Indigenous Peoples in the implementation areas	50	Year 2 and 3	PMU, territorial public servants, consultant on Indigenous affairs, boards of directors of Indigenous Peoples	USD 28,216	• Progress reports • Annual report	Cost Integrated in A 3.1.1.5
7. Selection and implementation of low-cost water harvesting technologies with proven effectiveness for agricultural use during the dry season	Water systems located in at least 2 municipalities with Indigenous Peoples.	2	Year 3	PMU, territorial public servants, consultant on Indigenous affairs, boards of directors of Indigenous	USD 5,000	• Progress reports • Activity evaluation reports. • Photo report	Cost Integrated in A 3.1.1.6

				Peoples.			
Component 4. Knowledge management including the capture and dissemination of knowledge and lessons from the project among assisted farming families to promote the sustainability of the project's impact on landscapes							
Output 4.1. A knowledge management and communications strategy is developed and implemented with the participation of women and Indigenous populations							
Activities	**Indicators**	**Goal**	**Timeline**	**Responsible**	**Cost (USD)**	**Follow up mechanism**	**Observations**
8. Awareness-raising and support to access information on Indigenous Peoples, culture and worldview. developed in conjunction with them and with their consent.	Number of dissemination/ communication materials for different auidiences.	At least two types of media implemented	Year 1 and 2	PMU	Cost Integrated in A 4.1.4	Monitoring Reports	Cost Integrated in A 4.1.1.3 and A 4.1.1.5
9. Dissemination of information through the communication strategy used by Indigenous Peoples	Communication strategy used by Indigenous Peoples	Designed and disseminated communication materials	Years 1, 2, 3, 4	PMU	USD 30,000	Project Website; •Web: electronic dissemination in the portals of the partners, the Government; Newsletters Monitoring Reports.	Cost Integrated in A 4.1.1.5
Output 4.2. Institutional capacities are strengthened to foster project monitoring and sustainability of the project's impact with a focus on gender, youth and Indigenous populations.							
Activities	**Indicators**	**Goal**	**Timeline**	**Responsible**	**Cost (USD)**	**Follow up mechanism**	**Observations**
10. Strengthening of institutional coordination and traditional authorities of Indigenous Peoples for planning in the territory (quarterly assemblies)	Number of community meetings or assemblies with the participation of women and youth Communication strategy and audiovisual material prepared for dissemination	3 assembly events at the community level fin 4 years with participation of women and youth.	Years 2,3,4,5	PMU, territorial public servants, consultant on Indigenous affairs, boards of directors of Indigenous Peoples	USD 20,000	• Minutes of activities • Project reports • List of protagonists	Cost Integrated in A 4.1.2.2

Free Prior Informed Consent (FPIC):
Among the findings of the consultation with the traditional authorities of the Indigenous Peoples, it is perceived that they value as positive the process of Free Prior and Informed Consent (FPRC), developed for the Climate Resilience and Adaptation to Livelihoods project. The FPIC documents compiled interests, needs and recommendations made by Indigenous Peoples, as well as the agreements reached, which were incorporated into this document. Below are the images of the Free and Informed Prior Consent Agreements signed with the two Indigenous Peoples (Sébaco and Telpaneca) in the area of intervention of the project:



ACUERDO DE CONSENTIMIENTO LIBRE, PREVIO E INFORMADO

Por medio del presente documento, se hace constar que se desarrolló el proceso de consentimiento libre, previo e informado (CPLI), del proyecto "*Resiliencia climática y medios de vida en el Corredor Seco de Nicaragua*" ejecutado en coordinación con las y los representantes del gobierno territorial del Pueblo Indígena de Telpaneca ubicado en el departamento de Madriz, con el apoyo de la Organización de las Naciones Unidas para la Alimentación y la Agricultura (FAO).

El proceso del CLPI se realizó en 2 eventos de consulta, el primer evento de consulta el 28 de noviembre 2022 y el segundo evento de consulta se realizó el 19 de diciembre 2022.

Se presentó los objetivos del proyecto, resultados de las consultas para la elaboración de la nota conceptual, alcances del proyecto, componentes, resultados esperados, presupuesto, y actores involucrados.

Por parte de FAO se ratificó que este documento expresa la voluntad y compromiso de la organización de garantizar que las actividades del proyecto no afectan de manera negativa las tierras, territorios, los recursos naturales, la cultura, espiritualidad, lugares sagrados entre otros, sitios de interés y la propiedad de los pueblos indígenas tangible e intangible.

El presente acuerdo confirma que se realizó un proceso para recopilar los intereses, necesidades y recomendaciones por parte de las mujeres, hombres jóvenes participantes del proceso y sus autoridades.

El proceso de consulta relacionada a los pueblos indígenas compila opiniones que se respetarán e incorporarán en los documentos de consulta y divulgación del proyecto, así como líneas de acción detalladas en el documento del proyecto.

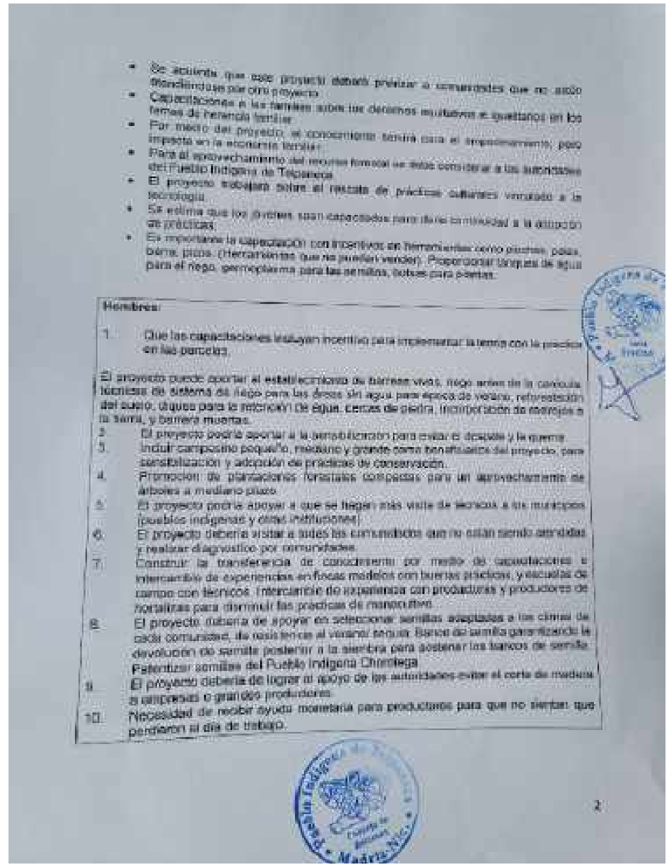
Por medio de este documento, se evidencia el compromiso del respeto a la cosmovisión y tradiciones indígenas.

De igual manera, se establece la promoción de los espacios de diálogo, participación y acompañamiento con autoridades de base y organizaciones de productores indígenas para informar sobre las diferentes actividades en el marco del proyecto, fomentando la participación activa y acceso a beneficios de manera adecuada conforme a la cosmovisión del pueblo indígena de Telpaneca.

En el presente acuerdo se recoge <u>intereses, necesidades y recomendaciones</u> realizadas por el pueblo indígena de Telpaneca:

- El proyecto está apegado a la realidad, ajustado al pueblo indígena.
- Consideran que la implementación de recuperación del bosque está ajustado a la zona, porque Telpaneca está en el naciente, de la recarga hídrica de la cuenca del río coco, para darle vida.
- Las actividades del proyecto deberán tener sensibilización para establecer sistemas silvopastoriles. La ganadería avanza y se debe reforestar el río.

1



- Se acuerda que este proyecto deberá priorizar a comunidades que no están beneficiándose por otro proyecto.
- Capacitaciones a las familias sobre los derechos equitativos e igualitarios en los temas de herencia familiar.
- Por medio del proyecto, el conocimiento servirá para el empoderamiento, para impacto en la economía familiar.
- Para el aprovechamiento del recurso forestal se debe considerar a las autoridades del Pueblo Indígena de Telpaneca.
- El proyecto trabajará sobre el rescate de prácticas culturales vinculado a la tecnología.
- Se estima que los jóvenes sean capacitados para darle continuidad a la adopción de prácticas.
- Es importante la capacitación con incentivos en herramientas como piochas, palas, barra, pizca. (Herramientas que no puedan vender). Proporcionar tanques de agua para el riego, germoplasma para las semillas, bolsas para plantas.

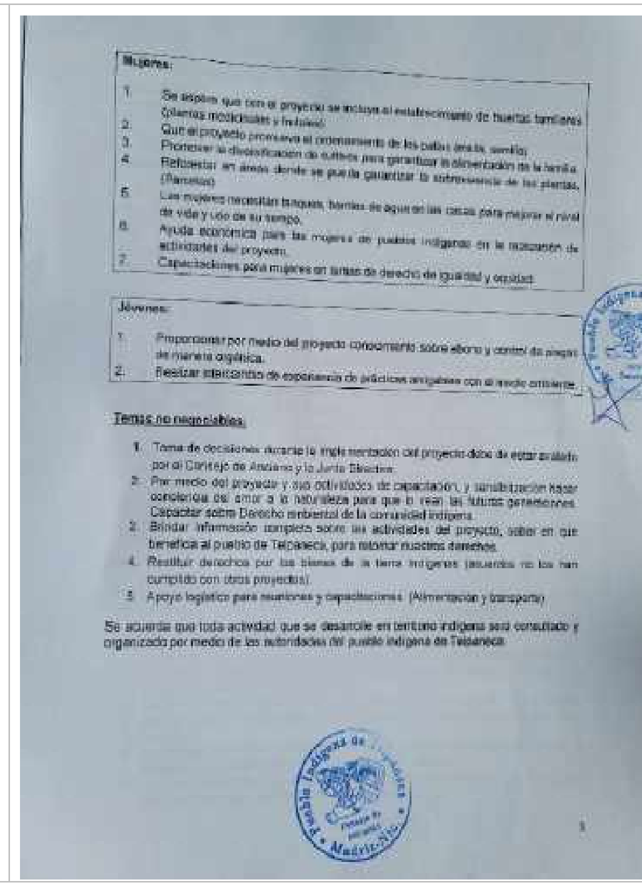
Hombres:

1. Que las capacitaciones incluyan incentivo para implementar la teoría con la práctica en las parcelas.

El proyecto puede aportar al establecimiento de barreras vivas, riego antes de la consulta técnica de sistema de riego para las áreas sin agua para época de verano, reforestación del suelo, diques para la retención de agua, cercas de piedra, incorporación de rastrojos a la tierra, y barrera muertas.

2. El proyecto podría aportar a la sensibilización para evitar el despale y la quema.
3. Incluir campesino pequeño, mediano y grande como beneficiarios del proyecto, para sensibilización y adopción de prácticas de conservación.
4. Promoción de plantaciones forestales compactas para un aprovechamiento de árboles a mediano plazo.
5. El proyecto podría apoyar a que se hagan más visita de técnicos a los municipios (pueblos indígenas y otras instituciones).
6. El proyecto debería visitar a todas las comunidades que no están siendo atendidas y realizar diagnóstico por comunidades.
7. Construir la transferencia de conocimiento por medio de capacitaciones e intercambio de experiencias en fincas modelos con buenas prácticas, y escuelas de campo con técnicos. Intercambio de experiencia con productoras y productores de hortalizas para disminuir las prácticas de monocultivo.
8. El proyecto debería de apoyar en seleccionar semillas adaptadas a los climas de cada comunidad, de resistencia al verano/ sequía. Banco de semilla garantizando la devolución de semilla posterior a la siembra para sostener los bancos de semilla. Patentizar semillas del Pueblo Indígena Chorotega.
9. El proyecto debería de lograr el apoyo de las autoridades evitar el corte de madera a empresas o grandes productores.
10. Necesidad de recibir ayuda monetaria para productores para que no sientan que perdieron el día de trabajo.

2



Mujeres:

1. Se espera que con el proyecto se incluya el establecimiento de huertos familiares (plantas medicinales y frutales).
2. Que el proyecto promueva el ordenamiento de los patios (aves, cerdo).
3. Promover la diversificación de cultivos para garantizar la alimentación de la familia.
4. Reforestar en áreas donde se pueda garantizar la sobrevivencia de las plantas. (Parcelas)
5. Las mujeres necesitan tanques, barriles de agua en las casas para mejorar el nivel de vida y uso de su tiempo.
6. Ayuda económica para las mujeres de pueblos indígenas en la realización de actividades del proyecto.
7. Capacitaciones para mujeres en temas de derecho de igualdad y equidad.

Jóvenes:

1. Proporcionar por medio del proyecto conocimiento sobre abono y control de plagas de manera orgánica.
2. Realizar intercambio de experiencia de prácticas amigables con el medio ambiente.

<u>Temas no negociables:</u>

1. Toma de decisiones durante la implementación del proyecto debe de estar avalado por el Consejo de Anciano y la Junta Directiva.
2. Por medio del proyecto y sus actividades de capacitación, y sensibilización hacer conciencia del amor a la naturaleza para que lo vean las futuras generaciones. Capacitar sobre Derecho ambiental de la comunidad indígena.
3. Brindar información completa sobre las actividades del proyecto, saber en que beneficia al pueblo de Telpaneca, para retomar nuestros derechos.
4. Restituir derechos por los bienes de la tierra indígenas (acuerdos no los han cumplido con otros proyectos).
5. Apoyo logístico para reuniones y capacitaciones. (Alimentación y transporte)

Se acuerda que toda actividad que se desarrolle en territorio indígena será consultado y organizado por medio de las autoridades del pueblo indígena de Telpaneca.

3

Mecanismo de comunicación, monitoreo y mecanismo de reclamación:

Se incluirá los mecanismos de comunicación, monitoreo y mecanismos de reclamación que son parte del presente acuerdo y que ha sido consultado en los eventos para la elaboración del PmDoc. Agregando los requerimientos en cuanto a actividades, presupuesto, comunicación y monitoreo.

Estrategia de Comunicación y apoyo institucional:

Solicitud de colaboración a la organización. Se requiere actualización de mapa territorial de acuerdo a la información generada por el Proyecto de Ordenamiento de la Propiedad (PRODEP). Delimitación territorial por comunitaria.

El pueblo indígena y su estructura se moviliza con fondos propios, por lo que las actividades previstas deben de tener presupuesto.

Mecanismos de comunicación y divulgación del proyecto toman en cuenta los siguientes puntos:

1. La coordinación y comunicación de acciones del proyecto se realizará de manera directa con las autoridades de los pueblos indígenas y las instituciones ejecutoras.
2. A nivel comunitario, convocan líderes comunitarios y consejo de anciano.
3. Se tiene un recurso de comunicación social por medio de la radio Segovia, se requiere fondos para actividades de divulgación.
4. Se debe garantizar en todo momento que las comunidades conozcan constantemente el proceso y cada una de las etapas del proyecto. Se podrán utilizar las Asambleas de Pueblos Indígenas, estas reuniones podrían realizarse de manera mensual internamente. Y una visita semestral a las comunidades, y con las instituciones sesión trimestral de evaluación.
5. Las actividades que se realicen en el marco del proyecto encuentros, reuniones y charlas). Podrán calendarizarse de manera mensual en beneficiarias comunidades indígenas.

Mecanismo de quejas, reclamos y sugerencia

El mecanismo tiene como objetivo garantizar que las quejas, reclamos y sugerencias de los diferentes protagonistas y que reciban respuesta y se manejen adecuadamente.

Pasos para Gestionar de Quejas, Reclamos y Sugerencias

1. Existencia de formato o carta iniciará el proceso para la gestión del mecanismo.
2. La carta o formato se debe gestionar en la oficina del pueblo indígena. Atendido por cualquier miembro de la junta directiva.
3. Las autoridades indígenas formales y tradicionales como o son la Junta Directiva, se encargará de hacer valoración de pertinencia en la reunión mensual, a inicios de cada mes.
4. Las quejas, reclamos y sugerencias valoradas como pertinentes la presentaran al delegado municipal de MARENA como institución ejecutora.
5. Las autoridades indígenas deberán conservar una copia del formato con la firma del técnico y la fecha en que fue recibida.

6. MARENA valorara el tipo de requerimiento y emite a la institución relacionada con la queja, reclamo o sugerencia.
7. La respuesta a la Quejas, Reclamo y Sugerencias, se comunicará a la comunidad indígena por medio del delegado a nivel municipal.
8. Debe de existir una alternativa de apelación cuando la evaluación de la comunidad indígena entre en controversia con la resolución. Se podrá aportar pruebas adicionales en la apelación. En la apelación el consejo de anciano se incorporará al proceso.

Reunidos en Telpaneca, Madriz. En la oficina del gobierno territorial de Pueblo Indígena de Telpaneca, el día 19 de diciembre 2022.

Participantes:

1. Genaro Martínez Quintero
   Presidente Junta Directiva Pueblo Indígena Telpaneca, Madriz
   Firma

2. Reynaldo Matey Guerrero
   Vicepresidente Junta Directiva Pueblo Indígena Telpaneca, Madriz
   Firma

3. Jacinta del Carmen Polanco Ramírez
   Secretaria Junta Directiva Pueblo Indígena Telpaneca, Madriz
   Firma

4. Mateo Iván González Hernández
   Fiscal Junta Directiva Pueblo Indígena Telpaneca, Madriz
   Firma

5. Francisca Magdalena Cárdenas Posadas
   Representante de la Mujer, Junta Directiva Pueblo Indígena Telpaneca, Madriz
   Firma

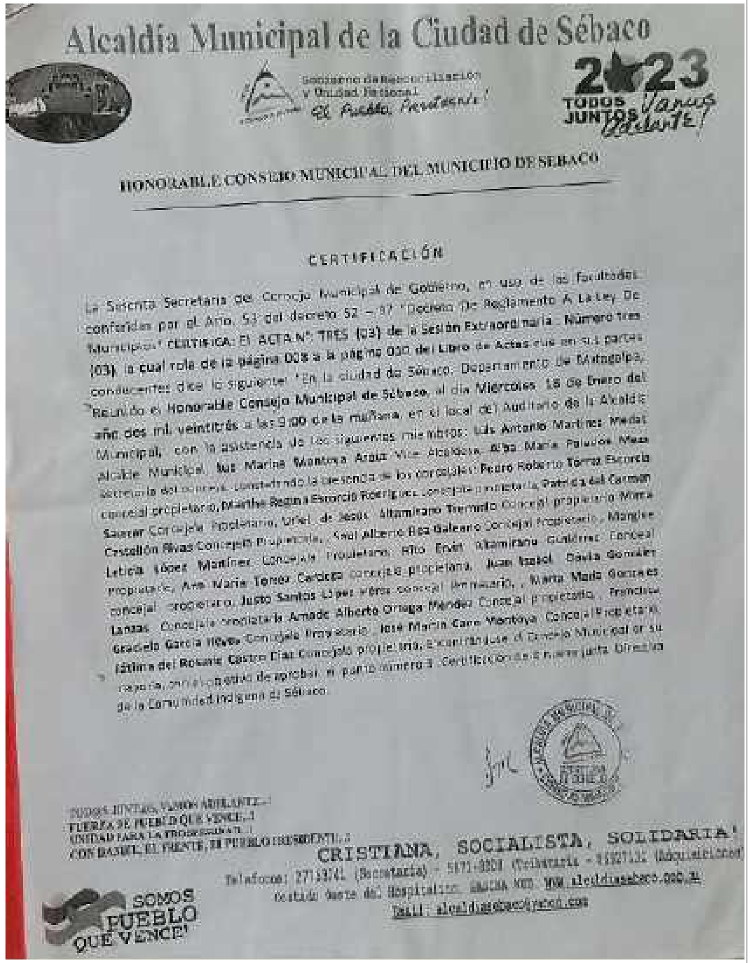
6. Benicia Polanco Ramos
   Representante de la Niñez y Adolescencia, Junta Directiva Pueblo Indígena Telpaneca, Madriz
   Firma

7. José Hernán Gómez Quintero
   Coordinador Consejo de Ancianos, Pueblo Indígena Telpaneca, Madriz
   Firma

8. José Benicio Zavala Zavala
   Consejo de Anciano Pueblo Indígena Telpaneca, Madriz
   Firma

9. Edjenn Jéens
   Consultora FAO
   Firma

10
   Firma



Alcaldía Municipal de la Ciudad de Sébaco

Gobierno de Reconciliación y Unidad Nacional
El Pueblo, Presidente!

2023 TODOS JUNTOS Vamos Adelante!

HONORABLE CONSEJO MUNICIPAL DEL MUNICIPIO DE SEBACO

CERTIFICACIÓN

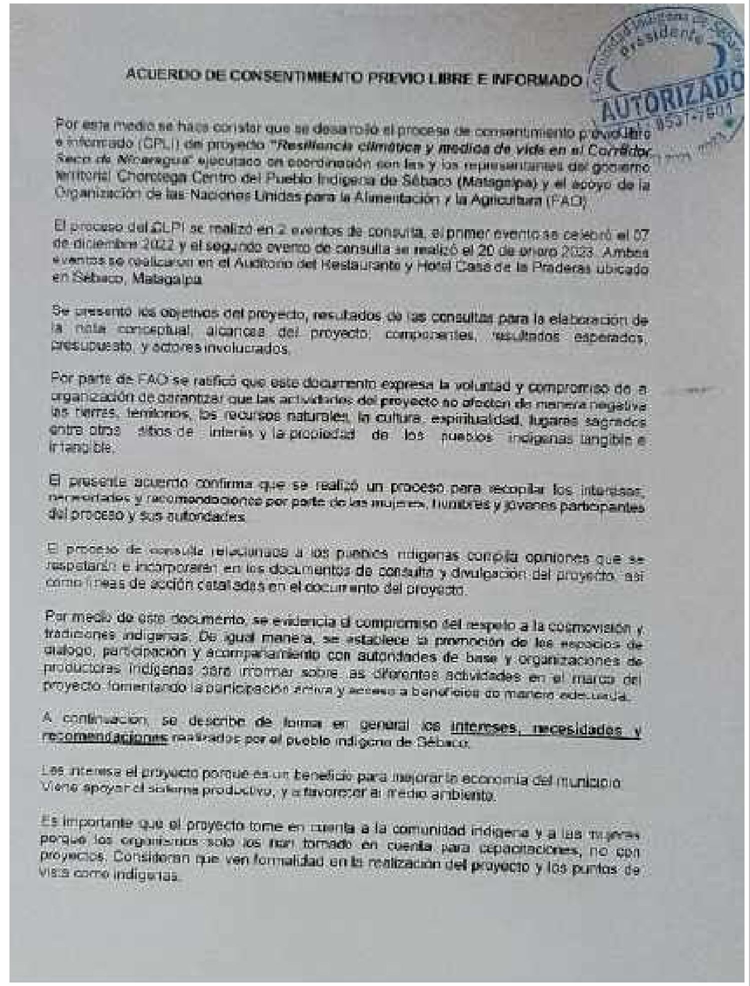
La Suscrita Secretaria del Concejo Municipal de Gobierno, en uso de las facultades conferidas por el Arto. 53 del decreto 52 – 97 "Decreto De Reglamento A La Ley De Municipios" CERTIFICA: EL ACTA N°: TRES (03) de la Sesión Extraordinaria, Número tres (03), la cual rola de la página 008 a la página 030 del Libro de Actas que en sus partes conducentes dice lo siguiente: "En la ciudad de Sébaco, Departamento de Matagalpa. Reunido el Honorable Consejo Municipal de Sébaco, al día Miércoles 18 de Enero del año dos mil veintitrés a las 9:00 de la mañana, en el local del Auditorio de la Alcaldía Municipal, con la asistencia de los siguientes miembros: Luis Antonio Martínez Mejía Alcalde Municipal, luz Marina Montoya Araúz Vice Alcaldesa, Alba María Palacios Meza secretaria del concejo, constatando la presencia de los concejales: Pedro Roberto Torrez Escorcia concejal propietario, Martha Regina Escorcia Rodríguez concejala propietaria, Patricia del Carmen Sauceda Concejala Propietaria, Uriel de Jesús Altamirano Tremiño Concejal propietario, Marta Castellón Rivas Concejala Propietaria, Saúl Alberto Ruiz Galeano Concejal Propietario, Marlene Leticia López Martínez Concejala Propietaria, Rito Ervin Altamirano Gutiérrez Concejal propietario, Ana María Torrez Cardoza concejala propietaria, Juan Isabel Dávila González concejal propietario, Justo Santos López Pérez concejal propietario, Marta María Gonzales Lanzas Concejala propietaria, Amado Alberto Ortega Méndez Concejal propietario, Francisca Graciela García Reyes Concejala Propietaria, José Martín Cano Montoya Concejal Propietario, Fátima del Rosario Castro Díaz Concejala propietaria. Encontrándose el Concejo Municipal en su mayoría, con el objetivo de aprobar el punto número 3. Certificación de la nueva junta Directiva de la Comunidad indígena de Sébaco.

TODOS JUNTOS, VAMOS ADELANTE..!
FUERZA DE PUEBLO QUE VENCE..!
UNIDAD PARA LA PROSPERIDAD..!
CON DANIEL, EL FRENTE, EL PUEBLO PRESIDENTE..!

CRISTIANA, SOCIALISTA, SOLIDARIA!

Teléfonos: 2775974 (Secretaría) - 5871-3201 (Tributaria) - [illegible] (Adquisiciones)
Costado Oeste del Hospitalito [illegible] www.alcaldiasebaco.gob.ni
Email: alcaldiasebaco@yahoo.com

SOMOS PUEBLO QUE VENCE!



ACUERDO DE CONSENTIMIENTO PREVIO LIBRE E INFORMADO

Por este medio se hace constar que se desarrolló el proceso de consentimiento previo libre e informado (CPLI) del proyecto "*Resiliencia climática y medios de vida en el Corredor Seco de Nicaragua*" ejecutado en coordinación con las y los representantes del gobierno territorial Chorotega Centro del Pueblo Indígena de Sébaco (Matagalpa) y el apoyo de la Organización de las Naciones Unidas para la Alimentación y la Agricultura (FAO).

El proceso del CLPI se realizó en 2 eventos de consulta, el primer evento se celebró el 07 de diciembre 2022 y el segundo evento de consulta se realizó el 20 de enero 2023. Ambos eventos se realizaron en el Auditorio del Restaurante y Hotel Casa de la Praderas ubicado en Sébaco, Matagalpa.

Se presentó los objetivos del proyecto, resultados de las consultas para la elaboración de la nota conceptual, alcances del proyecto, componentes, resultados esperados, presupuesto, y actores involucrados.

Por parte de FAO se ratificó que este documento expresa la voluntad y compromiso de la organización de garantizar que las actividades del proyecto no afecten de manera negativa las tierras, territorios, los recursos naturales, la cultura, espiritualidad, lugares sagrados entre otros sitios de interés y la propiedad de los pueblos indígenas tangible e intangible.

El presente acuerdo confirma que se realizó un proceso para recopilar los intereses, necesidades y recomendaciones por parte de las mujeres, hombres y jóvenes participantes del proceso y sus autoridades.

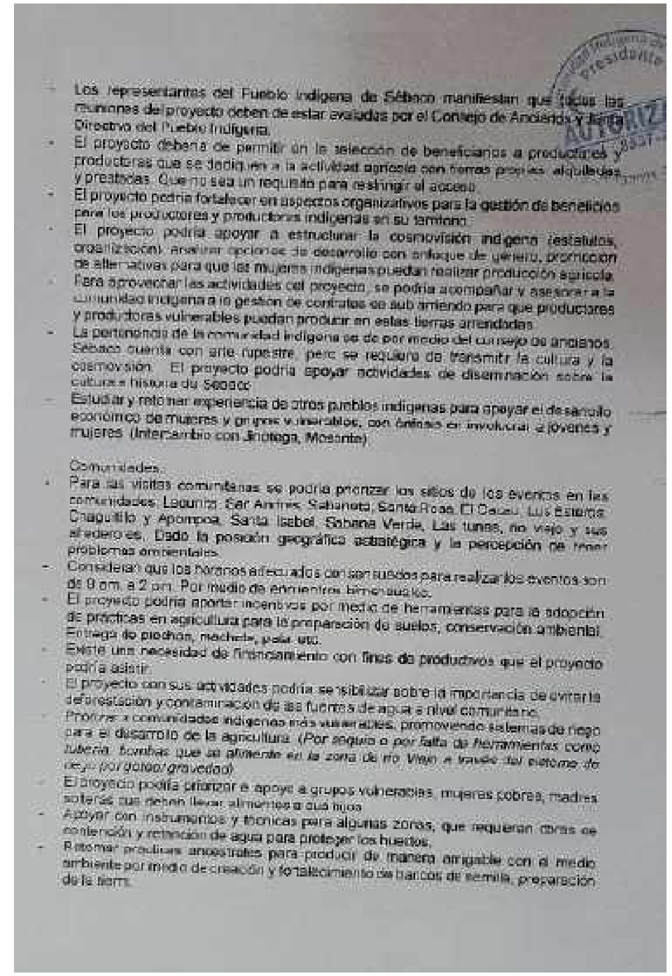
El proceso de consulta relacionado a los pueblos indígenas compila opiniones que se respetarán e incorporarán en los documentos de consulta y divulgación del proyecto, así como líneas de acción detalladas en el documento del proyecto.

Por medio de este documento, se evidencia el compromiso del respeto a la cosmovisión y tradiciones indígenas. De igual manera, se establece la promoción de los espacios de diálogo, participación y acompañamiento con autoridades de base y organizaciones de productoras indígenas para informar sobre las diferentes actividades en el marco del proyecto, fomentando la participación activa y acceso a beneficios de manera adecuada.

A continuación, se describe de forma en general los intereses, necesidades y recomendaciones realizados por el pueblo indígena de Sébaco.

Les interesa el proyecto porque es un beneficio para mejorar la economía del municipio. Viene apoyar el sistema productivo, y a favorecer al medio ambiente.

Es importante que el proyecto tome en cuenta a la comunidad indígena y a las mujeres porque los organismos solo los han tomado en cuenta para capacitaciones, no con proyectos. Consideran que ven formalidad en la realización del proyecto y los puntos de vista como indígenas.



- Los representantes del Pueblo indígena de Sébaco manifiestan que todas las acciones del proyecto deben de estar avaladas por el Consejo de Ancianos y Junta Directiva del Pueblo Indígena.
- El proyecto debería de permitir en la selección de beneficiarios a productores y productoras que se dediquen a la actividad agrícola con tierras propias, alquiladas y prestadas. Que no sea un requisito para restringir el acceso.
- El proyecto podría fortalecer en aspectos organizativos para la gestión de beneficios para los productores y productoras indígenas en su territorio.
- El proyecto podría apoyar a estructurar la cosmovisión indígena (estatutos, organización). Analizar opciones de desarrollo con enfoque de género, promoción de alternativas para que las mujeres indígenas puedan realizar producción agrícola.
- Para aprovechar las actividades del proyecto, se podría acompañar y asesorar a la comunidad indígena a la gestión de contratos de sub arriendo para que productores y productoras vulnerables puedan producir en estas tierras arrendadas.
- La pertenencia de la comunidad indígena se da por medio del consejo de ancianos. Sébaco cuenta con arte rupestre, pero se requiere de transmitir la cultura y la cosmovisión. El proyecto podría apoyar actividades de diseminación sobre la cultura e historia de Sébaco.
- Estudiar y retomar experiencia de otros pueblos indígenas para apoyar el desarrollo económico de mujeres y grupos vulnerables, con énfasis en involucrar a jóvenes y mujeres. (Intercambio con Jinotega, Mozonte)

Comunidades.

- Para las visitas comunitarias se podría priorizar los sitios de los eventos en las comunidades: Laguneta, San Andrés, Sabaneta, Santa Rosa, El Cacao, Los Esteros, Chaguitillo y Apompoa, Santa Isabel, Sabana Verde, Las tunas, río viejo y sus alrededores. Dado la posición geográfica estratégica y la percepción de tener problemas ambientales.
- Consideran que los horarios adecuados consensuados para realizar los eventos son de 9 am. a 2 pm. Por medio de encuentros bimensuales.
- El proyecto podría aportar incentivos por medio de herramientas para la adopción de prácticas en agricultura para la preparación de suelos, conservación ambiental. Entrega de piochas, machete, pala etc.
- Existe una necesidad de financiamiento con fines de productivos que el proyecto podría asistir.
- El proyecto con sus actividades podría sensibilizar sobre la importancia de evitar la deforestación y contaminación de las fuentes de agua a nivel comunitario.
- Priorizar a comunidades indígenas más vulnerables, promoviendo sistemas de riego para el desarrollo de la agricultura. (*Por sequía o por falta de herramientas como tubería, bombas que se alimente en la zona de río Viejo a través del sistema de riego por goteo/gravedad*)
- El proyecto podría priorizar e apoye a grupos vulnerables, mujeres pobres, madres solteras que deben llevar alimentos a sus hijos.
- Apoyar con instrumentos y técnicas para algunas zonas, que requieran obras de contención y retención de agua para proteger los huertos.
- Retomar prácticas ancestrales para producir de manera amigable con el medio ambiente por medio de creación y fortalecimiento de bancos de semilla, preparación de la tierra.

Hombres:

1. Apoyo en construcción de obras de cosecha de agua, reservorio, pozo.
2. Promover créditos productivos.
3. Reciclaje de agua de procesos, manejado, tratadas, y conducidas por medio de zanjas y tuberías.
4. Reforestación en áreas de fuentes hídricas.
5. Facilitar tuberías para los sistemas de riego, paneles solares.

Mujeres:

1. Promover la diversificación de cultivos para garantizar la alimentación de la familia.
2. Reforestar en áreas donde se pueda garantizar la sobrevivencia de las plantas (Parcelas).
3. El proyecto podría ayudar a las mujeres con alternativas como granjas avícolas.
4. Brindar semillas criollas mejoradas.
5. Promover la construcción de túneles para el cultivo de hortalizas.
6. Conocer medidas para evitar la profundización de las aguas.
7. En la selección de beneficiarios/as asegurarse que desarrollen producción agrícola para enriquecer la experiencia y aprendizaje de buenas prácticas.

Jóvenes:

1. Promover actividades económicas que se puedan desarrollar sin abandonar sus estudios.
2. Vincular las actividades de los proyectos en el territorio indígena para la siempre reforzados en el desarrollo productivo.

Temas no negociables:

- Toma de decisiones durante la implementación del proyecto debe de estar propuesto por la junta directiva avalado por el Consejo de Anciano.
- Apoyo logístico para reuniones y capacitaciones (Alimentación y transporte).
- Participación de la Junta Directiva y Consejo de Ancianos en la planificación de actividades en el territorio.
- Tomar en cuenta en la selección de beneficiarios y beneficiarias a la comunidad indígena.
- Se acuerda que toda actividad que se desarrolle en territorio indígena sera consultado y organizado por medio de los autoridades del pueblo indígena de Sébaco.

Mecanismo de comunicación:

Se incluirá los mecanismos de comunicación, monitoreo y mecanismos de reclamación que son parte del presente acuerdo y que ha sido consultado en los eventos para la elaboración

del ProDoc. Agregando los requerimientos en cuanto a actividades, presupuesto comunicación y monitoreo.

- Se considera que el proyecto debe visitar las comunidades y realizar las actividades en el sitio.
- Para las convocatorias se debe de utilizar la red de promotores líderes de las comunidades indígenas.
- Para las reuniones con la Junta Directiva y Consejo de ancianos aprovechando las asambleas para brindar información. Dichas asambleas se podrían realizar cada semestre (enero, julio). Preferiblemente días sábado.
- La coordinación y comunicación de acciones del proyecto se realizará de manera directa con las autoridades de los pueblos indígenas y las instituciones ejecutoras.
- Las actividades que se realicen en el marco del proyecto (encuentros, reuniones y charlas) podrán calendarizarse de manera mensual.

Mecanismo de quejas, reclamos y sugerencia

La propuesta del mecanismo de quejas, reclamo y sugerencia es considerada una vía para fortalecer la comunicación con los Pueblos Indígenas protagonistas del proyecto, al ofrecerles un camino efectivo para expresar sus preocupaciones y lograr soluciones.

El mecanismo tiene como objetivo garantizar que las quejas, reclamos y sugerencias de los diferentes protagonistas y que reciban respuesta y se manejan adecuadamente.

Para garantizar la accesibilidad del mecanismo de quejas, reclamos y sugerencias se propone como método de comunicación verbal.

Pasos para Gestionar de Quejas, Reclamos y Sugerencias

1. Existencia de formato o carta iniciará el proceso para la gestión del mecanismo.
2. Crear una comisión bajo orientaciones de la Junta Directiva del Pueblo Indígena de Sébaco, para apoyar el proceso de comunicación, monitoreo y seguimiento del proyecto.
3. La carta o formato se puede gestionar por medio de Comisión de comunicación de actividades de proyecto, Consejo de Ancianos, líderes comunitarios, y Junta Directiva del Pueblo Indígena de Sébaco.
4. Las autoridades indígenas formales y tradicionales serán las encargadas de hacer valoración de pertinencia y presentar el formato de Quejas, Reclamos y Sugerencias, al delegado de MARENA como institución ejecutora.
5. La presentación del formato se realizará con el delegado de MARENA.
6. Las autoridades indígenas deberán conservar una copia del formato con la firma del técnico (delegado) y la fecha en que fue recibida.
7. MARENA – Matagalpa, valora el tipo de requerimiento y emite a la institución relacionada.
8. La respuesta a las Quejas, Reclamos o Sugerencias se comunicará a la comunidad indígena por medio de los técnicos a nivel municipales, teniendo como recurso la apelación cuando la evaluación de la comunidad indígena entre en controversia con la resolución. Se podrá aportar nuevas propuestas en la apelación.

Reunidos en Sébaco, Matagalpa el día 29 de enero 2023.

Participantes:

1. Carlos Navarrete
   Presidente Junta Directiva Pueblo Indígena Sébaco, Matagalpa

   Firma
2. Rosalina Chavarría
   Vice presidenta Junta Directiva Pueblo indígena de Sébaco

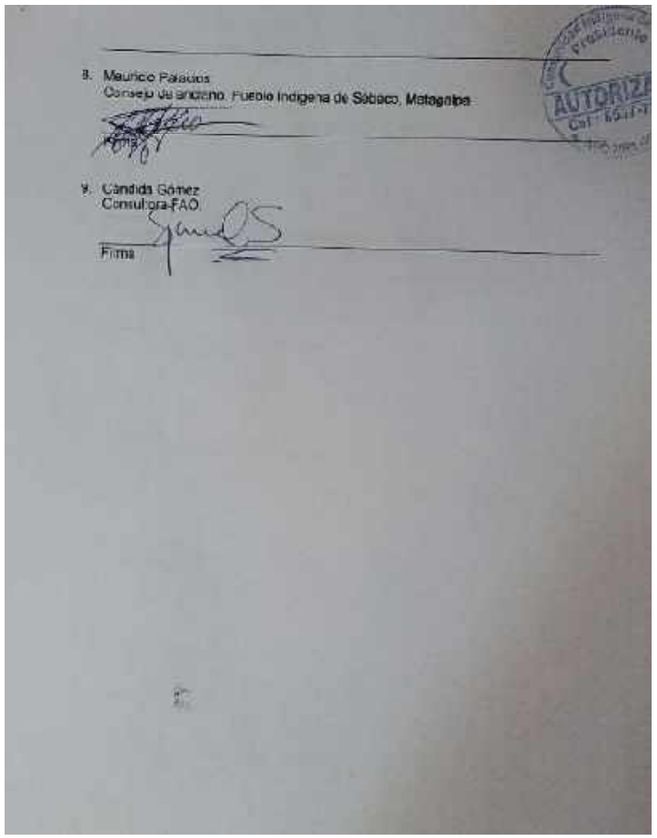
   Firma
3. Javier Francisco Palacios Torres
   Secretario Junta Directiva Pueblo Indígena de Sébaco, Matagalpa

   Firma
4. Dance Nubia Dávila Gallardo
   Representante de la Mujer, Junta Directiva Pueblo Indígena de Sébaco, Matagalpa

   Firma
5. David José González Rayo
   Vocal, Junta Directiva Pueblo Indígena de Sébaco, Matagalpa

   Firma
6. Santos Gonzalez
   Consejo de anciano, Pueblo Indígena de Sébaco, Matagalpa

   Firma



8. Mauricio Palacios
Consejo de Ancianos. Pueblo Indígena de Sébaco, Matagalpa

Firma

9. Candida Gómez
Consultora-FAO

Firma

Liderazgo comunitario

7. Jacklin Vanessa Aguilar Treminio
Directorio Electoral. Pueblo Indígena de Sébaco, Matagalpa

Firma

8. Moisés Palacios
Directorio Electoral. Pueblo Indígena de Sébaco, Matagalpa

Firma

9. Silvia Rayo
Pueblo Indígena de Sébaco, Matagalpa

Firma

10. Marcos Dávila
Pueblo Indígena de Sébaco, Matagalpa

Firma

11. Jacob de Orozco
Pueblo Indígena de Sébaco, Matagalpa

Firma

12. Isabel Gómez
Pueblo Indígena de Sébaco, Matagalpa

Firma

13. Orlando Dávila
Pueblo Indígena de Sébaco, Matagalpa

Firma

Annex 4: Environmental and Social Screening, Impact Assessment and Screening and Environmental and Social Management Plan

I. Introducton and Background

61. This is an environmentally positive project with no potentially adverse impacts and is aligned with the Adaptation Fund's Environmental and Social Policy and Principles. Following the environmental and social risk assessment detailed in the section, the project was determined to be a 'Category B' project (project with easily mitigated) due to some minor risks related to the potential exclusion of vulnerable groups such as women, youth and Indigenous Peoples from project benefits, the interventions for ecosystem restoration, and the rehabilitation of agricultural livelihoods. For all identified risks, measures have been designed to effectively avoid or minimise them.

62. Although easily mitigated, the main risks are related to activities involving the delimitation of zones and the design and implementation of plans for the environmental recovery of ecologically important areas (river banks, water recharge zones and ecological corridors) including areas in the buffer zone of protected areas, under outcome 2.1; as well as the risks posed by activities involving the identification and implementation of agro-ecological practices in productive plots, and water harvesting and irrigation systems, under outcome 3.1. The project contemplates measures to avoid the risks of affecting natural habitats and biological diversity during environmental restoration activities; as well as the risks of land use change and the minor risk of pollution and inefficient use of resources in the introduction of adaptation practices in agriculture and livestock activity. This section provides a provides a brief summary of the outcome of the risk assessment in relation to the 15 Environmental and Social Principles of the Adaptation Fund, followed by a detailed environmental and social risk assessment.

I. Screening and categorisation

The project was screened against the 15 Environmental and Social principles of the Adaptation Fund using the screening tool (available here). This screening tool consists of a list of around 20 general level 1 questions (indicated with two digits, e.g. 3.1) and around 60 detailed level 2 questions (indicated with three digits, e.g. 3.1.1), corresponding to the 15 principles of the Adaptation Fund Environmental and Social Policy.

The level 1 questions need to be answered first and they need to be answered ALL. If a level 1 question is answered with a ‘yes’, it leads to more detailed questions of level 2. All level 2 questions under a level 1 question that triggered a ‘yes’ need to be answered. If a level 1 question is answered with a ‘no’, then the corresponding level 2 questions do not need to be answered.

Answers to the detailed Level 2 questions result in one of three degrees of concern. If any Level 2 question is answered with a ‘yes’, the indicated degree of concern will determine the degree of concern for the whole activity. This means that if a single question indicates a high degree of concern, the activity is classified as an activity of high concern and appropriate measures must be taken. If no question is answered with a high degree of concern, but at least one medium-level concern is raised, then the activity is a medium concern activity. If no Level 1 or Level 2 questions are answered with a ‘yes’, then the activity is of low concern and no further action is required.

It is possible that a level 1 question is answered with a ‘yes’ and all associated level 2 questions are answered ‘no’ as they are more detailed and specific questions of the same issue. If all the level 2 questions are answered ‘no’, then this area will be of low concern, even if the level 1 questions was answered with a ‘yes’. If a potential impact is not covered by any of the L1 or L2 questions, it can be added in the empty box at the end of each of the sections.

Table 10. Environmental and Social Risk Checklist

Environmental and Social Principles Checklist	No further assessment is required for compliance	Potential impacts and risks
ESP Compliance with Law	X	**No risk** ***There is no risk the activity would not comply with an applicable domestic or international law.*** As a UN entity, WFP abides by international and national law. WFP's partners and contracted service providers are equally obliged to do the same. The project has been worked closely with national, regional, and district authorities during the proposal development phase and will continue to do so throughout the implementation process to ensure compliance with all relevant laws detailed in section II-E.
ESP 2 Access and Equity	X	***Low risk of exclusion of women, Indigenous Peoples, and other vulnerable groups.*** During consultations, gaps in access to knowledge, goods, resources, and services between men and women, particularly in vulnerable communities, were identified. There is a low risk that the absence of land ownership and tenure could hinder women's participation in component 2. The project will adopt an equal participation and empowerment approach. It will include transparent measures outlined in the GAP, IPAP, and ESMP to ensure that project benefits are distributed fairly, without discrimination or favouritism.
ESP 3 Marginalized and Vulnerable Groups	X	***Low risk of exclusion of vulnerable groups*** Marginalised and Groups in situations of vulnerability, including women, young people, and Indigenous Peoples, were consulted during the formulation of the project proposal to ensure that the project considers their needs and leads to their empowerment in decision-making. During consultations, communities and groups in precarious conditions were also identified, particularly regarding income, access to water and land ownership. There is a low risk of excluding marginalised and vulnerable groups, especially women and young people related the prevalent inequalities in the context the project would be implemented. The project will contemplate measures to ensure that its execution does not increase the differences and, on the contrary, assists in reducing the existing gaps. To avoid the risk of exclusion of marginalised and vulnerable groups, measures have been designed in the GAP, IPAP, and ESMP.
ESP 4 Human Rights	X	***No risk*** ***There is no risk the activity fails to respect human rights.*** The project affirms the rights of all people and does not violate any human rights pillar, in line with the UN principles and WFP guidance to respect human rights. All project interventions will respect and promote the human rights of vulnerable populations, as recognised by national legislation and international instruments. The consultations, proposal design, and project implementation have this focus. They will continue to focus on promoting human rights, especially the rights of women, girls, and youth, and support for Indigenous Peoples.
ESP 5 Gender Equality and Women's Empowerment	X	***Low risk of exclusion of women and of deepening gender gaps.*** The project aims to promote gender equality and empower women in the Dry Corridor communities by adopting an approach that ensures equal participation. During consultations, it was noted that women and men do not participate equally in community organisations, and young people and women need to be more involved in these spaces. Given the current context of gender inequality in the project area and recognising the higher impact of climate change on women and girls, there is a low risk that participating women will not benefit from project actions aiming at women's empowerment. During the formulation of the project proposal, a **Gender Analysis and Action Plan** has been developed, presented in Annex 2. Through specific consultations, it has been ensured that the project addresses the main constraints to women's equal participation, needs and interests and that

		gender considerations are integrated into each project activity.
ESP 6 Core Labour Rights	X	***No risk*** ***There is no risk the activity fails to respect core labour rights.*** The project will comply with national, international and WFP standards in relation to fundamental labour rights. WFP implements and requires to its cooperating partners full compliance with labour policies and adherence to labour rights. Likewise, Nicaragua has been a member of the ILO since 1957 and has ratified the eight core conventions on: Forced Labour; Freedom of Association; Right to Organise and Collective Bargaining; Equal Remuneration; Abolition of Forced Labour; Discrimination (Employment and Occupation); Minimum Age; and Child Labour.
ESP 7 Indigenous Peoples	X	***Low risk of exclusion of indigenous peoples and violation of their rights.*** The project will have a positive impact on Indigenous Peoples as it contemplates activities to be developed in Indigenous territories. Therefore, mechanisms have been established to ensure that the rights of indigenous peoples are respected, including the application of Free and Informed Consent - FPIC during territorial consultations. The consultation allowed for an in-depth determination of the environmental, social, economic, and cultural aspects of the setting where the project will be implemented, leading to early identification of the possible risks associated with the design and implementation of appropriate measures to avoid them. In formulating the project proposal, extensive consultations and participatory planning sessions have been conducted with a representative sample of Indigenous Peoples, including territorial leaders, women, youth, and elders. Through the FPIC process and the development of the Indigenous Peoples Action Plan, the priorities and needs of the Indigenous Peoples population were identified and incorporated into the project in all relevant activities.
ESP 8 Involuntary Resettlement	X	***No risk*** ***There is no risk the activity leads to resettlement.*** None of the project components foresees displacement or involuntary resettlement. Should a resettlement or economic displacement situation arise during project implementation that was not anticipated during design, then the executing agency and WFP will ensure that a process of consultation and negotiation with potentially affected persons takes place in accordance with FPIC and Do No Harm principles. If no agreement is reached, project implementers will modify the specific interventions associated with the affected persons or halt them if changes are impossible. If project implementers fail to carry out a process of consultation and negotiation with affected people in accordance with FPIC and the Do-No-Harm principles, the project will respect land ownership and land use rights, as well as customary law.
ESP 9 Protection of Natural Habitats	X	***Very low risk of affecting natural habitats during interventions in buffer zones of protected areas.*** The project is not expected to have any negative impact on critical natural habitats, including those that are (a) legally protected; (b) officially proposed for protection; (c) recognised by authoritative sources for their high conservation value, including as critical habitat; or (d) recognised as protected by local traditional or Indigenous communities. The project intervention zone includes areas within the buffer zones of protected areas where the use of natural resources is a concern, further exacerbated by climate change. However, the project will establish a mechanism to ensure that natural habitats are not negatively impacted. Although agriculture is currently practised in the buffer areas, there is a low risk of harm to the natural habitats. To avoid potential harm, the project will use silvopastoral systems, agroforestry, and non-invasive species plantations, as outlined in national legislation and area development plans. Additionally, the project will provide awareness-raising campaigns and technical assistance to farmers and the local population to ensure they take adequate measures to protect the environment and wildlife. It is expected that the project will have a positive impact on the protection of natural habitats through the restoration of ecosystems in the buffer zones of protected areas and other areas of ecological importance, where the connectivity of biological corridors and other environmental services, such as

		water recharge, will be enhanced. and other environmental services, such as water recharge, will be enhanced.
ESP 10 Conservation of Biological Diversity	X	***Very low risk of affecting biodiversity during livelihood recovery and rehabilitation activities.*** The project will not affect critical areas for biodiversity conservation. The project intervention area does not contain UNESCO Biosphere Reserves or RAMSAR sites, nor species listed by IUCN or protected by national legislation. However, there is a low risk of impacting natural habitats, ecosystems, and biodiversity during environmental restoration activities; the project will contribute to biodiversity conservation by incorporating agroforestry and silvopastoral systems, as well as other agroecological practices, and the restoration of the forest landscape, using native tree species. To ensure that local habitats are not negatively impacted, the sites to be restored will be selected by INAFOR in consultation with municipal governments, community organisations, and Indigenous authorities (where applicable). This selection will follow local development plans, land use plans, and national environmental legislation.
ESP 11 Climate Change	X	***No risk*** ***There is no risk the activity led to increased exposure, increased vulnerability, or reduced resilience of beneficiaries to the effects of climate change.*** The project will have a positive impact on reducing the vulnerability to climate shocks and stressors of families in the Dry Corridor, through the incorporation of adaptation measures in their productive systems, improving their water and food security. ***There is no risk the activity led to an increased GHG emissions or reduced carbon sinks.*** None of the activities in the project is expected to increase greenhouse gas emissions or reduce carbon sinks. The project will not have any negative impact on climate change, as it does not promote any climate change drivers (energy, transport, heavy industry, construction materials, large-scale agriculture, large-scale forestry products and waste management). The project will conduct ecosystem and forest landscape restoration activities to enhance environmental services, including carbon fixation.
ESP 12 Pollution Prevention and Resource Efficiency	X	***Very low risk of affecting pollution or inefficient use of resources (water and land) during livelihood rehabilitation activities.*** The project will promote sustainable agricultural practices, applying integrated pest control and soil management, itcluding agroforestry, crops association, and composting; but, The project activities will not pose any significant pollution risk The project will adopt a sustainable approach, increasing productivity through a balanced use of resources and inputs, and taking advantage of the potential benefits of ecosystem services, aligned with WFP's Environmental and Social Sustainability Framework and the AF policy. The project will not provide pesticides or inorganic fertilisers. None of the activities in the project will release pollutants into the air, soil or water. The risk of farmers introducing changes that lead to soil degradation and contamination, e.g. the use of hazardous agrochemicals or excessive fertilisers, is very low given the average size of the beneficiaries' farms and the limited access they have to them. There is a low risk that some household-level or community-level assets or inputs may be abandoned in the long run, but these assets or inputs will be natural, local materials that have no environmental impact, and appropriate waste management in agricultural practices will be incorporated into the training and follow-up activities for farmers.
ESP 13 Public Health	X	***No risk*** ***There is no risk the activity could lead to increased risk to community health and safety.*** The project is not expected to cause adverse effects on public health. The project will positively impact the quality of life of families in the Dry Corridor through the rehabilitation of agricultural livelihoods and alternative income-generating activities, improving their access to water for agriculture and food

		production. Water harvesting and storage activities will be emphasised, and communities will be sensitised to use and store water safely and efficiently. During project implementation, eventual health alerts will be monitored, and measures will be taken to prevent staff from compromising the health or safety of rural communities and Indigenous Peoples involved in the project.
ESP 14 Physical and Cultural Heritage	X	***No risk*** ***There is no risk the activity negatively affect heritage.*** No risks to physical or cultural heritage have been identified. Nicaragua ratified the Convention Concerning the Protection of the World Cultural and Natural Heritage 1979. Since the formulation, the project has contemplated consultations, including with authorities and representatives of Indigenous Peoples through the FPIC process, which will be continued during its implementation, ensuring the right to recognition, ownership, control, and protection of cultural heritage. Moreover, the project aims to enhance the preservation and dissemination of Indigenous Peoples' knowledge and practices, potentially fostering climate resilience in their production systems.
ESP 15 Lands and Soil Conservation	X	***Very low risk of adverse effects on land and soil conservation during livelihood rehabilitation activities.*** The project is expected to have a positive impact on land and soil conservation, as project activities are not likely to harm it. However, there is a minor possibility of unintentionally promoting land use changes in order to take advantage of project benefits. Through component 2, this project will aim to restore forest landscapes and degraded soils through natural regeneration, and planting of native nitrogen-fixing plants. Through component 3, the project will promote practices that will improve overall soil fertility and soil conditions. The project will incorporate measures to avoid the risk of land use changes to access project benefits, as well as monitoring to ensure that farmers maintain or increase the areas of forest cover on their farming plots.

A brief description of the outcome of the risk assessment in relation to the 15 principles of the AF Environmental and Social Policy is provided below.

Principle 1: Compliance with the Law

63. The project will comply with all national laws and standards on environment, agriculture, water management, climate change adaptation, among others, as detailed in section 'II-E'. Therefore, no additional assessment of potential impacts and risks to legal compliance is required.

64. The project has been designed in such a way that it will generate net environmental and social benefits as demonstrated in section II-C. MARENA as the lead executing agency, together with the institutions in the Project Steering Committee (PSC) and the Inter-Agency Task Team (IATT), in coordination with the municipal governments, will help ensure compliance with relevant laws.

65. The System of Environmental Assessment of Permits and Authorizations for the Sustainable Use of Natural Resources in Nicaragua establishes the Strategic Environmental Assessment as an instrument of environmental management that incorporates procedures to consider the environmental impacts of plans and programmes at the highest levels of the decision-making process, which is administered by the central MARENA office. To comply with the guidelines of the national legislation, and in alignment with WFP's Environmental and Social Sustainability Framework, and the Environmental and Social Policy of the AF, the project envisages risk assessment and environmental and social impact assessment based on the AF's ESPs, and the elaboration of an Environmental and Social Management Plan. In view of their minimal environmental impacts and risks, the specific project activities are not subject to environmental permits or authorisations.

66. Throughout the implementation of the project, it will comply with the principles established in the **Law on Equal Rights and Opportunities No. 648**, which describes the State's policies for the promotion and guarantee of equality in the political, economic, social, cultural, and environmental spheres, and establishes the mechanisms for implementation and monitoring. The project will also comply with the

Law on the Rights of Persons with Disabilities No. 763, regarding the inclusion and non-discrimination of persons with disabilities.

67. In component 2, activities will consider compliance with environmental legislation, including the **General Law on the Environment and Natural Resources, No. 217 and its Regulations, Decree, 9-96**, which establishes that the planning of national, regional, and municipal development of the country must integrate environmental elements in its economic and social plans, programmes and projects, respecting the principles of publicity and citizen participation. It will also comply with the **Forestry Law No. 462** regarding forest management of natural forests, the promotion of plantations, protection, conservation, and restoration of forest areas; and with the **General Law on National Waters No. 620 and its Regulations, Decree No. 44-2010**, regarding the management and use of water for agricultural activities and the protection of springs.

68. In component 3, the implementation of actions for the rehabilitation of agricultural livelihoods at farm level will comply with the following laws, decrees and technical standards: **Law for the Promotion of Agroecological or Organic Farming (2011); Law No. 291 on Animal and Plant Health; NTON 11 037 - 12 Characterisation, Regulation, and Certification of Agroecological Production Units; NTON 11 010-03: Nicaraguan Mandatory Technical Standard for ecological farming; NTON 11 011-03: Nicaraguan Mandatory Technical Standard for production, certification and marketing of seeds of forage grasses and legumes;** and **NTON 16 002-00: on bean seeds.**

Principle 2: Access and Equity

69. The project will not reduce or prevent communities in the target areas from accessing basic services. However, during the proposal development process consultations, gaps in access to knowledge, goods, resources and services between men and women were recognized. Particularly in vulnerable communities, inequities in terms of access to water and land ownership and were identified. There is a low risk that the absence of land ownership and tenure could hinder women's participation in component 2, on the Restoration of forest landscape. The project will not reduce or prevent communities in the target areas from accessing basic services. The project will implement transparent actions and measures contained in the Gender Action Plan, Indigenous Peoples Action Plan and Environmental and Social Management Plan that will help ensure that project benefits are distributed fairly without discrimination or favouritism. The PMU in consultation with the IATT institutions will define inclusive criteria for the selection of beneficiaries, explicitly including non-discrimination based on sex, age, ethnicity, religion and political affiliation, and non-discrimination against persons with disabilities. The selection of the beneficiaries will be conducted in conjunction with the municipal government, leaders recognised by the community, and Indigenous authorities where appropriate, and gender, age and Indigenous quotas will be ensured. The project will develop a knowledge management and communication strategy, which will be elaborated with the participation of women and Indigenous People; this strategy will consider mainstreaming and awareness-raising on gender aspects with a focus on climate change resilience and agricultural livelihoods, generating materials that will be widely disseminated through the most accessible means to the different target groups of the project. The project will also provide information materials that respond to the information and communication needs of Indigenous and non-Indigenous men, women, adults, and youth. The project will promote WFP's Community Feedback Mechanism to ensure that any person or group that may be directly affected by the project can file a complaint, and that these are adequately addressed.

Principle 3: Marginalised and Vulnerable Groups

70. There is a low risk of excluding marginalised and vulnerable groups, especially women and young people related the prevalent inequalities in the context the project would be implemented. To avoid risks of negatively affecting groups in marginalised and vulnerable situations, Marginalised and Vulnerable Groups, including women, young people, and Indigenous Peoples, were consulted during the formulation of the project proposal to ensure that the project considers their needs and leads to their empowerment in decision-making. During consultations, communities and groups in precarious conditions were also identified, particularly regarding income, access to and quality of water and land tenure and ownership. The project design considers a target group composed of smallholder farmers (including Indigenous Peoples) in the Dry Corridor, most of whom live in poverty; the project will

facilitate access to resources, means, information and training to improve their livelihoods, and their capacity to adapt to climate change. Furthermore, measures have been designed in the GAP, IPAP and ESMP. Groups in ,marginalised and vulnerable situations, including Indigenous Peoples, women, the elderly, and youth, people with disabilities have been consulted during the formulation of the project proposal, to ensure that the project considers their needs and leads to their empowerment in decision-making.

71. To ensure the inclusion of groups in vulnerable situations and intersectionality, the project has also established participation quotas for **women** (40% in components 1 and 3 and 30% in component 2), **youth** (20%) and **Indigenous People** (175 households). The councils of elders shall be consulted in accordance with the cultural norms of the Indigenous Peoples.. The project has also designed project activities specifically aimed at improving the climate resilience of these groups. The project has developed a **Gender Action Plan (GAP)**, detailed in Annex 2, which includes actions to ensure the participation of women (adult and young) in project activities, and has defined specific affirmative actions to improve women's climate resilience and livelihoods, through entrepreneurship, and by improving their participation in organisational structures linked to the empowerment of female farmers. The **Indigenous Peoples Action Plan**, which is presented in Annex 3, identifies project activities are aligned with Indigenous Peoples' priorities, needs and experiences through a consultative process that ensures Indigenous Peoples' Free, Prior and Informed Consent, a continued set of consultations and , the cultural adaptation of project activities aimed at benefiting Indigenous People, as well as the process of consultation and permanent flow of information with them and their authorities.

72. The project will be flexible and open to the participation of people who do not own land, but who have possession of it, even when this is limited to the land where the house is located. This will benefit vulnerable groups who do not have property in their name, especially women and young people.

Principle 4: Human Rights

73. No additional assessment of potential impacts and risks to human rights compliance is required, as all project interventions will respect and promote human rights as recognised by national legislation and international instruments in compliance with this ESP. WFP's Environmental and Social Management Guidelines are deeply rooted in the human rights-based approach and will at all times support the realisation of the United Nations principles expressed in the Universal Declaration of Human Rights and the incorporation of employment and decent work.
74. The project affirms the rights of all people and does not violate any human rights pillar. All project interventions will respect and promote the human rights of vulnerable populations, as recognised by national legislation and international instruments. The consultations, proposal design, and project implementation have focused and will continue to focus on promoting human rights, especially the rights of women, girls, and youth, and support for Indigenous Peoples.

75. The project will focus on the the **rights of women and girls and Indigenous Peoples**; those aimed at strengthening women's participation in the economic and political spheres; and the adoption of measures to protect the rights of Indigenous Peoples, and the implementation of an adequate procedure for free, prior, and informed consultation on any measure affecting their rights. Any **human rights violations** observed during project implementation will be reported through the feedback and grievance mechanism.

Principle 5: Gender Equality and Women's Empowerment

76. As detailed in Annex 4 the project has conducted a Gender Assessment and Analysis as required by the AF Gender Policy. The IGA analysed gender aspects considering the socio-economic and cultural context of the country and intervention area; food security; gender-based violence; access to and control over land and resources; poverty; cultural context of gender roles; division of labour; regulatory framework and national gender strategies; participation in decision making; gender differentiated impacts of climate change; needs and priorities of women and men and other gender-related issues that emerged from stakeholder consultations. The assessment helped the project to take proactive steps to integrate gender-focused development strategies that will ensure compliance and alignment of project activities with the principle of gender equality and women's empowerment.

77. **Constraints.** Women living in the municipalities of the Dry Corridor face severe living conditions, especially when they are heads of households. Indigenous women have less access to resources and are more constrained by cultural patterns. In the Dry Corridor, women usually work two or three shifts, as in addition to housework, garden work, childcare and child-rearing, they participate significantly in agricultural production and other economic activities that generate income for their families. Women's excessive workload is a constraint to their participation in training processes, entrepreneurship initiatives and community organisation. Women have less access to training opportunities, skills transfer, financing, and implementation initiatives in the agricultural sector.

78. A low risk exists that participating women do not benefit from project actions aiming at women´s empowerment and equality related to the implementation context where gender inequality is prevalent, as detailed from constraints above. During the formulation of the project proposal, a Gender Analysis and Action Plan has been developed, presented in Annex 2. Through specific consultations, it has been ensured that the project addresses the main constraints to women's equal participation, needs and interests and that gender considerations are integrated into each project activity.

79. **Design.** Based on the territorial consultations, the elements identified in the Gender Assessment and Analysis and the AF's Gender Policy, a comprehensive strategy has been included in the project design to ensure attention to the identified gender needs. This is included in the Gender Action Plan, which has activities, indicators, disaggregated targets and budget allocations. The strategy responds to gender issues and this ESP in the following ways: (i) Definition of gender indicators in the results framework; (ii) Definition of gender quotas in order to reduce the gaps; (iii) Affirmative actions directly integrated into the project budget and the GAP; (iv) creations/strengthening of empowerment groups of rural female farmers; (v) Facilitating investment by non-landowner female farmers; (vi) Creation of tools, instruments and mechanisms that facilitate the participation, access and decision-making of women and men in the project; (vii) Incorporating gender and communication tools in the project; (viii) Integrating a monitoring and evaluation system with a gender perspective. The project includes training of technical staff of the PMU and beneficiary institutions on gender equality with a focus on climate change resilience and livelihoods. In addition, the project will actively engage the Nicaraguan Ministry of Women (MINIM), which together with the MARENA's Gender Unit, will contribute to the implementation of the GAP in the project.

80. **Inclusion.** The findings of the Gender Analysis highlight that women play a key role in agricultural production in the communities of the Dry Corridor; yet this role is not visible in society. To reduce gaps in the division of labour and increase the role of women and their participation in agricultural economic activities, in component 1 the project foresees the transfer of skills to women in measures for the adaptation of family production systems. These women will also benefit from the assistance and delivery of technological packages for the implementation of agro-ecological production practices in crops, agroforestry and silvopastoral systems, and the development of productive initiatives such as home gardens and nurseries, seed banks, planting and marketing of vegetables, and value-adding initiatives. The Gender Action Plan contemplates the creation or strengthening (where they already exist) of *empowerment groups for female* farmers to promote peer support and address issues for their individual and collective development, facilitate their insertion in the project and reduce gender gaps in the rural productive sector.

81. In component 3, women will benefit from the development of investment plans, assistance, monitoring, and the positive impacts of restoration activities. The creation of project content and communication materials in component 4 will incorporate a gender and generational approach, including the visibilisation of the role and valorisation of women's work linked to the agricultural sector, through the implementation of the Gender Action Plan. The distribution of communication materials will respond to the needs and preferences of the different groups involved in the project (men, women, adults, youth).

82. During the implementation of all project activities, it will be ensured that 50% of the technical facilitating staff of the beneficiary institutions are women, which will help to address gender relations and aspects, and will help to stimulate the participation of women beneficiaries in the project.

Principle 6: Core Labour Rights

83. The project will not negatively affect the basic labour rights of the people involved in the project. Nicaragua has been a member of the ILO since 1957 and has ratified the 8 core conventions: Forced Labour; Freedom of Association; Right to Organise and Collective Bargaining; Equal Remuneration; Abolition of Forced Labour; Discrimination (Employment and Occupation); Minimum Age; and Child Labour. The project will ensure that national and international labour standards are applied, will not involve child labour in any of its activities and will apply the WFP's framework regarding child labour. WFP is also an equal opportunity employer and, as such, works to ensure that all its projects are free from discrimination in respect of employment and occupation.

Principle 7: Indigenous Peoples

84. The project does contemplate activities to be developed in Indigenous territories. Therefore, since the start territorial consultations with Indigenous Peoples took place to ensure the principle of Free and Informed Consent was applied. The consultation allowed for an in-depth identification of the environmental, social, economic, and cultural aspects of the setting where the project will be implemented. This led to an early identification of the possible risks associated with the design and the appropriate measures to be implemented to avoid them. Some risks include limitations to participation in the project components including difficulty to understand technical language, announcement by government institutions not in coordination with the Indigenous Peoples representation. Indigenous Peoples voiced the need for continuous communication, accompaniment and feedback mechansims with the communities.

85. For the design of the project, meaningful and extensive consultations were conducted at the community level in the two Indigenous territories involved in the project (Telpaneca and Sébaco). The consultations and participatory planning sessions involved a representative sample of the Indigenous community, including territorial leaders, women, youth, and elders. The project has conducted a Free, Prior and Informed Consent (FPIC) process. Through the elaboration of the Indigenous Peoples Action Plan (IPAP), the priorities and needs of the Indigenous Peoples' groups were identified and incorporated into project activities under the principles of Do-No-Harm and inclusion, and ensuring that their rights are not violated, including the right to recognition of their cultural heritage (see Annex 3). The application of the IPAP during project implementation will ensure the cultural adaptation to the context of Indigenous communities of the training and practices promoted, both in the transformation of livelihoods and in environmental restoration activities, as well as in communication and information dissemination materials. Ancestral agricultural knowledge and practices of Indigenous communities with the potential to increase resilience to climate change in productive systems will be rescued and promoted, fostering, and giving value to Indigenous identity. During the implementation of the project, a flow of information in formats and languages easily understood by the communities will be maintained in a timely manner, and the leadership and authorities of the Indigenous community will be involved in decision-making. The project will strengthen the Indigenous Peoples´ own governance structures and organisations so they have representative roles within and in interaction with the project structures and serve as a communication channel with Indigenous families.

Principle 8: Involuntary Resettlement

86. None of the project components foresees displacement or involuntary resettlement during the project implementation. Should a resettlement or economic displacement situation arise during project implementation that was not anticipated during design, MARENA and WFP will ensure that a process of consultation and negotiation with potentially affected persons takes place in accordance with FPIC and Non-Harm principles. In case no agreement is reached, project implementers will modify the specific interventions associated with the affected people or will stop them if changes are not possible. If project implementers fail to carry out a process of consultation and negotiation with affected people, in accordance with FPIC and the Do-No-Harm principles, the project will respect land ownership and land use rights, as well as customary law.

Principle 9: Protection of Natural Habitats

87. The project is not expected to have any negative impact on critical natural habitats, including those that are (a) legally protected; (b) officially proposed for protection; (c) recognised by authoritative sources for their high conservation value, including as critical habitat; or (d) recognised as protected

by local traditional or Indigenous communities.

88. It is expected that the project will have a positive impact on the protection of natural habitats through the restoration of ecosystems in the buffer zones of protected areas and other areas of ecological importance, where the connectivity of biological corridors and other environmental services, such as water recharge, will be enhanced. and other environmental services, such as water recharge, will be enhanced. While it is true the project intervention zone includes areas within the buffer zones of protected areas where the use of natural resources is a concern, further exacerbated by climate change. However, the project will establish a mechanism to ensure that natural habitats are not negatively impacted.

89. While it is true that the project intervention zone includes areas within the buffer zones of protected areas, the actions to be carried out in these areas (silvopastoral systems, agroforestry, and plantations with non-invasive species) are in line with national legislation and with the development plans established for these areas, consequently, no additional assessment will be necessary during project implementation. Stimulation for the implementation of agro-ecological practices and diversification of production systems is not expected to result in the conversion of natural habitats at the local level; on the contrary, the investments to be made in areas within the farms, productive plots or plots of smallholder farmers, prioritising areas of ecological importance, will result in the improvement of ecosystems and the provision of environmental services, including the restoration of connectivity and functionality of biological corridors, particularly in degraded areas within the buffer zones of protected areas. Furthermore, the project incorporates measures, for the selection of protagonists and intervention sites, as well as the inclusion of clauses in contracts with beneficiaries, for the protection of natural habitats, and to avoid inadvertent adverse effects.

Principle 10: Conservation of Biological Diversity

90. The project is not expected to cause negative impacts on biodiversity. No additional assessment of potential impacts and risks to compliance is required as the project area has not been found to contain UNESCO biosphere reserves or RAMSAR sites, nor species listed by IUCN or protected by national legislation applicable to this ESP. However, there is a low risk of impacting natural habitats, ecosystems, and biodiversity during environmental restoration activities. In the environmental restoration and reforestation activities the project will not introduce invasive species, the only species used will be native to the project area. In the environmental restoration and reforestation activities the project will not introduce invasive species, the only species used will be native to the project area. The project will have a positive impact on the conservation of biological diversity through the incorporation of agroforestry and silvopastoral systems, as well as other agro-ecological practices, and the restoration of the forest landscape in ecologically important areas such as riverbanks and water recharge areas. To avoid any risk of affecting local biodiversity, the final selection of sites to be restored will be led by INAFOR in consultation with municipal governments, community organisations and Indigenous authorities and Indigenous Peoples' Organizations, where appropriate. The selection will be aligned with the local development and land use plan, and national environmental legislation.

Principle 11: Climate Change

91. The project design responds to the climate change adaptation needs of smallholder families in the Dry Corridor, with activities based on the adaptation priorities set out in the NDC and the National Climate Change Policy of Nicaragua, as well as the National Strategy for Reducing Emissions from Deforestation and Forest Degradation (ENDE - REDD+ 2008 - 2040).
92. The project will not have any negative impacts on climate change as it does not promote any climate change drivers (energy, transport, heavy industry, construction materials, large-scale agriculture, large-scale forest products and waste management). None of the activities in the project is expected to increase greenhouse gas emissions or reduce carbon sinks. The project will have a positive impact on reducing the vulnerability to climate change of households in the Dry Corridor, through the incorporation of adaptation measures in their productive systems, improving their water and food security. None of the activities led to increased exposure, increased vulnerability, or reduced climate resilience. Therefore, no additional assessment of potential impacts and risks to compliance with the climate change ESP is required. The project will conduct ecosystem and forest landscape restoration

activities that will improve the provision of environmental services, including carbon sequestration.

Principle 12: Pollution Prevention and Resource Efficiency

93. The project is not expected to pose significant risks to resource efficiency (water) or pollution risks (agrochemicals and fertilisers) and no further assessments beyond the procedures already built into the project will be required. The project will adopt a sustainable approach, increasing productivity, through a balanced use of resources and inputs, and exploiting the potential benefits of ecosystem services. The risk of farmers introducing changes that lead to soil degradation and contamination, e.g. the use of hazardous agrochemicals or excessive fertilisers, is very low given the average size of the beneficiaries' farms and the limited access they have to them. The project will promote sustainable agricultural practices, applying integrated pest and soil management, through agroforestry, crop association, and organic fertiliser production, among others. The project will not provide pesticides or inorganic fertilisers. The use of all fertilisers will be in accordance with WFP standard procedures for fertiliser handling, and training will be provided for the safe handling of organic fertilisers. The monitoring and control of the use of agrochemicals will be incorporated into the monitoring of farmers by the technical team.

94. There is a risk that some household-level or community-level assets or inputs may be abandoned in the long run, but these assets or inputs will be natural, local materials that have no environmental impact, and appropriate waste management in agricultural practices will be incorporated into the training and follow-up activities for farmers. The proper management of waste in agricultural practices will be incorporated into the training and monitoring activities for farmers. The project will promote water-efficient alternatives for agricultural activities through rainwater harvesting and small-scale irrigation systems (drip irrigation), reducing pressures on resource use.

Principle 13: Public Health

95. The project will not have negative impacts on public health. The WHO explains[140] that many factors combine to affect the health of individuals and communities. Whether people are healthy or not is determined by their circumstances and environment. To a large extent, factors such as where people live, the state of their environment, genetics, levels of income and education, and relationships with friends and family have a considerable impact on health, while more commonly considered factors such as access to and use of health services often have a lesser impact. The main general determinants of health are:

    - The social and economic environment,
    - The physical environment and
    - The individual characteristics and behaviours of the person.

96. During the proposal development process consultations, environmental risks related to water scarcity, pollution, and sanitation were identified. Water harvesting and storage activities will be emphasised, and communities will be sensitised to use and store water safely and efficiently. During project implementation, eventual health alerts will be monitored, and measures will be taken to prevent staff from compromising the health or safety of rural communities and Indigenous Peoples involved in the project.
97. The project will have a positive impact on improving the quality of life of families in the Dry Corridor, through the rehabilitation of agricultural livelihoods, and alternative income-generating activities, improving their access to water for agricultural production and food, while reducing their vulnerability to the effects of climate change. During project implementation, applicable health alerts will be monitored, and measures will be taken to prevent staff from compromising the health or safety of rural communities and Indigenous Peoples involved in the project.

Principle 14: Physical and Cultural Heritage

98. There is no risk of the project imposing adverse impacts on physical and cultural heritage. Nicaragua accepted the Convention Concerning the Protection of the World Cultural and Natural Heritage in 1979. From the early stages of formulation, the project has contemplated broad consultations, including with

[140] https://www.who.int/news-room/questions-and-answers/item/determinants-of-health

authorities and representatives of Indigenous Peoples through the FPIC process, which will be continued during its implementation, ensuring the right to recognition, ownership, control and protection of cultural heritage. Consultations have shown that there are no national cultural heritage sites in the project area, nor does the project area contain UNESCO World Heritage sites. On the other hand, the project will have a positive impact on the preservation of the intangible cultural heritage of the Chorotega Indigenous Peoples involved in the project, through the rescue and dissemination of Indigenous knowledge and ancestral practices (ensuring their consent) with the potential to promote climate resilience in their productive systems.

Principle 15: Lands and Soil Conservation

99. The project will have no negative impacts on land and soil conservation. The project has been designed in a way that reduces any risk it poses to the environment, it is not expected to pose any risk to land, and it promotes land, soil and water conservation. Through actions in component 2, this project will aim to restore forest landscapes and restore degraded soils through natural regeneration and planting of native nitrogen-fixing plants. Through component 3, the project will promote sustainable and resilient agricultural practices that will improve soil fertility and overall soil conditions. Through the actions in these components the project aims to ensure that 18,119 ha of agricultural land will be subjected to sustainable agricultural practices that will, among other things, increase crop yields with the addition of organic fertiliser, reducing run-off and soil loss through erosion. The project will result in improved physical soil properties and increased soil moisture through conservation agriculture.
100. Although the risk of inadvertently stimulating changes in activity or land use to access project benefits is very small, due to the average size of farms in the project area, and its location in a predominantly agricultural area, the project will incorporate measures to avoid this risk by ensuring that the selection of actors and farms to intervene is limited to established farmers, and that the land where project actions will be carried out is previously dedicated to agricultural activity. The project will incorporate measures to avoid the risk of land use changes to access project benefits, as well as monitoring to ensure that farmers maintain or increase the areas of forest cover on their farming plots. The investment plans for environmental restoration will have a detailed description of the areas, practices, and investments to be developed in them, which will be included in a contract, incorporating the prohibition of converting land with forest cover (if found) to productive schemes, including agro-ecological methods.

II. Environmental and Social Impact Assessment

101. The Government of Nicaragua's development and environmental policies support sustainable development and environmental preservation, based on the joint action of the general population and public institutions, in order to improve the life quality of the Nicaraguan people. The National Plan for the Fight against Poverty and for Human Development 2022-2026 emphasises the protection and sustainable use of natural resources, adaptation to climate change and integrated disaster risk management.

102. Decree No. 20-2017 establishes the Environmental Assessment System for Permits and Authorisations for the Sustainable Use of Nicaragua's Natural Resources, which is applicable to all sectoral and national investment plans and programmes, and establishes the Strategic Environmental Assessment as a preventive management tool to identify and mitigate the potential environmental impacts of programmes and projects, which is administered by Central MARENA.

103. In alignment with national legislation and WFP’s Environmental and Social Sustainability Framework, and the Environmental and Social Policy of the AF, the assessment of environmental and social risks and impacts of the project has been incorporated from an early stage of project planning. The following table provides a brief summary of the outcome of the environmental and social assessment according to the programmed activities by components.

Table 11. Matrix of Environmental and Social Risks and Impacts

Outputs and Activities	Positive Impacts	Negative Impacts	Environmental and Social Mitigation and Safeguard Measures
Component 1. Transfer of capacities to farming families leading to the implementation of resilient natural resource management practices and degraded landscape restoration in 14 municipalities in the Dry Corridor.			
Outcome 1.1 Farming families in 14 municipalities in the Dry Corridor develop capacities for planning and implementing practices that contribute to their food security and ecosystem services, with the participation and consultation of women and Indigenous Peoples.			
Output 1.1.1 Capacity-building programme for SNPCC institutions and farming families is developed and implemented with the participation of women, youth and Indigenous Peoples.	Capacity Building:The project will have a positive impact on capacity building to cope with climate change and improve the food security of families in the Dry Corridor. This result aims at transferring capacities adaptation measures of family production systems to technical staff of SNPCC institutions and smallholder farmers (40% women). Promotion of Gender Equality and Empowerment : This component will have a positive impact on the promotion of gender equality in the agricultural sector at national and local level, by involving women and men in training, creating conditions to contribute to the empowerment and greater visibility of women's role and contribution to Climate Change Management.	No negative environmental impacts are identified in the implementation of these activities. Exclusion of Groups in Marginalized or Vulnerable Situations : A very low risk of exclusion of groups in a vulnerable situation, such as Indigenous Peoples, women and youth, from the benefits of this component is identified.	Through the Gender Action Plan, Indigenous Action Plan, FPIC and ESMP the project will ensure access, equity and inclusion of groups in marginalised and vulnerable situation: Gender Action Plan-Participation quotas have been defined for women (40%) and youth (20%) in the activities of this component. The Gender Action Plan includes measures to ensure that the project addresses the constraints women face to their free and full participation, including training of technical staff, gender awareness actions targeting the family and partners, and the definition of suitable times and locations for women to attend. FPIC- At least 175 Indigenous families will participate in this component. The project will ensure that capacity transfer to Indigenous Peoples incorporates cultural adaptation and respects and promotes ancestral agricultural, soil and water conservation practices, guaranteeing their right to recognition of their cultural heritage. During the implementation of the project, a process of consultation and permanent flow of information with Indigenous Peoples will be maintained through the implementation of a FPIC process and the development of an Indigenous Peoples' Plan, which will ensure that their rights are not violated. Capacity transfer activities will be carried out through different modalities including workshops, the creation of learning sites (farms or plots where soil and water management practices are already in place) and exchange visits. - WFP is to ensure consultation with the IATT institutions to define inclusive criteria for the selection of beneficiaries, including explicit non-discrimination on the basis of sex, age, ethnicity, religion and political affiliation, and non-discrimination against persons with disabilities. The project will be open to benefit farmers who are not landowners. The selection of the protagonists will be carried out in conjunction with the municipal government, leaders recognised by the community, and Indigenous authorities where appropriate ESMP- ESS compliance and implementation will follow the agreed ESMP with AF.
Component 2. Restoration of forest landscape to enable the generation of ecosystem services.			
Outcome 2.1. Forest landscapes are preserved and restored for the generation of ecosystem services..			
Output 2.1.1 Farming families have adopted resilient natural resource management practices to restore the forest landscape	Environmental Restoration: The project will have a positive impact on the environmental restoration of the Dry Corridor and on the	. Exclusion of vulnerable groups: A very low risk of	Gender inclusion through the Gender Action Plan-A 30% quota for women's participation in the activities of this component has been defined. The Gender Action Plan includes measures to ensure that women are not excluded from the benefits of the project.

Outputs and Activities	Positive Impacts	Negative Impacts	Environmental and Social Mitigation and Safeguard Measures
and improving the flow of critical ecosystem services in drought periods, in 14 municipalities of the Dry Corridor.	generation of ecosystem services. Activities under this component include conservation, natural regeneration of degraded areas, recovery of ecologically important sites such as riverbanks (or other water sources) and water recharge areas. These activities will result in environmental benefits for communities, improving biodiversity, water recharge, and carbon fixation, among others.	exclusion of people from vulnerable groups from the benefits of this component is identified. Land use change: There is possibility of inadvertently stimulating land use change to access project benefits which may result in a very low risk of affecting natural habitats, ecosystems and biodiversity in environmental restoration activities .	Strengthened stakeholder engagement-The PMU in consultation with IATT institutions will define inclusive criteria for the selection of beneficiaries. The selection will be carried out in conjunction with the municipal government, leaders recognised by the community, and Indigenous authorities where appropriate. Promotion of Indigenous Knowledge and culture - At least 175 Indigenous families will benefit from withis component. The project through the implementation of the IPAP will ensure that activities in Indigenous communities incorporate cultural adaptation and respect and promote ancestral practices, soil and water conservation, respecting their right to recognition of their physical and cultural heritage. Role of government authorities The selection of sites for environmental recovery investments will be led by PMU in consultation with municipal governments, farmers, community leaders and Indigenous authorities, where appropriate, giving priority to sites of ecological importance (river banks, water recharge areas, ecological corridors), and respecting environmental legislation. Restauration activities will be carried out with native (non-invasive) tree species. In the buffer zones of protected areas, actions will be carried out in accordance with decree 01-2007, ensuring that sustainable productive models are implemented, and that social and inter-institutional coordination is encouraged. Protection and land use: The investment plans for environmental restoration will have a detailed description of the areas, practices and investments that will be developed. This will be included in an agreement Project will establish wirh farmers, and the no converting forested land to productive schemes, including agro-ecological methods. INAFOR will be in charge of monitoring the investment plans for environmental restoration or farm plans.
Component 3. Rehabilitation of agricultural livelihoods at farm level, using climate- resiliente and environmentally-sustainable practices for landscape restoration.			
Outcome 3.1. The livelihood of farming families are rehabilitated and diversified through climate resilient systems and practices for landscape restoration.			
Output 3.1.1 Farming families have established and improved practices in agroecology, water and landscape management, crop production and income generation **Output 3.1.2** The capacities of farming families to diversify and access markets using sustainable soil management practices,	Activities in this component will have a positive impact on reducing the vulnerability to climate change of households in the Dry Corridor, and building resilience in agricultural production systems through the implementation of environmentally sustainable and resilient practices, such as silvopastoral and agroforestry systems, the use of climate-resilient seeds, and other agroecological	. A very low risk of exclusion of people from vulnerable groups is identified. A very low risk of inadvertently stimulating a change of economic activities or land use change that will not be sustainable in order to access project	Inclusion of Women and Youth: -A quota for the participation of women (40%) and youth (20%) in the activities of this component has been defined. The Gender Action Plan includes measures to ensure that the project addresses the constraints women face to their free and full participation. Implementation of IPAP:-The project through the implementation of the IPAP will ensure that the introduction of environmentally sustainable and resilient agricultural practices in Indigenous communities incorporates cultural adaptation and that ancestral agricultural practices are respected and promoted, respecting their right to recognition of their physical and cultural heritage. Training, incentives and constant support to farmers will contribute to their gradual change from bad practices to climate-resilient, economically and environmentally sustainable practices. However, farmers change practices when they see and hear from other farmers who have already made the change, and when they try it for themselves and see results.

Outputs and Activities	Positive Impacts	Negative Impacts	Environmental and Social Mitigation and Safeguard Measures
with the participation of women and Indigenous populations, are strengthened.	practices. The implementation of these adaptation measures in agriculture is expected to have a positive effect on soil and water conservation and in sustainable resource management. 8,881 hectares will be restored, benefiting 4.441 farming families. The activities of this product will have a positive impact on the improvement of life quality of farmer families in the Dry Corridor, with the improvement of their food security and income, through the diversification of production, and the commercialisation in formal markets of at least two crops. 900 farming families will benefit from community seed banks, vegetable gardens, entrepreneurship activities, and commercialisation.	benefits is identified. A very low risk that farmers keep doing in the first years conventional agricultural practices with the use of agrochemicals or fertilisers, and inefficiency in the use of resources, particularly water.	Strengthened stakeholder engagement -The PMU in consultation with the IATT institutions will define inclusive criteria for the selection of beneficiaries. The selection of the protagonists will be carried out in conjunction with the municipal government, leaders recognised by the community, and Indigenous authorities where appropriate. -The selection of beneficiaries and farms for the project by MARENA and MEFCCA and validated by communities will consider, in addition to the criteria detailed in Component III, that the farmers are established and that the lands where the project actions will be carried out are previously dedicated to agricultural activity. -The project will not provide agrochemicals, and will promote integrated pest management and soil fertility, and the use of organic fertilisers. The use of all fertilisers will be regulated by WFP's standard procedures for fertiliser management, and training will be provided for the safe handling of organic fertilisers. Monitoring and control of the use of agrochemicals will be incorporated into the monitoring of farmers by the technical team. -The project will promote and provide training in water use, conservation and management practices in agriculture, including the protection and conservation of water sources, applying integrated watershed management. The project will facilitate efficient water use alternatives in agricultural activities through rainwater harvesting and small-scale irrigation systems (drip irrigation), reducing pressures on resource use.
Component 4. Knowledge management including the capture and dissemination of knowledge and lessons from the project among assisted farming families to promote the sustainability of the project's impact on landscapes.			
Outcome 4.1 Adaptative and knowledge management approach applied during the implementation of project.			
Output 4.1.1 A knowledge management and communications strategy is developed and implemented with the participation of women and Indigenous Peoples . **Output 4.1.2** Institutional capacities are strengthened to foster project monitoring and sustainability of the project's impact with a focus on gender, youth and	This component will have a positive impact on the dissemination of knowledge. To do so, it will systematise the project's experiences from the beginning of its implementation, for the promotion of sustainable agricultural practices to a wider public, and the generation of lessons that facilitates replication in other contexts. The dissemination of gender-sensitive content, making	No negative environmental impacts are identified in the implementation of the activities of this component. A very low risk of exclusion of people from vulnerable groups is identified.	GAP: -The creation of the content and communication and dissemination materials of the project will incorporate the gender and generational approach, including the visibility of the role and valorisation of women's work linked to the agricultural sector, through the implementation of the Gender Action Plan. The format and distribution of communication materials will respond to the needs and preferences of the different groups involved in the project (men, women, adults, youth). CFM: The Community a Feedback mechanism will also provide a bilateral communication channel, that will contribute to the improvement of the programme; to mitigate and manage potential negatives impact identified that are captured and to provide messages related to beneficiaries' entitlements. Communication mechanism will be provided using local languages in a culturally appropriate manner.

Outputs and Activities	Positive Impacts	Negative Impacts	Environmental and Social Mitigation and Safeguard Measures
Indigenous Peoples.	visible the role of women in the agricultural sector and in adapting to climate change, will have a positive impact on the promotion of equality in the distribution of work and gender roles. Similarly, the rescue and dissemination of Indigenous ancestral knowledge and practices (in line with their consent) will have a positive impact on the valuation of Indigenous culture and identity. This component also includes the follow-up, monitoring and evaluation of the project, which will allow for measuring progress towards the achievement of the expected results, and for informed decision-making during project implementation.		-,FPIC and IPAP: Through the implementation of the FPIC process and the Indigenous Peoples Action Plan, the project will ensure that these are adapted to the context of Indigenous communities and families, and that the project's communication and dissemination content and materials incorporate Indigenous practices and knowledge in a respectful manner that does not infringe on their rights to land and resources, and the recognition of their cultural heritage.

Environmental and Social Management Plan (ESMP)

104. The project has been designed to have positive impacts during its implementation period, avoiding or minimising possible social and environmental risks with mitigation measures and safeguards taken for all applicable principles of the Environmental and Social Policy. Below is a consolidated table of the project's Environmental and Social Management Plan (ESMP), which addresses environmental and social risks identified during the screening exercise and will serve to track these and ensure tha they properly monitored, evaluated, and reported upon.

105. The ESMP will be an integral part of the project's interventions and will serve as a living document, which can be revised, updated, and adapted depending on any additional and/or different environmental and social risks which may be identified during the implementation phase. The mitigation measures indicated herein will therefore be tailored to the specific on-site interventions once these are clearly designed.

106. During implementation and operational phase, the PMU and executing entities will be responsible for the execution of the measures in the ESMP. In particular, the Project Coordinator and the three Specialists that will be recruited to provide overall coordination of the project components will ensure that these measures are put in place and duly monitored for all activities implemented during the life of the project. Even though MARENA, the lead executing agency, has established capacity and knowledge on environmental and social safeguards and their monitoring, specialized training will be provided by WFP to enhance the national capacities to comply with international standards, AF ESP, and WFP environmental and social framwork to allow the entities to undertake their roles with a strong focus on thes issues.

107. As the implementing agency, WFP country office will oversee the ESMP implementation. WFP's Country Office has a team of interdisciplinary experts, which includes a gender specialist, agronomists. and livelihoods experts with a wealth of experience in implementing socioproductive programmes. Additionally, a Project Coordinator trainned on ESS will be hired to provide overall coordination and oversight of the implementation. Nonetheless, to ensure that its core team involved in this project is in a strong capacity to provide this support to MARENA and the other executing entities, the Country Office will refresh and strengthen its knowledge on these topics, with a mission from its specialised HQ ESS team scheduled for the last trimester of 2023. The Country Office will count with the ongoing support of the HQ and regional ESS specialists throughout the entire project.

108. In terms of monitoring and reporting arrangements, the ESMP is integrated in the implementation and monitoring plan of the intervention and will be subject to the formal agreement between WFP and the different partners. The executing entities and the PMU will periodically report on the risks and risk management measures and the ESMP may be adjusted based on the monitoring and reporting. This in turn be duly reported in the annual reports presented to the Adaptation Fund. The costs required to ensure the monitoring of the ESMP have been integrated in the budget allocated to monitoring and reporting. Additionally, this will be a core function of the staff budgeted under the project costs, particularly the project coordinator and specialists.

109. The implementation of the ESMP is complemented by the actions and measures designed in the Gender Action Plan (GAP) and Indigenous Peoples Action Plan (IPAP). The costs of implementing the ESMP are included in the project costs presented in budget section III-H.

Table 12. Project's Environmental and Social Management Plan (ESMP)

	ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN					
	Project Climate Resilience and Livelihoods in the Nicaraguan Dry Corridor					
	Component 1. Transfer of capacities to farming families leading to the implementation of resilient natural resource management practices and degraded landscape restoration in 14 municipalities in the Dry Corridor.					
	Output 1.1. Capacity-building programme for SNPCC institutions and farming families is developed and implemented with the participation of women, youth and Indigenous Peoples.					
Risk identified	**Activities/mitigation Measures**	**ESP**	**Indicators**	**Timeline**	**Responsible**	**Verification mechanism/Monitoring Indicator**
Exclusion of women, Indigenous Peoples, and other vulnerable groups.	1 IATT sessions for the **definition of inclusive criteria for the selection of beneficiaries**, with a gender focus (in accordance with the GAP), and which explicitly include non-discrimination based on sex, age, ethnicity, religion and political affiliation, and non-discrimination against persons with disabilities. The beneficiaries will be smallholder farmers established in the project municipalities. The criteria will be open to the participation of people who do not have land titles, but have possession of the land, even when this is limited to the land where the house is located.	ESP 2 ESP 3 ESP 5 ESP 7	Number of documents that establish inclusive and gender-sensitive selection criteria defined for smallholder farmers who are beneficiaries of component 1 and 3	Year 1	PMU and institutions in the IATT	Demonstration of non-discrimination and ensuring consultations are in local languages. Minutes and Selection Criteria Document
Exclusion of women, Indigenous Peoples, and other vulnerable groups.	**2. Selection of beneficiaries** in conjunction with the municipal government, leaders recognised by the community, and Indigenous authorities where appropriate, considering inclusive criteria and ensuring quotas for the participation of women (40%), youth (20%) and at least 175 Indigenous families.	ESP 2 ESP 3 ESP 5 ESP 7	Number of beneficiaries targeted considering inclusive criteria	Year 1	PMU	An increment in the assets managed at community level or by association. Number of women, youth and Indigenous People benefitting from the project. Documented in minutes of meetings and agreements with institutions, leaders, and local organisations List of beneficiaries.
Exclusion of women, Indigenous Peoples, and other vulnerable groups.	**3. Dissemination of the project selection criteria** through media accessible to the different target groups of the project (women, men, youth, Indigenous People), including conventional and electronic media (social networks, website, and text messag)	ESP 2 ESP 3 ESP 5 ESP 7	Number of media in which the selection criteria are publicised Number of publications for the dissemination of selection criteria	Year 1	PMU	Publications for the dissemination of the selection criteria in the communication channels(social networks, websites, text messaging)

Pollution or inefficient use of resources (water and land) during livelihood rehabilitation activities.	4. **Training** sessions for farmers include **integrated pest and soil management** practices**, production of organic fertilisers**, and **safe handling of fertilisers**. Information on prohibited agrochemicals and pesticides will be included. Training will also include good practices for **efficient use and conservation of water**.	ESP 11 ESP 12	Number of people (men, women, youth and Indigenous People) trained in integrated pest and soil management, production of organic fertilisers, safe handling of fertilisers, agrochemicals and banned pesticides, and efficient use and conservation of water	Year 1 to 3	PMU	Number of women, youth, Indigenous Peoples trained. Documentation though project reports, memory helps and lists of training protagonists
	Component 2. Restoration of forest landscape to enable the generation of ecosystem services					
	Output 2.2. Farming families have adopted resilient natural resource management practices to restore the forest landscape and improving the flow of critical ecosystem services in drought periods, in 14 municipalities of the Dry Corridor					
	Activities/Measures	**ESP**	**Indicators**	**Timeline**	**Responsible**	**Verification mechanism /Monitoring Indicator**
Risk of non-complience with domestic or international law. Risk of exclusion of women, Indigenous Peoples, and other vulnerable groups.	5. IATT sessions for the **definition of site selection criteria and modalities** for conducting environmental restoration investments; giving priority to sites of ecological importance and respecting environmental legislation, including the definition of actions in areas within buffer zones of protected areas. The criteria for the selection of sites and persons to benefit will consider gender aspects and will explicitly include non-discrimination on the basis of sex, age, ethnicity, religion and political affiliation, and non-discrimination of persons with disabilities as per the GAP and IPAP. The criteria will be open to the participation of people who do not have land titles, but have possession of the land	ESP 1 ESP 2 ESP 3 ESP 5 ESP 7	Number of documents with inclusive selection criteria defined for the selection of sites and modalities of environmental restoration investments	Year 1	INAFOR and IATT institutions	Memory Help and Selection Criteria Document. Number of documents with inclusive selection criteria defined for the selection of beneficiaries and implementation sites

Exclusion of women, Indigenous Peoples, and other vulnerable groups.	**6. Selection of prioritised sites and identification of the properties (farms) of smallholder farmers** where environmental conservation and restoration investments will be carried out, in conjunction with the municipal government, leaders recognised by the community, and Indigenous authorities where appropriate, considering inclusive criteria and ensuring quotas for the participation of women (30%), youth (20%) and at least 175 Indigenous families	ESP 2 ESP 3 ESP 5 ESP 7	Number of farms/properties and smallholder farmers identified to conduct environmental restoration investments, considering inclusive criteria and participation quotas for women (30%), youth (20%)	Year 1 and 2	INAFOR	Documentation of an inclusive selection criteria defined for the selection of sites and properties (farms) of smallholder farmers through minutes of meetings and agreements with institutions, leaders, and local organisations Listings of properties and beneficiaries
Exclusion of women, Indigenous Peoples, and other vulnerable groups.	**7. Dissemination of the project selection criteria** through media accessible to the different target groups of the project (women, men, youth, Indigenous People), including conventional and electronic media (social networks, website, and text messaging)	ESP 2 ESP 3 ESP 5 ESP 7	Number of media in which the selection criteria are publicised Number of publications for the dissemination of selection criteria	Year 1	PMU	Publications for the dissemination of the selection criteria Project reports
Affecting natural habitats during interventions in buffer zones of protected areas. Risk of failure to respect core labour rights.	**8. Signing of contracts** with beneficiaries detailing the areas, practices, and investments to be developed (investment plan), including the prohibition of converting forested land to farming schemes, including agro-ecological methods, and the prohibition of child labour	ESP 6 ESP 9 ESP 10 ESP 15	Number of contracts with beneficiaries including investment plan and clauses on protection of forest areas and prohibition of child labour	Year 1 and 2	INAFOR	Records of contracts signed with beneficiaries
Affecting natural habitats during interventions in buffer zones of protected areas.	9. Assistance and monitoring of investment plans, and verification of compliance with the agreements signed in the contracts signed with the beneficiaries	ESP 6 ESP 9 ESP 10 ESP 11 ESP 15	Number of assistance and follow-up visits to beneficiaries Number of contracts checked for compliance with agreements	Year 2 to 5	INAFOR	Reports of assistance, monitoring, and verification visits Project reports

	Component 3. Rehabilitation of agricultural livelihoods at farm level, using climate- resiliente and environmentally sustainable practices for landscape restoration					
	Output 3.1.1. Farming families have established and improved practices in agroecology, water and landscape management, crop production and income generation					
	Activities/Measures	**ESP**	**Indicators**	**Timeline**	**Responsible**	**Verification mechanism**
Exclusion of women, Indigenous Peoples, and other vulnerable groups.	10. Ensuring quotas for women (40%), youth (20%) and at least 175 Indigenous families in activities to improve productive systems by implementing agro-ecological practices and promoting resilient livelihoods through diversification and access to markets (Output 3.1 and 3.2). as per the GAP and IPAP,	ESP 2 ESP 3 ESP 5 ESP 7 ESP 11	number of men, women, youth, and Indigenous People participating in activities that improve productive systems by implementing agro-ecological practices and promoting resilient livelihoods	Year 2 to 4	PMU	Project reports Mid-term and Final Evaluation Reports
Affecting natural habitats during interventions in buffer zones of protected areas.	**11. Signing of contracts** with the beneficiaries of the technological packages, detailing the practices and investments that will be developed in the investment plan or farm/orchard plan, including the prohibition of converting forested land to farming schemes, including agroecological methods, and the prohibition of child labour	ESP 6 ESP 9 ESP 10 ESP 15	Number of contracts with beneficiaries including investment plan and clauses on protection of forest areas and prohibition of child labour	Year 1 to 4	PMU	Records of ontracts signed with beneficiaries
Affecting natural habitats during interventions in buffer zones of protected areas.	12. Assistance and monitoring of investment plans or farm plans, and verification of compliance with the agreements made in the contracts signed with the beneficiaries	ESP 6 ESP 9 ESP 10 ESP 11 ESP 15	Number of assistance and follow-up visits to beneficiaries Number of contracts checked for compliance with agreements	Year 2 to 5	PMU	Reports of assistance, monitoring, and verification visits Project reports
	Component 4. Knowledge management including the capture and dissemination of knowledge and lessons from the project among assisted farming families to promote the sustainability of the project's impact on landscapes.					
	Output 4.1 A knowledge management and communications strategy is developed and implemented with the participation of women and Indigenous populations.					
	Activities/Measures	**ESP**	**Indicators**	**Timeline**	**Responsible**	**Verification mechanism Monitoring Indicator**

Exclusion of women, Indigenous Peoples, and other vulnerable groups.	13. Systematisation of project experiences with the participation of the different target groups (men, women, youth, and Indigenous Peoples) and generation of communication and information materials with a gender and Indigenous Peoples' perspective	ESP 2 ESP 3 ESP 5 ESP 7	Number of systematisations of experiences carried out with the participation of the different target groups Information and communication materials developed with a gender and Indigenous Peoples' perspective	Year 1 to 5	PMU	Experience systematisation reports Information and communication materials Monitoring reports Mid-term and Final Evaluation
Exclusion of women, Indigenous Peoples, and other vulnerable groups.	**14. Dissemination of project communication and information materials** through media accessible to the different target groups of the project (women, men, youth, Indigenous People), including conventional and electronic media (social networks, website, and text messaging)	ESP 2 ESP 3 ESP 5 ESP 7	Number of media in which information and communication materials are disseminated. Number of publications for the dissemination of information and communication materials	Year 1 to 5	PMU	Publications for the dissemination of information and communication materials Project reports
	General activities (to be conducted during the whole project implementation)					
	Activities/Measures	**ESP**	**Indicators**	**Timeline**	**Responsible**	**Verification mechanism Monitoring Indicator**
Risk of non-complience with domestic or international law.	Project activities ensure compliance with the laws applicable to the project	ESP 1	Percentage of the activities in the project that are alined with national legislations	Year 1 to 5	PMU	Project reports Mid-term and Final Evaluation
Exclusion of women, Indigenous Peoples, and other vulnerable groups.	Project activities respect and adherence to human rights during project implementation, with special attention to the rights of groups in vulnerable situations, including women's and girls' rights; and Indigenous Peoples' rights.. The CFM is to be made operational to ensure achievement of the proposed	ESP 4 ESP 5 ESP 7	Percentage of activities in the project that meet national and international legislation on human rights and child labour	Year 1 to 5	PMU	Project reports Mid-term and Final Evaluation

Risk of failure to respect human rights	mitigation measure, based on the protagonists preferred communication channels.					
Increased risk to community health and safety.	Monitoring of health alerts and implementation of biosecurity measures in case of emergencies or local disease outbreaks	ESP 13	Number of measures established in case of sanitary alerts or crises	Year 1 to 5	PMU	Project reports Mid-term and Final Evaluation
Risk of exclusion of women and of deepening gender gaps	Equal opportunity recruitment of technical staff, ensuring a 50% quota of female employees, and in compliance with national and international labour laws and rights	ESP 5 ESP 6	Percentage of staff hired for the project that are women	Year 1 to 5	PMU	Project reports Mid-term and Final Evaluation

Table 13. Consolidated ESMP

ESP	Mitigation Measures for environmental and social risk management
ESP 1 Compliance with the Law	The project will comply with relevant laws, decrees, and legislation. MARENA as the lead executing agency, supervised by WFP, will ensure that the regulations are applied throughout the project implementation process, and that they are respected by national co-executing entities, contractors and other actors involved in the project.
ESP 2 Access and Equity	The project will take a series of transparent steps and measures set out in the GAP, IPAP, and ESMP that will help ensure that project benefits are distributed fairly, without discrimination or favouritism.
	Participating farmers will be selected using inclusive criteria and quotas for gender, age, disability and Indigenous Peoples will be considered.
	The selection of beneficiaries will be conducted through a participatory process involving national institutions in the IATT, municipal governments, local leaders recognised by the community, and farmers.
	The criteria for the selection of beneficiaries will be widely disseminated through media accessible to the different target groups of the project.
ESP 3 Marginalised and Vulnerable Groups	The project will directly benefit vulnerable populations such as farmer families in the Dry Corridor. During project implementation, the flow of information, consultation and meaningful participation of target groups will be ensured. The project will also ensure that mechanisms are in place for groups or individuals who feel affected, excluded, or marginalised to lodge complaints.
ESP 4 Human Rights	All project interventions will respect and promote human rights as recognised by national legislation and international instruments. Project consultations and the design of the proposal were focused on the promotion of human rights, including equal rights for women and support for vulnerable groups such as Indigenous Peoples.
ESP 5 Gender Equality and Women's Empowerment	The project has specific gender objectives and budget allocations. A Gender Action Plan has been developed to ensure that the project addresses the main constraints to women's equal participation, needs and interests, ensuring that gender considerations are integrated into each project activity:
	The Gender Action Plan considers a quota of at least 40% of women direct beneficiaries in all components 1 and 3 and 30% in component 2.
	The project contemplates actions specifically aimed at promoting entrepreneurship and the insertion of women in productive activities, to achieve their economic empowerment.
	Limitations to women's participation will be addressed through different strategies, such as: explicit invitations and calls, sensitisation of families on gender roles and division of labour in the household, and the definition of appropriate schedules and modalities.
	Women's empowerment groups will be promoted as spaces for the accompaniment of women in the development of entrepreneurial skills, with the aim of reducing gender gaps in the productive rural sector.
	The knowledge management component will incorporate the dissemination of gender-sensitive information, making the role of women in agriculture more visible.
ESP 6 Fundamental Labour Rights	The project will comply with national, international and WFP standards in relation to fundamental labour rights.
ESP 7 Indigenous Peoples	The project will involve at least 175 Indigenous households in the municipalities of Telpaneca and Sébaco in the training and adoption of climate-smart agriculture practices, environmental restoration, productive diversification, and water harvesting, among other adaptation measures.
	The project activities foresee the incorporation of a culturally differentiated approach to promote knowledge and exchange of resilient ancestral practices with the aim of preserving their culture and ensuring an inclusive approach.
	Through the implementation of Free, Prior and Informed Consent (FPIC) during the implementation of the proposal, a flow of information and set of consultations will be maintained with the Indigenous community, including territorial leaders, women, youth, and elders, and people with disablities.

ESP	Mitigation Measures for environmental and social risk management
	The Indigenous Peoples Action Plan incorporates the priorities and needs of the Indigenous Peoples' populations into the project in all relevant activities. At the same time, it ensures that the implementation of the project does not violate the rights of Indigenous Peoples, including the right to recognition of their cultural heritage and land and resources.
ESP 8 Involuntary Resettlement	No involuntary resettlement is foreseen during project implementation.
	Should a situation of resettlement or economic displacement arise during project implementation that was not anticipated during design, executing agency and WFP will ensure that a process of consultation and negotiation with potentially affected people takes place, in accordance with FPIC and the Do-No-Harm principle.
ESP 9 Protection of Natural Habitats	In the buffer zones of protected areas, actions will be carried out in accordance with decree 01-2007, ensuring that sustainable productive models are implemented, and that social and inter-institutional concertation is encouraged.
	The project will have a positive impact on the restoration of ecosystems in the Dry Corridor, where reforestation and natural regeneration will be promoted in degraded areas and ecologically important zones (riparian zones, water recharge zones and biological corridors).
ESP 10 Conservation of Biological Diversity	The project will exclusively use native tree species in reforestation activities.
	The final selection of sites to be restored will be led by INAFOR in consultation with municipal governments, community organisations and Indigenous authorities, where appropriate. The selection will be aligned with the local development and land use plan, and national environmental legislation.
ESP 11 Climate Change	The project will not have any negative impact on climate change, as it does not promote any AF climate change drivers (energy, transport, heavy industry, construction materials, large-scale agriculture, large-scale forestry products and waste management). The project will reduce the vulnerability to climate change of households in the Dry Corridor by incorporating adaptation measures into their production systems, improving their water and food security. The project will conduct ecosystem and forest landscape restoration activities that will improve the provision of environmental services, including carbon sequestration.
ESP 12 Pollution prevention and resource efficiency	The project will not pose any significant risk to resource efficiency or pollution from the use of water, land, or fertilisers.
	The project will promote water-efficient alternatives for agricultural activities through rainwater harvesting and small-scale irrigation systems.
	The project will promote sustainable agricultural practices, applying integrated pest and soil management, through agroforestry, crop association, and the production of organic fertilisers, among others.
	The project will not provide pesticides or inorganic fertilisers.
	The proper and acceptable management of organic fertilisers and waste management will be incorporated into training and follow-up activities for farmers.
ESP 13 Public Health	The project is not expected to cause adverse effects on public health. During project implementation, applicable health alerts will be monitored, and measures will be taken to prevent personnel from compromising the health or safety of rural communities and Indigenous Peoples involved in the project.
ESP 14 Physical and Cultural Heritage	From the early stages of formulation, the project has contemplated broad consultations, including with authorities and representatives of Indigenous Peoples through the FPIC process, which will be continued during its implementation, ensuring the right to recognition, ownership, control and protection of cultural heritage. The project will have a positive impact on the recivery and dissemination of Indigenous knowledge and ancestral practices with the potential to promote climate resilience in their productive systems.
ESP 15 Land and Soil Conservation	Through the actions in component 2, this project will aim to restore forest landscapes and restore degraded soils through natural regeneration, planting of native nitrogen-fixing plants and reforestation.
	Through component 3, the project will promote climate-smart agricultural practices that will improve soil fertility and overall soil conditions.
	The project will incorporate measures to avoid the risk of changes in land use to access project benefits, as well as monitoring to ensure that farmers maintain or increase the areas of forest cover on their productive plots.

Grievances and redress mechanisms

110. WFP has a community feedback mechanism (CFM) in every country where it has operations and an institutional-level grievance redress mechanism. The CFM ensures that any project stakeholders have an appropriate and effective way to communicate their concerns, complaints and/or comments regarding project implementation. This is followed by an effective and efficient system for resolving any concerns or complaints from any stakeholder.

111. Under the CFM, the first interface for complaints or grievances from beneficiaries or affected populations will be the country-level community feedback mechanism. At start, it will include three channels: direct interface committee, suggestion boxes and tollfree helplines; however, during stakeholder engagement, consultations will be conducted in order to stablish preferred communications channels and confirm languages to communicate trough.

- The direct interface committee consists of community members (50% women and youth at least) who are tasked with receiving and recording complaints and feedback from other members of the community, as well as channeling this to the responsible project officer. At all times feedback is given promptly, and for those requiring investigations, the Incident Management Protocol is followed, and this requires that investigations be done between 2-5 working days and findings shared with relevant stakeholders.
- Suggestion boxes are a free and easy way to collect real experiences and honest suggestions from anyone. The suggestion box is mostly used where anonymity is required by the user. The suggestion box is located at a strategic, secluded and convenient place so that people are not afraid to use it. It is lockable and the keys are kept with the responsible WFP officer. The box is opened in the presence of the project team. All feedback is documented and categorized for reporting and/ or follow-up if necessary.
- The tollfree hotline allow protagonists to call or text their suggestions and complaints related to the project. The hotline number is available throughout the project cycle and especially in key activities like registration. Project staff also ensure that they visibly display banners with details about the hotline through use of posters. The number is also available on registration cards. The management of the toll-free is done by a third party. All calls that come in are documented and categorised and transmitted to WFP. Immediate response can be given depending on the type of feedback/complaint.

112. The three channels of the complaints and feedback mechanism will be explained to the communities at the beginning of project implementation. Beneficiaries will be made aware of the CFM mechanism in every stage of the project, particularly during direct contact with beneficiaries. They will be able to make a choice of which feedback mechanism to use. Gender, language, and accessibility considerations will be incorporated to make sure that the CFM can be used by everyone.

113. The tollfree number will also be printed on all communication material about the project distributed to stakeholders. Although main spoken and read language is expected to be Spanish, during consultations the project will make sure local languages are identified and the information regarding the communications and messages will be shared trough those languages and in formats that are accessible and understandable to all.. Messages for people with disabilities will be also produced and CFM's SOPs will take into account how communication can be undertaken. The distribution of the boxes will be made in an equitable way (according to beneficiaries coverage).

114. For all the 3 mechanisms, data will be captured into a common log and some of the information collected will include name of the person providing feedback, village, ward, district, cooperating partner, programme, nature of feedback. Issues will be followed-up, investigated and action will be taken to improve on programme delivery. Data will be analysed, and reports shared. Feedback will also be communicated through stakeholder meetings and beneficiary meetings during registrations and distributions. For sensitive issues, feedback will be given to the concerned persons bilaterally.

115. Issues of a severe nature that need urgent escalation are referred immediately to WFP Country Office management within 24 hours. All non-WFP related cases will be referred to relevant stakeholders. Depending on the nature, the incident management protocol can also be initiated, which may lead to elevation of the case to the institutional-level grievance and redress mechanism managed by the Office of Investigations at the WFP headquarters.

116. The institutional-level grievance and redress mechanism can also be contacted directly at the confidential email hotline@wfp.org, the confidential phone +39 06 6513 3663, or the confidential fax +39 06 6513 2063.

Annex 5: List of consulted stakeholders and meeting summary

Technical approach to the consultation

117. The methodological design and the consultation for the formulation of the Project Climate Resilience and Livelihoods in the Nicaraguan Dry Corridor, was carried out in permanent coordination with the entities in charge of this competence (MINREX, MHCP and MARENA); likewise, all national and territorial stakeholders were kept informed, including municipal governments and local organisations; who were directly involved in the implementation of the Project. Between November and March 2023, meetings, working sessions, municipal workshops, direct interviews, and surveys were conducted.

118. The whole process of reviewing and completing the information during the consultation was based on what was described in the narrative of the Concept Note (CN) that has been approved by the AF and on those aspects indicated and suggested in the review of the AF for the approval of the CN. It is important to remind the participants that the elaboration of the CN went through a previous consultation process and that it was advisable to maintain the approach

119. The National Inter Agency Task Team (IATT) has actively participated in the feedback of the methodological design of the consultation process, as well as in the summons at both the national and territorial levels and in the facilitation of institutional spaces for meetings and working sessions.

120. **General Objective:** generate spaces for participation and early involvement of institutions, public-private actors and farmers (stakeholders), to reach a common understanding and ownership of the goals and objectives, as well as of the roles and responsibilities within the decision-making structures for the formulation of the project, in line with the National Climate Change Policy of Nicaragua, and other relevant national policies and consistent with the policies of the AF.

121. **Specific objectives of the national territorial stakeholder consultation:** enquire about:
    - Institutional competences in the implementation of the Project.
    - Methodology of the consultation process for the formulation of the Project.
    - New information available to allow updating of Part I of the project document.
    - Activities or actions to be developed in each component.
    - Project complementarity and duplication, synergies, coordination mechanisms.
    - Sustainability of project results.
    - Preparation of the project budget.
    - Financial and project risk management measures.
    - Risks of environmental and social impacts of the Project.

122. **Specific objectives of the gender consultation process:** Consultation about:
    - Collect information on gender roles and the conditions of access to and control of resources, participation, and decision-making (governance spaces) of women and men, understanding the differences and gaps to be considered in the actions to be defined in the Project.
    - Collect information to analyse needs, interests and priorities by gender, age, and ethnicity.

- Consult on the situation of women in the face of climate change threats, the effects they have on their communities and families, assessing how the project (according to its defined components) could contribute to improving their situation.

123. **Specific objectives of the consultation process with IndigenousIndigenous Peoples:** Consultation on:
- Socio-cultural aspects that should be integrated into contracts or possible agreements to promote productive linkages and/or the commercialisation of their products.
- Measures to ensure that Indigenous communities receive appropriate benefits; establish actions to mitigate impacts that may result from risky activities.
- The process and application of free, prior, and informed consent
- Detailed analysis of ancestral agricultural practices used, and forest, soil and water conservation measures implemented.
- Acquire knowledge about appropriate consultation processes for decision-making during the implementation of the IP Action Plan and general project activities.

Consulted Stakeholders

124. From November 2022 to April 2023, 10 workshops/sessions were held with National Technical Teams and 14 territorial workshops with technical teams, municipal governments, farmer organisations, farmer groups, private sector representatives, local organisations, women's groups, and representatives of Indigenous Peoples. Representation was as follows:

Table 14. Distribution of participants consulted

Categories of informants	Number of participants	Men (%)	Women (%)
Inter-Agency Task Team (National IATT)	45	69%	31%
Municipalities (Mayors' offices)	17	65%	35%
Territorial Institutions	148	66%	34%
Farmer organisation	7	43%	57%
Farmers	198	61%	39%
Private sector	4	-	100%
Local organisations	5	60%	40%
Women's organisations	182	46%	54%
Indigenous People	15	40%	60%
TOTAL	**621**	**57%**	**43%**

Source: FAO-EC with information from Working Sessions and Territorial Workshops.

125. **Stakeholder consultations at national and territorial level**[267] to strengthen the process initiated during the Concept Note included: representatives of national and territorial institutions, representatives of municipal governments, representatives of farmers, representatives of the education sector, representatives of women and youth, and representatives of Indigenous Peoples.

126. They were grouped into three categories of informants, addressing specific objectives and specific methodologies, as shown in the table below:

Table 25. Category of informants and type of consultation

Informant categories	Nomenclature assigned to consultation types for each category of respondents
Representatives of national and territorial institutions,	**Comprehensive territorial stakeholder consultations**

[267] See methodological details in the document: Diseño metodológico proceso de consulta territorial con partes interesadas: Instituciones, gobiernos municipales, productores y productoras y otros; consulta específica de género y pueblos indígenas [Methodological design of the territorial consultation process with stakeholders: Institutions, municipal governments, farmers, and others; specific consultation on gender and indigenous peoples]. November 2022.

Informant categories	Nomenclature assigned to consultation types for each category of respondents
representatives of municipal governments, representatives of farmers, representatives of the education sector, representatives of local organisations and farmers' organisations.	Two working groups were organised: • SNPCC institutions: MARENA, MEFCCA, MAG, INTA/UDC/UPAs, INAFOR, IPSA, MHCP, INATEC, MINIM, SCCP, INETER, ANA, INIFOM, representative of municipalities and representative of local organisations. • Farmers and representatives of farmer organisations.
Young women, Indigenous women leaders, female farmers, male farmers, women's organisations and municipal gender commissions.	• **Gender consultations** • Three groups were formed, according to sex, age, and ethnicity, and they worked collectively on the guide of questions for the four components proposed in the Project, namely: • A group of adult female farmers • A group of young females (mestizo and Indigenous) • A group of adult and young male farmers (mestizo and Indigenous)
Indigenous Community Board of Directors (council of elders and/or leaders) - Men, women and youth and representatives of actors of the National Reforestation Crusade	**Consultation with Indigenous Peoples** Two groups were formed, one of male and female farmers and the other with an impact on the Board of Directors, which worked on the guide of questions for the four components proposed in the project.

Source: FAO-EC

127. Based on this matrix, the types of consultation will henceforth be summarised as: ***stakeholder consultations, gender consultations and consultations with Indigenous Peoples.***

Consultation Techniques

128. The consultations were conducted using the following methods: working sessions or meetings, workshops, interviews (face-to-face and virtual). The levels of action were national and territorial.

Results of the Consultation Process: Stakeholders, Gender, and Indigenous Peoples, by consulted topics.

Table 36. Record of stakeholder consultation sessions

Dates	Location	Topic	Participants	Summary of the meeting
7/11/2022	Convention Centre Hotel HEX, Managua, Nicaragua.	Institutional competences in the implementation of the Project.	National IATT: ANA, IPSA, INAFOR, INIFOM, INTA, MAG, MEFCCA, MHCP, MARENA, SCCP, SEPRES	To consult on institutional competencies, contributions, and collaboration for the development of each component in the implementation of the Project. The objective of the group work was to promote a space for the exchange of contributions, observations, and recommendations on the development of each component of the *Project*, methodologies and the activities foreseen in the Concept Note. The result was that the participating institutions indicated the perspective of their roles from their institutional competences. *Minutes of the Kick-off Workshop. Formulation of the Project Document entitled "Climate Resilience and Livelihoods in the Nicaraguan Dry Corridor". November 2022.*
8/11/2022	Convention Centre Hotel HEX, Managua, Nicaragua.	Review and validation of the Methodology for the stakeholder consultation process for the formulation of the Project.	National IATT: ANA, IPSA, INAFOR, INETER, INIFOM, INTA, MAG, MEFCCA, MHCP, MARENA, SCCP, SEPRES	The Inter Agency Task Team at the central level (National IATT) was informed of the objectives and methodological design for the consultation process with: Stakeholders, Gender, and Indigenous Peoples, which were reviewed and validated. The FAO consultant team incorporated the recommendations and feedback for final approval. The outcome of this working session was the approved consultation methodology. *Minutes – Kick-off Workshop and Territorial Consultation Methodology. Formulation of the Project Document entitled "Climate Resilience and Livelihoods in the Nicaraguan Dry Corridor". November 2022.*
8/11/2022	Convention Centre Hotel HEX, Managua, Nicaragua.	Part I. Project Information. Consultations on new information to update Part I of the project document.	National IATT: ANA, IPSA, INAFOR, INETER, INIFOM, INTA, MAG, MEFCCA, MHCP, MARENA, SCCP, SEPRES	During the kick-off workshop, the content of Part I of the project document was presented for consultation on documents that are in the process of final elaboration (new information), in order to update this information during the revision of Part I of the Project under formulation. The requested documents were: • Fourth National Communication on Climate Change, 2023 updated (Climate Change Secretariat) • Update of Part I maps and data (consult INETER) These documents are under preparation and have not been published. *Minutes - Kick-off Workshop Formulation of the Project Document "Climate Resilience and Livelihoods in the Dry Corridor of Nicaragua". November 2022.*
From 28/11/2022 to 16/12/2022	In the 14 municipalities of the Project	Section A: Consultations on activities or actions to be conducted under component 1: Capacity Building.	Territorial IATTs/SNPCC Farmers Gender group (men and women) Indigenous Peoples	In the territorial stakeholder consultations, for the component Capacity Transfer, input on three main aspects were received: a) training topics needed/recommended by farmers; b) preferred training modalities; and c) constraints they might have in participating in the trainings, all from the perspectives or needs of each stakeholder. All consultations were conducted with separate stakeholder groups, to provide results according to the needs and priorities of each group. *Minutes of the results from the Territorial Consultation Process and output 2 report. Report of the Territorial Consultation Workshops 16.01.23.*
From 28/11/2022 to 16/12/2022	In the 14 municipalities of the Project	Section A: Consultations on activities or actions to be developed in component 3: Rehabilitation of agricultural livelihoods at farm level.	Territorial IATTs/SNPCC Farmers Gender group (men and women) Indigenous Peoples	In the territorial stakeholder consultations, for the component Agricultural Livelihoods Rehabilitation at farm level, inputs were received on the following consulted aspects: a) Technologies and practices to rehabilitate agricultural livelihoods and b) possible actions and constraints/needs for marketing and market access. All consultations were conducted with separate stakeholder groups, to provide results according to the needs and priorities of each group. *Minutes of the results from the Territorial Consultation Process and output 2 report. Report of the Territorial Consultation Workshops 16.01.23.*
From 28/11/2022 to 16/12/2022	In the 14 municipalities of the Project	Section A: Consultations on activities or actions to be developed in component 4: Capturing and disseminating	Territorial IATTs/SNPCC Farmers Gender group (men and women)	In the territorial stakeholder consultations, for the component Capturing and Disseminating Knowledge and Learning, inputs were received on the following aspect: a) the most preferred means and tools to receive and share knowledge. *Minutes of the results from the Territorial Consultation Process and output 2 report. Report of the Territorial Consultation Workshops 16.01.23.*

Dates	Location	Topic	Participants	Summary of the meeting
		knowledge and learning.	Indigenous Peoples	
From 28/11/2022 to 16/12/2022	In the 14 municipalities of the Project	Section C. Sustainability	Territorial IATTs/SNPCC Farmers Gender group (men and women) Indigenous Peoples	The territorial stakeholder consultations on sustainability addressed the following issues: the reasons why some project actions are not sustainable over time and what should be done to overcome this situation, and measures or commitments to reduce the risk of unsustainability. *Minutes of the results from the Territorial Consultation Process and output 2 report. Report of the Territorial Consultation Workshops 16.01.23.*
From 28/11/2022 to 16/12/2022	In the 14 municipalities of the Project	Section C. Environmental and Social Impact Risk (Safeguards)	Territorial IATTs/SNPCC Farmers Gender group (men and women) Indigenous Peoples	The consultation process allowed for an in-depth determination of the environmental, social, economic, and cultural aspects of the setting where the project will be implemented, leading to an early identification of the possible risks associated with the implementation, and the design of appropriate measures to avoid them. The project contemplates activities to be developed in Indigenous territories, therefore, mechanisms have been foreseen to ensure that the rights of Indigenous Peoples are respected, including the application of Free, Prior and Informed Consent, during territorial consultations. *Minutes of the results from the Territorial Consultation Process and output 2 report. Report of the Territorial Consultation Workshops 16.01.23.*
From 28/11/2022 to 16/12/2022	In the 14 municipalities of the Project	Gender	Gender group (men and women) A total of 151 surveys were conducted, targeting male and female farmers participating in the sessions in each municipality.	A brief survey was carried out in digital format, with the aim of obtaining a closer look at the socio-demographic profile of the participants in the gender focus groups, as well as to obtain essential information that will allow to quantify trends in perceptions on topics of interest such as: *effects of climate change; access and decision-making in the use of natural resources; economic activities; gender roles, and expectations* related to priority needs, to address the effects of climate change in the communities of the 14 municipalities of the Dry Corridor prioritised for intervention with the project. *Minutes of the results from the Territorial Consultation Process and output 2 report. Report of the Territorial Consultation Workshops 16.01.23.*
6/12/2022	Online (Via Zoom platform)	Gender	Rosa Romero- Focal Point Gender UNFPA	The objective of the meeting was to obtain recommendations from UNFPA for the integration of gender issues in the project (transformative actions), especially on the issue of violence, the situation of girls and young women in the country, empowerment, as well as to know if there are any related projects or initiatives (active or past) that can be replicated and recommendations from local organisations for potential links.
15/12/2022	Teustepe, Boaco	Gender	Darwin Borge- Gender practices officer. MINIM	The objective of the meeting was to obtain recommendations and suggestions on how to approach the 4 components of the project from a gender equity perspective at the local level.
25/01/2023	MARENA- Salón Naturaleza	Section A: Project components / Input-activity-output-outcome chain (with inputs from territorial consultation). Results framework (Outcomes, outputs, activities)	National IATT: ANA, IPSA, INAFOR, INETER, INIFOM, INTA, MAG, MEFCCA, MHCP, MINIM, MARENA, SCCP.	The objective of the session was to: Describe the components of the project, with a particular focus on the concrete adaptation activities of the project, and how these activities contribute to climate resilience. The results of the territorial consultations were presented and from this exercise the representatives of the National IATT defined the activities for each component of the project, taking into account the priorities raised by the stakeholders in the intervention territories of the project. *Minutes of the Follow-up Workshops with the National IATT* (25, 26 and 27 January 2023). February 2023.

Dates	Location	Topic	Participants	Summary of the meeting
26/01/2023	MARENA, Salón Naturaleza	Section F: Describe if there is duplication of the project with other sources of funding, if any. (complementarity, synergies, coordination mechanisms)	National IATT: ANA, IPSA, INAFOR, INETER, INTA, MAG, MEFCCA, MHCP, MINIM, MARENA, SCCP.	Section F of the CN on Complementarity and Synergies with related projects located in the territory was revised and updated. The representatives of institutions have expressed their clarity about the non-duplication of protagonists with interventions of projects implemented by the government. They stated that they already have such a mandate. They also expressed that a platform with the registration of protagonists of all projects implemented by the public sector is about to be put into use, through which they will have more control. *Minutes of the Follow-up Workshops with the National IATT* (25, 26 and 27 January 2023). February 2023.
27/01/2023	MARENA, Salón Naturaleza	Section J: Describe how the sustainability of the project's results has been taken into account in the design of the project/programme.	National IATT: ANA, IPSA, INAFOR, INETER, INTA, MAG, MEFCCA, MHCP, MINIM, MARENA, SCCP.	Section J of the CN on Sustainability was revised and updated with inputs from the territorial consultation and the lessons learned from the National IATTs, and new aspects were added to complement this section, taking into account the following three dimensions: environmental sustainability, social sustainability and economic sustainability. In general, it was agreed that monitoring the sustainability of the actions once the project has been completed should be incorporated into the annual plans and budgets of the SNPCC; among other aspects complemented in the narrative of this section. *Minutes of the Follow-up Workshops with the National IATT (*25, 26 and 27 January 2023). *Formulation of the Project Document entitled " Climate Resilience and Livelihoods in the Nicaraguan Dry Corridor". February 2023*.
23/02/2023	MAG	Part III. Section G: Include a detailed budget with budget notes, a budget on the use of the implementing entity's administration fee and an explanation and breakdown of the implementation costs.	National IATT: ANA, IPSA, INAFOR, INETER, INTA, INATEC, MAG, MEFCCA, MINIM, MARENA, SCCP.	The objective of the session was to: Elaborate the detailed budget with budget notes. The working groups reviewed, verified, and adjusted the activities that had already been defined for each component in the workshop on 25 and 26 January and conducted the budgeting of each of the activities. After the group work, the results of the budget exercise and the development of the activities of each component were socialised. *Minutes of the Follow-up Workshops with the National IATT (23 February 2023). Formulation of the Project Document entitled "Climate resilience and livelihoods in the Nicaraguan Dry Corridor". March 2023.*
23/02/2023	MAG	Part III. Section E: Results framework for the project proposal, including milestones, targets, and indicators.	National IATT: ANA, IPSA, INAFOR, INETER, INTA, INATEC, MAG, MEFCCA, MINIM, MARENA, SCCP.	The objective of the session was to: Complete the results framework: indicators, targets, means of verification and assumptions. Working groups will be organised according to the affinities and competences that the SNPCC institutions have in the framework of the Project implementation, which completed the indicators, targets, and means of verification. *Minutes of the Follow-up Workshops with the National IATT (23 February 2023). Formulation of the Project Document entitled "Climate resilience and livelihoods in the Nicaraguan Dry Corridor ". March 2023.*
23/02/2023	MAG	Part III. Section B: Describe financial and project/programme risk management measures	National IATT: ANA, IPSA, INAFOR, INETER, INTA, INATEC, MAG, MEFCCA, MINIM, MARENA, SCCP.	The objective of the session was to: Describe the measures for financial and project/programme risk management. Working groups will be organised according to the affinities and competences that the SNPCC institutions have in the framework of the implementation of the project and each group will identify the possible risks, the solution measures in case they occur and the evaluation according to category: high, medium, and low. *Minutes of the Follow-up Workshops with the National IATT (23 February 2023). Formulation of the Project Document entitled "Climate resilience and livelihoods in the Nicaraguan Dry Corridor ". March 2023.*
23/02/2023	MAG	Part II. Section C: Economic, social, and environmental benefits Part II. Section D:	National IATT: MEFCCA, MAG and INTA	The objective of the meeting was to: Define the proposed agricultural models for component 3 and to agree on projection data for the economic-financial analysis of the 10-year models. Four models will be analysed: • Home gardens with vegetables + irrigation system (cushaw squash (Cucurbita

Dates	Location	Topic	Participants	Summary of the meeting
		Profitability		argyrosperma), pipián (Cucúrbita mixta), tomato, pepper and fruits (citrus, avocado). • Agroforestry systems with fruit trees, basic grains, musaceae. Post-harvest handling (12-hundredweight silos). • Silvopastoral systems, vegetative seed pasture + technology • Basic grains + Investment in water harvesting, one per municipality: Reservoir with a capacity of 937 cubic metres, using the natural relief of the land. *Minutes of the Follow-up Workshops with the National IATT (23 February 2023). Formulation of the Project Document entitled "Climate resilience and livelihoods in the Nicaraguan Dry Corridor ". March 2023.*
24/02/2023	MARENA, Salón Indio Maíz	Follow-up meeting	MARENA Deputy Minister AFAOR Programmes FAO-Nicaragua Consulting Team	Follow-up meeting for the presentation of progress in the formulation of the project document "Climate Resilience and Livelihoods in the Nicaraguan Dry Corridor" by the consultant. The main issues addressed were: submitting a gender analysis document and action plan for MINIM's review, organising a workshop to learn about experiences with incentives for farmers, MARENA will strengthen its leadership as executing entity, among other aspects. Minutes of the meeting with MARENA's deputy minister. Friday, 24 February 2023
23/03/2023	MARENA, Salón Naturaleza	Presentation of the project document draft	National IATT: ANA, IPSA, INAFOR, INETER, INTA, INATEC, MAG, MEFCCA, MINIM, MARENA, SCCP.	The objectives of the working day were to: i) Present the draft project proposal and receive feedback to make the corresponding adjustments for the final version and ii) Review and validate with the National IATT some key items of the content of the document and receive feedback to make the corresponding adjustments for the final version. The presentation of each part with its corresponding sections was conducted. The participants made various contributions, which have been incorporated into the project document. *Minutes of the Draft Project Proposal Presentation, Follow-up Workshop with the National IATT (23 March 2023). Formulation of the Project Document entitled " Climate resilience and livelihoods in the Nicaraguan Dry Corridor". March 2023.*
04/05/2023	MARENA	Handover from FAO to WFP as MIE	MARENA, MHCP, FAO, WFP	MARENA senior management formalizes the change of agency and WFP agrees to continue the process of formulating the proposed Project.
12 – 30/05/2023	MARENA-Salones del despacho y de la Dirección de Patrimonio	Reading of PRODOC Technical meetings to discuss programmatic, monitoring, and budget components.	MARENA, WFP	12 May: MARENA, FAO and WFP discuss initial consultations on the proposal. 8-16: Review of PRODOC and supporting documents such as Gender Consultations, Indigenous Peoples. 16 May: Exchange of information requested from MARENA by WFP (Capacity Assessment in Procurement Systems, Human Resources Management) 29 May: Technical meeting on programmatic components. Questions that WFP had previously shared with MARENA were discussed. Discussions on technical, practical approaches and their challenges are highlighted. May 31: Technical meeting on monitoring component. Questions that WFP had previously shared with MARENA were discussed. Highlights the monitoring and follow-up requirements required by the project
01 – 22/06/2023	MARENA-Salones del despacho y de la Dirección de Patrimonio	Revision and editing of PRODOC Technical meetings to: define approaches, areas by municipality and productive model, among others	MARENA, WFP	01 June: Meeting for review and in-depth discussion of the first three components of the project. 02 June: Meeting for budget review (Project, MARENA, and WFP). Necessary adjustments were identified under the rules of the Adaptation Fund. 06 June: Continuation of the budget review. 14 June: Discussion of critical points: goals, budget, contributions from the complementarity of government institutions. 19 June: Discussion and adjustments to activities and components. 20 June: Discussion and adjustments to activities and components. 21 June: Discussion and adjustments to activities and components.

Dates	Location	Topic	Participants	Summary of the meeting
		Identification of MARENA experiences and supporting literature		
23/06/2023	MARENA – Despacho	First validation of WFP proposal to MARENA's Senior Management	MARENA, WFP.	WFP presented the four components of the proposal with the modifications according to the previous technical discussions with the MARENA team. Due to the budgetary constraint to achieve the proposed goals, MARENA's Senior Management recommended expanding incentive options and combining with activities with lower incentives.
21 - 30/06/2023	MARENA- Salones del despacho y de la Dirección de Patrimonio	Adjustments to the technical components and budgets according to recommendations of the Superior Management of MARENA.	MARENA, WFP	June 26: Meeting with MARENA's technical team (SIG) to define incentive options for families for conservation and management of natural regeneration, areas to intervene by productive model. June 29: Technical meeting with MARENA GIS team to refine the potential areas of intervention by zones.
03 – 10/07/2023	MARENA – Salón del Despacho	Final adjustments to components and budget.	MARENA, WFP	July 3: Meeting at MARENA for final revision of programmatic approach and budget revision July 11: Meeting at Ministerial level to present final proposal
18/07/2023	MARENA	Presentation and validation of the project document prior to its submission to the Adaptation Fund	MARENA, IPSA, MAG, INATEC, INETER, MHCP, SCCP, INAFOR, ANA, MEFCCA, MINIM, WFP	Workshop to present the final project document to the institutions that were involved in the project design and that will participate in the implementation of the project. The final document was well received and next steps were also discussed.

List of consulted participants

List of participants in "National IATT Workshops/Sessions"

No.	Date	Municipality	Name and surname	Age	Sex	Position	Represented institution
Session 1- Kick-off Workshop							
1	7/11/2022	Managua	Eduardo Flores	59	M	Climate Change Specialist	SCCP
2	7/11/2022	Managua	América Aburto	33	F	Natural Heritage Specialist	MARENA
3	7/11/2022	Managua	Arlen Amador	-	F	Director General for Planning, External Cooperation and Projects	MARENA
4	7/11/2022	Managua	Marlon Sirias	35	M	Director SiAgua	ANA
5	7/11/2022	Managua	Yader Mercado	42	M	DGAFC	MEFCCA
6	7/11/2022	Managua	Alfonso García	53	M	External Cooperation	MEFCCA
7	7/11/2022	Managua	Carlos A. Muñoz	40	M	DIA/DPP Planning	IPSA

8	7/11/2022	Managua	Indiana Montoya	-	F	Director General for Natural Heritage and Biodiversity	MARENA
9	7/11/2022	Managua	Tatiana Pilarte	38	F	Technical Advisor for Planning	SEPRES
10	7/11/2022	Managua	Bruno Gallardo	-	M	Deputy Minister	MHCP
11	7/11/2022	Managua	Arlen Ramírez	-	F	Coordinator	MHCP
12	7/11/2022	Managua	Yuri Zepeda	-	M	MHCP Liaison	MHCP
13	7/11/2022	Managua	Yelisseth Y. Zambrana	-	F	External Cooperation and Projects Officer	INAFOR
14	7/11/2022	Managua	Roberto Domínguez	47	M	Director of Promotion, Protection and Forestry Development	INAFOR
15	7/11/2022	Managua	María José Corea	44	F	Head of the Agricultural Technical Unit	MAG
16	7/11/2022	Managua	Juan Carlos Sánchez	53	M	Director General for Planning	SEPRES/ MHCP
17	7/11/2022	Managua	Jonathan González	43	M	Climate Change Specialist	SEPRES/ SCCP
18	7/11/2022	Managua	Maritza Ruiz	-	F	Director of Local Development	INIFOM
19	7/11/2022	Managua	Martin Agenor Rosales	-	M	Phytosanitary Surveillance and Campaigns Department Officer	IPSA
20	7/11/2022	Managua	Víctor Báez Yubank	44	M	Partnership Officer	INIFOM
21	7/11/2022	Managua	Mario José Román	-	M	Adviser to the Minister	MAG
22	7/11/2022	Managua	Nasser H. Carrillo	50	M	Project Office Manager	INTA
Session 2- Kick-off Workshop							
1	8/11/2022	Managua	Eduardo Flores	59	M	Climate Change Specialist	SCCP
2	8/11/2022	Managua	Marlon Sirias	35	M	Director SiAgua	ANA
3	8/11/2022	Managua	Arlen Amador	-	F	Director-General for Planning, External Cooperation and Projects	MARENA
4	8/11/2022	Managua	América Aburto	33	F	Natural Heritage Specialist	MARENA
5	8/11/2022	Managua	Saulo León	60	M	MHCP Liaison	MHCP
6	8/11/2022	Managua	Jonathan Gonzalez	43	M	Climate Change Specialist	SCCP
7	8/11/2022	Managua	Yelisseth Y. Zambrana	-	F	External Cooperation and Projects Officer	INAFOR
8	8/11/2022	Managua	María José Corea	44	F	Head of the Agricultural Technical Unit	MAG
9	8/11/2022	Managua	Roberto Domínguez	47	M	Director of Promotion, Protection and Forestry Development	INAFOR
10	8/11/2022	Managua	Yader Mercado	42	M	DGAFC	MEFCCA
11	8/11/2022	Managua	Alfonso García	53	M	External Cooperation	MEFCCA

12	8/11/2022	Managua	Yuri Zepeda	-	M	MHCP Liaison	MHCP
13	8/11/2022	Managua	Víctor Báez Yubank	44	M	Partnership Officer	INIFOM
14	8/11/2022	Managua	Luis Mariano Gutiérrez	-	M	Technical Advisor	INETER
15	8/11/2022	Managua	Carlos A. Muñoz	40	M	DIA/DPP Planning	IPSA
16	8/11/2022	Managua	Fernando Leal	50	M	Director of Planning and Projects	IPSA
17	8/11/2022	Managua	Martin Rosales	-	M	DISAUES	IPSA
18	8/11/2022	Managua	Nasser H. Carrillo	50	M	Project Office Manager	INTA
19	8/11/2022	Managua	Juan Carlos Sánchez	53	M	Director General for Planning	SEPRES
20	8/11/2022	Managua	Tatiana Pilarte	38	F	Technical Advisor for Planning	SEPRES
21	8/11/2022	Managua	Juan Bautista Reyna	24	M	Responsible for National and International Agreements	MARENA
22	8/11/2022	Managua	Jaquelene Gutierrez	42	F	Formulation Analyst	MARENA
Session 3- Continuation of the consultation process							
1	25/1/2023	Managua	Keltin Angulo	35	M	Health Compliance Officer	IPSA
2	25/1/2023	Managua	María José Corea	44	F	Head of the Agricultural Technical Unit	MAG
3	25/1/2023	Managua	América Aburto	33	F	Natural Heritage Specialist	MARENA
4	25/1/2023	Managua	Rene Castellón	59	M	Biodiversity Director	MARENA
5	25/1/2023	Managua	Saulo León	60	M	MHCP Liaison	MHCP
6	25/1/2023	Managua	Jonathan Gonzalez	43	M	Climate Change Specialist	SCCP
7	25/1/2023	Managua	Eduardo Flores	59	M	Climate Change Specialist	SCCP
8	25/1/2023	Managua	Carlos Mairena	60	M	Responsible for the pest free areas department	IPSA
9	25/1/2023	Managua	Yader Mercado	42	M	General Directorate for Family and Community Farming	MEFCCA
10	25/1/2023	Managua	Alfonso García	53	M	External Cooperation	MEFCCA
11	25/1/2023	Managua	Marlon Sirias	35	M	Director SiAgua	ANA
12	25/1/2023	Managua	Manuel Prado	35	M	Director CC and CA	INETER
13	25/1/2023	Managua	Roberto Aburto	57	M	Project Analyst	INETER
14	25/1/2023	Managua	Kelly Chacon	28	F	Gender Analyst	MINIM
15	25/1/2023	Managua	Noemy Lara	42	F	Director of Public Policy	MINIM

16	25/1/2023	Managua	Nasser H. Carrillo	50	M	Project Office Manager	INTA
17	25/1/2023	Managua	Ana Ortega	35	F	Director of Water Resources Management	ANA
18	25/1/2023	Managua	Fernando Leal	50	M	Director of Planning and Projects	IPSA
19	25/1/2023	Managua	Roberto Domínguez	47	M	Director of Promotion, Protection and Forestry Development	INAFOR
20	25/1/2023	Managua	Alejandra Briones	33	F	Director of Planning	INAFOR
21	25/1/2023	Managua	Víctor Báez Yubank	44	M	Partnership Officer	INIFOM
22	25/1/2023	Managua	Juan Bautista Reyna	24	M	Responsible for National and International Agreements	MARENA
23	25/1/2023	Managua	Katherine Jarquin	26	F	National and International Agreements Analyst	MARENA
24	25/1/2023	Managua	Mayaris Castillo	35	F	Forestry Development Officer	INAFOR
Session 4- Continuation of the consultation process							
1	26/1/2023	Managua	Maria Jose Corea	44	F	Head of the Agricultural Technical Unit	MAG
2	26/1/2023	Managua	Marlon Sirias	35	M	Director SiAgua	ANA
3	26/1/2023	Managua	Saulo León	60	M	MHCP Liaison	MHCP
4	26/1/2023	Managua	Mayaris Castillo	35	F	Forestry Development Officer	INAFOR
5	26/1/2023	Managua	Eduardo Flores	59	M	Climate Change Specialist	SCCP
6	26/1/2023	Managua	América Aburto	33	F	Natural Heritage Specialist	MARENA
7	26/1/2023	Managua	Carlos A. Muñoz	40	M	DIA/DPP Planning	IPSA
8	26/1/2023	Managua	René Castellón	59	M	Biodiversity Director	MARENA
9	26/1/2023	Managua	Jaime José Jimenez	30	M	Pre-investment Officer	MEFCCA
10	26/1/2023	Managua	Alfonso García	53	M	External Cooperation Analyst	MEFCCA
11	26/1/2023	Managua	Carlos Mairena	60	M	Responsible for the pest free areas department	IPSA
12	26/1/2023	Managua	Yader Mercado	42	M	General Directorate for Family and Community Farming	MEFCCA
13	26/1/2023	Managua	Noemy Lara	42	F	Director of Public Policy	MINIM
14	26/1/2023	Managua	Kelly Chacon	28	F	Gender Analyst	MINIM
15	26/1/2023	Managua	Marcio Baca	56	M	Director of Meteorology	INETER
16	26/1/2023	Managua	Aldo Avilés	44	M	Project Manager	INETER
17	26/1/2023	Managua	Keltin Angulo	35	M	Health Compliance Officer	IPSA

18	26/1/2023	Managua	Katherine Jarquin	26	F	National and International Agreements Analyst	MARENA
19	26/1/2023	Managua	Juan Bautista Reyna	24	M	Responsible for National and International Agreements	MARENA
20	26/1/2023	Managua	Emilio Romero C.	43	M	Forestry Development Officer	INAFOR
21	26/1/2023	Managua	Nasser H. Carrillo	50	M	Project Office Manager	INTA
22	26/1/2023	Managua	Roberto Aburto	57	M	Project Analyst	INETER
23	26/1/2023	Managua	Juan Carlos Sánchez	53	M	Director General for Planning	SEPRES
24	26/1/2023	Managua	Tatiana Pilarte	38	F	Technical Advisor Planning	SEPRES
Session 5 - Continuation of the consultation process							
1	27/1/2023	Managua	Eduardo Flores	59	M	Climate Change Specialist	SCCP
2	27/1/2023	Managua	Carlos A. Muñoz	40	M	DIA/DPP Planning	IPSA
3	27/1/2023	Managua	Kelly Chacon	28	F	Gender Analyst	MINIM
4	27/1/2023	Managua	Noemy Lara	42	F	Director of Public Policy	MINIM
5	27/1/2023	Managua	Marlon Sirias	35	M	Director SiAgua	ANA
6	27/1/2023	Managua	Nasser H. Carrillo	50	M	Project Office Manager	INTA
7	27/1/2023	Managua	Alfonso García	53	M	External Cooperation	MEFCCA
8	27/1/2023	Managua	Jaime Jose Jimenez	30	M	Pre-investment officer	MEFCCA
9	27/1/2023	Managua	Marcio Baca	56	M	Director of Meteorology	INETER
10	27/1/2023	Managua	Aldo Avilés	44	M	Project Manager	INETER
11	27/1/2023	Managua	Jonathan Gonzalez	43	M	Climate Change Specialist	SCCP
12	27/1/2023	Managua	América Aburto	33	F	Natural Heritage Specialist	MARENA
13	27/1/2023	Managua	Mayaris Castillo	35	F	Forestry Development Officer	INAFOR
14	27/1/2023	Managua	Keltin Angulo	35	M	Health Compliance Officer	IPSA
15	27/1/2023	Managua	Yader Mercado	42	M	General Directorate for Family and Community Farming	MEFCCA
16	27/1/2023	Managua	Carlos Mairena	60	M	Responsible for the pest free areas department	IPSA
17	27/1/2023	Managua	Marielos D.	-	F	Consultant	MARENA
18	27/1/2023	Managua	Deyvin Mayorga	-	M	National Biodiversity Specialist	MARENA
19	27/1/2023	Managua	Hawell Ponce	-	M	Project Coordinator	FAO

20	27/1/2023	Managua	Emilio Romero C.	43	M	Forestry Development Officer	INAFOR
21	27/1/2023	Managua	Katherine Jarquin	26	F	National and International Agreements Analyst	MARENA
22	27/1/2023	Managua	Juan Bautista Reyna	24	M	Responsible for National and International Agreements	MARENA
23	27/1/2023	Managua	René Castellón	59	M	Biodiversity Director	MARENA
24	27/1/2023	Managua	Jorge Guevara	62	M	NICAVIDA Planner	MEFCCA
25	27/1/2023	Managua	María José Corea	44	F	Head of the Agricultural Technical Unit	MAG
26	27/1/2023	Managua	Saulo León	60	M	MHCP Liaison	MHCP
Session 6 - Continuation of the consultation process							
1	23/2/2023	Managua	Norman Lacayo Cuadra	26	M	Water Rights and Discharge Specialist	ANA
2	23/2/2023	Managua	Noemy Lara	42	F	Director of Public Policy	MINIM
3	23/2/2023	Managua	Roberto Domínguez	47	M	Director of Promotion, Protection and Forestry Development	INAFOR
4	23/2/2023	Managua	Marlon Sirias	35	M	Director SiAgua	ANA
5	23/2/2023	Managua	Carlos Mairena	60	M	Responsible for the pest free areas department	IPSA
6	23/2/2023	Managua	Alejandra Briones	33	F	Director of Planning	INAFOR
7	23/2/2023	Managua	Kelly Chacon	28	F	Gender Analyst	MINIM
8	23/2/2023	Managua	María José Corea	44	F	Head of the Agricultural Technical Unit	MAG
9	23/2/2023	Managua	Yader Mercado	42	M	General Directorate for Family and Community Farming	MEFCCA
10	23/2/2023	Managua	Eduardo Flores	59	M	Climate Change Specialist	SCCP
11	23/2/2023	Managua	América Aburto	33	F	Natural Heritage Specialist	MARENA
12	23/2/2023	Managua	Juan Bautista Reyna	25	M	Responsible for National and International Agreements	MARENA
13	23/2/2023	Managua	Marcio Baca	60	M	Director of Meteorology	INETER
14	23/2/2023	Managua	Oscar Danilo Real	38	M	Responsible for the Agricultural Sector	INATEL
15	23/2/2023	Managua	Carlos A .Muñoz	40	M	DIA/DPP Planning	IPSA
16	23/2/2023	Managua	Nasser H. Carrillo	50	M	Project Office Manager	INTA

List of participants "Territorial Consultation Workshops"

No.	Date	Municipality	Name and surname	Age	Sex	Occupation/profession	Institution	Vulnerable Group
1	28/11/2022	Telpaneca	Frady Evelio Gutierrez M.	26	M	Field Technician	CPCD.RL	Farmer organisations
2	28/11/2022	Telpaneca	Reynaldo Perez	61	M	Farmer	Farmer	Farmers
3	28/11/2022	Telpaneca	Osmar Ceferino M.L.	21	M	Farmer	Farmer	Farmers
4	28/11/2022	Telpaneca	Jose Luis Melgara G.	52	M	Farmer	Farmer	Farmers
5	28/11/2022	Telpaneca	Felipe Melgara	53	M	Farmer	Farmer	Farmers
6	28/11/2022	Telpaneca	Noé Midence O.	59	M	Family Farmer	MEFCCA	Institutions
7	28/11/2022	Telpaneca	Elizabeth Rodriguez	34	F	Farmer	Farmer	Gender
8	28/11/2022	Telpaneca	Walter Miguel González Huete	31	M	Delegate	MEFCCA	Institutions
9	28/11/2022	Telpaneca	Anarelby Centeno	25	F	Housewife	Housewife	Gender
10	28/11/2022	Telpaneca	Heydi Mariela Alfaro González	21	F	Farmer	Farmer	Gender
11	28/11/2022	Telpaneca	Juana Pastora Gonzales Melgara	69	F	Farmers	Farmers	
12	28/11/2022	Telpaneca	Jose Luis Baez Espinoza	34	M	Technician	IPSA	Institutions
13	28/11/2022	Telpaneca	Brenda Susana Martinez Contreras	36	F	Technician	MAG	Institutions
14	28/11/2022	Telpaneca	Jose Porfirio Melgara Cardonas	49	M	Farmer	Farmer	Gender
15	28/11/2022	Telpaneca	Claudia Polanco Gómez	29	F	Farmer	Farmer	Gender
16	28/11/2022	Telpaneca	Marcio Alcides Inestroza Polanco	42	M	Farmer	Farmer	Gender
17	28/11/2022	Telpaneca	Maria Julia Rivera Carazo	69	F	Farmer	Farmer	
18	28/11/2022	Telpaneca	Rogelio Miranda Hernandez	63	M	Farmer	Farmer	Gender
19	28/11/2022	Telpaneca	Felix Pedro Gutierrez	59	M	Farmer	Farmer	Gender
20	28/11/2022	Telpaneca	Margarita Mendoza Miranda	56	F	Farmer	Farmer	Gender
21	28/11/2022	Telpaneca	Emilio Muñoz Muñoz	48	M	Agricultural Engineer	Agricultural Engineer	Farmers
22	28/11/2022	Telpaneca	Nelson Muñoz	48	M	Farmer	Farmer	Gender
23	28/11/2022	Telpaneca	Enmanuel de Jesús Pérez Tercero	38	M	Farmer	Farmer	Gender

24	28/11/2022	Telpaneca	Lilian Antonia Gómez Perez	28	F	Farmer	Farmer	Gender
25	28/11/2022	Telpaneca	Maria Auxiliadora Melgara Lopez	50	F	Farmer	Farmer	Gender
26	28/11/2022	Telpaneca	Jose Agustín Aguilar García	58	M	Farmer	Farmer	Gender
27	28/11/2022	Telpaneca	América Aburto	33	F	Esp. Natural Heritage	MARENA	Institutions
28	28/11/2022	Telpaneca	Simona Lionisa C.	70	F	Farmer	Farmer	
29	28/11/2022	Telpaneca	Juan B. Perez P.	63	M	Council of Asi	Council of Asi	
30	28/11/2022	Telpaneca	Odri del Carmen Melga C.	22	F	Farmer	Farmer	Farmers
31	28/11/2022	Telpaneca	Juan Carlos Hernandez	45	M	Technician	MEFCCA	Institutions
32	28/11/2022	Telpaneca	Jose Dolores Córdobas	43	M	Farmer	Farmer	Farmers
33	28/11/2022	Telpaneca	Jose Antonio G.	47	M	Farmer	Farmer	Farmers
34	28/11/2022	Telpaneca	Darlin David Tercero I.	28	M	Administrator	COOPAJES R.L.	Gender
35	28/11/2022	Telpaneca	Douglas E. Martinez	40	M	Management	Town Hall	Town Hall
36	28/11/2022	Telpaneca	Santos Paulo Boc	42	F		Diniodesa	Farmers
37	28/11/2022	Telpaneca	Ana Pastora N.	40	F	COSERVIAPEP	COSERVIAPEP	Gender
38	28/11/2022	Telpaneca	Liseth del R. Lopez	28	F	Farmer	Farmer	Gender
39	28/11/2022	Telpaneca	Reynaldo Nite	59	F			
40	28/11/2022	Telpaneca	Wilfer Edén Hernandez	77	M	Farmer	Farmer	Farmers
41	28/11/2022	Telpaneca	Leslie Rafael Rodríguez	55	M	Coffee grower	Coffee grower	Farmers
42	28/11/2022	Telpaneca	Wilson Pablo Montoya	54	M	Departmental Delegate	MEFCCA	Institutions
43	28/11/2022	Telpaneca	Sucre A. Buloid H.	46	M	Farmer	Farmer	Farmers
44	28/11/2022	Telpaneca	Nelly Maria Zeledón Rodas	20	F	Student	Student	Gender
45	28/11/2022	Telpaneca	Cristel Guadalupe Benavidez M.	20	F	Student	Student	Gender
46	28/11/2022	Telpaneca	Gerald Fanuel Bellorin	40	M	Agricultural engineer	INTA	Institutions
47	28/11/2022	Telpaneca	Lorenzo Mejia	42	M	Farmer	Farmer	Gender
48	28/11/2022	Telpaneca	Benicia Polanco R.	62	F	Benitiro Board	Benitiro Board	
49	28/11/2022	Telpaneca	Erick A. Martinez	39	M	Agronomist	Agronomist	Gender
50	29/11/2022	Palacagüina	Rafael Gomez	75	M	Farmer	Farmer	Gender

51	29/11/2022	Palacagüina	América Aburto	33	F	Natural Heritage Specialist	MARENA	Institutions
52	29/11/2022	Palacagüina	Moisés Emilio Medina	30	M	Municipal Delegate	INAFOR	Institutions
53	29/11/2022	Palacagüina	Dagoberto Méndez Tercero	54	M	Transfer Technician	INTA	Institutions
54	29/11/2022	Palacagüina	Cristina Casco	66	F	Farmer	Farmer	Gender
55	29/11/2022	Palacagüina	Lester Pineda	37	M	Technician	MEFCCA	Institutions
56	29/11/2022	Palacagüina	Carmen del Socorro J.V.	50	F	Farmer	Farmer	Gender
57	29/11/2022	Palacagüina	Milagros Isabel Olivas	43	F	Field Technician	MAG	Institutions
58	29/11/2022	Palacagüina	Ángela Rodríguez	61	F	Farmer	Community leader	Gender
59	29/11/2022	Palacagüina	Jose S. Rivera	66	M	Farmer	Farmer	Gender
60	29/11/2022	Palacagüina	Miguel E. Jarquín	50	M	Farmer	Farmer	Gender
61	29/11/2022	Palacagüina	Felix M. Raudales	20	M	Farmer	Farmer	Gender
62	29/11/2022	Palacagüina	Jose S. Jarquín	83	M	Farmer	Farmer	Gender
63	29/11/2022	Palacagüina	Jesus Acuña	63	M	Farmer	Farmer	Gender
64	29/11/2022	Palacagüina	Ervin Olivas	37	M	Farmer	Farmer	Gender
65	29/11/2022	Palacagüina	José Francisco Gonzales	40	M	Farmer	Farmer	Gender
66	29/11/2022	Palacagüina	Berta Nohemí Olivas Acuña	40	F	Farmer	Farmer	Gender
67	29/11/2022	Palacagüina	Syometh	42	F	Housewife	Housewife	Gender
68	29/11/2022	Palacagüina	Kenia L.	26	F	Housewife	Housewife	Gender
69	29/11/2022	Palacagüina	Ignacio Montalván	44	M	Farmer	Farmer	Farmers
70	29/11/2022	Palacagüina	Narciso Matute	66	M	Farmer	Farmer	Farmers
71	29/11/2022	Palacagüina	Víctor A. Ríos M.	72	M	Retired	Retired	Gender
72	29/11/2022	Palacagüina	Álvaro Sumin	47	M	Farmer	Farmer	Farmers
73	29/11/2022	Palacagüina	Alejandro González	55	M	Farmer	Farmer	Farmers
74	29/11/2022	Palacagüina	Jose Vilchez	68	M	Farmer	Farmer	Farmers
75	29/11/2022	Palacagüina	Miguel A. Iglesias	69	M	Produce	Produce	Farmers
76	29/11/2022	Palacagüina	Bayardo Francisco Lumbí	39	M	Farmer	Farmer	Farmers
77	29/11/2022	Palacagüina	Fanny del Carmen	41	F	Housewife	Housewife	Gender

78	29/11/2022	Palacagüina	Martin Olivas	70	M	Farmer	Farmer	Gender
79	29/11/2022	Palacagüina	Pedro Antonio Manzanares	63	M	Farmer	Farmer	Farmers
80	29/11/2022	Palacagüina	Balbina Gonzales	62	F	Farmer	Farmer	Farmers
81	29/11/2022	Palacagüina	Víctor Iglesias	67	M	Farmer	Farmer	Gender
82	29/11/2022	Palacagüina	Maria Teresa Olivas	37	F	Municipal Technician	MEFCCA	Institutions
83	29/11/2022	Palacagüina	Yaselis del Rosario	38	F	Housewife	Housewife	Gender
84	29/11/2022	Palacagüina	Jose Ramon Gonzalez	58	M	Farmer	Farmer	Farmers
85	29/11/2022	Palacagüina	Karla Olivas	36	F	Phytosanitary Specialist	IPSA	Institutions
86	29/11/2022	Palacagüina	Zoyla del Carmen Rojas	68	F	Farmer	Farmer	Farmers
87	29/11/2022	Palacagüina	Julla j.	62	F	Farmer	Farmer	Farmers
88	29/11/2022	Palacagüina	Aura Isabel Gonzales	41	F	Farmer	Farmer	Gender
89	29/11/2022	Palacagüina	Saints Germano	50	M	Farmer	Farmer	Farmers
90	29/11/2022	Palacagüina	Jose T.	63	F	Farmer	Farmer	Farmers
91	29/11/2022	Palacagüina	Natalia de J. Martinez	56	F	Farmer	Farmer	Farmers
92	29/11/2022	Palacagüina	Maria Belén Kurklan	27	M	Technician Region 1	MINIM	Institutions
93	29/11/2022	Palacagüina	Maryuri Idalia	31	F	Farmer	Farmer	Farmers
94	29/11/2022	Palacagüina	Antonia Yuris Díaz	21	F	Farmer	Farmer	Farmers
95	29/11/2022	Palacagüina	Marlin Jesenia Castro	33	F	Farmer	Farmer	Gender
96	30/11/2022	Somoto	Gloria Maria Moreno	54	F	Farmer	Farmer	Gender
97	30/11/2022	Somoto	Raquel Gomez	30	F	Housewife + home garden work	UCANS	Farmer organisations
98	30/11/2022	Somoto	Crisbel Yodari Lira M.	25	F	Trader	COOPAMEM R.L.	Farmer organisations
99	30/11/2022	Somoto	Miguel A. Casco	56	M	Farmer	Farmer	Gender
100	30/11/2022	Somoto	Ahida L. Rios	29	F	Farmer	Farmer	Gender
101	30/11/2022	Somoto	Maria Belén Kurklan	27	F	Technician	MINIM	Institutions
102	30/11/2022	Somoto	Ervin A.	54	M	Farmer	MELONAR	Gender
103	30/11/2022	Somoto	Cristhian Garcia	32	M	Field Technician	MARENA	Institutions
104	30/11/2022	Somoto	Hugo Zelaya	48	M	Transfer Technician	INTA	Institutions

105	30/11/2022	Somoto	Aleni Puente H. V.	48	M	Delegate	INIFOM	Institutions
106	30/11/2022	Somoto	Sonia del C.G.S.	31	F	Housewife	Housewife	Gender
107	30/11/2022	Somoto	Brenda Cuadra Díaz	23	F	Housewife	Housewife	Gender
108	30/11/2022	Somoto	Rosa Haydee Moreno	29	F	Housewife	Housewife	Gender
109	30/11/2022	Somoto	Reynerio Pérez Hernández	74	M	Farmer	Farmer	Farmers
110	30/11/2022	Somoto	Melba Miranda Hernández	48	F	Farmer	UCANS	Farmer organisations
111	30/11/2022	Somoto	Ingrid Aracely Morales P.	17	F	Farmer	UCANS	Farmer organisations
112	30/11/2022	Somoto	Brenda Liseth Guzmán G.	41	F	Sewing	Sewing	Gender
113	30/11/2022	Somoto	Salba Imara M.	24	F	Housewife	Housewife	Gender
114	30/11/2022	Somoto	Jose Ismael Vílchez A.	34	M	Phytosanitary Specialist	IPSA	Institutions
115	30/11/2022	Somoto	Julius Caesar	55	M	Farmer	Farmer	Gender
116	30/11/2022	Somoto	Jamileth del Socorro	39	F	Farmer	Farmer	Gender
117	30/11/2022	Somoto	Geovania Margarita	40	F	Farmer	Farmer	Gender
118	30/11/2022	Somoto	Pedro Joaquín Larios	60	M	Field Technician	MAG	Institutions
119	30/11/2022	Somoto	Carlos Ariel G.	37	M	Agriculture	Agriculture	Farmers
120	30/11/2022	Somoto	Maria Margarita	55	F	Councilman	City Hall	City Hall
121	30/11/2022	Somoto	Antonia Gonzales	60	F	Farmer	Farmer	Farmers
122	30/11/2022	Somoto	Anacleto Lopez H.	72	M	Farmer	Farmer	Farmers
123	30/11/2022	Somoto	Cruz Hiberto G.	33	M	Farmer	Farmer	Farmers
124	30/11/2022	Somoto	Salvador A. Muñoz Z.	32	M	Farmer	Farmer	Farmers
125	30/11/2022	Somoto	Felix E. Muñoz Z.	41	M	Farmer	Farmer	Farmers
126	30/11/2022	Somoto	Juana Sánchez	50	F	Housewife	Housewife	Gender
127	30/11/2022	Somoto	Jose Ramon S.	28	M	Gardener	Gardener	Farmers
128	30/11/2022	Somoto	Noe Midence O.	59	M	Family Farming	Family Farming	Farmers
129	30/11/2022	Somoto	Luis Milagros García	24	M	Housewife	Housewife	Farmers
130	30/11/2022	Somoto	Maritza Massiel Díaz Ríos	24	F	Technician	MEFCCA	Institutions
131	30/11/2022	Somoto	Saint Eusebius	59	M	Farmer	Farmer	Farmers

132	30/11/2022	Somoto	Juana Antonia	44	F	*Huerto Saludable*	*Huerto Saludable*	Gender
133	30/11/2022	Somoto	Lenis Vanega s	32	F	Housewife	Housewife	Gender
134	30/11/2022	Somoto	Ramón Ernesto Casco	62	M	Farmer	Farmer	Farmers
135	30/11/2022	Somoto	Otilio Mejías	40	M	Farmer	Farmer	Farmers
136	30/11/2022	Somoto	Martha Figueroa	32	F	Housewife	Housewife	Farmers
137	30/11/2022	Somoto	F.J.	51	M	Farmer	Farmer	Farmers
138	30/11/2022	Somoto	América Aburto	33	F	Natural Heritage Specialist	MARENA	Institutions
139	30/11/2022	Somoto	Víctor Manuel Perez González	33	M	Territorial Technician	MEFCCA	Institutions
140	30/11/2022	Somoto	Bayardo Morazán	39	M	Municipal Technician	MEFCCA	Institutions
141	30/11/2022	Somoto	Ervin Jiron	48	M	Driver	MARENA	Institutions
142	1/12/2022	Condega	Ana Yancis Espinoza	34	F	Leader	G.A.	Gender
143	1/12/2022	Condega	Jessenia del C Rugama	28	F	Housewife	G.J.	Gender
144	1/12/2022	Condega	América Aburto	33	F	Natural Heritage Specialist	MARENA	Institutions
145	1/12/2022	Condega	Harvy Rivera Zamora	57	M	Technician	MEFCCA	Institutions
146	1/12/2022	Condega	Carmen E. Meléndez	37	F	Farmer	Farmer	Gender
147	1/12/2022	Condega	Rosibel Ramos	62	F	Housewife	Housewife	Gender
148	1/12/2022	Condega	Lilliam Zavala Gomez	58	F	Housewife	COOPANLUP	Gender
149	1/12/2022	Condega	Victoria Centeno	53	F	Farmer	Farmer	Gender
150	1/12/2022	Condega	Francisca Moreno	54	F	Pig Trader	Pig Trader	Gender
151	1/12/2022	Condega	Jose Aristidez Jarquín Olivas	41	M	Agricultural Engineer	IPSA	Institutions
152	1/12/2022	Condega	Blanca E. Rodríguez	56	F	Housewife	G.A.	Gender
153	1/12/2022	Condega	Ervin Jiron	48	M	Driver	MARENA	Institutions
154	1/12/2022	Condega	Johana Gutierrez F.	38	F	Agronomist	Town Hall	Town Hall
155	1/12/2022	Condega	Jose Francisco M.P	52	M	Nursery manager	Nursery manager	Gender
156	1/12/2022	Condega	Lilliam del S. Lira F.	57	F	Trader	Trader	Private sector
157	1/12/2022	Condega	Alba E. Gonzales T.	43	F	Housewife	Housewife	Gender
158	1/12/2022	Condega	Ramon Alonso Amador	32	M	Protected Area Ranger	MARENA	Institutions

159	1/12/2022	Condega	Mario Fuentes H.	55	M	Agronomist	Agronomist	Farmers
160	1/12/2022	Condega	Ángela Ruiz	42	F	Orchard	Orchard	Gender
161	1/12/2022	Condega	Jessica Rodriguez	32	F	Vulnerable Group	Vulnerable Group	Farmers
162	1/12/2022	Condega	Lorena Alvir	45	F	Housewife	Housewife	Gender
163	1/12/2022	Condega	Maryini Chavarría	29	F	Housewife	Housewife	Gender
164	1/12/2022	Condega	Carlos Herrera S.	45	M	TECUMGIR	Town Hall	Town Hall
165	1/12/2022	Condega	Wilmer Peralta	36	M	Farmer	Farmer	Gender
166	1/12/2022	Condega	Denis R. G. A	50	M	Farmer	Farmer	Farmers
167	1/12/2022	Condega	Sindy Villarreyna L.	23	F	Housewife	Housewife	Gender
168	1/12/2022	Condega	Jose T. Rodas	69	M	Farmer	Farmer	Gender
169	1/12/2022	Condega	Aminta G. Talavera	52	F	Protagonist	Protagonist	Gender
170	1/12/2022	Condega	Franciny Calderon	13	F	Accompanying person	Farmer	Farmers
171	1/12/2022	Condega	Marlene M.A.	50	F	Farmer	MECCAF	Farmers
172	1/12/2022	Condega	Elvin Daniel Amador	39	M	Technician	INTA	Institutions
173	1/12/2022	Condega	Jose Francisco Peralta	54	M	Farmer	Farmer	Farmers
174	1/12/2022	Condega	Alba L. Vallecillo	59	F	Baker	Bakery	Private sector
175	1/12/2022	Condega	Harold F. Talavera	55	M	Farmer	Farmer	Farmers
176	1/12/2022	Condega	Juan A. Blandon	62	M	Agronomist	INTA	Institutions
177	1/12/2022	Condega	Maria Belén Kurklan	28	F	Regional Technician	MINIM	Institutions
178	1/12/2022	Condega	Noel Guillermo	51	M	Coordinator	UNAG	Farmer organisations
179	1/12/2022	Condega	Oscar Zavala	56	M	Farmer	Farmer	Farmers
180	1/12/2022	Condega	Mario Adiu	41	M	Farmer	Farmer	Farmers
181	1/12/2022	Condega	Martin Prima Lira	59	M	Municipal Delegate	INAFOR	Institutions
182	1/12/2022	Condega	Jeremi S. Rodríguez	6	M	Accompanying person	Farmer	Farmers
183	2/12/2022	San Juan de Limay	América Aburto	33	F	Natural Heritage Specialist	MARENA	Institutions
184	2/12/2022	San Juan de Limay	Olman Betancourth P.	30	M	Technician	INTA	Institutions
185	2/12/2022	San Juan de Limay	Francisco Cedeño	64	M	Farmer	Farmer	Gender

186	2/12/2022	San Juan de Limay	Arelys J. M. Z.	27	F	Farmer	Farmer	Gender
187	2/12/2022	San Juan de Limay	Jesús Cruz Murillo	70	M	Farmer	Farmer	Farmers
188	2/12/2022	San Juan de Limay	Javier Rodríguez	43	M	Farmer	Farmer	Gender
189	2/12/2022	San Juan de Limay	Gleydis Moreno C.	25	F	Farmer	Farmer	Farmers
190	2/12/2022	San Juan de Limay	Martha I. Perez	52	F	Farmer	Farmer	Gender
191	2/12/2022	San Juan de Limay	Cristian Guerrero	33	M	Delegate	MAG	Institutions
192	2/12/2022	San Juan de Limay	Giovanny F. Castellón Vindell	28	M	MEFCCA Technician	MEFCCA	Institutions
193	2/12/2022	San Juan de Limay	Juan J. Cruz M	56	M	Agronomist	MARENA	Institutions
194	2/12/2022	San Juan de Limay	Juan A. Soza	61	M	Farmer	Farmer	Farmers
195	2/12/2022	San Juan de Limay	Edwin B. Ponce	38	M	Field Technician	MAG	Institutions
196	2/12/2022	San Juan de Limay	Roayan Hernandez	30	M	Fitasoni Certification Specialist	IPSA	Institutions
197	2/12/2022	San Juan de Limay	Erika Cruz Valdivia	33	F	Architect	Architect	Farmers
198	2/12/2022	San Juan de Limay	Ricardo Martin Arce	34	M	Forestry Engineer	INAFOR	Institutions
199	2/12/2022	San Juan de Limay	Octavio I. Rosales	64	M	Farmer	Farmer	Gender
200	2/12/2022	San Juan de Limay	Dora del C. Orozco G.	35	F	Farmer	Farmer	Gender
201	2/12/2022	San Juan de Limay	Paulino L. Rodríguez	68	M	Farmer	Farmer	Farmers
202	2/12/2022	San Juan de Limay	Manuel A. Midense	67	M	Farmer	Farmer	Farmers
203	2/12/2022	San Juan de Limay	Erlinda de Jesús L.H.	35	F	Farmer	Farmer	Gender
204	2/12/2022	San Juan de Limay	Clementina A.S.	48	F	Farmer	Farmer	Gender
205	2/12/2022	San Juan de Limay	Jose Luis Centeno R.	55	M	Farmer	Farmer	Farmers
206	2/12/2022	San Juan de Limay	Luis Daniel	58	M	Farmer	Farmer	Farmers
207	2/12/2022	San Juan de Limay	Norlan A. Centeno	35	M	Farmer	Farmer	Farmers
208	2/12/2022	San Juan de Limay	Jose Maria Blandon	70	M	Farmer	Farmer	Gender
209	2/12/2022	San Juan de Limay	Alba Liseth Blandon C.	32	F	Farmer	Farmer	Gender
210	2/12/2022	San Juan de Limay	Rosa Amalia Ruiz	43	F	Farmer	Farmer	Farmers
211	2/12/2022	San Juan de Limay	Nereyda Yaosca	25	F	Farmer	Farmer	Gender
212	2/12/2022	San Juan de Limay	Rodemiro Cruz	76	M	Farmer	Farmer	Farmers

213	2/12/2022	San Juan de Limay	Juan R. Corea	54	M	Agronomist	Town Hall	Town Hall
214	2/12/2022	San Juan de Limay	Jairo Osoiro	44	M	Mayor	Town Hall	Town Hall
215	2/12/2022	San Juan de Limay	Maria Belén Kurlan	27	F	Regional Technician	MINIM	Institutions
216	2/12/2022	San Juan de Limay	Martha Sandoval	38	F	Public Driver	Farmer	Gender
217	2/12/2022	San Juan de Limay	Maria Digna Gonzales	46	F	Farmer	Farmer	Gender
218	2/12/2022	San Juan de Limay	Lidia Isabel Espinoza M.	54	F	Farmer	Farmer	Gender
219	2/12/2022	San Juan de Limay	Amada Morales	22	F	Farmer	Farmer	Farmers
220	2/12/2022	San Juan de Limay	Justo P.B.	53	M	Farmer	Farmer	Farmers
221	2/12/2022	San Juan de Limay	Fatima Deyanire Valdivia	29	F	Family Care Analyst	MIFAM	Institutions
222	2/12/2022	San Juan de Limay	Jonas B.	62	M	Farmer	Farmer	Farmers
223	2/12/2022	San Juan de Limay	Ramon Esteban Espinoza Galeano	40	M	Municipality of Limay Technician	MEFCCA	Institutions
224	2/12/2022	San Juan de Limay	Doris P.P.	60	F	Farmer	Farmer	Gender
225	2/12/2022	San Juan de Limay	Santos Aurelio Guevara	75	M	Farmer	Farmer	Farmers
226	5/12/2022	La Trinidad	Franklin Blandon	53	M	Farmer	G.A.	Gender
227	5/12/2022	La Trinidad	América Aburto	33	F	Natural Heritage Specialist	MARENA	Institutions
228	5/12/2022	La Trinidad	Glenys Patricia Castillo Perez	26	F	Territorial Technician	MEFCCA	Institutions
229	5/12/2022	La Trinidad	Ricardo García	59	M	Farmer	G.A.	Gender
230	5/12/2022	La Trinidad	Samuel Úbeda Vásquez	25	M	Technician	INTA	Institutions
231	5/12/2022	La Trinidad	Marlon A. Valdivia	41	M	Municipal Delegate	INAFOR	Institutions
232	5/12/2022	La Trinidad	Aarón Aguilar Ruiz	46	M	Infringement Specialist	IPSA	Institutions
233	5/12/2022	La Trinidad	Virginia Paul	50	F	Farmer	Farmer	Farmers
234	5/12/2022	La Trinidad	Mariza Quezada	58	F	Housewife	Housewife	Farmers
235	5/12/2022	La Trinidad	Cándida Lazo V.	46	F	Farmer	Farmer	Farmers
236	5/12/2022	La Trinidad	Mónico Centeno	77	M	Farmer	G.A.	Gender
237	5/12/2022	La Trinidad	Cándida Cardoza	23	F	Farmer	G.A.	Gender
238	5/12/2022	La Trinidad	Yuris Rayo G.	25	F	Farmer	G.A.	Gender
239	5/12/2022	La Trinidad	Bernardino Arauz	79	M	Farmer	Farmer	Farmers

240	5/12/2022	La Trinidad	Carlos Laguna B.	63	M	Farmer	Farmer	Farmers
241	5/12/2022	La Trinidad	Maryuri Molina M.	35	F	Housewife	Housewife	Farmers
242	5/12/2022	La Trinidad	Ayda Nazarely Guillén	19	F	Farmer	Farmer	Farmers
243	5/12/2022	La Trinidad	Elba Urrutia V.	49	F	Farmer	Farmer	Farmers
244	5/12/2022	La Trinidad	Vilma M.B.	46	F	Farmer	Farmer	Farmers
245	5/12/2022	La Trinidad	Marithza del R.Z.F.	36	F	Entrepreneur	Entrepreneur	Farmers
246	5/12/2022	La Trinidad	Maria Belén Kurklan	28	F	Technician	MINIM	Institutions
247	5/12/2022	La Trinidad	Blanca Arauz	43	F	Technician	MARENA	Institutions
248	5/12/2022	La Trinidad	Haroy Rivera Z.	57	M	Technician for land tenure security	MARENA	Institutions
249	5/12/2022	La Trinidad	Migdalia de J. Escoto	54	F	Farmer	Farmer	Farmers
250	5/12/2022	La Trinidad	Jader Laguna L.	30	M	Farmer	Farmer	Farmers
251	5/12/2022	La Trinidad	Luis H. García R.	36	M	Promoter	MCN	Institutions
252	5/12/2022	La Trinidad	Santos Rayos D.	68	M	Farmer	Farmer	Farmers
253	6/12/2022	San Isidro	Justo Wilmer Urbina	35	M	Municipal Technician	MEFCCA	Institutions
254	6/12/2022	San Isidro	Roger Mendoza Ríos	60	M	Municipal Technician	INTA	Institutions
255	6/12/2022	San Isidro	Victor S. Martinez M.	45	M	Environmental Inspector	MARENA	Institutions
256	6/12/2022	San Isidro	Alexander Rodriguez	23	M	Firefighter	Firefighter	Institutions
257	6/12/2022	San Isidro	Henry Thomas	29	M	Environmental Technician	Town Hall	Town Hall
258	6/12/2022	San Isidro	Pedro B. Mendoza	30	M	Farmer	Casa Maria de San Francisco	Gender
259	6/12/2022	San Isidro	Cesar I. G.	67	M	Farmer	Farmer	Gender
260	6/12/2022	San Isidro	Victoria Rodriguez	60	F	Farmer	Farmer	Gender
261	6/12/2022	San Isidro	Julio Dolores Meza	53	M	Farmer	Farmer	Gender
262	6/12/2022	San Isidro	Alfredo Tercero	46	M	Farmer	Farmer	Gender
263	6/12/2022	San Isidro	Santos Santiago	49	M	Farmer	Farmer	Gender
264	6/12/2022	San Isidro	Rafaela Vallejos	53	F	Entrepreneur	Entrepreneur	Farmers
265	6/12/2022	San Isidro	Juan Jose Pupiros	58	M	Agronomist	IPSA	Institutions
266	6/12/2022	San Isidro	Alba C.	58	F	Delegate	Delegate	Farmers

267	6/12/2022	San Isidro	Rodrigo Laguna	62	M	Farmer	Farmer	Gender
268	6/12/2022	San Isidro	Roger Rivas T.	71	M	Farmer	Farmer	Farmers
269	6/12/2022	San Isidro	Juan Carlos Jairal	54	M	Teacher	INATEC	Institutions
270	6/12/2022	San Isidro	Santiago Rivas	43	M	Agronomist	Farmer	Farmers
271	6/12/2022	San Isidro	Juan A. Blanco	56	M	Agronomist	Farmer	Farmers
272	6/12/2022	San Isidro	Oscar M. Rugama	35	M	Agricultural Engineer	Farmer	Farmers
273	6/12/2022	San Isidro	América Aburto	33	F	Natural Heritage Specialist	MARENA	Institutions
274	6/12/2022	San Isidro	Melvin del C. Molina	46	F	Farmer	Farmer	Gender
275	6/12/2022	San Isidro	Ángela Rodríguez	40	F	Farmer	Farmer	Farmers
276	6/12/2022	San Isidro	Rosibel Ríos V.	45	F	Farmer	Farmer	Farmers
277	6/12/2022	San Isidro	Maryeling Quintero	35	F	Field Technician	MAG	Institutions
278	6/12/2022	San Isidro	Yesenia del Socorro	39	F	Farmer	Farmer	Farmers
279	6/12/2022	San Isidro	Petrona Isabel Ruiz	56	F	Farmer	Farmer	Farmers
280	6/12/2022	San Isidro	Francisca Rios	63	F	Farmer	Farmer	Gender
281	6/12/2022	San Isidro	Silvia Martínez	32	F	Farmer	Farmer	Gender
282	6/12/2022	San Isidro	Enrique Rios	57	M	Farmer	Farmer	Farmers
283	6/12/2022	San Isidro	Rosa E. Morán	61	F	Farmer	Farmer	Farmers
284	6/12/2022	San Isidro	Yadira del C Morán	59	F	Farmer	Farmer	Farmers
285	6/12/2022	San Isidro	Genaro Rayo	63	M	Farmer	Farmer	Farmers
286	6/12/2022	San Isidro	Sirley Samapo	36	F	Regional Technician	Ministry of Women	Institutions
287	6/12/2022	San Isidro	Jafet Gutierrez	35	F	Farmer	Farmer	Gender
288	6/12/2022	San Isidro	Silvia ML	68	F	Farmer	Farmer	Gender
289	6/12/2022	San Isidro	Deysi Betanco	45	F	Teacher	MINED	Institutions
290	6/12/2022	San Isidro	Ana Yansis Rizo	24	F	Firefighter	Firefighters Nicaragua	Institutions
291	6/12/2022	San Isidro	Eyder Antonio Martínez	31	M	Farmer	Farmer	Gender
292	6/12/2022	San Isidro	Néstor Rodríguez	20	M	Farmer	Farmer	Gender
293	6/12/2022	San Isidro	Jorge Perez	36	M	Delegate	MARENA	Institutions

294	7-Dec-22	Sébaco	Mayerling Quintana Arcia	35	F	Field Technician	MAG	Institutions
295	7-Dec-22	Sébaco	Lucila del C. Castro Castro	42	F	Farmer	Farmer	Gender
296	7-Dec-22	Sébaco	Andrés Centeno Duarte	25	M	Farmer	Farmer	Gender
297	7-Dec-22	Sébaco	Santos Luis Centeno	48	M	Farmer	Farmer	Gender
298	7-Dec-22	Sébaco	Modesto Duarte Flores	42	M	Farmer	Farmer	Gender
299	7-Dec-22	Sébaco	Jackson José Urbina	17	M	Farmer	Farmer	Gender
300	7-Dec-22	Sébaco	Norman Lacayo Castro	26	M	Specialist	ANA	Institutions
301	7-Dec-22	Sébaco	Marlon Silva Silva	34	M	Director SI AGUA	ANA	Institutions
302	7-Dec-22	Sébaco	América Aburto	33	F	Natural Heritage Specialist	MARENA	Institutions
303	7-Dec-22	Sébaco	Juan Dávila	53	M	Farmer	Farmer	Gender
304	7-Dec-22	Sébaco	José Pérez Conde	36	M	Technician	MARENA	Institutions
305	7-Dec-22	Sébaco	Mauricio Alvarado Sequeira	39	M	Teacher	MINED	Institutions
306	7-Dec-22	Sébaco	José Castro G	43	M	Firefighter	Firefighters Nicaragua	Institutions
307	7-Dec-22	Sébaco	Ivanna Blandón	19	F	Firefighter	Firefighters Nicaragua	Institutions
308	7-Dec-22	Sébaco	Gioconda Orozco	38	F	Secretary		
309	7-Dec-22	Sébaco	Jacilda Aguilar	26	F	Election Director		
310	7-Dec-22	Sébaco	Carlos Navarrete	59	M	President		
311	7-Dec-22	Sébaco	Isabel C. Gómez	45	F	Farmer		
312	7-Dec-22	Sébaco	José R. Rioz	62	M	Farmer	Farmer	
313	7-Dec-22	Sébaco	Jhony Miranda	40	M	Security		
314	7-Dec-22	Sébaco	Víctor S. Martínez	45	M	Environmental Inspector	MARENA	Institutions
315	7-Dec-22	Sébaco	Bayardo A	63	M	President	FADESE	Farmers
316	7-Dec-22	Sébaco	Juan M. Sánchez C	19	M	Farmer	Farmer	Gender
317	7-Dec-22	Sébaco	María Auxiliadora Ortega	44	F	Farmer	Farmer	Farmers
318	7-Dec-22	Sébaco	Patricia Salazar	39	F	Delegate	Asociación para el desarrollo [Association for Development]	Gender
319	7-Dec-22	Sébaco	Mauricio Palacio	62	M	Pensioner	Pensioner	
320	7-Dec-22	Sébaco	Adrián Sotelo Torrez	55	M	Farmer	Farmer	

321	7-Dec-22	Sébaco	Orfa Raquel M. C.	42	F	Farmer	Farmer	Farmers
322	7-Dec-22	Sébaco	Josefina Duarte	42	F	Farmer	Farmer	Farmers
323	7-Dec-22	Sébaco	Anselmo Saúl Castro	45	M	Farmer	Farmer	Farmers
324	7-Dec-22	Sébaco	Margina López M	37	F	Farmer	Farmer	Farmers
325	7-Dec-22	Sébaco	Amanda Martinez	21	F	Farmer	Farmer	Farmers
326	7-Dec-22	Sébaco	Ronald Flores	51	M	Technician	INTA	Institutions
327	7-Dec-22	Sébaco	Bayardo A. Alonso	40	M	Environment	City Hall	City Hall
328	7-Dec-22	Sébaco	José Leonel E.	53	M	Farmer	Farmer	Farmers
329	7-Dec-22	Sébaco	Ismarys A. Larios	47	F	Farmer	Farmer	Farmers
330	7-Dec-22	Sébaco	Fatima Rayo	50	F	Farmer	Farmer	Farmers
331	7-Dec-22	Sébaco	Rafael Membreño	27	M	Technician	MEFCCA	Institutions
332	7-Dec-22	Sébaco	Marco A. Dávila	61	M	Farmer	Farmer	Farmers
333	7-Dec-22	Sébaco	Martín René Dávila	63	M	Farmer	Farmer	Farmers
334	7-Dec-22	Sébaco	Sirley Samaya S.	36	F	Regional Technician	MINIM	Institutions
335	7-Dec-22	Sébaco	Benjamín González	39	M	Specialist	IPSA	Institutions
336	7-Dec-22	Sébaco	Karla Azucena Treminio Trujillo	31	F	Farmer	Farmer	Farmers
337	7-Dec-22	Sébaco	Gladys B. Velázquez	27	F	Farmer	Farmer	Farmers
338	7-Dec-22	Sébaco	María del Carmen Escobar	40	F	Farmer	Farmer	Gender
339	7-Dec-22	Sébaco	Julia Rocha	45	F	Farmer	Farmer	Gender
340	7-Dec-22	Sébaco	Silvia Elena Orozco	38	F	Farmer	Farmer	Gender
341	7-Dec-22	Sébaco	Marlon Antonio	17	M	Farmer	Farmer	Gender
342	7-Dec-22	Sébaco	Miriam Rocha	47	F	Farmer	Farmer	Farmers
343	7-Dec-22	Sébaco	Andrés González	62	M	Farmer	Farmer	Farmers
344	7-Dec-22	Sébaco	Teodoro Aguirre	69	M	Farmer	Farmer	Gender
345	7-Dec-22	Sébaco	Martina	62	F	Farmer	Farmer	
346	9-Dec-22	El Jicaral	José Luis R.	54	M	Agronomist	Agronomist (Los Zarzales)	Gender
347	9-Dec-22	El Jicaral	Félix Antonio García	32	F	Specialist	IPSA	Institutions

348	9-Dec-22	El Jicaral	Marcos Valle	52	M	Farmer	Farmer	Gender
349	9-Dec-22	El Jicaral	Omar Salvador Velázquez	33	M	Veterinary Doctor	MEFFCA	Institutions
350	9-Dec-22	El Jicaral	Juan B. Reyes	24	M	Geological Engineer	MARENA	Institutions
351	9-Dec-22	El Jicaral	Cleris Delgado	25	F	Business Administration	MINIM	Institutions
352	9-Dec-22	El Jicaral	Samuel Garcia	59	M	Farmer	Farmer	Farmers
353	9-Dec-22	El Jicaral	Rosario Pulido	63	M	Farmer	Farmer	Farmers
354	9-Dec-22	El Jicaral	Aura González	16	F	Farmer	Farmer	Gender
355	9-Dec-22	El Jicaral	Esterling Calero	17	F	Farmer	Farmer	Farmers
356	9-Dec-22	El Jicaral	Ana Cristina Alfaro Valle	20	F	Agriculture	Agriculture	Farmers
357	9-Dec-22	El Jicaral	Eva Luz Valdivia	50	F	Beekeeping	Beekeeping	Farmers
358	9-Dec-22	El Jicaral	Veronica Tellez	52	F	Secretary of the Board	Town Hall	Town Hall
359	9-Dec-22	El Jicaral	Salvador Castillo	36	M	Agriculture	Agriculture	Farmers
360	9-Dec-22	El Jicaral	Marcos Vargas	35	M	Engineer	MARENA	Institutions
361	9-Dec-22	El Jicaral	Abraham Ruiz	72	M	Farmer	Farmer	Gender
362	9-Dec-22	El Jicaral	Jorge Pérez	36	M	Consultant	MARENA	Institutions
363	9-Dec-22	El Jicaral	Juan Alcides M.	59	M	Field Technician	MAG	Institutions
364	9-Dec-22	El Jicaral	Ernesto Salvador Laguna	62	M	Municipal Environment Unit (UAM) Officer	Municipal UAM	Town Hall
365	9-Dec-22	El Jicaral	Geronimo Rivera	30	M	Project Manager	Town Hall	Town Hall
366	9-Dec-22	El Jicaral	Ordin I. Orozco L.	33	M	Project	Project	Gender
367	9-Dec-22	El Jicaral	Denis Alonso	66	M	Agriculture	Agriculture	Gender
368	9-Dec-22	El Jicaral	Bertalina P	61	F	Farmer	Farmer	Gender
369	9-Dec-22	El Jicaral	Guillermina Altamirano	58	F	Trader	Trader	Gender
370	9-Dec-22	El Jicaral	Elton Lopez	45	M	Agriculture	Agriculture	Farmers
371	9-Dec-22	El Jicaral	Francisco Tórrez	51	M	Farmer	Farmer	Farmers
372	9-Dec-22	El Jicaral	Urania	58	F	Housewife	Housewife	Gender
373	12-Dec-22	Santa Rosa del Peñón	Abraham Luna Medina	28	M	Agro-Ecological Engineer	MAG	Institutions
374	12-Dec-22	Santa Rosa del Peñón	Pablo Pérez	40	M	Agricultural engineer	Agriadapta	Institutions

375	12-Dec-22	Santa Rosa del Peñón	Virgilio Urrutia	72	M	Farmer	Farmer	Gender
376	12-Dec-22	Santa Rosa del Peñón	Luisa Gutiérrez González	50	F	Farmer	Farmer	Gender
377	12-Dec-22	Santa Rosa del Peñón	Cresencio Salas	69	M	Farmer	Farmer	Farmers
378	12-Dec-22	Santa Rosa del Peñón	Juana Santana	39	F	Farmer	Farmer	Farmers
379	12-Dec-22	Santa Rosa del Peñón	Meyling Sujey Barrera	28	F	Farmer	Farmer	Farmers
380	12-Dec-22	Santa Rosa del Peñón	Suyen Valdez Luna	56	F	Farmer	Farmer	Farmers
381	12-Dec-22	Santa Rosa del Peñón	Maria Membreño	34	F	Farmer	Farmer	Farmers
382	12-Dec-22	Santa Rosa del Peñón	Fidencio Martínez	60	M	Farmer	Farmer	Farmers
383	12-Dec-22	Santa Rosa del Peñón	Rigoberto Sampson	33	M	Specialist	IPSA	Institutions
384	12-Dec-22	Santa Rosa del Peñón	Elena	35	F	Farmer	Farmer	Farmers
385	12-Dec-22	Santa Rosa del Peñón	John Francis	24	M	Youth	Youth	Local organisations
386	12-Dec-22	Santa Rosa del Peñón	Denis Martinez	43	M	Agronomist	Agronomist	Farmers
387	12-Dec-22	Santa Rosa del Peñón	Antonio Machado	65	M	Farmer	Farmer	Farmers
388	12-Dec-22	Santa Rosa del Peñón	Marcos Vargas	35	M	Engineer	MARENA	Institutions
389	12-Dec-22	Santa Rosa del Peñón	Rushbelig Hernandez	18	F	Promoter	Promoter	Gender
390	12-Dec-22	Santa Rosa del Peñón	Ángela Pulido	67	F	Promoter	Promoter	Gender
391	12-Dec-22	Santa Rosa del Peñón	Edenia Hernández	21	F	Farmer	Farmer	Farmers
392	12-Dec-22	Santa Rosa del Peñón	Juan Francisco Leiva	67	M	Farmer	Farmer	Gender
393	12-Dec-22	Santa Rosa del Peñón	Gertrudis Aguirre	35	F	Farmer	Farmer	Gender
394	12-Dec-22	Santa Rosa del Peñón	Deyvin Acuña	34	M	Delegate	Town Hall	Town Hall
395	12-Dec-22	Santa Rosa del Peñón	Nirtia Castellón	39	F	Agricultural Engineer	MEFFCA	Institutions
396	12-Dec-22	Santa Rosa del Peñón	Lorenzo U	54	M	Agriculture	Agriculture	Farmers
397	12-Dec-22	Santa Rosa del Peñón	Jessica Martinez	17	F	Coordinator	Sandinista Youth	Local organisations
398	12-Dec-22	Santa Rosa del Peñón	Wilber A. Gutiérrez	20	M	Farmer	Farmer	Farmers
399	12-Dec-22	Santa Rosa del Peñón	Jorge Luis Durán	22	M	Farmer	Farmer	Gender
400	12-Dec-22	Santa Rosa del Peñón	Néstor Padilla	48	M	Advisor	INIFOM	Institutions
401	12-Dec-22	Santa Rosa del Peñón	Sergio Martínez	65	M	Farmer	Farmer	Farmers

402	12-Dec-22	Santa Rosa del Peñón	Martha Lorena	34	F	Farmer	Farmer	Gender
403	12-Dec-22	Santa Rosa del Peñón	Máximo Rivera	66	M	Agriculture	Agriculture	Gender
404	12-Dec-22	Santa Rosa del Peñón	Juan Carlos Sánchez	53	M	Director General of Planning	SEPRES	Institutions
405	12-Dec-22	Santa Rosa del Peñón	Tatiana Pilarte	38	F	Economist	SEPRES	Institutions
406	12-Dec-22	Santa Rosa del Peñón	Cleris Delgado	25	F	Business Administration	MINIM	Institutions
407	12-Dec-22	Santa Rosa del Peñón	Reynaldo	60	M	Farmer	Farmer	Gender
408	12-Dec-22	Santa Rosa del Peñón	Horacio Espinoza	62	M	Farmer	Farmer	Farmers
409	12-Dec-22	Santa Rosa del Peñón	Variano Zeas	68	M	Farmer	Farmer	Farmers
410	12-Dec-22	Santa Rosa del Peñón	Alcides Espinoza	49	M	Farmer	Farmer	Gender
411	12-Dec-22	Santa Rosa del Peñón	Rafael Rivera	72	M	Farmer	Farmer	Farmers
412	12-Dec-22	Santa Rosa del Peñón	David Rivera	32	M	Farmer	Farmer	Farmers
413	12-Dec-22	Santa Rosa del Peñón	Genaro Aguirre	67	M	Farmer	Farmer	Farmers
414	13-Dec-22	Ciudad Dario	Calixta Martínez	54	F	Farmer	Farmer	Gender
415	13-Dec-22	Ciudad Dario	Sandra Alarcón	34	F	Farmer	Farmer	Gender
416	13-Dec-22	Ciudad Dario	Iván Ramírez	43	M	Farmer	Farmer	Farmers
417	13-Dec-22	Ciudad Dario	Leonardo Tórrez	38	M	Farmer	Farmer	Gender
418	13-Dec-22	Ciudad Dario	Juan José Gómez	42	M	Field Technician	FAO	Institutions
419	13-Dec-22	Ciudad Dario	Jessi Rayo M.	40	F	Field Technician	FAO	Institutions
420	13-Dec-22	Ciudad Dario	Jorge Luis Vega	34	M	Farmer	Farmer	Farmers
421	13-Dec-22	Ciudad Dario	Rosa Amelia Gutiérrez	54	F	Field Technician	FAO	Institutions
422	13-Dec-22	Ciudad Dario	Rosendo V. M.	43	M	Farmer	Farmer	Farmers
423	13-Dec-22	Ciudad Dario	Anselmo Valle	54	M	Farmer	Farmer	Gender
424	13-Dec-22	Ciudad Dario	Cruz Gilberto Velázquez	58	M	Farmer	Farmer	Farmers
425	13-Dec-22	Ciudad Dario	Juan Carlos Jiménez	44	M	Specialist	MEFCCA	Institutions
426	13-Dec-22	Ciudad Dario	Kristheld Velázquez	30	F	Planner	MEFCCA	Institutions
427	13-Dec-22	Ciudad Dario	Erith Antonio Ocampo	33	M	Teacher	MINED	Institutions
428	13-Dec-22	Ciudad Dario	América Aburto	33	F	Natural Heritage Specialist	MARENA	Institutions

429	13-Dec-22	Ciudad Dario	Haydee Vega	50	F	Housewife	Housewife	Farmers
430	13-Dec-22	Ciudad Dario	Maryuri del C. Obando	33	F	Housewife	Housewife	Gender
431	13-Dec-22	Ciudad Dario	Marcial A. Orozco	54	M	Farmer	Farmer	Gender
432	13-Dec-22	Ciudad Dario	Ervin Lopez	56	M	Farmer	Farmer	Gender
433	13-Dec-22	Ciudad Dario	Elmara Marcela Gómez	17	F	Technician	MEFCCA	Institutions
434	13-Dec-22	Ciudad Dario	Pablo Castrillo A.	30	M	Farmer	Farmer	Farmers
435	13-Dec-22	Ciudad Dario	Yahaira Torres	35	F	Housewife	Housewife	Gender
436	13-Dec-22	Ciudad Dario	Welquia Obando S.	33	F	Housewife	Housewife	Gender
437	13-Dec-22	Ciudad Dario	Roger Rios	48	M	Farmer	Farmer	Gender
438	13-Dec-22	Ciudad Dario	Julio Ruiz	66	M	Farmer	Farmer	Farmers
439	13-Dec-22	Ciudad Dario	Rosa Amelia Treminio	41	F	Housewife	Housewife	Gender
440	13-Dec-22	Ciudad Dario	Johanelly Carcache	34	F	Agronomist	IPSA	Institutions
441	13-Dec-22	Ciudad Dario	Ivania del Carmen	50	F	Farmer	Farmer	Farmers
442	13-Dec-22	Ciudad Dario	Sirley Samapas	36	F	Regional Technician	MINIM	Institutions
443	13-Dec-22	Ciudad Dario	José A. Mejía	52	M	Engineer	UNAG	Farmer organisation
444	13-Dec-22	Ciudad Dario	Sabina O. A.	44	F	Artisan	Artisan	Private sector
445	13-Dec-22	Ciudad Dario	Keyla Paola Jarquín	23	F	Artisan	Artisan	Private sector
446	13-Dec-22	Ciudad Dario	Roberto F. D. G.	43	M	Farmer	Farmer	Farmers
447	13-Dec-22	Ciudad Dario	Sherling V. V	32	F	Farmer	Farmer	Farmers
448	13-Dec-22	Ciudad Dario	Melania del C. Rios	57	F	Environment	City Hall	City Hall
449	13-Dec-22	Ciudad Dario	Jassier Treminio	23	M	Land registry	City Hall	City Hall
450	13-Dec-22	Ciudad Dario	Erick Rodriguez	58	M	Administrator	Finca	Farmers
451	13-Dec-22	Ciudad Dario	Hayners Chavarría	27	M	Field Technician	MAG	Institutions
452	13-Dec-22	Ciudad Dario	Ronald Flores	51	M	Technician	INTA	Institutions
453	13-Dec-22	Ciudad Dario	Miurel Cruz R	31	F	Hygienist	MINSA	Institutions
454	13-Dec-22	Ciudad Dario	Maria Luisa V.	50	F	Farmer	Farmer	Farmers
455	13-Dec-22	Ciudad Dario	Carmen Jarquín	29	F	Farmer	Farmer	Farmers

456	13-Dec-22	Ciudad Dario	Víctor Martínez	45	M	Environmental Inspector	MARENA	Institutions
457	13-Dec-22	Ciudad Dario	Sandra Estrada	42	F	Municipal Delegate	INAFOR	Institutions
458	13-Dec-22	Ciudad Dario	Yadira Moran	47	F	Farmer	Farmer	Farmers
459	13-Dec-22	Ciudad Dario	Misael Paz H	32	M	General Directorate of Fire Brigades	General Directorate of Fire Brigades	Institutions
460	14-Dec-22	San Francisco Libre	David Peralta	28	M	Environmental Inspector	MARENA	Institutions
461	14-Dec-22	San Francisco Libre	Jairo Vivas	54	M	Driver	MARENA	Institutions
462	14-Dec-22	San Francisco Libre	América Aburto	33	F	Natural Heritage Specialist	MARENA	Institutions
463	14-Dec-22	San Francisco Libre	Felicito Miranda	66	M	Farmer	Farmer	Gender
464	14-Dec-22	San Francisco Libre	Carlos Emilio Areas	42	M	Technician	Agriadapta	Institutions
465	14-Dec-22	San Francisco Libre	Wilfredo Valdivia	62	M	Farmer	Farmer	Gender
466	14-Dec-22	San Francisco Libre	Josselyn Guevara	28	F	Agribusiness	Agribusiness	Gender
467	14-Dec-22	San Francisco Libre	Arlen Fabiola	35	F	Beekeeper	Beekeeper	Gender
468	14-Dec-22	San Francisco Libre	José Reyes	72	M	Farmer	Farmer	Farmers
469	14-Dec-22	San Francisco Libre	Juan C. Saldaña	43	M	Environmental Engineering	Municipal Environment Unit	Town Hall
470	14-Dec-22	San Francisco Libre	Jin Emmanuel Varga	30	M	Agronomist	IPSA	Institutions
471	14-Dec-22	San Francisco Libre	Alba Luz Pineda	51	F	Agronomist	INTA	Institutions
472	14-Dec-22	San Francisco Libre	Luisa Padilla	41	F	Technician	Technician	Farmers
473	14-Dec-22	San Francisco Libre	Sayda Coronado	42	F	Farmer	Farmer	Farmers
474	14-Dec-22	San Francisco Libre	Amelia Rojas Molina	40	F	Farmer	Farmer	Gender
475	14-Dec-22	San Francisco Libre	Humberto Meza	67	M	Farmer	Farmer	Gender
476	14-Dec-22	San Francisco Libre	Angel Meza	62	M	Farmer	Farmer	Farmers
477	14-Dec-22	San Francisco Libre	Marling Bentancourt	26	F	Agronomist	MEFCCA	Institutions
478	14-Dec-22	San Francisco Libre	Oscar Enrique Martínez	45	M	Field Technician	MAG	Institutions
479	14-Dec-22	San Francisco Libre	Margarito	47	M	Farmer	Farmer	Gender
480	14-Dec-22	San Francisco Libre	Rosa Isabel V.	58	F	Teacher	MINED	Institutions
481	14-Dec-22	San Francisco Libre	Marcela Mayorga	30	F	Business Administration	Business Administration	Farmers
482	14-Dec-22	San Francisco Libre	Norma Isabel Martínez	45	F	Teacher	MINED	Institutions

483	14-Dec-22	San Francisco Libre	Hernaldo Montes	34	M	Carrier	INTA	Institutions
484	14-Dec-22	San Francisco Libre	Fermín A. Espinoza	61	M	Farmer	Farmer	Gender
485	14-Dec-22	San Francisco Libre	Angel Ariel Briceños	28	M	Beekeeper	Beekeeper	Farmers
486	14-Dec-22	San Francisco Libre	Héctor Briceño M	52	M	Municipal Politician	Municipal Politician	Local organisations
487	14-Dec-22	San Francisco Libre	Karina Isabel Flores	24	F	Farmer	Farmer	Farmers
488	14-Dec-22	San Francisco Libre	Ninoska Meza	32	F	Farmer	Farmer	Farmers
489	14-Dec-22	San Francisco Libre	Jessica Alemán	38	F	Farmer	Farmer	Farmers
490	14-Dec-22	San Francisco Libre	Tatiana Pilarte	38	F	Economist	SEPRES	Institutions
491	14-Dec-22	San Francisco Libre	Juan Carlos Sánchez	53	M	Director General of Planning	SEPRES	Institutions
492	14-Dec-22	San Francisco Libre	Joel David Diaz	23	M	Agro-industrial Engineer	MEFCCA	Institutions
493	14-Dec-22	San Francisco Libre	Harold Barahona	24	M	Driver	MEFCCA	Institutions
494	14-Dec-22	San Francisco Libre	Noemy Lara C	42	F	Public Policy Director	MINIM	Institutions
495	14-Dec-22	San Francisco Libre	Marcio Padilla	49	M	Municipal Delegate	INAFOR	Institutions
496	14-Dec-22	San Francisco Libre	Margarita	54	F	Farmer	Farmer	Gender
497	14-Dec-22	San Francisco Libre	Simon Teminios	49	M	Farmer	Farmer	Gender
498	14-Dec-22	San Francisco Libre	Michael Padilla	38	M	Technician	FAO	Institutions
499	14-Dec-22	San Francisco Libre	Jaime González	38	M	Farmer	Farmer	Farmers
500	14-Dec-22	San Francisco Libre	Rosa Marín R	49	F	Farmer	Farmer	Farmers
501	14-Dec-22	San Francisco Libre	Kenia Delgadillo	30	F	Farmer	Youth Network	Local organisations
502	14-Dec-22	San Francisco Libre	Inés López	56	F	Farmer	Cooperative	Gender
503	15-Dec-22	Teustepe	Darwin Borge	39	M	Head of Department	MINIM	Institutions
504	15-Dec-22	Teustepe	Bernardina Obando	43	F	Housewife	Housewife	Gender
505	15-Dec-22	Teustepe	David Flores	50	M	Agricultural Engineer	MARENA	Institutions
506	15-Dec-22	Teustepe	Marco Montoya	51	M	Territorial Technician	INIFOM	Institutions
507	15-Dec-22	Teustepe	Maria A. Luna	42	F	Farmer	Farmer	Farmers
508	15-Dec-22	Teustepe	German Obando	62	M	Farmer	Farmer	Farmers
509	15-Dec-22	Teustepe	Belsy Solano	24	F	Farmer	Farmer	Gender

510	15-Dec-22	Teustepe	Pedro Obando	60	M	Farmer	Farmer	Gender
511	15-Dec-22	Teustepe	José Hurtado	60	M	Farmer	Farmer	Farmers
512	15-Dec-22	Teustepe	Marlon Tijerino	50	M	Farmer	Farmer	Farmers
513	15-Dec-22	Teustepe	Jaime Hurtado B.	51	M	Farmer	Farmer	Farmers
514	15-Dec-22	Teustepe	Karelia Soza M	26	F	Farmer	Farmer	Gender
515	15-Dec-22	Teustepe	Erlinda Hurtado	37	F	Farmer	Farmer	Gender
516	15-Dec-22	Teustepe	Aurelia Gaitán	51	F	Farmer	Farmer	Farmers
517	15-Dec-22	Teustepe	Juan Campos	29	M	Farmer	Farmer	Farmers
518	15-Dec-22	Teustepe	Fabio Padilla	50	M	Farmer	Farmer	Farmers
519	15-Dec-22	Teustepe	José Mendoza	55	M	Farmer	Farmer	Gender
520	15-Dec-22	Teustepe	Manuel Enriquez	56	M	Farmer	Farmer	Gender
521	15-Dec-22	Teustepe	Frank Urbina	27	M	Farmer	Farmer	Gender
522	15-Dec-22	Teustepe	Norlan Solano	28	M	Farmer	Farmer	Gender
523	15-Dec-22	Teustepe	Armando Flores	53	M	Farmer	Farmer	Farmers
524	15-Dec-22	Teustepe	Marlon José Rosales	22	M	Farmer	Farmer	Farmers
525	15-Dec-22	Teustepe	Heriberto Reynaldo M	33	M	Farmer	Farmer	Farmers
526	15-Dec-22	Teustepe	Julián E. Huerta	40	M	Farmer	Farmer	Farmers
527	15-Dec-22	Teustepe	Roberto Gutiérrez	39	M	Farmer	Farmer	Farmers
528	15-Dec-22	Teustepe	David Exequiel Rosales	37	M	Farmer	Farmer	Farmers
529	15-Dec-22	Teustepe	Modesto R.	62	M	Farmer	Farmer	Farmers
530	15-Dec-22	Teustepe	Elizabeth Sanchez	42	F	Delegate	Town Hall	Town Hall
531	15-Dec-22	Teustepe	José Osman	52	M	Farmer	Farmer	Farmers
532	15-Dec-22	Teustepe	Juana Guardian	44	F	Delegate	Town Hall	Town Hall
533	15-Dec-22	Teustepe	Tomás Rosales	54	M	Farmer	Farmer	Gender
534	15-Dec-22	Teustepe	Juan Zamora	31	M	Delegate	INAFOR	Institutions
535	15-Dec-22	Teustepe	Mauricio Garay	51	M	Delegate	MEFCCA	Institutions
536	15-Dec-22	Teustepe	Ricardo Lumbí	37	M	Delegate	MARENA	Institutions

537	15-Dec-22	Teustepe	Dickson Medal	45	M	Delegate	MEFCCA	Institutions
538	15-Dec-22	Teustepe	Odell Ortega	52	M	Delegate	MEFCCA	Institutions
539	15-Dec-22	Teustepe	América Aburto	33	F	Natural Heritage Specialist	MARENA	Institutions
540	15-Dec-22	Teustepe	Moisés David Obregón	28	M	Veterinarian	IPSA	Institutions
541	15-Dec-22	Teustepe	Rosa Alba	48	F	Farmer	Farmer	Gender
542	15-Dec-22	Teustepe	Francis G	47	M	Farmer	Farmer	Farmers
543	15-Dec-22	Teustepe	Roniel Solano	20	M	Farmer	Farmer	Farmers
544	15-Dec-22	Teustepe	Nelly Sanchez	43	F	Farmer	Farmer	Farmers
545	15-Dec-22	Teustepe	José Alcides	63	M	Farmer	Farmer	Gender
546	15-Dec-22	Teustepe	Cándida Hurtado	43	F	Farmer	Farmer	Farmers
547	15-Dec-22	Teustepe	Mabel González	32	F	Lawyer	Lawyer	Farmers
548	15-Dec-22	Teustepe	Berna Duarte	20	F	Farmer	Farmer	Farmers
549	15-Dec-22	Teustepe	Leonardo	47	M	Driver	Driver	Farmers
550	16-Dec-22	San Lorenzo	David Flores	50	M	Agricultural Engineer	MARENA	Institutions
551	16-Dec-22	San Lorenzo	Rafaela Jiménez	50	F	Farmer	Farmer	Gender
552	16-Dec-22	San Lorenzo	Rafael López	60	M	Farmer	Farmer	Gender
553	16-Dec-22	San Lorenzo	Maximiliano López	57	M	Farmer	Farmer	Gender
554	16-Dec-22	San Lorenzo	Narcisa Vanega A.	57	F	Farmer	Farmer	Gender
555	16-Dec-22	San Lorenzo	Emilio Miranda	48	M	Farmer	Farmer	Gender
556	16-Dec-22	San Lorenzo	Ana Chavarría	23	F	Farmer	Farmer	Gender
557	16-Dec-22	San Lorenzo	Lenín Orozco	39	M	Farmer	Farmer	Farmers
558	16-Dec-22	San Lorenzo	Margarito Picado	43	M	Farmer	Farmer	Farmers
559	16-Dec-22	San Lorenzo	Aurora Gómez	75	F	Farmer	Farmer	Farmers
560	16-Dec-22	San Lorenzo	Ricardo Lumbí	37	M	Delegate	MARENA	Institutions
561	16-Dec-22	San Lorenzo	Juan Canales	30	M	Builder	Builder	Farmers
562	16-Dec-22	San Lorenzo	Vivian Paola Martínez	26	F	Municipal Delegate	INAFOR	Institutions
563	16-Dec-22	San Lorenzo	Jeanette Chavarría	38	F	Farmer	Farmer	Farmers

564	16-Dec-22	San Lorenzo	Marisela Canales	39	F	Farmer	Farmer	Farmers
565	16-Dec-22	San Lorenzo	Kenia Rivas	42	F	Farmer	Farmer	Farmers
566	16-Dec-22	San Lorenzo	Gloria Pamela Rivas	27	F	Farmer	Farmer	Farmers
567	16-Dec-22	San Lorenzo	Juan Carlos Esquivel	40	M	Farmer	Farmer	Farmers
568	16-Dec-22	San Lorenzo	Hector A.	25	M	Farmer	Farmer	Farmers
569	16-Dec-22	San Lorenzo	Johnny Aviles	45	M	Delegate	MEFCCA	Institutions
570	16-Dec-22	San Lorenzo	Mario José R.	38	M	Technician	IPSA	Institutions
571	16-Dec-22	San Lorenzo	Francisco Campos	39	M	Technician	MEFCCA	Institutions
572	16-Dec-22	San Lorenzo	América Aburto	33	F	Natural Heritage Specialist	MARENA	Institutions
573	16-Dec-22	San Lorenzo	Mauricio Garay	51	M	Delegate	MEFCCA	Institutions
574	16-Dec-22	San Lorenzo	José María Siles	42	M	Farmer	Farmer	Farmers
575	16-Dec-22	San Lorenzo	Román A. Miranda	56	M	Farmer	Farmer	Farmers
576	16-Dec-22	San Lorenzo	Bernardino Obando	88	M	Farmer	Farmer	Gender

Annex 6: Productive Practices

The table below presents a summary of the sustainable productive practices tested by the PAGRICC project and also validaded by AGRIADAPTA

No.	Environmental Practice	Description	Environmental Benefit	Time for environmental benefits	Economic Benefit	Average time for Economic benefits
1	Plantation of Coffee-Plants	It is an environmental restoration system called ecoforestry and a new way of growing coffee, protecting the environment, with the incorporation of trees of different species, use of inputs from the farm and family labor, obtaining the producer income from the different components of the system, in the shortest possible time.	Soil and water conservation. Soil erosion is reduced. Improves biodiversity. Improves the microclimate. Diversification of crops: coffee, chaguite, fruit trees, timber, firewood. It maintains soil moisture and increases vegetation cover. Improvement of the environmental quality of the farm. Improvement of the quality of life of the family.	3 - 5 years	Higher economic income from product sales: 1. Increased coffee yields 2. Production of firewood and charcoal. 3. Wood production. 4. Increased revenue by Sale of fruit trees and musaceae.	3 - 5 years.

2	Agroforestry Plantation	The agroforestry plantation combines forest species, fruit species, annual and multiannual crops. An Agroforestry System is a set of forestry and agricultural components that, interacting with each other, form a whole, to guarantee the sustainability of production, food security and sovereignty and the Environment. It consists of the planting of timber forest plants that measure up to more than 15 meters in height, and is where wood will be obtained for sale, in a time that will vary between 8 to 20 years, depending on tree species and areas.	It allows trees to grow in crop areas. Trees provide food, energy, (firewood and charcoal), medicine, wood. They serve as windbreaks and protection for staple crops, vegetables, and fruit trees. It increases the biodiversity of the farm, the vegetation cover, they take the water from the deepest part of the soil, without competing with the fruit trees. Improvement of soil fertility, improvement of the microclimate for crop growth and control of crop pests. It improves the quality of natural resources and contributes to risk reduction and adaptation to climate change.	5 years	Production of good value wood. Production of poles, firewood and charcoal. Economic income from the sale of products.	8 - 12 years
3	Fruit trees (not grafts)	It consists of the planting of fruit plants such as citrus, avocado, mango, papaya in order to obtain a better income for the producer and the diversification of the farm.	It attracts greater biodiversity to the plot, improves vegetation cover and water infiltration into the subsoil, provides permanent shade to coffee cultivation.	4 - 5 years	It provides greater economic income to the producer by selling the products, improving productivity in coffee.	4 - 5 years
4	Fruit grafts	It consists of the planting of fruit plants grafted such as citrus, avocado, mango, to obtain a better income in the short term for the producer and the diversification of the farm.	Improves vegetation cover and water infiltration into the subsoil, attracts greater biodiversity to the plot,	2 years	It provides economic income to the producer by selling the products in quantity, quality and in the shortest time.	2 1/2 - 4 years
5	Musáceas	It consists of the planting of bananas, bananas, bananas in order to obtain a better income for the producer and the production of temporary shade for coffee and fruit crops in periods of establishment.	Maintains soil moisture, improves soil structure with the contribution of organic matter, provides temporary shade for crops such as coffee and fruit trees, attracts greater biodiversity to the plot	9 months	It provides greater economic income to the producer by selling the products, improves productivity in coffee cultivation.	9 months

6	Cultivation of Coverage (bean fertilizer)	The cover crop consisting of the planting of Grain or cover legumes associated with a basic grain crop.	Increase of the content of organic matter in the soil, of the capacity of infiltration of water in the soil, reduction of surface runoff, reduction of production costs, improvement of soil fertility as green manure.	4 months.	As green manure improves soil fertility, improving the production of other associated crops. Grains are eaten when ripe and immature pods and seeds, like leaves, are consumed as vegetables. It can be incorporated into the human diet in the form of flours, pasta, and cookies. A mz produces 8 - 12 qq of grains and 14 to 16 tons, of green matter.	4 months.
7	Seto	It is formed by a row of trees located on the boundaries and internal divisions of the farm. The products obtained from a live fence are firewood, poles, stakes and fodder.	Nitrogen fixation (if leguminous species are used for this purpose), diversification, shade, favor biodiversity and reduce pressure on the forest by taking advantage of products such as poles, firewood, cuttings, fodder and charcoal production.	1 year .	When establishing a live fence it can last 30-50 years, while fences with dead posts last only 3-5 years. Economic income from the sale of products.	1 year .
8	Shrub Living Barrier	They are rows of perennial or semi-perennial plants with dense growth, planted perpendicular to the slope, in combination with some soil conservation works such as hillside droughts and dead barriers (of stone or other materials of the area that may well be harvest stubble).	Their main function is to reduce soil loss because they intercept rainwater by reducing its speed; Another of its functions is to protect soil conservation works such as contour lines, containment dikes, droughts, dead barriers, etc. It increases the vegetation in the plots and therefore the production of environmental goods and services.	6 months	It improves soil fertility, improving the fertile layer of the soil and therefore the productivity of crops.	6 months
9	Works by How to store Soil (Tools)	It consists of the establishment of small works for the conservation of soil and water through infiltration pits, droughts, live and dead barriers in areas of the farm where it is required to protect the soil from runoff and erosion.	It improves soil fertility, increases the fertile layer of the soil, improves the infiltration of water into the subsoil, and the biodiversity of soil microorganisms responsible for improving soil structure and aeration. The main function is to reduce soil loss.	6 - 8 months	The productivity of crops is improved, and therefore higher economic income with the increase in production.	6 - 8 months.

10	Water Harvesting Work	It is the damming by means of preselected works, of rainwater that drains from hills and mountains, in order to use it in cultivation under irrigation, in medium and small areas during the summer. It can also be used as supplementary irrigation during the winter and water consumption for animals and humans in summer.	It is considered as a regulating activity of surface runoff during the rainy season, reducing the impact on infrastructure and populations located downstream. Generator of a cool microclimate, allowing to generate site of concurrence of wildlife. Infiltration of water into the subsoil to improve the water table.	1 year or after a winter.	For use in lean periods of small-scale irrigated agricultural production such as vegetables and plants fruit trees, activity livestock such as watering holes for livestock, domestic uses for washing clothes and others, and Human consumption as long as the required quality is guaranteed. It teaches producers to make efficient use of the vital liquid such as water, seeking to create alternatives and adequate and efficient techniques to solve the problem of water scarcity in critical areas.	1 year or after a winter.
11	Trees in paddocks	This practice is known as "Trees scattered in pastures" and grow by natural regeneration according to the agro-ecological conditions and species present in the site, in addition, through the planting of species of forage and shade trees.	They contribute to the conservation of biodiversity, as five times more abundance and three times more species richness have been found compared to open paddocks without trees.	5 - 8 Years	Under the canopy of the trees the temperature is lower by 2 to 3 °C to the ambient temperature. This helps cattle improve their digestion (eat more food, reduce water consumption, graze and ruminate longer); increase their production (more milk or meat) and improve reproductive rates (more birth and earlier puberty).	5 - 8 Years
12	Establishment of Forage Bank (Tree Arboreal; Protein)	A forage bank is a small plot of the farm cultivated with high densities of legumes or grasses to feed cattle and increase production. They can be "protein banks" when you have more than 15% protein and "energy banks" when they have high energy levels, in some cases combining them to get protein and energy at the same time.	They increase the vegetation cover of the farm, retain moisture in the soil and prevent erosion. Improve the biodiversity of the farm.	6 - 8 months	They improve the production of livestock with the contribution of feed. Higher income from the production of milk and meat from livestock. Avoid cattle in dry season.	6 - 8 months.

13	Pastures Improved	Practice of vital importance in the intensification of the use of livestock land in the same way as the energy bank. It consists of the planting of pastures of improved species that are characterized by maintaining green fodder in most of the dry season, for being tastier and more resistant to trampling and burning.	They retain soil, preventing erosion, the vegetation cover.	1 year	They provide high quality feed to livestock and therefore improve milk and meat production.	1 year
14	Energy Plantation	The energy plantation aims to increase the forest cover for forest use for firewood and charcoal, and thus reduce the pressure on the use of the natural forest. It consists of the planting of fast-growing species for energy use.	Increased forest cover. Production of firewood and charcoal. Improves the biodiversity of the farm. Improvement of the environmental quality of the farm. Improvement of the quality of life of the family. Increase in water collection and retention . Enrichment of forest species. Forest Protection.	8 - 12 months	Higher income from the production of firewood and charcoal sales.	8 - 12 months.
15	Industrial Plantation	Industrial plantation aims to increase forest cover for forest use and thus reduce the pressure to the use of the natural forest. A plantation with species for commercial and industrial use will be established.	Increased forest cover. Wood production Increase and conservation of local fauna. Improvement of the environmental quality of the farm. Improvement of the quality of life of the family. Increase in water collection and retention. Enrichment of forest species. Forest Protection.	5 years	Higher income with the production of construction timber sales.	20 - 30 years
16	Enrichment (Handling Regeneration Natural)	The Natural Regeneration Management system, has the scope of improving the genetic quality of forest species, enriching the frequency of species, provide protection and allow conditions conducive to promoting the natural regeneration of the existing forest.	Increased forest cover. Production of firewood and charcoal. Wood production Increase and preservation of local fauna. Improvement of the environmental quality of the farm. Improvement of the quality of life of the family. Increase in water uptake and retention	6 - 7 years	Economic income from the sale of forest products (firewood, charcoal, timber, poles)	10 - 12 years

			Enrichment of forest species. Forest Protection.			
17	Round Short Fire	Strips of land devoid of vegetation built for various purposes including facilitating access, preventing forest fires and their spread.	Prevention and control of fire caused by forest and agricultural fires.	Summer period (January - May): 6 months.	Avoided losses on soil fertility. Maintenance of plant mass, soil organic matter, crop productivity.	Summer period (January - May): 6 months.
18	Raleo No Commercial and Clean-Jornal	Environmental practice that allows to regulate the shade of the trees and as a practice of forest sanitation, removing from the forest trees the dry, broken or diseased parts.	Greater health for the forestry approach. Greater productivity and growth of the forest plantation is achieved.	7 - 10 years.	We obtain fodder, firewood and poles and with the sale economic income. To obtain forage, pruning is carried out every 4-6 months from the second year of planting and to obtain firewood or poles it must be every two years.	Every 2 years
19	Elaboration and management of the management plan (Management of Forests)	A General Forest Management Plan is pr Broadleaf forest, this PGMF will detail all t that must be carried out during the period plans according to the competent authorit	To order and identify the possible uses that the forest provides, will allow to know the number and quantity of species both commercial, potential and non-commercial, in the same way the amount of cubic meters available for consumption or commercialization and of those that have to be protected or conserved.	5 years.	Increased forest cover. Production of firewood and charcoal. Wood production . Increase and conservation of local fauna. Improvement of the environmental quality of the farm. Improvement of the quality of life of the family. The farming family will have a scientific forest planning tool called the General Forest Management Plan. Increase in water uptake and retention.	15 - 25 years
20	Enrichment (Management of Forests)	It is a practice that consists of the establishment of forest plants in areas of forest or natural regeneration where there are windows or areas devoid of trees. Also, in areas of forests with low density of plants, which achieves a greater population of plants per unit of surface.	Greater vegetation cover with selected species with commercial value. Increase and conservation of local fauna. Improvement of the environmental quality of the farm and quality of life of the family.	5 years	Higher income from the sale of forest products such as firewood, wood and charcoal.	15 - 25 years.