AFB/PPRC.37/12
16 March 2026

Adaptation Fund Board
Project and Programme Review Committee
Thirty seventh Meeting
Bonn, Germany, 7-8 April 2026

Agenda Item 5 (g)

PROPOSAL FOR PERU (1)

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Background

1. The Operational Policies and Guidelines (OPG) for Parties to Access Resources from the Adaptation Fund (the Fund), adopted by the Adaptation Fund Board (the Board), state in paragraph 45 that regular adaptation project and programme proposals, i.e. those that request funding exceeding US$ 1 million, would undergo either a one-step, or a two-step approval process. In case of the one-step process, the proponent would directly submit a fully-developed project proposal. In the two-step process, the proponent would first submit a brief project concept, which would be reviewed by the Project and Programme Review Committee (PPRC) and would have to receive the endorsement of the Board. In the second step, the fully-developed project/programme document would be reviewed by the PPRC, and would ultimately require the Board's approval.

2. The Templates approved by the Board (Annex 5 of the OPG, as amended in March 2016) do not include a separate template for project and programme concepts but provide that these are to be submitted using the project and programme proposal template. The section on Adaptation Fund Project Review Criteria states:

> *For regular projects using the two-step approval process, only the first four criteria will be applied when reviewing the 1st step for regular project concept. In addition, the information provided in the 1st step approval process with respect to the review criteria for the regular project concept could be less detailed than the information in the request for approval template submitted at the 2nd step approval process. Furthermore, a final project document is required for regular projects for the 2nd step approval, in addition to the approval template.*

3. The first four criteria mentioned above are:
   (i) Country Eligibility,
   (ii) Project Eligibility,
   (iii) Resource Availability, and
   (iv) Eligibility of NIE/MIE.

4. The fifth criterion, applied when reviewing a fully-developed project document, is:
   (v) Implementation Arrangements.

5. It is worth noting that at the twenty-second Board meeting, the Environmental and Social Policy (ESP) of the Fund was approved and at the twenty-seventh Board meeting, the Gender Policy (GP) of the Fund was also approved. Consequently, compliance with both the ESP and the GP has been included in the review criteria both for concept documents and fully-developed project documents. The proposal template was revised as well, to include sections requesting demonstration of compliance of the project/programme with the ESP and the GP.

6. At its seventeenth meeting, the Board decided (Decision B.17/7) to approve "Instructions for preparing a request for project or programme funding from the Adaptation Fund", contained in the Annex to document AFB/PPRC.8/4, which further outlines applicable review criteria for both concepts and fully-developed proposals. The latest version of this document was launched in conjunction with the revision of the Operational Policies and Guidelines in November 2013.

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7. Based on the Board Decision B.9/2, the first call for project and programme proposals was issued and an invitation letter to eligible Parties to submit project and programme proposals to the Fund was sent out on April 8, 2010.

8. The following project concept document titled “Climate Resilience in Andean-Amazonian Landscapes of Peru: Ecosystem-based Adaptation and Sustainable Livelihoods” was submitted for Peru by the Peruvian Trust Fund for National Parks and Protected Areas (Profonanpe), which is the National Implementing Entity of the Adaptation Fund.

9. This is the fourth submission of the project concept proposal using the two-step submission process. It was first submitted as a concept note ahead of the forty-fifth Board meeting.

10. The current submission was received by the secretariat in time to be considered in the forty-sixth Board meeting. The secretariat carried out a technical review of the project proposal, assigned it the diary number AF00000451, and completed a review sheet.

11. In accordance with a request to the secretariat made by the Board in its 10th meeting, the secretariat shared this review sheet with Profonanpe and offered it the opportunity of providing responses before the review sheet was sent to the PPRC.

12. The secretariat is submitting to the PPRC the summary and, pursuant to decision B.17/15, the final technical review of the project, both prepared by the secretariat, along with the final submission of the proposal in the following section. In accordance with decision B.25.15, the proposal is submitted with changes between the initial submission and the revised version highlighted.

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ADAPTATION FUND BOARD SECRETARIAT TECHNICAL REVIEW OF PROJECT/PROGRAMME PROPOSAL

PROJECT/PROGRAMME CATEGORY: CONCEPT NOTE

Country/Region: Peru
Project Title: Climate Resilience in Andean-Amazonian Landscapes of Peru: Ecosystem-based Adaptation and Sustainable Livelihoods
Thematic Focal Area: Multisector
Implementing Entity: Profonanpe
Executing Entities: Ministry of the Environment of Peru
AF Project ID: AF00000451
IE Project ID:
Requested Financing from Adaptation Fund (US Dollars): 10,000,000
Reviewer and contact person: Estefanía Jiménez
Co-reviewer(s): Mahamat Assouyouti
IE Contact Person:

Technical Summary	The project "Climate Resilience in Andean-Amazonian Landscapes of Peru: Ecosystem-based Adaptation and Sustainable Livelihoods" aims to strengthen the climate resilience of populations and their livelihoods in vulnerable Andean-Amazonian landscapes in Peru through the implementation of ecosystem-based adaptation (EbA) measures to address climate-related hazards. This will be done through the four components below: Component 1: Design and implementation of ecosystem-based adaptation measures to reduce climate risks and strengthen community resilience (USD 3,000,000); Component 2: Diversification of local livelihoods to increase resilience, food and nutritional security, and access to financing opportunities, in harmony with ecosystem conservation (USD 3,500,000); Component 3: Strengthening governance and public investment for climate change adaptation and the sustainability of livelihoods (USD 1,000,000). Component 4: Strengthening knowledge management and adaptation monitoring to support continuous improvement and informed decision-making for adaptation in vulnerable Andean-Amazonian landscapes (USD 916,977).

	Requested financing overview: Project/Programme Execution Cost: USD 799,613 Total Project/Programme Cost: USD 9,216,590 Implementing Fee: USD 783,410 Financing Requested: USD 10,000,000 The proposal includes a request for a project formulation grant and/or project formulation assistance grant of USD 150,000. The initial technical review raises several issues, such as the need for strengthening the adaptation rationale of the various components, the identification of potential risks and impacts of the project, consistency between the tables which identify the risks, the links between the risks, activities and outcomes in the Theory of Change; the lack of information about potential overlapping projects, the project's cost-effectiveness, and the stated Execution Cost, as is discussed in the number of Clarification Requests (CRs) and Corrective Action Requests (CARs) raised in the review. This second technical review has addressed some of the earlier CRs and CARs, however a number of amendments are required concerning Gender assessment, project implementation through USP, identification of beneficiaries, alignment table etc. as raised in the number of CRs and CARs raised in the review. The third review have addressed almost all CRs and CARs raised earlier. A final amendment is required concerning the estimated number of beneficiaries and updated results framework alignment table. The fourth review have addressed all CRs and CARs raised earlier.
Date:	December 12, 2025

Review Criteria	Questions	First Technical Review Comments August 5, 2025	Second Technical Review Comments August 26, 2025	Third Technical Review Comments November 10, 2025	Fourth Technical Review Comments December 12, 2025

Country Eligibility	1. Is the country party to the Kyoto Protocol, and/or the Paris Agreement?	**Yes.**	-	-	-
	2. Is the country a developing country particularly vulnerable to the adverse effects of climate change?	**Yes.** Peru is particularly vulnerable to phenomena such as frosts, droughts, and floods, which affect both the economy and social well-being. Historical data show that these extreme climate events have had a direct impact on productive sectors, as well as on the country's natural and social infrastructure, generating significant economic losses.	-	-	-
Project Eligibility	1. Has the designated government authority for the Adaptation Fund endorsed the project/programme ?	**Yes.** As per the Endorsement letter dated July 17th, 2025.	-	-	-
	2. Does the length of the proposal amount to no more than Fifty pages for the project/programme concept, including its annexes?	**No** The concept note exceeds 50 pages including its annexes. **CR1**: Please reduce the total pages within the required 50 pages	**CR1: Cleared.** As per revised CN up to 50 pages, including annexes.	-	-
	3. Does the project / programme support concrete adaptation actions to assist the country in	**Yes.** **However additional information is required.** The concept note provides overall information about the components			

	addressing adaptive capacity to the adverse effects of climate change and build in climate resilience?	and activities and is aimed at strengthening the climate resilience of populations and their livelihoods in vulnerable Andean-Amazonian landscapes in Peru through the implementation of ecosystem-based adaptation (EbA) measures to address climate-related hazards. However, there are few elements to be addressed: **CR2:** Although the EbA has been implemented in Peru for many years including through AF funded project, the project concept note aims to pilot adaptation measures through EbA solutions. Although the context might be different from other EbA experiences in the country, it would be useful to take stock of EbA solutions that have been implemented in Peru and replicate and/or scale up. Please document and strengthen the link of the proposed activities to design and pilot EbA with existing solutions in the country and specifically the selected areas of intervention. **CR3**: The entity has developed a similar project in the past for AF funding titled "Building a program for adaptation and resilience to climate change of Andean local communities and ecosystems in Peru". Please clarify how this new	**CR2: Cleared.** As per revised CN page 18 that strengthen the rationale for the proposed EBA measures under outcome **CR3: Not Cleared.** Thank you for the clarification and additional information.	- **CR3: Cleared.** As per revised Section F and Table 9 (previously Table 6).	- -

		project builds or complements the above-mentioned project since both projects are in the same area. **CAR1:** The CN doesn't provide an indicative number of beneficiaries. Please indicate the estimated number of beneficiaries (direct and indirect) which will be supported. **CR4:** Please confirm if the project includes USP and refer to AF policy of USP for compliance. Please refer to Guidance Document for Project/Programme with Unidentified Sub-Projects **CR5:** Kindly provide more details for each project activity, for example: clarify stakeholders to be involved), and which specific actions will be taken to ensure successful implementation of livelihood activities, and the locations where	Please update the concept note with the explanation provided in the review sheet. In addition, please update the Table 6 (page 34) accordingly with the proposed synergies and complementarity between the 2 projects. The table 6 has been updated but it does not include the information provided in the review sheet. **CAR 1: Not Cleared.** We do recognize the difficulty to provide an exact number of beneficiaries at this stage of the CN. However, it is important to	**CAR 1: Not cleared.** Thank you for the revised text with indicative number of beneficiaries on page 11. However, there is small mistake about the	**CAR 1: Cleared** as per revised text and Table 4 on page 10.

		the activities will be placed if already known at this stage. **CR6:** Under Component 1, among the EbA measures listed under Table 3, 4 and 5, please clarify how the proposed newly designed EbA will be based on national documents, i.e. "Catalog of NDC Adaptation Measures (MINAM, 2024)" and how these activities will not be creating maladaptation if different from NDC measures. **CAR2:** Under Component 2, there seems to be a complete misalignment between the livelihood activities and the EbA measures to be implemented under Component 1. Since the project will be implemented as a whole, please clarify the link between EbA measures under Component 1 and the livelihood activities under Component 2. **CAR3**: Under Component 2, although presented as activities aiming for "Diversification of local livelihoods to increase their resilience, food and nutritional security, and access to financing opportunities, in harmony with ecosystem conservation", there is very little information on the exact	indicate a rough estimate of beneficiaries (direct and indirect) which can be further defined during full proposal stage. **CR4: Not Cleared.** Thank you for the confirmation that there is no USP under the project. However, the response to CR5 indicates that locations of the activities are yet to be identified. Please clarify and update the CN accordingly.	indirect beneficiaries. The sentence seems incomplete as it is stated "*The direct beneficiaries are estimated in 69,023 people and 75,925 people".* In addition, please provide a gender disaggregated data of the estimated beneficiaries if the information is available. There is a gender disaggregated data under social benefit (page 28) which you can user under this section as well. **CR4**: **Cleared**. As per the clarification provided that the project does	-

		nature of these activities nor their ability to increase resilience through income generating activities, except for activity 2.1.2 which lists "agroecology, aquaculture, sustainable management of non-timber forest products, and other initiatives tailored to each territory's socio-environmental conditions". Please provide more information of the exact nature of the proposed livelihood activities and how they increase local resilience. **CAR4**: Under Component 2, for activity 2.1.3 Capacity-building, market access and brand development for enterprises, it is unclear how the proposed capacity building is linked and aligned with Component 3 that also aims at building capacity. Please clarify. **CR7**: Under Component 2, also under Activity 2.1.3, please clarify who are the targeted entities to be supported and described as "commercial, and organizational capacities of sustainable local enterprise". **CAR5:** Under Component 3, please clarify if the proposed approach is aligned with the country NDC, in particular in relation to the "Micro-	**CR5: Not cleared.** Please refer to CR4 and revised accordingly. **CR6: Cleared.** As per clarification provided and revised CN (page 18-19).	not fall under the USP category, as both activities and intervention areas are already defined. Further identification will be conducted during full development stage. The text has been revised with merged Activities 2.1.1 pages 23-25. **CR5: Cleared.** As per CR4 above **-**	**-** **-**

		watershed or sub-watershed management plans, integrating ecosystem-based adaptation (EbA) approaches, water security, and risk management". **CR8**: Under the proposed "Local climate change plans (PLCC) or other territorial instruments", please clarify if these PLCC are new or already existing under the country NDCs which will be supported with AF funding. **CAR6**: The proposed "Activity 3.1.2: Development of climate change impact risk analyses" seems to be inappropriate for such a capacity building component. This activity should be part of the Component 1 and 2 which involve adaptation activities and some investments. Please consider moving this activity to be part of the preparatory activities under Components 1 and 2. **CAR7:** As required by AF, please add explicitly the alignment with the Adaptation Fund Results Framework aat Part I B. **CAR8:** The Theory of Change does not show how the Components, Outcomes and Activities are linked	**CAR 2: Cleared.** As per clarification provided and updated CN (page 20-21) as part of the descriptions of Components 1 and 2. **CAR 3: Not cleared.** Thank you for the clarification and additional information on the proposed activities aiming for "Diversification of local livelihoods to increase their resilience, food and nutritional security, and access to financing opportunities, in harmony with ecosystem conservation".	- **CAR 3: Cleared** As per revised description of Outcome 2 (p. 18) and Table 7.	- -

		with the specific climate risks. Please include the specific climate risks and show how they are linked with the Activities, Outputs, Outcomes and Activities.	However, the CN would benefit to include information provide in the review sheet. We advise to include a paragraph under component 2 description with the clarification provided in the review sheet. **CAR4: Not cleared.** As per clarification provided. However, please revise the CN to reflect the clarification provided in the review sheet as we do not find the updated section. **CR 7: Not cleared.**	**CAR 4: Cleared** Further Clarification provided under activity 2.1.2 (previously 2.1.3), page 20. **CR 7: Cleared.**	- -

			Please update the information under Activity 2.1.3 and include the precision provided in the review sheet.	As per revised information under Activity 2.1.2 (previously 2.1.3), see page 20.	
			CAR 5: Cleared. As per the clarification provided and updated CN under component 3.	**-**	**-**
			CR8: Not cleared. Thank you for the clarification. However, please update the CN accordingly**.**	**CR8: Cleared** As per revised text on PLCC under activity 3.1.1, page 22.	**-**
			CAR6: Cleared. As per revised component 1.	**-**	**-**
			CAR7: **Cleared.**	**-**	**-**

			As per revised CN under Part II.A. **CAR8: Cleared.** As revised Annex 2.	-	-
	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?	**No.** The concept note briefly outlines some of the project's economic, social, and environmental benefits; however, the explanation is too general and does not include estimated benefits. Moreover, the document does not provide information on the expected total number of beneficiaries of the project and the specific vulnerable groups targeted, neither does the concept note include an Initial Gender Assessment. **CR9:** Please include in the economic benefits section, how many people will benefit in each community and what is the dollar-value of the economic benefit to them for each of the target communities. It would also be useful to present overall figures for economic and social benefits. **CR10**: Please strengthen the social, and environmental benefits with	**CR9: Not cleared.** Please refer to CAR1 and provide further information (even indicative) of economic and social benefits. **CR10: Cleared.**	**CR9: Cleared** As per CAR1 and addition information under Economic Benefits in section B (p.25). -	- -

		specific and quantifiable data where possible. **CAR9:** Please include an initial gender assessment which is required at the concept note stage. **CAR10:** Kindly provide specific information on the expected beneficiaries, disaggregated by gender and age, where possible. Also, whether marginalized and vulnerable groups and indigenous communities have been identified in the project area and if so, specify how the project benefits those groups. **CR11:** Kindly explain how the project will ensure the equitable distribution of benefits.	as per updated Section B, page 28. **CAR 9: Not cleared.** Thank you for the updated CN with an initial gender assessment, page 29. However, the text is rather short and lacks many information on the gender assessment. Please update the paragraph and include a more detailed initial gender analysis that describes the different needs, roles and knowledge sources of women and men in the areas of intervention, clearly stating	**CAR 9: Cleared** As per revised initial gender assessment with additional available data. Please consider conducting a survey during full project development to gather further data on gender related challenges in the project intervention.	-

			how the proposed change in gender dynamics under the project might drive lasting changes. The gender analysis should inform and recommend how gender considerations are mainstreamed throughout the project's activities.		
			CAR 10: **Not cleared.** Please refer to CAR1 and update the section accordingly with indicative estimate.	**CAR10: Cleared as per CAR1 above.**	-
			CR11: Not cleared. Thank you for the clarification and addition	**CR11: Cleared.** As per revised section B (p.26).	-

			information. However, the CN should be updated to reflect the proposed approach for equitable distribution of benefits.		
	5. Is the project / programme cost effective?	**Unsure.** The concept note provides a broad explanation of the project cost-effectiveness, without information on the specific components. It does not specify clearly the scope and approach, nor method for the calculation. It is also not possible to demonstrate the cost-effectiveness of the selected measures. **CAR11:** Kindly provide a sound justification for the cost-effectiveness of the project and selected measures, including scope, approach, alternative options to the proposed measures, and estimates of the evaluation where possible. Please consider using a table to compare proposed EbA approaches	**CAR 11: Cleared.** As per revised Section C, page 30.	-	-

	with tentative cost figures for benchmark.				
	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.** **But further information is needed.** The project identifies relevant adaptation-related plans and strategies as well as sectoral country's policy and strategies. **CAR12:** Kindly provide the specific linkage about how the project supports the implementation of the SDGs and justify the link between the project and the PNS. **CAR13:** Please include information on relevant Agriculture, Forestry and Fisheries Sector Plans citing the sections of relevance to Climate Change	**CAR 12: Cleared.** As revised Section D, page 32. **CAR 13: Cleared.** As revised Section D, page 33.	- -	- -
	7. Does the project / programme meet the relevant national technical standards, where applicable, in compliance with the Environmental and Social Policy of the Fund?	**Yes.** The concept identifies several national regulations relevant to the project as described in Section D and E, Part II.	-	-	-
	8. Is there duplication of project / programme with	**Yes.** **However additional information is required.**			

	other funding sources?	Although relevant information is described to the minimum extent in Section F, Part II, and its Table 6, all potentially overlapping projects are not clearly identified in the concept note. **CR12:** Kindly conduct further analyses and include a comprehensive list of projects that are or have been implemented in Peru and the selected area, since Table 6 currently includes only 3 projects.	**CR12: Cleared.** As per revised Table 6.	-	-
	9. Does the project / programme have a learning and knowledge management component to capture and feedback lessons?	**Yes.** As per information provided on section G, Part II. The project has knowledge and dissemination-related activities throughout the four components. **CAR14**: Please consider incorporating feedback mechanisms in the capacity building activities to ensure that the training is effective so that the training programmes can be adapted or modified to be more targeted and effective, where necessary.	**CAR 14: Cleared.** As per updated section G and component 4.	-	-
	10. Has a consultative process taken place, and has it involved all key stakeholders, and	**Yes.** **However, further information is needed.**			

	vulnerable groups, including gender considerations in compliance with the Environmental and Social Policy and Gender Policy of the Fund?	Initial consultations were conducted through workshops that seem to be taken place virtually (google meet), ref Annex 3. The consultative process has included local authorities, government entities, and communities. **CR13:** Kindly indicate whether any physical consultation has taken place and if the local communities been involved? **CAR15**: Considering the important role of vulnerable groups including women and youth, kindly explain how these groups been involved during consultation workshops and provide a report on the consultations in the Annexes.	**CR13: Cleared.** As per clarification provided. **CAR 15: Cleared.** As per updated Section H, page 36.	- -	- -
	11. Is the requested financing justified on the basis of full cost of adaptation reasoning?	**Unsure.** The concept note provides general arguments for the funding of the project and its impact on Peru. However, it does not clearly demonstrate how the project will address its adaptation objective with the resources provided. **CR14:** Please present information to indicate how this project will meet its objectives solely with the resources of the adaptation fund.	**CR14: Cleared.** As per updated Section I, page 37.	-	-

		CR15: Kindly clarify whether the project requires co-financing or not. If co-financing is being considered, please clearly indicate how the project with the AF resources only, will be able to effectively meet its objectives. **CR16**: Considering that most of the proposed activities are to be designed or identified, kindly confirm if this project will be implemented through an approach of unidentified sub-project (USP).	**CR15: Cleared.** As per clarification that the project does not include any co-financing. **CR16**: **Not cleared.** Please refer to CR4 and CR6 and update the section accordingly.	- **CR 16: Cleared** As per CR4 and CR6 above.	- -
	12. Is the project / program aligned with AF's results framework?	**Yes.** **However, amendment is required.** As per the information provided on section A, Part III. **CAR16:** Please ensure that the top (outcome level) and bottom part of the table (output level) is completed.	**CAR 16: Not Cleared.** The revisions at Table in part III. A are well noted, however further amendments are required. The first row can remain as in as it captures the entire project	**CAR 16: Not cleared.** Please amend the table to comply with the guidance and the format presented at Results Framework Alignment Table (Amended in November 2025) (77 kB, DOC).	**CAR 16: Cleared** as per changes in table in Part III.A.

		CAR17: Please ensure that for each outcome/output indicator the costs are separated in the final column of the table.	objective. However, please insert additional rows under the outcomes (top) part of the table to capture the project outcomes 1 to 4 and the associated AF outcomes and outcome indicators to match the output level (bottom) i.e. since Output 5 is selected for the project outcome 1 in the bottom, please select outcome 5 for project outcome 1 as well in the top. This is in addition to the project objective row which is currently there. Please also separate the costs as was done for the		

			output level (bottom) of the table. The figures for the output level in the grant amount should match the outcome level information now being inserted. **CAR 17: Cleared.** As per revised Table in part III. A	**-**	**-**
	13. Has the sustainability of the project/programme outcomes been taken into account when designing the project?	**Yes.** **However additional information is required.** The project seeks to sustain its benefits through the involvement of national and local stakeholders, fostering community ownership, and building capacity for end users. However, there is no mention of regulations and resources, and therefore, it is not clear how the project will be sustained in the long run. In addition, in the absence of clear identification of proposed activities under EbA and livelihood activities, it			

		is not clear how the sustainability be ensured. **CR17:** Kindly identify the adaptation benefits that can be sustained after this project ends and explain if this can be replicated and/or scale up. **CR18:** Kindly refer to how sustainability resources (for example, financial, social, regulatory, institutional) play a role in the sustainability and maintenance of the project.	**CR17: Cleared.** As per revised Section J, page 39. **CR18: Cleared.** As per revised Section J, page 39.	- -	- -
	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?	**No.** The concept note does not state the project classification (A, B or C) from the screening. The proposal has not identified all potential risks and impacts but rather provides some general information about some of the environmental and social principles from the checklist. For the concept note, the ESP overview should start by identifying potential risks, even if the project aims do not affect issues related to the principles. There are some discrepancies with Table I (Page 15) which presents the challenges of cross-cutting approaches in the Thematic Areas of Water, Agriculture and Forests and			

		the Risks in the Table in Section K. Specifically, Table 1 identified - Health risks in the Water Sector with impacts on vulnerable populations due to lack of access to water resources, drinking water services, and sanitation. However, the ESP principles checklist table states that no health risks are expected. **CAR18:** Please kindly state the project classification from the screening in Section K, Part II. **CAR19:** Please review Table 4 and assess all the principles that may apply to the project, and state and describe all potential impacts (direct, indirect, transboundary and cumulative) and risks particularly regarding the unidentified subprojects. As per our ESP Guidance document Principles 1, 4 and 6 always apply. Please see Guidance document for Environment and Social Policy (English, French and Spanish) **CR19.** Please ensure consistency between the risks identified Table 1 and the Risks in the Table in Section K.	**CAR18: Cleared.** As per categorization B included under Section K. **CAR19: Not Cleared.** As per clarification provided and ref to Table 4. As per AF policy ESPs 1, 4 and 6 will always require further assessment for compliance. Please amend accordingly. **CR19: Cleared.** As per information provided and	**-** **CAR 19: Cleared** As per revised Table 4 with updated Policy ESPs 1, 4, and 6. **-**	**-** **-** **-**

			updated Table under section K, page 40.		
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.** **CR20:** Please confirm if MINAM will also execute the PFG. If this is the case, then no change in the PFG request form if required. If PROFONANPE intends to also execute the PFG, please amend the PFG request form.	**CR20: Cleared.** As per confirmation that PROFONANPE will execute the PFG. PFG format has been updated.	**-**	**-**
	3. Are the Project/Programme Execution Costs at or below 9.5 per cent of the total project/programme budget (including the fee)?	**No.** **CAR20**: The total component cost is listed as the EE cost. Please insert the EE cost amount in the proposal document (which seems to be 799,612.82) based on the total project cost presented. Please correct and amend all figures. **CAR21:** Please ensure that the figures are rounded with no decimal points	**CAR 20: Cleared.** As per revised EE cost of US$799,612. **CAR 21: Cleared.** As per revised CN with all figures rounded with no decimals.	**-** **-**	**-** **-**

Eligibility of IE	1. Is the project/programme submitted through an eligible Implementing Entity that has been accredited by the Board?	**Yes.** The National Implementing Entity is Profonanpe, whose accreditation expires on: 18 June 2026	-	-	-
Implementation Arrangements	1. Is there adequate arrangement for project / programme management, in compliance with the Gender Policy of the Fund?	n/a at concept stage			
	2. Are there measures for financial and project/programme risk management?	n/a at concept stage			
	3. Are there measures in place for the management of for environmental and social risks, in line with the Environmental and Social Policy and Gender Policy of the Fund?	n/a at concept stage			
	4. Is a budget on the Implementing Entity Management Fee use included?	n/a at concept stage			
	5. Is an explanation and a breakdown of	n/a at concept stage			

	the execution costs included?				
	6. Is a detailed budget including budget notes included?	n/a at concept stage			
	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?	n/a at concept stage			
	8. Does the M&E Framework include a break-down of how implementing entity IE fees will be utilized in the supervision of the M&E function?	n/a at concept stage			
	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?	n/a at concept stage			

	10. Is a disbursement schedule with time-bound milestones included?	n/a at concept stage			

ADAPTATION FUND

CONCEPT NOTE PROPOSAL FOR SINGLE COUNTRY

PART I: PROJECT/PROGRAMME INFORMATION

Title of Project/Programme: "Climate Resilience in Andean-Amazonian Landscapes of Peru: Ecosystem-based Adaptation and Sustainable Livelihoods"

Country: Peru

Thematic Focal Area: Multisector

Type of Implementing Entity: National Implementing Entity

Implementing Entity: Profonanpe

Executing Entities: Ministry of the Environment of Peru

Amount of Financing Requested: USD10,000,000 (in U.S Dollars Equivalent)

Project Formulation Grant Request (available to NIEs only): Yes ☐☒ No ☐ ☐

Amount of Requested financing for PFG: USD 150,000 (in U.S Dollars Equivalent)

Letter of Endorsement (LOE) signed: Yes ☒ ☐ No ☐ ☐

NOTE: LOEs 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:

☐☐X This concept has been submitted before

☐ This is the first submission ever of the concept proposal

In case of a resubmission, please indicate the last submission date: 08/10/2025

Please note that concept note documents should not exceed 50 pages, including annexes.

Official Use Only

Project/Programme Background and Context:

Introduction

Peru is considered a megadiverse country due to its wide variety of landscapes, natural regions, and ecosystems, which together host approximately 70% of global biodiversity. This richness is attributed to its tropical location, the influence of marine currents, and its complex geography, which generates multiple environments based on altitude and climate. According to the National Ecosystem Map, the country comprises 40 ecosystem types: 36 continental (34 terrestrial and 2 aquatic) and 4 marines, classified into five main categories: freshwater ecosystems, mountain ecosystems, forest ecosystems, marine and coastal ecosystems, and cave ecosystems.

The Andes Mountain range divides the Peruvian territory into three major hydrographic basins: the Pacific, the Amazon (or Atlantic), and the Titicaca. The Pacific basin includes 53 rivers originating between 4,000 and 6,000 meters above sea level on the western slope of the Andes. These rivers depend mainly on seasonal rainfall, resulting in irregular flow regimes with floods during summer (December–March) and extreme droughts in winter. This basin contributes only 2.2% of the country's freshwater resources, with glacial meltwater serving as a complementary source.

The Amazon basin is the largest and contains 97.3% of Peru's water resources. Its rivers, of pluvio-glacial origin, are deep, navigable, and have stable flows. They experience floods from October to March and low flows between April and September. These rivers are vital for economic activities such as agriculture, fishing, livestock, and hydropower generation. Lastly, the Titicaca basin is located on the Collao Plateau at 3,810 meters above sea level. Its rivers flow into Lake Titicaca, except for the Desaguadero River, which flows into Bolivia. This basin has an irregular flow regime and represents only 0.5% of national water resources.

Peru has a wide range of climates, with 38 climate types identified. This climatic diversity arises from the interaction between several controlling factors, including atmospheric systems like the Bolivian High, the Intertropical Convergence Zone, and the South Pacific Anticyclone; oceanic factors such as the Humboldt Current and cold-water upwelling; and continental features like the Andes Mountains[1].

Particularly important is the influence of the El Niño and La Niña phenomena, which are part of the ENSO cycle. El Niño is associated with anomalous warming of the Eastern Tropical Pacific Ocean, while La Niña involves abnormal cooling in the same region.

In addition, the Pacific Decadal Oscillation (PDO)—a natural variation that alternates between warm and cold phases every 20–30 years—affects the frequency and intensity of El Niño events. Although there is increasing evidence of more frequent El Niño and La Niña events in Peru, there remains some uncertainty about whether climate change is increasing their overall frequency. However, there is growing consensus that extreme El Niño events in the Eastern Pacific will become more frequent.

Historical data show that these extreme climate events have had a direct impact on productive sectors, as well as on the country's natural and social infrastructure, generating significant economic losses. For instance, the 1997–1998 El Niño caused damage equivalent to over 4.5% of GDP. Moreover, Peru is particularly vulnerable to phenomena such as frosts, droughts, and floods, which affect both the economy and social well-being. Between 1995 and 2008, the frequency of extreme events—including droughts, heavy rains, floods, frosts, and hailstorms—increased more than sixfold.

In recent decades, a progressive increase in temperatures has been observed both in Peru and worldwide, leading to increasingly warmer seasons compared to historical records. This global warming is occurring rapidly in both the atmosphere and the oceans. Simultaneously, glacial retreat has accelerated since the mid-20th century, and phenomena are being observed that are unprecedented in the past 2,000 years.

According to the 2023 National Glacier and Glacier Lake Inventory, there has been an alarming reduction in Peru's glacier surface area. Compared to the first inventory in 1989, current data show that over a period of 58 years, approximately 1,348.75 km² of glacier surface has been lost—equivalent to a 56.22% decrease.

Impacts and Climate Change Risks in Peru

[1] Peru's fourth national communication to the United Nations Framework Convention on Climate Change

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Climate Change-Related Hazards

According to the National Meteorology and Hydrology Service of Peru (SENAMHI), climate change-related hydrometeorological hazards are associated with changes in climate averages and the alteration of climate variability.

As stated in the National Adaptation Plan (NAP), the government conducted a prioritization process for climate-related hazards based on three main criteria: availability of data on their behavior and future projections; their relevance in historical and projected climate analysis; and their importance within each of the priority adaptation thematic areas.

As a result of this assessment, four climate change-related hazards were prioritized for Peru:

- Mass movements
- Floods
- Changes in aridity conditions
- Glacier retreat

These hazards were classified using a risk level system: low, medium, high, and very high.

Peru's geographic location, along with its geological, climatic, and seismic characteristics, makes it one of the most hazard-prone countries in South America for **mass movements**, such as landslides, rockfalls, and debris flows. These events are driven by conditioning factors (such as slope, soil type, vegetation, or lithology) and triggering factors, with precipitation being one of the main triggers. Based on the analysis of changes in precipitation, the occurrence of mass movement events is concentrated mainly in the Andes and along the coast, where steep slopes and greater susceptibility to such hazards are found.

Floods are another frequent hazard in Peru, typically occurring between December and April when rivers exceed their maximum flow and overflow into adjacent floodplains. Similar to mass movements, flood risk analysis is based on geographic conditioning factors and triggering factors like intense rainfall.

The regions most vulnerable to floods are Loreto, Ucayali, and Madre de Dios, where the topography favors periodic river overflows. On the coast, the flood risk is moderate due to the gentle slopes (less than 5%) at river mouths. However, in northern coastal areas (Piura and Lambayeque), flood risk is high, mainly due to the influence of El Niño events. In contrast, the Andes show low flood risk due to steeper terrain, which limits water accumulation.

To represent **drought** risk in the context of climate change, a different approach was used based on changes in **aridity conditions**. The Lang Index, which relates annual precipitation to annual mean temperature, was applied to characterize arid climates without underestimation. According to this index, there has been a slight increase in aridity in recent decades, especially in the southern coast, while some areas in the central and northern coast and interior have experienced improved humidity conditions due to increased rainfall. However, under a high emissions scenario (RCP 8.5), both the Andes and the Amazon are projected to experience a significant increase in aridity due to higher temperatures and reduced rainfall, with more severe impacts expected by 2050.

Glacier retreat is one of the most critical climate risks, driven mainly by the rise in global average temperatures. In regions like Áncash, glacial meltwater accounts for up to 91% of water availability during extreme droughts, according to the Societal Impacts of Glacier Melt in the Andes (SIGMA) project.

Climate Change Exposure

According to the NAP, the object of analysis in the water thematic area is water availability, with the unit of analysis being the watershed. In this regard, the Ministry of the Environment (MINAM) has identified that 57% of the surface area of Peru's watersheds (26 basins) presents very high exposure to hazards associated with climate change, as illustrated in Figure 1 below:

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Figure 1. Map of Exposure of Water Availability

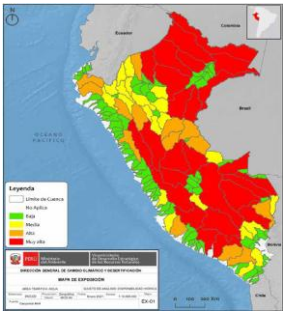
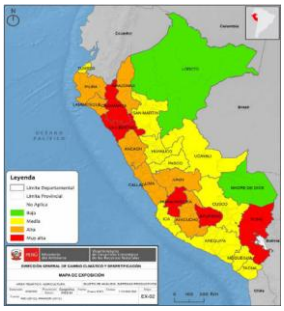


Figure 2. Map of Exposure of Productive Systems



Source: Fourth National Communication to the UNFCCC

On the other hand, in the thematic area of agriculture, the subject of analysis was identified as productive systems, with provinces serving as the unit of analysis. In this regard, 26% (99,900.56 km²) and 32% (123,291.59 km²) of the total national agricultural area are classified as having very high and high exposure, respectively, to the occurrence of climate change-related hazards.

In the thematic area of Forests, two subjects of analysis were identified: ecosystems and society. The units of analysis for these subjects were defined as ecosystems and population centers, respectively. In this regard, Figure 3 shows that 73% (508,781.10 km²) and 25% (172,452.59 km²) of the total surface area of ecosystems in Peru are classified as having very high and high exposure, respectively, to the occurrence of climate change-related hazards.

Figure 3. Map of Ecosystem Exposure

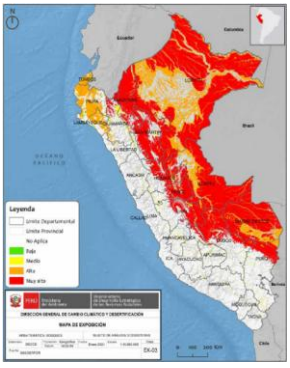
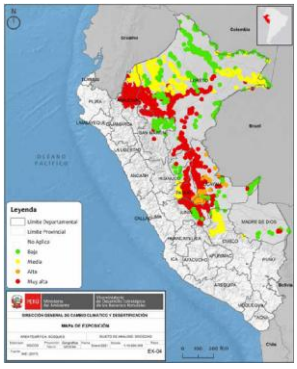


Figure 4. Ecosystem Exposure Map



Source: Fourth National Communication to the UNFCCC

Furthermore, it is observed that 58% (1,303) and 2% (53) of all communities in Peru are highly and very highly exposed, respectively, to the occurrence of climate change-related hazards.

Finally, in the thematic area of Fisheries and Aquaculture, three subjects of analysis were identified: industrial fishing, artisanal fishing, and aquaculture. The units of analysis for all three were the provinces, which are the political-administrative units of the country. In this regard, Figure 5 shows that 70% (4,357) and 12% (738) of all aquaculture rights in Peru are classified as having very high and high exposure, respectively, to the occurrence of climate change-

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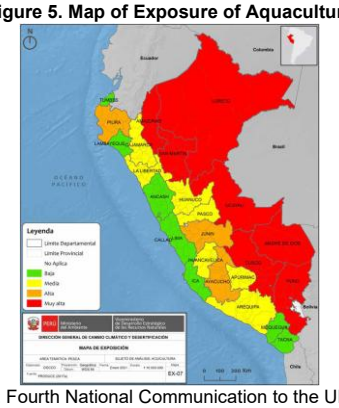
related hazards (based on the aquaculture analysis).

Figure 5. Map of Exposure of Aquaculture



Source: Fourth National Communication to the UNFCCC

Vulnerability

Regarding vulnerability in the water thematic area, Figure 6 shows that 1% (8,697.21 km²), 28% (351,450.39 km²), and 60% (868,137.91 km²) of the total surface area occupied by the river basins of Peru present very high, high, and medium vulnerability, respectively, to the occurrence of climate change-related hazards (based on the analysis of water availability).

Figure 6. Map of vulnerability of water availability

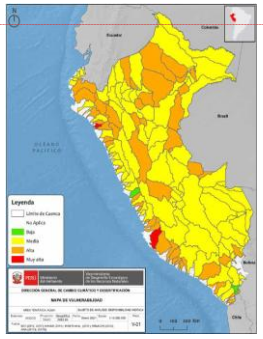
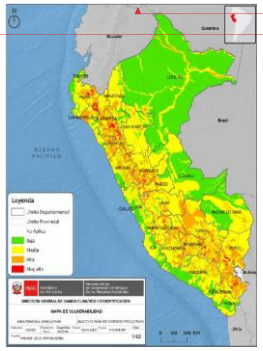


Figure 7. Vulnerability map of productive systems



Source: Fourth National Communication to the UNFCCC

Regarding the agriculture sector, Figure 7 shows that 39% (151,387.8 km²) and 45% (173,701.94 km²) of the total national agricultural area present high and medium vulnerability, respectively, to climate change-related hazards (based on the analysis of productive systems). Furthermore, 51% (1,162,218) and 44% (998,948) of the total agricultural producers in the country also face high and medium vulnerability, respectively, to such hazards.

Regarding the Forests thematic area, Figure 8 shows that 42% (289,867.31 km²) and 24% (172,452.59 km²) of the total ecosystem area in Peru exhibit high and medium vulnerability, respectively, to the occurrence of climate change-related hazards (based on the ecosystem analysis). To estimate ecosystem vulnerability, two key factors were considered: i) fragile surface area within each ecosystem, which reflects higher sensitivity due to greater ecosystem fragility; ii) fragmented surface area within each ecosystem, which reflects increased sensitivity when greater fragmentation is

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identified.

Figure 8. Map of Ecosystem Vulnerability

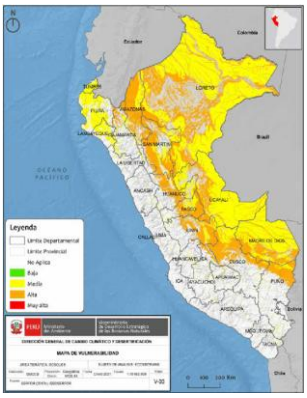
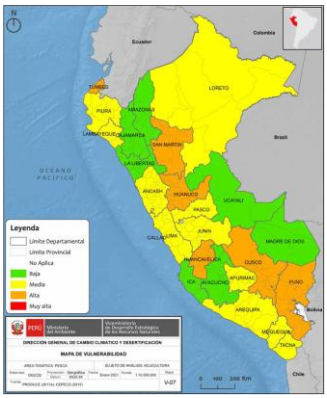


Figure 9. Aquaculture vulnerability map



Source: Fourth National Communication to the UNFCCC

To estimate the vulnerability of aquaculture rights, variables related to sensitivity to climate variability were considered: harvest volume, which indicates high sensitivity when there is a greater harvest capacity; and productive diversity, which indicates high sensitivity when there are lower conditions of productive diversity. In the following figure, it is observed that 32% (1,965) and 28% (1,728) of the total aquaculture rights in Peru present high and medium vulnerability, respectively, to the occurrence of climate change-related hazards.

Likewise, variables of adaptive capacity at the national scale were also considered, such as the existence of a Regional Climate Change Strategy. Additionally, another variable included is the percentage of the population earning a net average monthly income below S/ 2,000, where greater adaptive capacity is attributed to aquaculture producers with higher net incomes.

Climate Risk

For the preparation of the NAP, a climate risk analysis was carried out for each prioritized thematic area, for each climate change scenario, for each identified hazard type, and for each subject of analysis. This analysis followed the conceptual and methodological framework defined by the Intergovernmental Panel on Climate Change (IPCC), as well as national regulations established in the Framework Law on Climate Change (FLCC) and its Regulation. Accordingly, the different levels of risk due to climate change effects were determined based on the interaction of three factors:

i) climate-related hazards;
ii) exposure conditions; and
iii) the vulnerability of the subjects of analysis.

Climate Risks in the Water Thematic Area

According to the climate risk analysis developed in the NAP, under the current scenario (2020), more than 50% of the surface area of the country's watersheds presents high or medium levels of climate risk due to mass movements and floods. This situation is projected to remain or even intensify by 2030 and 2050, indicating a progressive deterioration in water availability.

In the case of glacier retreat, future scenarios show a significant worsening: by 2050, more than 30% of the watersheds may face high or very high climate risk levels, especially affecting high Andean regions that depend on seasonal glacier melt for agriculture, human consumption, and the maintenance of fragile ecosystems.

Climate Risks in the Agriculture Thematic Area

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Regarding mass movements, the analysis shows that over 72% of the national agricultural surface is at high or very high risk in all climate scenarios (2020, 2030, and 2050), with a progressive increase in very high risk from 9.38% in 2020 to 17.31% in 2050.

For floods, around 65% of the national agricultural surface remains exposed to medium and high-risk levels up to 2050. Although the risk level does not increase significantly, its persistence at elevated levels continues to pose a threat to agricultural stability in many regions.

Arid conditions represent the most widespread and intensified risk. In 2020, 44% of the agricultural surface was already facing high risk, increasing to 55% by 2050. This reflects growing water scarcity, especially impacting the coast and southern highlands, where water is a limited and strategic resource for rural production.

Climate Risks in the Forests Thematic Area

In the case of mass movements, more than 60% of forest ecosystems are already under high or very high climate risk in 2020, worsening by 2050 when more than 30% are projected to be at very high risk. This is due to the weakening of vegetation cover, increased extreme rainfall, and land-use changes, which elevate susceptibility to landslides, especially in Andean-Amazonian slope areas.

For floods, about 34% of forest territory consistently faces medium to high risk between 2020 and 2050. Regarding arid conditions, forest ecosystems are already in a critical state of climate risk, with more than 93% of natural territory exposed to high or very high risk since 2020. Although scenarios for 2030 and 2050 show some classification variations, the persistent high risk in over 90% of the territory highlights the urgent need for ecosystem-based adaptation interventions to strengthen ecological resilience under increasing water stress.

Climate Risks in the Fisheries and Aquaculture Thematic Area

In 2020, 64.85% of aquaculture permits were already at high or very high risk, with 17.65% categorized as very high. For 2030 and 2050, this situation worsens, with a steady increase in very high risk to 27.06%. Although high risk slightly decreases, more than 64% of aquaculture units remain severely exposed, indicating high structural vulnerability.

Regarding flood hazards, in both 2020 and the projected scenarios for 2030 and 2050, 40.47% of aquaculture rights remain at high risk, and an additional 20.39% at medium risk. This means that over 60% of aquaculture production units are located in areas susceptible to overflow, extreme rainfall, and facility flooding, with no signs of improvement.

Arid conditions also represent a growing threat. In 2020, 46.08% of aquaculture rights were at high risk and 44.75% at medium risk, reflecting wide exposure to water scarcity, reduced flows, and water stress in aquatic systems. By 2050, the situation worsens: high risk rises to 66.70%, although medium risk drops to 24.13%.

Climate Change-Related Issues at the National Level

In line with the structure of the risk analysis by thematic areas defined in the NAP, the main problems are presented below for the water, agriculture, and forest thematic areas, along with the respective subjects of analysis.

Water Thematic Area

The NAP defines the subject of analysis as water availability and associated infrastructure. Therefore, the main issue is the risk of alteration in current and future water availability due to climate change, which affects multisectoral water use. Identified problems include:

- Loss of water quantity, quality, and timing for multisectoral supply due to climate change.
- Impacts on power generation and transmission infrastructure and planning processes related to water management.
- Impacts on agricultural water infrastructure, exacerbating food insecurity.
- Impacts on potable water supply systems for human consumption.

Agriculture Thematic Area

The subject of analysis in this thematic area includes productive systems (farming, agroforestry, and livestock). The

central problem is the negative impact on the agricultural population and the reduced resilience of agricultural production systems, affecting food security. Specific issues include:

- Increased losses and risks in agricultural production due to climate change.
- Greater degradation of agricultural soils due to climate-related hazards.
- Disruption of goods and services within the agricultural value chain due to climate change.

Forests Thematic Area

The subjects of analysis are ecosystems and society. The overall issue is the risk of functional disruption of forests and their ecosystem services. Specific problems include:

- High vulnerability of forest ecosystems to the effects of climate change.
- Low adaptive capacity of peasant, Indigenous, and Afro-Peruvian populations to manage forests under climate stress.

Cross-Cutting Approaches

It is essential to recognize that the NAP's cross-cutting approaches—gender, interculturality, and intergenerational equity—play a key role in understanding the climate change problem. These approaches help to reveal how climate impacts do not affect everyone equally. They tend to amplify the vulnerability of specific population groups, such as women, Indigenous peoples, the elderly, and youth, limiting their adaptive capacity and participation in climate change management.

Below, the main cross-cutting issues are described for each of the mentioned thematic areas.

Table 1. Challenges of Cross-Cutting Approaches in the Thematic Areas of Water, Agriculture and Forests

Water	Agriculture	Forests
• Impact on water availability for crops in rural areas, Indigenous or native peoples, and Afro-Peruvian communities. • Increased risk of exclusion of women from water resource management at the household level and in Watershed Councils, and reinforcement of traditional gender roles. • Impact on public service infrastructure such as water supply systems, which affects vulnerable populations. • Health impacts on vulnerable populations due to lack of access to water resources, drinking water services, and sanitation. • Increased risk of food insecurity for vulnerable populations	• Increased risk of food insecurity among the most vulnerable populations. • Increased risk of subsistence failure in vulnerable rural populations due to soil degradation and changes in water cycles. • Increased social conflicts due to losses and risks in agricultural production. • Exclusion of women from agricultural decision-making due to lack of land ownership and tenure. • Increased risk of damage to ancestral natural infrastructure and loss of ancestral knowledge	• Risk of exclusion of women from decision-making regarding the management of forest and wildlife resources, and water resources. • Increased social inequality in Indigenous or native peoples and Afro-Peruvian communities. • Increased risk of subsistence failure in populations due to ecosystem degradation and changes in water cycles. • Increased social conflicts due to changes and reduction in forest ecosystem services. • Migration due to overexploitation of forest resources. • Increased risk of damage to ancestral natural infrastructure and loss of ancestral knowledge.

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Source: National Adaptation Plan

Project Intervention Areas

The prioritization of the project's intervention areas is based on the criteria established in the National Adaptation Plan, taking into account a comprehensive territorial approach. Within this framework, strategic regions and river basins have been identified according to their exposure to climate change-related hazards, their socio-environmental vulnerability, and their ecosystemic importance.

Table 2. Project Intervention Areas at the Watershed Level

Natural Region	Prioritized Watershed / Territory	Climate Change-Related Hazards
Andes region	Santa River (Áncash)	Glacier retreat, mass movements
	Vilcanota-Urubamba River (Cusco)	Glacier retreat, mass movements
	Mantaro River (Junín)	Glacier retreat, droughts
Amazon region	Amazonas River (Loreto)	Floods, erosion
	Mayo River (San Martín)	Floods, erosion

Source: MINAM

Annex 1 includes the map showing the location of the intervention areas. These territories have been prioritized based on the following technical and strategic criteria:

- High exposure to climate hazards identified in the NAP, such as glacier retreat, landslides, floods, and droughts.
- Presence of strategic ecosystems (high Andean wetlands, Amazonian forests, headwaters), essential for ecosystem services.
- High vulnerability of local communities and dependence on climate-sensitive productive activities such as agriculture and fishing.
- Potential for engagement with local and regional stakeholders and alignment with Regional Climate Change Strategies (ERCC) and Local Climate Change Plans (PLCC).

This prioritization aims to ensure that project interventions have high impact, socio-environmental relevance, and feasibility of implementation in accordance with national frameworks. Below is a description of each of the project's intervention basins.

In the following table shows the estimated population of districts located within the boundaries of the watersheds. The information was taken from the National Institute of Statistics and Informatics – INEI, the basin viewer of the National Water Authority and PNUD.

Table 3 Estimated population of the project intervention area

	Population		
Watersheds	**Total**	**Male**	**Female**
Santa River (Ancash)	534,198	263,306	270,892

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Vilcanota-Urubamba River (Cusco)	358,849	177,558	181,291
Mantaro River (Junin)	315,167	154,022	161,145
Marañon River (Loreto)	79,021	39,692	39,329
Mayo River (San Martin)	484,713	247,155	237,558

Source: Prepared by the author

~~From this information, an initial estimate of beneficiaries was made using data from the IV National Agricultural Census 2012 (CENAGRO), prepared by the National Institute of Statistics and Informatics (INEI) in coordination with the Ministry of Agrarian Development and Irrigation (MIDAGRI). For this purpose, the number of agricultural producers registered in the districts that make up the five basins prioritized for the project's intervention was taken as a reference. The direct beneficiaries are estimated in 69,023 people and 75,925 people.~~

Based on this information, an initial estimate of beneficiaries was developed using data from the IV National Agricultural Census 2012 (CENAGRO), prepared by the National Institute of Statistics and Informatics (INEI) in coordination with the Ministry of Agrarian Development and Irrigation (MIDAGRI). For this purpose, the number of agricultural producers recorded in the districts that comprise the five basins prioritized for the project's intervention was taken as a reference. The direct beneficiaries are estimated in 69,023 people, while indirect beneficiaries are estimated in 75,925 people, witha gender distribution of 72% men and 28% women. Please see table 4.

Table 4 Estimate beneficiaries of the project

Project intervention areas	Total Direct Beneficiaries	Men	Women
Santa River (Ancash)	20,037.23	13,024.20	7,013.03
Vilcanota-Urubamba River (Cusco)	22,230.50	15,339.05	6,891.46
Mantaro River (Junin)	11,811.90	8,268.33	3,543.57
Marañon River (Loreto)	3,421.00	3,010.48	410.52
Mayo River (San Martin)	11,522.70	9,909.52	1,613.18
Total	**69,023.33**	**49,551.57**	**19,471.75**

Source: Prepared by the author

Santa River Basin

Located on the western slopes of the Peruvian Andes, the Santa River Basin spans approximately 14,900 km² and extends from the high Andean zones of the Cordillera Blanca to the Pacific Ocean, crossing the regions of Áncash and part of La Libertad. This basin is strategically important due to its ecological, hydrological, economic, and social significance. It contains over 457 glaciers that feed a complex hydrological system including lakes, wetlands, and tributary rivers. Its mountainous geography ranges from elevations above 6,000 masl. to arid coastal zones, supporting a high diversity of ecosystems. The Santa River provides vital water for over a million people, irrigates approximately 47,000 ha of farmland, supplies cities like Huaraz and Chimbote, and powers the Cañón del Pato hydroelectric plant, one of the most important in the country[2].

Climate change is having clear impacts on the basin's dynamics. Glacier retreat is one of the main threats: between 1970 and 2003, glacier cover was reduced by more than 22%, directly affecting river flow during the dry season. Temperatures have increased rapidly, with rises of up to 1.5°C per decade in areas above 4,000 masl. Climate scenarios project temperature increases of 0.6 to 1°C by 2030, with higher increases in fall and winter, and more erratic precipitation patterns. The southern part of the basin is seeing more intense rainfall, while the north experiences greater variability, increasing the likelihood of floods, landslides, and water scarcity during the dry season, especially in lowland areas.

These changes increase the vulnerability of the population, infrastructure, and ecosystems within the basin. Reduced flows affect water, energy, and food security, threatening the sustainability of sectors such as irrigated agriculture, urban

[2] Climate scenarios in the Santa River Basin for 2030 - SENAMHI

water supply, and hydroelectric production. Environmentally, the loss of glaciers and wetlands undermines water regulation, high-Andean biodiversity, and key ecosystem services. Vulnerable populations—especially in rural areas—face heightened risks from extreme events. In this context, it is crucial to promote ecosystem-based adaptation measures, strengthen water governance, enhance climate monitoring, and engage in multisectoral planning to address the current and future challenges of climate change in the Santa River Basin.

The basin hosts a remarkable diversity of ecosystems, shaped by its steep altitudinal gradient and varied climatic conditions. In the high Andes, glaciers, lakes, grasslands, wetlands, and Andean shrubs predominate, playing key roles in water regulation, carbon capture, and native biodiversity conservation. At mid-elevations, montane forests and remnant queñua woodlands are found—ecosystems highly sensitive to human pressure and climate change. In the lower basin, particularly in the Santa Valley, arid ecosystems and coastal fog oases dominate, along with areas transformed by intensive agriculture. This ecological diversity supports a wide variety of flora and fauna, many of them endemic or threatened. However, pressure from urban expansion, agriculture, mining, and climate change has caused ecosystem degradation, weakening their ability to provide ecosystem services—making their restoration and conservation a priority for adaptation strategies in the basin.

Mayo River Basin

The Mayo River Basin is located in the San Martín region and partially in Amazonas, covering approximately 9,774 km². Its main river flows about 300 km before joining the Huallaga River. The basin features varied topography ranging from mountainous zones to densely populated valleys, hosting cities such as Moyobamba, Rioja, and Tarapoto. The dominant economic activity is agriculture, with crops such as rice, coffee, and maize. The basin hosts ecosystems with high biodiversity and ecological value, leading to the designation of eight Protected Natural Areas (PNAs), four fragile ecosystems, and conservation concessions. Annual rainfall ranges from 800 to 2,000 mm, with the lower basin receiving the most precipitation[3].

The basin faces several climate change-related risks, primarily due to variability in rainfall, extreme temperatures, and droughts. Over the past 40 years, some areas such as Pacaysapa and Tabalosos have seen significant rainfall increases, while others have experienced seasonal decreases, especially during winter. Although not frequent, droughts have occurred during El Niño events, mainly affecting the Alto Mayo. Moreover, the lack of water storage and distribution infrastructure creates imbalances in the temporal availability of water, affecting both populations and productive sectors.

According to SENAMHI, by 2030 the maximum temperature in the basin is expected to rise between +0.9 and +1.2 °C, with more marked anomalies in summer and spring, especially in Tarapoto, Juan Guerra, and Naranjos. Minimum temperatures are also projected to increase by +0.2 to +0.7 °C. Precipitation may decrease slightly by up to -3% in specific areas, although total annual rainfall will remain close to historical averages. These changes may increase the likelihood of extreme rainfall events, as projected in Pacaysapa, which could intensify hydroclimatic hazards and jeopardize water security in some sub-basins.

Rising temperatures and rainfall variability are already affecting ecosystems and local livelihoods. Water sources are increasingly contaminated by untreated wastewater, especially in urban centers, posing a threat to public health and aquatic ecosystems. The agricultural sector also faces risks due to deficient irrigation infrastructure, potentially worsening food insecurity and increasing pressure on natural resources. Protected areas like the Alto Mayo Protected Forest play a fundamental role in water recharge, but are also threatened by human activities and climate changes, undermining essential ecosystem services for the basin.

Mantaro River Basin

The Mantaro River Basin, located in the central Andes of Peru, spans the regions of Pasco, Junín, Huancavelica, and Ayacucho. It is crucial for the country due to its vast agricultural, energy, and water potential. With a population exceeding 700,000, it is the main center for hydroelectric generation in Peru (34.3% of the National Interconnected Electrical System - SEIN) and a key food supplier for Lima. The basin features varied topography, ranging from high Andean zones to inter-Andean valleys, and a climate characterized by a dry season (May–August) and a rainy season (January–March). It also benefits from an extensive meteorological and hydrological monitoring network, enabling precise study of climatic conditions[4].

[3] Climate scenarios in the Mayo River Basin for 2030 – SENAMHI

[4] Current and future vulnerability to climate change and adaptation measures in the Mantaro River Basin

Climate change poses a growing threat to the Mantaro Basin, which is already affected by extreme events such as frost, droughts, heavy rains, snowfalls, and hailstorms. These phenomena have become more intense and frequent, impacting infrastructure, economic activities, and social well-being. Rural areas, subsistence farmers, and those living near riverbanks are particularly vulnerable. The basin is also exposed to geodynamic risks such as landslides, mudslides, and soil erosion—risks that are expected to worsen with the increase in extreme climate events due to global warming.

The basin's ecosystems include high-Andean areas, montane forests, puna grasslands, and pastures, where agriculture and forestry activities take place. These ecosystems are highly sensitive to changes in water and temperature regimes, and their degradation directly affects the availability of ecosystem services such as water, fertile soil, and biodiversity. Intensive land use, deforestation, and overgrazing increase the ecological vulnerability of the region and limit its ability to adapt to future climate impacts, such as glacier retreat or declining agricultural productivity.

The impact of climate change on the population of the basin is mainly reflected in reduced food security, increased incidence of disease, and a decline in hydroelectric generation capacity.

Vilcanota-Urubamba River Basin

The Vilcanota-Urubamba River Basin, located between the regions of Cusco (73.84%) and Ucayali (26.16%), covers an area of more than 58,000 km² and is part of the Amazon watershed. Altitudinally, it stretches from 180 meters above sea level in the lower zone to over 6,300 meters in the Andean peaks. This basin features a complex hydrographic system composed of the Vilcanota, Yanatile, and Mapacho rivers, which converge to form the Urubamba River. Its varied topography includes high plateaus, mountain ranges, inter-Andean valleys, cloud forests, and Amazonian plains, resulting in a wide diversity of climates, ecosystems, and economic activities such as agriculture, tourism, livestock, and commerce[5].

The basin faces multiple climate change-related risks that significantly affect the availability and quality of water. According to the Fourth National Communication, glacier retreat, the formation of new glacial lakes, and increasing water demand could reduce the flow of the Vilcanota-Urubamba River by 2 to 11% by 2050 and 7 to 14% by 2100. In the headwaters and during dry seasons, the contribution of glaciers—currently 15–25%—could drop to 4–22% by 2050 and 1–3% by 2100 under a high warming scenario (RCP 8.5). Vulnerability is high due to factors such as limited hydraulic infrastructure, low institutional response capacity, and unequal access to basic services in many communities.

In terms of ecosystems, the basin hosts a wide range of natural environments including glaciers, high-Andean wetlands, montane forests, Amazonian tropical forests, Andean shrublands, and humid puna grasslands. Three major ecoregions are identified: the puna in the south, the cloud forest in the central area, and the Amazon rainforest in the north. It also includes Protected Natural Areas (PNAs), such as Regional Conservation Areas (RCAs) and Private Conservation Areas (PCAs). Climate pressure—especially glacier loss and altered hydrological regimes—threatens the stability of these ecosystems and undermines their ability to provide environmental services.

Climate change impacts on the population are significant, especially for rural and Indigenous communities that depend on water for agriculture, fishing, energy, and domestic use. Changes in water availability put local livelihoods at risk, increasing food insecurity, reducing agricultural productivity, and affecting sanitation and hydroelectric energy services.

Amazon River Basin

The Amazon Basin, covering approximately 7 million km²—16% of which lies within Peru—is primarily located in the Lowland Rainforest region. It is characterized by minimal topographic variation, broad alluvial plains, and an extensive hydrographic system. Its landscapes include meandering floodplains, sedimentary flood zones, elevated natural levees, and seasonally inundated river complexes. The Amazon River has two components: the permanent channels and the flood zone, which includes lakes and seasonal channels that retain water even during the dry season[6].

The hydrological regime of the Amazon in Peru is complex due to its numerous tributaries. Two sub-regimes can be distinguished: one in the north, with rivers originating in the Ecuadorian Andes (such as the Napo and Putumayo), and another in the south, with rivers flowing from the Peruvian Andes (such as the Ucayali and Marañón). These regimes are opposite in behavior: when one is in flood stage, the other is receding. The annual hydrological cycle of the major

[5] Climate risk study in the Vilcanota-Urubamba basin – Mountain Institute

[6] Project for integrated and sustainable management of transboundary water resources in the Amazon River basin, taking into account climate variability and climate change

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Andean rivers has four clearly defined phases, and in cities like Iquitos, annual water level variations of up to 11 meters are observed. The river's width can vary from 2 to 5 kilometers in Peru, and up to 200 kilometers at its delta in Brazil, due to the flat terrain.

The Amazon Basin is affected by climate change in several ways, ranging from potential changes in streamflow levels and extreme events to other threats to the biological diversity of the many rivers that rely on surrounding ecosystems. Sea level rise is already showing clear impacts on the Amazon delta and is affecting local populations. Both recent observations and future climate models strongly suggest that climate change is having severe impacts on the ecosystems and societies of the Amazon region. Rising temperatures, shifting precipitation patterns, and increasing extreme weather events are leading to serious damage and economic losses, as well as biodiversity loss and the extinction of species in the region[7].

Project/Programme Objectives:

General Objective of the Project:

To strengthen the climate resilience of populations and their livelihoods in vulnerable Andean-Amazonian landscapes in Peru through the implementation of ecosystem-based adaptation (EbA) measures to address climate-related hazards.

Specific Objectives:

- To design and implement ecosystem-based adaptation measures to reduce climate risks and enhance the resilience of communities.
- To promote sustainable and climate-resilient livelihoods through economic diversification and market access, contributing to food security and ecosystem conservation in the targeted territories.
- To strengthen governance, financing, and knowledge management for adaptation through multisectoral and multilevel institutional coordination, the development of local capacities, and the integration of monitoring and learning systems that support informed decision-making in vulnerable territories.

The project's Theory of Change is included in Annex 2.

Project/Programme Components and Financing:

Project/Programme Components	Expected Outcomes	Expected Concrete Outputs	Amount (US$)
Component 1 Design and implementation of ecosystem-based adaptation measures to reduce climate risks and strengthen community resilience.	**Outcome 1:** Increased resilience of vulnerable populations and ecosystems in prioritized landscapes	**Output 1:** Pilot adaptation measures identified, prioritized, and participatorily implemented for the reduction of climate and ecosystem risks.	US$3,000,000
Component 2 Diversification of local livelihoods to increase resilience, food and nutritional security, and access to financing opportunities, in harmony with ecosystem	**Outcome 2:** Climate-resilient and diversified local livelihoods are strengthened.	**Output 2.1:** Sustainable and climate-resilient livelihoods are strengthened and linked to markets and investment. **Output 2.2:** Vulnerable populations adopt healthy and safe practices to cope with	US$3,500,000

[7] Climate Change in the Amazon Region Actions by the Amazon Cooperation Treaty Organization (ACTO)

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conservation.		extreme climate events and protect their livelihoods.	
Component 3 Strengthening governance and public investment for climate change adaptation and the sustainability of livelihoods.	**Outcome 3:** Territorial governance and public investment for adaptation are strengthened.	**Output 3.1:** Territorial planning instruments and coordination mechanisms are strengthened. **Output 3.2** Technical assistance is provided for the financial sustainability, monitoring, and scalability of adaptation measures.	US$ 1,000,000
Component 4. Strengthening knowledge management and adaptation monitoring to support continuous improvement and informed decision-making for adaptation in vulnerable Andean-Amazonian landscapes.	**Outcome 4:** Monitoring and knowledge management are strengthened for adaptation planning and implementation in vulnerable Andean-Amazonian landscapes.	**Output 4.1** Professionals, technicians, communities, and decision-makers are sensitized and trained in adaptation management, including its monitoring and reporting. **Output 4.2:** Relevant knowledge management products are developed and disseminated among key stakeholders.	US$ 916,977
6. Project/Programme Execution cost			US$ 799,613
7. Total Project/Programme Cost			US$ 9,216,590
8. Project/Programme Cycle Management Fee charged by the Implementing Entity (if applicable)			US$ 783,410
Amount of Financing Requested			US$ 10,000,000

Projected Calendar:

Milestones	Expected Dates
Start of Project/Programme Implementation	2026
Mid-term Review (if planned)	2028
Project/Programme Closing	2030
Terminal Evaluation	2031

PART II: PROJECT / PROGRAMME JUSTIFICATION

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

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Component 1: Design and implementation of ecosystem-based adaptation (EbA) measures to reduce climate risks and strengthen the resilience of local populations.

Outcome 1: Increased resilience of vulnerable populations and ecosystems in prioritized landscapes.

Ecosystems provide essential hydrological environmental services for human well-being. These include water security through supply, aquifer recharge, and the maintenance of conditions necessary for carrying out sustainable productive activities—services that can be compromised by water stress associated with climate change. Climate hazards create an imbalance between water supply and demand, directly affecting productive sectors (such as agriculture, energy, and industry), public services (such as water supply and sanitation), and the ecosystems that rely on water to maintain their functionality.

According to the National Adaptation Plan (NAP), climate risk in the water sector is defined as the alteration of current and future water availability for multisectoral use, with negative effects on livelihoods and the provision of public services. In response, ecosystem-based adaptation (EbA) targets the structural causes of ecosystem degradation that impact water regulation by restoring their capacity for storage, infiltration, regulation, and provision. This translates into improved water management at the landscape or watershed scale. By restoring these ecosystem functions, EbA reduces the vulnerability of livelihoods, strengthens the resilience of public services, and enables more effective and equitable water planning.
The EbA interventions proposed under this component are designed to provide ecological conditions that sustain water availability, soil fertility, and biodiversity, thereby creating an enabling environment for climate-resilient livelihoods. The restored ecosystem services from Component 1 are directly linked to and supportive of the sustainable productive activities promoted under Component 2.

The proposed EbA measures are based on Peru's National Catalogue of Ecosystem-based Adaptation Measures, approved by the Ministry of Environment in 2022, which serves as a national reference for planning and prioritizing EbA actions at national, sectoral, and subnational levels. This catalogue aligns with the country's NDCs and National Adaptation Plans and organizes measures by themes such as water, soils, forests, biodiversity, and coastal zones.

The proposal also draws on lessons learned from previous projects. Notable among these is the PRAA Project (2008–2014), which implemented EbA actions in high Andean areas (e.g., wetland restoration, native revegetation, infiltration ditches), resulting in increased water retention in wetlands (20–30%), improved pasture productivity, and strengthened community capacities. The EbA Mountain Project (2011–2016) demonstrated successful interventions such as water harvesting, native reforestation, and resilient crop diversification in Ayacucho, contributing to greater water availability and reduced soil erosion.

The ongoing "Water for Abancay" initiative (since 2013) uses a sustainable financing mechanism (MRSE) to implement watershed conservation measures—such as live fences and pasture management—with positive impacts on dry-season flow stabilization and water quality. Lastly, the High Andean Wetlands Resilience Project (2018–2022) restored wetlands in Puno and Cusco, improved natural pasture and camelid management, and increased vegetative cover and aquifer recharge through community agreements.

Output 1.1: Pilot adaptation measures identified, prioritized, and implemented through participatory processes for the purpose of reducing climate and ecosystem risks.

Activity 1.1.1: Design of ecosystem-based adaptation measures to reduce climate and ecosystem risks.

Under the NDC adaptation framework, MINAM has already identified a set of potential EbA measures that address climate ecosystem risks. These measures will serve as the technical basis for this activity, which will develop the adaptation package and the corresponding implementation plan for each intervention area through the elaboration of participatory climate risks assessments.

The assessments will also consider the productive and subsistence needs of local populations to ensure that EbA measures simultaneously support sustainable livelihood strategies to be implemented under Component 2. Working groups and workshops will be formed in coordination with the National Water Authority (ANA), Watershed Water Resources Councils (CRHC), regional and local governments, communities, and key local stakeholders. These assessments for improving resilient water management among local actors, to be included in their management documents, local/regional policy frameworks, and/or the next cycle of Nationally Determined Contributions (NDCs).

The following tables present the portfolio of options that will be adjusted to reflect the specific conditions and priorities of each prioritized basin or sub-basin:

Table 4. Adaptation Measures for Reducing Climate Risks (droughts, heavy rainfall, frost)

Adaptation Measure Options	Ecosystem Function	Productive Function	Risk Reduced
Qochas and amunas restored	Aquifer recharge, water regulation	Availability of water for irrigation and consumption	Droughts, water stress
Infiltration ditches and/or waru waru	Infiltration, runoff control	Prevents soil fertility loss	Floods, erosion
Reforestation with native species	Vegetative cover	Reduction of frost, productive microclimate	Frosts, temperature changes
Micro-watershed management	Runoff and sediment control	Support for hillside agriculture	Floods, landslides

Source: Catalog of NDC Adaptation Measures (MINAM, 2024)

Table 5. Ecosystem-Based Adaptation Measures to Reduce Ecosystem Risks (soil degradation, biodiversity loss, desertification)

Adaptation Measure Options	Ecosystem Function	Productive Function	Risk Reduced
Natural restoration of high-Andean wetlands (bofedales)	Water regulation and potential wildlife habitat	Water for livestock and natural forage	Wetland degradation
Agroforestry	Increased biodiversity	Income diversification	Biodiversity loss
Restoration of agricultural terraces	Erosion and runoff control	Improved soil capacity and productivity	Desertification, loss of fertile soil
Reforestation with native species	Habitat restoration and carbon capture	Sustainable production of timber and fruits	Biodiversity loss, soil erosion
Control of invasive species in forested areas	Recovery of native flora	Protection of ecosystem services	Biodiversity loss
Establishment of biologic corridors	Ecological connectivity and genetic flow	Landscape sustainability and functional conservation	Habitat fragmentation, biodiversity loss

Source: Catalog of NDC Adaptation Measures (MINAM, 2024)

Table 6. Adaptation measures to reduce production risks (crop loss, water stress due to glacier retreat, low agricultural resilience)

Adaptation Measure Options	Ecosystem Function	Productive Function	Risk Reduced

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Rustic reservoirs connected to qochas	Temporary water storage	Sustains production during droughts	Crop loss due to water scarcity
Drought- and frost-resistant crop varieties	Agrobiodiversity conservation	Improved climate-resilient yields	Crop failure
Bio-gardens and communal gardens with efficient irrigation systems	Water conservation and pollination	Local food security	Food insecurity
Partnerships with producers for payment for ecosystem services (PES/MERESE)	Incentives for ecosystem conservation	Complementary income	Economic pressure on ecosystems
Sustainable livestock rotation and grazing load management	Improved vegetation cover	Reduction of overgrazing	Soil degradation
Implementation of silvopastoral systems	Soil conservation and carbon sequestration	Production of grass and trees (fodder, firewood)	Soil degradation and loss of vegetation cover

Source: Catalog of NDC Adaptation Measures (MINAM, 2024)

Active participation from key individuals and institutions in the watershed will be promoted at every stage of the risk assessment. This is important for building a shared vision from different perspectives and ensuring the inclusion of highly vulnerable and often overlooked groups or sectors. The results will be accessible and capable of generating long-term sustainability.

Activity 1.1.2: Implementation of ecosystem-based adaptation measures to reduce climate and ecosystem risks

This activity aims to implement the adaptation measure package and its implementation plan for each prioritized area using an adaptive management approach that includes active participation of local communities and inter-institutional coordination with relevant territorial actors. This process seeks to ensure social ownership, operational sustainability, and alignment with local and regional governance frameworks. The linkages between EbA implementation and productive resilience will be made explicit through the joint planning of EbA measures and livelihood activities.

This activity will be aligned with, and contribute to, the implementation of two adaptation measures in the water sector under the NDC framework:

NDC Adaptation Measure	**Objective**
AGU4: Implementation of protective infrastructure in agricultural hydraulic sectors.	It seeks to reduce the risks and impacts caused by floods and heavy rains on hydraulic infrastructure, crop areas (canals, intakes, drainage, farmland, among others), and other livelihoods through the construction of river defenses, dikes, channeling, among other protective measures.
AGU24: Conservation and restoration of natural infrastructure for the regulation and provision of water-related ecosystem services in watersheds vulnerable to climate change.	Actions are promoted for the conservation and recovery of ecosystems or natural infrastructure that affect the provision and regulation of water ecosystem services, with the aim of avoiding the risks posed by the degradation or loss of these ecosystems in terms of their capacity to infiltrate, store, and regulate surface and groundwater, in order to ensure the sustainable provision of water for multisectoral uses.

This activity will be implemented in coordination with communities and vulnerable population, such as women and local communities; regional and local actors composed by the Water Administrative Authorities (AAA), Local Water Administrations (ALA), Water Resources Basin Councils (CRHC) and local authorities.

Activity 1.1.3 Community management, monitoring and scaling-up of pilot measures

This activity aims to consolidate the sustainability and impact of ecosystem-based adaptation (EbA) pilot measures by implementing participatory community management mechanisms, designing and implementing local monitoring systems, and scaling up successful experiences in other sectors or territories within the watershed. The management systems will include linkages with livelihood strategies developed under Component 2 to ensure that productive uses of restored ecosystems remain compatible with their long-term conservation.

Community management will ensure that local populations play an active role in maintaining, monitoring, and making decisions about the implemented interventions, strengthening ownership and organizational capacity. At the same time, participatory and technical monitoring mechanisms will be established to assess the effectiveness of EbA measures in terms of ecological restoration, resilience improvement, and ecosystem service provision.

Finally, technical and institutional scaling-up strategies will be developed, including the systematization of lessons learned, the preparation of replication guidelines, and the engagement of local, sectoral, and academic authorities. These actions will help expand EbA measures beyond the pilot scope, integrating them into adaptation plans and territorial and public or private investment planning processes, and ensure their alignment with productive initiatives under Component 2.

Activity 1.1.4 Development of climate change impact risk analyses

This activity aims to generate key technical inputs for adaptation planning and decision-making through the development of comprehensive climate risk analyses in the prioritized territories. These analyses will identify the main hazards associated with climate change and assess their potential impacts on populations, ecosystems, and livelihoods, allowing them to be integrated with national and subnational risk management systems, territorial planning instruments, and public investment projects.

Technical assistance will also be provided to subnational governments and key stakeholders for the interpretation, use, and updating of risk analyses (e.g., creation of timely information systems at the micro-watershed level and development of contingency plans), so that these inputs can be applied in planning processes, prioritization of EbA measures, formulation of adaptation projects, and strengthening of climate governance in the territories.

Component 2: Diversification of local livelihoods to increase their resilience, food and nutritional security, and access to financing opportunities, in harmony with ecosystem conservation.

Outcome 2: Diversified and climate-resilient local livelihoods are strengthened.

This outcome aims to strengthen local livelihoods in prioritized Andean-Amazonian landscapes through productive diversification and economic sustainability strategies, in harmony with ecosystem conservation. This action responds to the high socioeconomic vulnerability of rural and Andean-Amazonian communities whose productive activities are closely linked to ecosystem services. Priority is given to the implementation of resilient productive practices, capacity-building, and access to markets and investment, incorporating gender, intercultural, and territorial relevance approaches.

These livelihood strategies are implemented in areas that are ecologically connected to the EbA interventions under Component 1, ensuring that economic activities benefit from restored ecosystem services such as water regulation, improved soil conditions, and climate buffering. This territorial articulation reinforces the sustainability and resilience of local livelihoods and reduces pressure on ecosystems.

The promotion of sustainable productive practices is based on strategic lines and types of sustainable productive activities that have demonstrated potential to contribute to local resilience. These include: agroecology, responsible fishing, community-based ecotourism, sustainable management of non-timber forest products, silvopastoral systems, bio-gardens with efficient irrigation systems, and others.

The typologies mentioned are based on practices already implemented in various national experiences—many of them led by MINAM and strategic partners—which have shown positive results such as:

- Income diversification and reduced dependence on climate-vulnerable activities.

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- Improved water availability and soil fertility, contributing to food security.
- Recovery of vegetative cover and ecological connectivity, reducing exposure to climate risks.

These pieces of evidence come from projects such as EbA Mountain, Agua para Abancay – PES scheme, and agroforestry and high-Andean pasture restoration experiences from regional adaptation programs, which have been partially systematized by MINAM and international partners.

This component contributes to the implementation of NDC adaptation measures in the thematic areas of forestry, fisheries and aquaculture, and health. Capacity-building under this component will also be aligned with the broader institutional strengthening efforts under Component 3 to ensure consistency and complementarity across governance, technical, and operational dimensions.

Output 2.1: Sustainable and resilient livelihoods are strengthened and connected to markets and investment.

Activity 2.1.1 Promotion of sustainable productive practices with a focus on soil conservation, diversification, and rational and healthy resource use

This activity aims to implement and scale sustainable productive practices that contribute simultaneously to climate resilience, food security, and local economic sustainability in prioritized Andean-Amazonian landscapes as part of a comprehensive ecosystem-based adaptation (Component 1) and resilient livelihoods strategy.

The activity will focus on the main productive activities and value chains of each intervention area, as described in the following table. Priority value chains and livelihood diversification actions will be selected during the full proposal development phase.

Table 7 Key value chains vulnerable to climate change and possible livelihood diversification measures in the intervention areas

Region	Main production chains and climate risk	Possible livelihood diversification actions
Ancash	▪ Potato and Andean cereals → vulnerable to frost, droughts, and pests. ▪ Dairy and sheep farming → affected by pasture degradation and glacier retreat. ▪ Avocado and fruit trees → at risk from water scarcity and emerging pests. ▪ Tourism→ exposed to hydrometeorological phenomena and mass movements.	▪ Implementation of family bio-gardens with drip irrigation systems; introduction of frost-resistant crop varieties; community-based rural tourism (Andean gastronomy). ▪ Production of artisanal cheeses and value-added dairy products; establishment of silvopastoral systems; beekeeping associated with high-Andean wetlands (bofedales). ▪ Agroforestry systems with native fruit trees (cherimoya, lúcuma); drip irrigation combined with rainwater harvesting.
San Martín	▪ Coffee and cocoa → exposed to coffee rust, moniliasis, and rainfall variability. ▪ Maize and rice → vulnerable to droughts and changes in water regimes. ▪ Fruit trees and banana → at risk of floods and pests. ▪ Aquaculture → affected by high temperatures and diseases.	▪ Diversified agroforestry (coffee + banana + timber species); ecotourism in coffee plantations; coffee blossom honey production. ▪ Introduction of drought-resistant crop varieties; reconversion towards Andean grains. ▪ Processing of fruit pulps and nectars; complementary fish farming; rural gastronomic tourism. ▪ Biotrade with certified organic products; experiential (community-based) tourism.

Junín	▪ Potato and quinoa → sensitive to frost, droughts, and soil degradation. ▪ Coffee and cocoa → at risk from coffee rust and water variability. ▪ Dairy farming → vulnerable due to pasture loss and limited water availability.	▪ Diversified agroforestry (coffee + banana + timber species); ecotourism in coffee plantations; coffee blossom honey production. ▪ Introduction of drought-resistant crop varieties; reconversion towards Andean grains. ▪ Processing of fruit pulps and nectars; complementary fish farming; rural gastronomic tourism.
Cusco	▪ Trout → affected by rising temperatures and reduced water flow. ▪ Beekeeping → at risk from biodiversity loss and phenological changes. ▪ Potato and Andean grains → vulnerable to frost, droughts, and pests. ▪ Tourism → exposed to extreme weather events	▪ Biotrade with certified organic products; experiential (community-based) tourism. ▪ Agroforestry with native trees; artisanal chocolate production; beekeeping in coffee plantations. ▪ Community-based cheese production; use of hydroponic fodder; production of wool and traditional textiles.
Loreto	▪ Cocoa and coffee → greater incidence of pests due to heat and humidity. ▪ Camu camu and riparian fruit trees → affected by changes in flood pulses. ▪ Aquaculture → vulnerable to high temperatures and pathogens.	▪ Diversification with Amazonian fruit trees (aguaje, camu camu); Amazonian honey production; tourism in agroecological farms. ▪ Diversification with lower-risk native fish species (boquichico); gastronomic tourism based on paiche; aquaculture with adaptive management.

Source: Prepared by the author

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These practices will be implemented considering soil and water conservation criteria, such as erosion control, maintaining vegetative cover, crop rotation and association, among others. Priority will also be given to ecological pest and disease management, the use of organic fertilizers, and agricultural and agroforestry diversification techniques that enhance resilience to droughts, frosts, heavy rainfall, and other extreme events—all aligned with the NDCs. These measures will be linked to the intervention areas defined for the implementation of EbA pilot measures, ensuring synergies between ecological conservation and economic sustainability.

Technical assistance, adaptive capacity training, and organizational support will be provided, with a fzfffocus on strengthening the roles of women, youth, and Indigenous Peoples as active agents of change. In addition, the connection of these practices to local markets and sustainable value chains will be encouraged to ensure their viability and scalability.

In this way, the activity will contribute to the consolidation of resilient and sustainable productive landscapes that generate lasting social, economic, and environmental benefits for communities in prioritized Andean-Amazonian landscapes.

A cross-cutting approach of gender, interculturality, and sustainability will ensure that these productive actions meet the differentiated needs, knowledge, and capacities of women, youth, and Indigenous Peoples, promoting their active participation in transforming productive systems and conserving territory.

Activity 2.1.2 Capacity-building, market access and brand development for enterprises

This activity aims to strengthen the productive, commercial, and organizational capacities of sustainable local enterprises, producers' associations and cooperatives, community enterprises and community groups in prioritized landscapes to improve their competitiveness, facilitate market access, and position their products or services with a focus on climate change adaptation, ecosystem conservation, and resilient territorial development.

Processes for productive and commercial readiness will be developed, including technical support for legal formalization

of enterprises, obtaining sanitary registrations, operating licenses, compliance with sectoral regulations, and improvement of product transformation, quality, and safety processes. Specialized support will be provided in basic business management, financial planning, business plans, production costs, and cooperative or associative organizational models.

These efforts are closely coordinated with Component 3, which provides broader institutional and technical capacity-building for local governments and stakeholders. This activity complements those efforts by equipping local enterprises, producers' associations, and community groups with the operational and commercial tools required to implement and sustain climate-resilient economic initiatives. Together, both actions establish an integrated capacity-building strategy that combines policy, technical, and entrepreneurial dimensions.
The use of sustainability and conservation certifications will also be promoted as a tool for differentiation and market positioning (e.g., the "Allies for Conservation" label where enterprises are located in Protected Natural Area's (PNAs) buffer zones.

This activity will be implemented participatively, with a gender and intercultural approach, ensuring that women, youth, and Indigenous Peoples play an active role in the leadership, management, and development of enterprises as part of the resilient and sustainable livelihoods diversification strategy. It will also support the implementation of the following NDC adaptation measures in forestry and agriculture:

- BOS2: Ecosystem restoration to maintain landscape connectivity and reduce impacts of extreme climate events
- BOS4: Implementation of sustainable practices for ecosystem conservation in watersheds within Protected Natural Areas (PNAs)
- BOS12: Implementation of strategic value chains for rural and Indigenous communities to reduce climate risks
- AGRI8: Management and conservation of cultivated pastures as supplementary feed in climate-vulnerable areas
- AGRI11: Management of wild South American camelids (vicuñas) considering climate change effects
- AGRI17: Value addition to agri-livestock products in climate-vulnerable areas
- PAC15: Capacity-building in good environmental practices to address climate-related risks

Activity 2.1.3 Linkage to sectoral programs and investment attraction for sustainable and resilient livelihoods

This activity aims to facilitate the sustainability and scaling of sustainable and resilient livelihoods promoted by the project through effective articulation with existing public and private programs and the attraction of private investment for strengthening local enterprises in prioritized landscapes.

Specialized technical assistance will be provided to enterprises and initiatives to facilitate access to sectoral programs developed by the Ministry of Production (PRODUCE), Ministry of Foreign Trade and Tourism (MINCETUR), agricultural development programs of the Ministry of Agrarian Development and Irrigation (MIDAGRI), budget programs, and others.

In parallel, a strategy will be developed to attract private investment. This will involve the creation and/or engagement of an investor roundtable with participation from private institutions such as donors, financial institutions, environmentally committed companies, or impact investors. This space will serve as a platform to connect responsible investment supply with the specific demand for adaptation and conservation-focused economic initiatives.

Additionally, local organizations will be supported in improving their proposals, business models, and management capacities to enhance their ability to negotiate and connect with high-value markets.

Output 2.2: Vulnerable populations adopt healthy and safe practices to cope with extreme climate events and protect their livelihoods.

Activity 2.2.1 Promotion of healthy practices for the population and their livelihoods

This activity aims to strengthen the capacity of vulnerable populations in the prioritized landscapes to protect their health and maintain the functionality of their livelihoods in the face of climate change effects—particularly extreme temperatures that affect both human health and agricultural productivity and food security.

Technical assistance and community training will be provided to promote the adoption of healthy, preventive, and adaptive practices, tailored to the different cultural and socio-territorial contexts of the intervention areas. These actions will include the dissemination of protective measures against frost, severe cold, and heat waves; training on livelihood protection practices in extreme temperatures; and the promotion of the participation of women and community leaders in health education and resilience activities, recognizing their key role as agents in the prevention and response to climate risks.

This work will be carried out in close coordination with the Ministry of Health (MINSA) and local and regional health services, which are responsible for implementing the adaptation measure "SAL 5: Promotion of healthy practices in vulnerable families in response to increasing exposure to extreme temperatures." These entities already have educational materials and community health workers in place, who require technical assistance and additional materials to disseminate and train the population with context-specific information tailored to the intervention territories.

Component 3: Strengthening governance and public investment for climate change adaptation and sustainable livelihoods

Outcome 3: Strengthened territorial governance and public investment for adaptation

This outcome aims to consolidate an institutional, technical, and financial environment conducive to climate change adaptation in the prioritized landscapes, through the strengthening of territorial governance and public investment mechanisms. This goal responds to the need to integrate adaptation as a cross-cutting axis in development planning and management processes, engaging multiple sectors, levels of government, and social actors under a common vision of sustainability and climate resilience.

Through this component, the project seeks to ensure that adaptation measures are not isolated interventions, but part of a sustainable territorial management strategy, institutionally supported and financially viable, contributing to the development of resilient landscapes and the structural reduction of climate vulnerability. The capacities developed under this component will be complementary to those promoted in Component 2. While Component 3 focuses on strengthening territorial governance systems and enabling public institutions to support and scale adaptation and conservation efforts, Component 2 delivers direct capacity-building to community groups and enterprises for the implementation of sustainable economic activities.

Output 3.1: Strengthened territorial planning instruments and coordination mechanisms

Activity 3.1.1 Strengthening multi-sector and multi-level adaptation governance in prioritized areas

This activity aims to strengthen planning mechanisms, institutional coordination, and collaboration among public and non-state actors for integrated, effective, and sustainable climate adaptation management in prioritized landscapes. The action is based on the recognition that adaptation is a cross-cutting and territorial process that requires coherent governance among sectors, levels of government, and local actors.

It will promote the formulation, updating, and participatory validation of territorial and climate planning instruments, such as:

- Micro-watershed or sub-watershed management plans, integrating ecosystem-based adaptation (EbA) approaches, water security, and risk management.
- Local climate change plans (PLCC) or other territorial instruments aligned with the Nationally Determined Contributions (NDC), the National Adaptation Plan (NAP), and the National Climate Change Strategy.

Local Climate Change Plans (PLCC) are instruments that guide and facilitate Integrated Climate Change Management (GICC) at the local level. PLCCs must be aligned with the corresponding Regional Climate Change Strategies (ERCCs) and contribute to the implementation of the National Climate Change Strategy (ENCC) and the Nationally Determined Contributions. The project aims to support the development and promote the approval of these plans in the intervention regions according to MINAM's guidelines[8], many of which currently have few approved plans, with others still in the process of being updated.

[8] Methodological Guidelines for Formulating and Updating Local Climate Change Plans - Ministerial Resolution No. 196-2021-MINAM

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In parallel, territorial coordination mechanisms will be strengthened, such as inter-institutional platforms, watershed management committees, and others, to coordinate the integrated implementation of adaptation measures within local development processes, including joint development plans, regional and local policies, and public investment programs/projects. This seeks to ensure that adaptation is not an isolated component but a structural criterion for sustainable development in the territories.

These spaces will also enable the alignment of interventions from different sectors (water, agriculture, health, production, etc.) with a shared territorial vision and active participation from local communities, local governments, grassroots organizations, women, youth, Indigenous peoples, and private actors.

Finally, spaces for dialogue and synergy generation will be facilitated between state and non-state actors, with a multi-level (national, regional, local) and multi-sector approach, to consolidate climate governance in line with the commitments established in the NDC. This activity will be implemented with approaches focused on equity, interculturality, and adaptive management, recognizing that strengthening governance is a key enabling condition for the long-term sustainability and effectiveness of adaptation measures.

Output 3.2: Technical assistance for the financial sustainability, monitoring, and scalability of adaptation measures

Activity 3.2.1 Capacity-building and advocacy for mobilizing public, mixed, and/or international cooperation financing for adaptation

Assistance will be provided to improve the formulation of technical files for Public Investment Projects (PIP) at the regional and local levels, with the objective of incorporating the ecosystem-based climate adaptation and risk management approach into the prioritized territories, in line with the National Adaptation Plan, the NDCs, and the guidelines of the National System for Multiannual Programming and Investment Management (Invierte.pe).

In parallel, technical capacity-building processes will be implemented for key actors—both from the public sector and civil society organizations—in the formulation of concept notes or technical proposals for interventions that replicate or complement the EbA measures and sustainable productive practices implemented by the project. These will focus on climate-resilient adaptation, livelihood sustainability, and ecosystem conservation. The goal is to mobilize and leverage resources from private financing sources, international cooperation, bilateral and multilateral mechanisms, and other international adaptation support schemes, helping scale and replicate successful experiences in other regions.

In this way, the activity will contribute to consolidating an enabling environment for the scalability and financial sustainability of adaptation measures through integrated management of public instruments, international cooperation, and financing mechanisms aligned with climate adaptation goals.

Activity 3.2.2 Support for the implementation of the **AdaptAcción** Program

This activity seeks to contribute to the implementation of the AdaptAcción Program, which is a recognition system for private sector organizations that contribute to climate change adaptation in Peru, through actions focused on managing their climate risks. It is part of the National System for Monitoring Climate Change Adaptation and Mitigation Measures, under the Framework Law on Climate Change. The program is implemented and led by the Ministry of the Environment of Peru through the General Directorate of Climate Change and Desertification.

This tool offers the private sector a business pathway for adaptation across five levels: (01) Identification, (02) Implementation, (03) Monitoring, (04) Evaluation, and (05) Updating—interrelated and based on a continuous improvement approach, aligned with ISO 14090 and TCFD principles.

The project will seek to implement pilot initiatives to recognize private sector organizations that adopt adaptation actions in the prioritized territories and/or promote conditions for their replicability and scaling at the national level, in coordination with the Ministry of the Environment (MINAM).

Component 4. Strengthening knowledge management and adaptation monitoring to support continuous improvement and informed decision-making for adaptation management in vulnerable Andean-Amazonian landscapes.

Outcome 4: Monitoring and knowledge management are strengthened for adaptation management in vulnerable Andean-Amazonian landscapes.

Outcome 4 aims to comprehensively strengthen the capacities for monitoring, evaluation, and knowledge management regarding climate change adaptation, as fundamental pillars for the effective, transparent, and sustainable implementation of interventions in prioritized territories. This line of action recognizes that timely information availability, informed participation of local actors, and systematization of lessons learned are essential elements for promoting evidence-based, inclusive, and continuously improving adaptation.

Output 4.1: Professionals, technicians, communities, and decision-makers are sensitized and trained in adaptation management, monitoring, and reporting.

Activity 4.1.1 Awareness-raising, training, and technical assistance on adaptation

This activity aims to strengthen the capacities of authorities, technical personnel, and communities in managing climate risks and implementing adaptation measures in prioritized territories. Training sessions will be provided to local authorities and community actors on preparedness and response to extreme events such as fires, droughts, and floods, as well as the use and management of early warning systems.

Additionally, technical training programs will be implemented on climate risk analysis, territorial planning with a climate change perspective, and the integration of climate adaptation into public investment. To promote community ownership, the training of local climate promoters will be encouraged, and Adaptation Field Schools will be established—practical and participatory spaces where state and non-state actors can learn and exchange experiences on resilient practices and ecosystem-based adaptation measures (EbA).

The activity will incorporate gender, interculturality, and local relevance approaches and will contribute to ensuring the social and institutional sustainability of the implemented measures.

Activity 4.1.2 Implementation and strengthening of adaptation measure monitoring and reporting

Participatory monitoring tools for the project's planned measures will be developed and implemented as part of its monitoring and evaluation plan. These tools will be adapted to the characteristics and realities of each watershed and will enable local actors to participate in tracking the implementation and outcomes of the adaptation interventions, particularly those based on ecosystems. Their application will facilitate the systematic collection of information on the project's progress and achievement of its objectives.

In parallel, coordination with the National System for Monitoring Adaptation and Mitigation Measures (SIMOM), managed by the Ministry of Environment, will be promoted to report progress at the regional and national levels in line with the goals established in the Nationally Determined Contributions (NDC). To this end, technical assistance will be provided to subnational actors to support data use and integration, complying with the standards and requirements established by the system.

Furthermore, technical assistance will be provided to support the preparation of periodic reports on the implementation of adaptation measures at the regional and local levels, within the framework of planning and integrated climate change management instruments, such as Regional Strategies and Local Climate Change Plans.

The activity will also promote institutional capacity building in monitoring and evaluation by developing templates, tools, and replicable case studies for use in other regions with similar characteristics. Active participation of women, youth, Indigenous peoples, and local organizations will be prioritized, integrating their knowledge, perceptions, and experiences as part of adaptive monitoring.

Output 4.2: Relevant knowledge management products are developed and disseminated among key stakeholders.

Activity 4.2.1 Project knowledge management

This activity aims to strengthen the generation, systematization, and dissemination of knowledge derived from project implementation, to ensure that lessons learned, good practices, and achieved results contribute both to the continuous improvement of interventions and to the design of public policies and replicable actions in other territories.

The systematization of pilot experiences in ecosystem-based adaptation (EbA), livelihood diversification, and territorial governance processes will be carried out. This process will include the collection of qualitative and quantitative information, case studies, participatory records, and testimonies from local actors, to document enabling conditions and challenges encountered during implementation.

As part of the communication and awareness-raising strategy, technical and community outreach materials (guides, factsheets, videos, infographics, among others) will be developed, tailored to different audiences: local communities, subnational governments, decision-makers, and strategic allies. These products will aim to facilitate knowledge appropriation, practical use, and integration into planning and decision-making processes.

In addition, active participation in spaces for exchange and multi-actor dialogue will be promoted at local, national, and international levels, including climate change adaptation networks or learning platforms. Horizontal exchange of experiences between project beneficiary territories and communities will also be encouraged as a mechanism to stimulate social innovation and the articulation of learnings across different socio-environmental and cultural contexts.

This activity will be cross-cutting throughout the project's implementation and will be aligned with its monitoring and training actions.

To ensure the effectiveness and continuous improvement of capacity-building processes, the project will incorporate structured feedback mechanisms in all training and technical assistance activities. These mechanisms will include pre- and post-training assessments, participatory evaluations, and feedback surveys with trainees and local stakeholders. The information gathered will inform periodic reviews of the training programmes, allowing content and methodologies to be adapted or refined as needed to better respond to the needs, knowledge gaps, and evolving priorities of the target groups. This approach will help ensure that training efforts remain relevant, targeted, and impactful in strengthening local climate governance and institutional capacities.

Finally, the project components and activities are aligned with the Adaptation Fund's results framework in the following outcomes:

- Outcome 5: Increased ecosystem resilience in response to climate change and variability-induced
- Outcome 6: Outcome 6: Diversified and strengthened livelihoods and sources of income for vulnerable people in targeted areas.
- Outcome 2: Strengthened institutional capacity to reduce risks associated with climate-induced
- socioeconomic and environmental losses.
- Outcome 7: Improved policies and regulations that promote and enforce resilience measures
- Outcome 3: Strengthened awareness and ownership of adaptation and climate risk reduction processes at local level

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.

Economic Benefits

The project will contribute to the diversification and sustainability of rural livelihoods by promoting climate-adapted productive practices such as agroecology, responsible fishing, ecotourism, agroforestry systems, and the management of non-timber forest products. These initiatives will help improve productivity, reduce exposure to climate risks, and generate new income streams, particularly for vulnerable populations. Additionally, the restoration and conservation of natural infrastructure will enhance the efficiency of water use and soil fertility, thereby reducing production costs and strengthening food security.

The project is expected to directly benefit 69,023 people across the prioritized watersheds. For the economic benefit calculation, beneficiaries are grouped into units, which may include households, producer associations, community organizations, or local enterprises. Assuming unit sizes range from 5 to 50 people, with an average of 30, this

corresponds to an estimated 2,300 beneficiary units.

Evidence from similar ecosystem-based adaptation (EbA) and sustainable livelihood projects implemented in Peru (e.g., EbA Montaña, Helvetas EbA, Sierra y Selva Exportadora, Biocomercio initiatives) shows that households typically experience incremental income in the range of USD 150 to 500 per year as a result of improved agricultural practices, natural resource management, and diversification of livelihoods.

To remain conservative, the calculation assumes an average incremental benefit of USD 200 per unit per year derived from improved agricultural production through EbA measures (e.g., water regulation, soil recovery, agroforestry) and the introduction of new or complementary sustainable livelihood activities (e.g., honey production, community-based ecotourism, bio-businesses).This corresponds to an estimated total annual economic benefit of approximately USD 460,153 across the intervention areas.

Environmental Benefits

The ecosystem-based adaptation approach will promote the restoration of degraded areas, the conservation of headwaters, and the protection of biodiversity. This will help recover and strengthen key ecosystem services such as water regulation, aquifer recharge, erosion control, and the provision of habitat for native species. These actions will also reduce vulnerability to extreme events—such as floods and landslides—through nature-based solutions that act as living barriers. Scientific studies[9] in similar high-altitude interventions in Peru have shown that wetland restoration can increase water retention capacity by 20% to 30% during the dry season, reduce runoff and erosion by up to 40%, and improve pasture productivity by over 25%.Furthermore, the project is expected to improve both the quality and availability of water for multiple uses (human, agricultural, and ecosystem), as well as support biodiversity recovery through reforestation with native species and participatory management of fragile or protected ecosystems.

Interventions such as the reforestation with native species, the installation of infiltration ditches, and the protection of headwaters will contribute to reducing peak flows and sediment loads during extreme rainfall events. This will mitigate climate-induced hazards such as floods and landslides, acting as natural infrastructure that protects downstream communities and productive areas.

Social Benefits

It is anticipated that the project will directly benefit 69,023 people and indirectly reach 75,925 people, with an estimated gender distribution of 72% men and 28% women. In doing so, it will contribute to improving the quality of life for local communities, particularly those facing climate vulnerability and limited access to sustainable income sources. This will be achieved through safer and more equitable access to water for human consumption, improved livelihoods, and reduced exposure to climate-related disasters. In addition, the participatory implementation of measures, community-based monitoring, and territorial planning processes will strengthen local governance and empower communities to manage their natural resources.

Through improved access to clean and reliable water, the promotion of climate-resilient livelihoods (such as agroecology, sustainable livestock, and native crop diversification), and the reduction of exposure to climate-related disasters, the project will contribute to enhancing food security, income stability, and overall well-being.

Community-based adaptation processes—including participatory planning, risk mapping, and ecosystem monitoring—will empower local populations to make informed decisions and increase their autonomy in managing natural resources. These processes will strengthen local governance structures and build institutional capacities at the community, municipal, and regional levels.

Special emphasis will be placed on promoting the leadership of women, youth, and Indigenous peoples in decision-making related to production systems and adaptation, incorporating gender and intercultural approaches as cross-cutting principles. The project will ensure that all intervention areas include clear mechanisms for social inclusion, equitable participation, and shared community responsibility.

The project will ensure equitable benefit distribution through the application of targeting mechanisms based on climate vulnerability, socio-economic indicators, and differentiated access to resources.

[9] PRAA Project (Adaptación de la Agricultura al Cambio Climático) – final report (MINAM, GEF, Banco Mundial, 2014).
Proyecto EbA Montaña – Perú (2011–2016) –IUCN, PNUMA y PNUD final technical report.

During the full proposal phase, baseline assessments will identify priority groups—particularly women, Indigenous peoples, and youth—to guide resource allocation and activity design. All project components will incorporate equity criteria in the selection of beneficiaries, delivery of technical assistance, and access to financial or productive support. Gender and intercultural strategies will be operationalized through mandatory participation quotas, differentiated training modules, and tailored communication tools. Furthermore, participatory monitoring and grievance mechanisms will be established to track the distribution of benefits, detect gaps or exclusions, and enable corrective measures in real time

Initial gender assessment:

In the regions of Áncash, Cusco, and Junín—characterized by high Andean Mountain landscapes—rural women play a key role in managing family farming systems, using water for irrigation and household consumption, and conserving native seeds. However, they face structural barriers in accessing productive resources, technical assistance, credit, and participation in decision-making spaces. In many communities, women's work is not formally recognized, and their workload tends to be greater than that of men due to the combination of domestic and agricultural responsibilities.

The Amazonian regions of Peru experience poverty in a particular way due to the presence of a significant number of Indigenous populations and the prominence of certain extractive activities carried out outside the law, mainly illegal logging and mining. In this context, gender inequalities are exacerbated, as many Indigenous women do not speak Spanish, have limited access to education, and live in rural areas far from cities where most public services are available[10].

The project will seek to address these gaps by ensuring equitable access to technical assistance and project benefits, as well as by promoting mechanisms that acknowledge ancestral knowledge and women's participation in territorial and climate governance.

Roles and Challenges in water management contexts[11]

Currently and traditionally, women and girls are the ones who manage water resources within the household, while men are the ones who make decisions regarding water management for agricultural, industrial, and hydro-energy use. For women and girls, access to water enables them to carry out subsistence activities, domestic chores, and unpaid care work for children and the elderly. However, they are underrepresented in Watershed Water Resources Councils (CRHC) and other water governance platforms.

Reduced water availability as a consequence of climate change could trigger migration in search of employment. This may result in women and girls who remain in their communities of origin spending more time securing water for their households, thereby increasing the time allocated to domestic and unpaid care tasks. As a result, the gender gap in access to water-related services would be further widened.

Roles and Challenges in Agricultural Contexts[12]

In Peru's agricultural sector, gender roles are distributed such that women are responsible for domestic tasks and food provision, while also engaging in farming activities. Men, due to seasonal fluctuations in agricultural income, often take on commercial work away from home, leaving women in charge of households and farms for extended periods. Despite this, women continue to face unequal representation in the economic sphere of agriculture (MIMP, 2015).

Structural inequalities remain significant. The 2012 National Agricultural Census showed an increase in women's participation as producers, yet they still represent only 30% compared to 69% of men (33% women in the Andes, 19% in the Amazon). Only 21% of women have access to land—usually under two hectares—mostly through social ties such as marriage or widowhood, versus 79% of men. Moreover, 70% of rural women are engaged in subsistence farming without labor rights or benefits, and only 4.7% of women producers hold formal land titles (PACGG, 2019).

Women farmers face multiple barriers, including limited access to land, credit, productive resources, and technical assistance. Addressing these gaps through improved access to financial resources and capacity-building is critical to increasing productivity, reducing poverty, and ensuring access to basic services such as water and health.

[10] Action plan on gender and climate change PAGCC-Perú
[11] According to the National Adaptation Plan
[12] idem

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Roles and Challenges in Forest Contexts[13]

Historically, gender roles have shaped men's and women's relationships with forest resources. In the forest value chain, men are usually engaged in the commercialization of timber products, while women focus on the use and management of non-timber forest products for subsistence, food, and health purposes (e.g., firewood, medicinal plants, fodder, natural fertilizers). As a result, women often hold more specialized knowledge of forests, particularly regarding conservation practices (MIMP, 2015).

Indigenous and peasant communities conserve and apply traditional practices and technologies that have enabled them to manage diverse environmental conditions and, to some extent, cope with changing climate pressures. Their traditional knowledge provides a foundation for land use and resource management practices that are well-suited to be incorporated into effective climate change adaptation strategies.

Based on the diagnostic assessment and drawing on lessons learned from similar projects previously implemented, the project will seek to implement actions aimed at achieving the following outcomes, which will be further specified during the full proposal development phase:

- Participation and decision-making
  - Promote women's participation quotas in watershed committees, producer associations, and governance spaces.
  - Strengthen women's leadership in the boards of cooperatives and associations.

- Access to productive and financial resources
  - Encourage women's participation in community-based savings programs or credit access mechanisms.

- Strengthening of technical capacities
  - Organize training on adaptation measures (family gardens, efficient irrigation, agroforestry) targeted at women and youth.
  - Develop training materials in indigenous languages and adapted to different educational levels.

- Recognition and redistribution of care roles
  - Promote the adoption of technologies that reduce domestic workload (improved cookstoves, safe water systems).

- Focus on sustainable livelihoods
  - Promote value chains where women play a central role (honey, handicrafts, family gardens, community-based tourism).
  - Support women's associations engaged in climate-resilient productive activities.
  - Link women producers to differentiated markets (organic, fair trade, sustainable tourism).

Therefore, it will be essential to ensure women inclusion in participatory processes for diagnosis, planning, and implementation of ecosystem-based adaptation (EbA) measures. Their leadership will be promoted in micro-watershed management committees and through technical training in the monitoring and restoration of water-related ecosystems. In addition, safe spaces and accessible meeting times must be created to ensure their active and sustained participation.

Finally, the project will seek to establish partnerships with rural and Indigenous women's organizations that are active in the intervention areas.

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

The proposed project has been designed to maximize its cost-effectiveness, both in terms of its direct impact on the resilience of vulnerable populations and ecosystems, and its potential for sustainability and replicability in other watersheds across the country.

With an estimated total budget of USD 10 million, the intervention will comprehensively address ecosystem, social,

[13] idem

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productive, institutional, and knowledge-related aspects in territories where the impacts of climate change are already severe and directly affect livelihoods and water security.

From a programmatic efficiency perspective, the project prioritizes nature-based interventions (EbA measures), whose benefits are multiple, cumulative, and sustainable over time. Pilot actions such as ecological restoration, water management in headwaters, recovery of degraded productive landscapes, and agroecological practices not only reduce climate risks but also enhance productivity and secure ecosystem services in the medium and long term — at a fraction of the cost of conventional alternatives. These measures will also be implemented with community participation and social co-benefits, which help reduce transaction costs and strengthen local ownership.

EbA measures were selected based on technical validation by the Ministry of Environment and alignment with Peru's Nationally Determined Contributions (NDCs). Compared to conventional infrastructure or isolated development projects, EbA approaches offer multi-functional, lower-cost, and longer-lasting solutions to climate risks. For example, ecosystem restoration in headwaters not only regulates water flow and reduces disaster risks but also improves biodiversity and carbon sequestration.

The following table shows comparative cost-effectiveness of selected EbA measures vs. conventional alternatives.

Table 8 Comparative cost-effectiveness of selected EbA measures vs. conventional alternatives

Adaptation Objective	EbA Approach (Proposed)	Approx. Cost (USD/ha)	Conventional Alternative	Approx. Cost (USD/ha)	Key Benefits of EbA Approach	Technical Justification / Source
Water regulation & storage	Wetland and grassland restoration	300–500	Concrete reservoirs	2,000–4,000	Lower cost, self-sustaining, improves regulation & recharge	MINAM (2021); GIZ-PRAA (2016); SNIP profiles of natural infrastructure projects
Soil erosion control & slope stabilization	Agroforestry, native reforestation	400–600	Retaining walls, terracing	1,500–3,000	Enhances productivity, controls erosion, improves carbon	FAO & MINAM (2020); EbA Montaña project reports; INIA-CIFOR (2022)
Livelihood diversification	Climate-resilient crops, agroecology, silvopastoral systems	500–800	Fertilizer-intensive monocultures	1,200–2,500	Reduces climate sensitivity, promotes food and income security	ICRAF (2020); Agroecología en Perú – MINAGRI/CGIAR (2021); FAO Perú
Flood and landslide risk reduction	Vegetative buffers, infiltration trenches, live barriers	300–700	River channeling, concrete defenses	2,500–5,000	Reduces risk upstream, avoids hard infrastructure maintenance	GIZ (2018); SENAMHI (2021); EcoDRR tools by UN Environment
Biodiversity and ecosystem service restoration	Community-led conservation in high-Andean ecosystems	200–500	Fenced protected areas with no use	800–1,200	Increases resilience, empowers communities	SERNANP & PNCB (2020); IUCN AbE Standards; Programa Bosques-MINAM

Source: Prepared by the author

On the other hand, the diversification of sustainable and resilient livelihoods represents another cost-effective strategy, as it reduces dependence on climate-sensitive production systems, strengthens local economies, and generates opportunities that enhance food, nutritional, and economic security. These activities include technical assistance, market linkages, brand development, and access to investments, ensuring that every dollar invested delivers tangible economic benefits to rural families. Furthermore, by integrating gender considerations, intercultural approaches, and local knowledge, implementation gaps are minimized, and the social effectiveness of investments is enhanced.

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The governance and public investment component aims to create enabling conditions for long-term sustainability. By strengthening capacities for integrating adaptation approaches into public planning and programming, the project's impact will extend beyond its implementation period. This directly contributes to the mobilization of additional resources and the structural incorporation of climate change considerations into development decision-making — representing a highly efficient investment compared to the escalating costs of inaction.

Finally, the knowledge management, monitoring, and continuous improvement component ensures that the lessons learned from the project are used to enhance decision-making, promote replicability in other territories, and sustain actions beyond the project's completion.

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

The project contributes to the objectives and priorities set out in the following documents:

Law 30754 (2019), Framework Law on Climate Change (FLCC)
The law provides guidelines for the comprehensive management of climate change; the project will specifically implement the approach of adaptation based on watersheds, ecosystems, territorial planning, and climate risks. It also contributes to the climate change adaptation measures established by the law.

Supreme Decree No. 013-2019-MINAM (2019), Regulation of FLCC
The regulation establishes multisectoral, multilevel, and multi-actor climate action, considering the inclusion of gender, interculturality, and intergenerational approaches. The project will contribute to the climate change adaptation measures established in the regulation and to their monitoring and evaluation.

Ministerial Resolution No. 096-2021-MINAM (2021), Peru's National Adaptation Plan to Climate Change
Enacted in 2021, the Plan assesses climate risk based on exposure and vulnerability to each of the hazards associated with climate change. It is guided by the NDC framework and, in the water sector, analyzes risks related to population, agricultural, hydro-energy, and multisectoral water uses. The project directly contributes to the priority objective and specific objectives to reduce, for populations and their livelihoods, ecosystems, watersheds, and territories, the damage, potential alterations, and consequent current and future losses generated by climate-related hazards.

Resolution Ministerial N.° 00092-2025-MINAM
Supreme Decree approving the List of Adaptation and Mitigation Measures that make up the Nationally Determined Contributions (NDC) and the process for approving new adaptation and mitigation measures. The resolution approves the list of adaptation and mitigation measures that make up the Nationally Determined Contributions, comprising eighty-four (84) adaptation measures and sixty-six (66) mitigation measures, and the process for formulating new measures.

Law 29338 (2009), Water Resources Law
This law aims to regulate the use and integrated management of water, the actions of the State and private actors in such management, as well as the assets associated with it. Article 89 states that the National Water Authority (ANA), in coordination with the Environmental Authority, must develop strategies and plans for the prevention and adaptation to the effects of climate change.

Supreme Decree No. 011-2015-MINAM (2015), National Strategy on Climate Change (ENCC's)
The ENCC's strategic objectives seek for the population, economic agents, and the State to increase awareness and adaptive capacity to act against the adverse effects and opportunities of climate change; and to conserve carbon reserves and reduce GHG emissions.

Supreme Decree No. 013-2015-MINAGRI (2015), National Water Resources Plan
This Plan aims to define the guidelines and programmatic measures of Peru's water policy and coordinate water management planning within the framework of the Water Resources Law and the National Water Resources Policy and Strategy.

Ministerial Resolution No. 152-2021-MINAM (2021)
This resolution provides methodological guidelines for the formulation and updating of Regional Climate Change Strategies and their annexes. Its goal is to provide guidance to Regional Governments (GORE) for the formulation and

updating of Regional Climate Change Strategies to be implemented, monitored, and evaluated over time as part of a continuous improvement process. The project will contribute to the updating and/or formulation of these strategies in the prioritized regions.

Ministerial Resolution No. 196-2021-MINAM (2021)
This resolution presents the methodological guidelines for the formulation and updating of Local Climate Change Plans and their annexes. Its objective is to provide guidance on the aspects to be included in Local Climate Change Plans (PLCC) for the implementation of climate change adaptation and mitigation measures at the local level. The project will contribute to the updating and/or formulation of these plans in the prioritized regions.

Supreme Decree No. 006-2015-MINAGRI (2015), National Policy and Strategy on Water Resources
The fifth policy axis of this strategy, 'Adaptation to climate change and events,' focuses on reducing the vulnerability of the population, economic activities, and ecosystems, under an integrated water resources management and disaster risk management approach.

Law on Mechanisms for the Remuneration of Ecosystem Services (MERESE) Law No. 30215.

This law enacted in 2013, defines the role of the state in promoting investment in conservation, recovery and conservation of ecosystem services, also raises the exchange of information generated by the actors to determine the status of the sources and technological development for the conservation of these services.

National Strategy on Forests and Climate Change (ENBCC)
Integrates forest conservation efforts with climate mitigation and adaptation strategies.

The National Agrarian Policy
Approved in 2016 by Supreme Decree No. 002-2016-MINAGRI, has as its general objective defined in Chapter 6: to achieve a sustained increase in the income and livelihoods of agricultural producers, prioritizing family farming, based on greater capacities and more productive assets, and with a sustainable use of agricultural resources in the framework of processes of growing social and economic inclusion of the rural population, contributing to food and nutritional security.

Plan for Risk Management and Adaptation to Climate Change in the Agricultural Sector
PLANGRACC-A is a document that seeks to reduce the adverse effects of climate change on agriculture. It was developed in collaboration with the FAO and covers the period from 2012 to 2021. The plan focuses on proactive, corrective, and reactive management of climate risk in the agricultural sector.

National Aquaculture Policy (PNA) to 2030
Seeks to strengthen competitiveness and increase investment in the aquaculture value chain by increasing research, development, and innovation capacity and strengthening the sustainability of aquaculture by consolidating the participation of companies linked to this sector.

Sustainable Development Objectives
The project will contribute to the following SDGs:

- SDG 1 – No Poverty: The project supports the reduction of rural poverty by promoting sustainable livelihoods, access to productive resources, and financial inclusion in communities vulnerable to climate change.
- SDG 5 – Gender Equality: It will foster the active participation of rural women in decision-making, technical assistance, water governance, and sustainable value chains, addressing structural gender gaps.
- SDG 6 – Clean Water and Sanitation: Through ecosystem-based adaptation (EbA) measures, it promotes the conservation of headwaters, improved water quality, aquifer recharge, and equitable access to water for human, agricultural, and ecological needs.
- SDG 8 – Decent Work and Economic Growth: The project will promote green job opportunities and supports entrepreneurship through sustainable value chains and local capacity building.
- SDG 10 – Reduced Inequalities: It ensures inclusive participation and equitable benefit-sharing for vulnerable groups, especially women and youth.
- SDG 12 – Responsible Consumption and Production: It will promote sustainable productive practices, efficient use of natural resources, ecological certifications, and inclusive business models grounded in environmental and social responsibility.
- SDG 13 – Climate Action: This is the core of the project, it contributes to climate change adaptation by restoring ecosystems, managing watersheds, and implementing measures that reduce vulnerability and enhance

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resilience.

- SDG 17 – Partnerships for the Goals: It will strengthen multi-actor collaboration among subnational governments, communities and civil society.

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

The project is directly aligned with the implementation of adaptation measures in the thematic areas of water, forests, agriculture, health, and aquaculture established in the National Adaptation Plan (NAP) and the Nationally Determined Contributions (NDCs). Accordingly, it will consider the technical and legal requirements of the Peruvian legal framework necessary for its execution. The project will contribute to the implementation of 10 adaptation measures. It will also apply the cross-cutting approaches defined in the NAP—gender, intercultural, and intergenerational—each of which plays an important role in ensuring the measures have a positive impact and help close gaps related to gender, sex, age, and other factors. For this reason, the project will carry out its activities in accordance with the *Guidelines for Mainstreaming the Gender, Intercultural, and Intergenerational Approaches in the Design and Implementation of Mitigation and Adaptation Measures under the NDCs*[14], in order to ensure that interventions focus on populations vulnerable to climate change and promote the sustainability of the actions implemented.

The proposed interventions will not result in negative environmental or social impacts, nor will they violate any human rights or labor regulations. These actions will be implemented in alignment with the environmental and social principles established in the Adaptation Fund's Environmental and Social Policy (ESP) and will comply with the environmental, social, and gender policies of the national implementing entity, Profonanpe. These policies are designed to prevent, mitigate, and manage any potential adverse environmental and social risks and impacts that may arise during project implementation, and to enhance environmental and social benefits and opportunities for the local populations involved.

To ensure full compliance with the aforementioned policies, the project will develop an environmental and social risk assessment and an Environmental and Social Management Plan (ESMP), including related monitoring and reporting actions, as well as a grievance mechanism and public disclosure procedures.

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

Currently, the Climate Action for Water Project (PACA Peru) is being implemented. This initiative seeks to generate a positive impact on water security and watershed management in Peru by integrating planning and decision-making based on climate science during the period 2023–2028. Led by the Ministry of the Environment (MINAM), the project is implemented by the Inter-American Development Bank (IDB), the General Secretariat of the Organization of American States (GS/OAS), and RTI International, with funding from the International Climate Initiative (IKI). The PACA Peru Project plans to conduct a climate risk assessment in 27 prioritized watersheds, with the aim of supporting decision-makers and their teams in implementing adaptation measures in the water, energy, and transportation sectors.

In parallel, the second phase of the regional project Andes Resilient to Climate Change (Bolivia, Ecuador, and Peru) has been launched. This project aims to increase the resilience of Andean family farming to climate change by building capacity, scaling up innovative practices, and promoting knowledge exchange at regional and global levels. The project is funded by the Embassy of Switzerland in Peru.

On the other hand, Profonanpe is implementing the *project "Building a Program for Adaptation and Resilience to Climate Change of Andean Local Communities and Ecosystems in Peru"* with HELVETAS Swiss Intercooperation as the executing entity. The project seeks to increase the adaptive capacity of the productive systems of Andean rural communities and to reduce the vulnerability of Peruvian Andean ecosystems (Andean forests, páramos, and bofedales). Although this project and the new one focus on climate change adaptation in Peru's Andean ecosystems, they differ in their territorial and methodological approaches. The approved project focuses on three conservation mosaics, with an emphasis on protected areas and their buffer zones. Priority is given to ecological conservation and restoration, as well as environmental monitoring, with a strong emphasis on strengthening the link between conservation and local development

Finally, the Resilient Puna Project, funded by the Green Climate Fund, German Cooperation, Canadian Cooperation, and MIDAGRI, and implemented by GIZ, MINAM, Profonanpe, MIDAGRI, the Mountain Institute, and SERNANP, seeks

[14] https://nuestrodesafioclimatico.minam.gob.pe/wp-content/uploads/2024/02/GuiaOrientaciones-Minam-version-aprobada-CANCC.pdf

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to help high-Andean communities adapt to climate change through the restoration and protection of Puna ecosystems. The project aims to ensure water security, safeguard livelihoods, and promote agricultural productivity above 3,500 meters above sea level.

The following table presents the mentioned projects and past projects implemented in Peru, including the overlapping intervention areas with the current proposal, as well as the identification of synergies and complementarities.

Table 9. Similar projects and their complementarity with the current project

Project	Implementing Entity	Period	Overlapping Intervention Area	Synergies/Complementarity
Climate Action for Water Project (PACA Peru)	IDB, GS/OAS, and RTI International	2023 – 2028	Santa River Basin, Mayo River Basin, Mantaro River Basin, Urubamba - Vilcanota River Basin	Due to the extent of the territory covered by the prioritized basins in both projects, the complementarity of intervention areas for the implementation of resilient water management pilots will be assessed during the full proposal development phase.
Regional Project Andes Resilient to Climate Change (Second Phase)	HELVETAS Swiss Intercooperation and Fundación Avina	September 2024 - August 2027	Cusco	Lessons learned from the Andes Resilient project will be identified, and complementarities in interventions in the Cusco region will be sought for the implementation of activities related to family farming.
Resilient Puna Project	GIZ, Profonanpe, MIDAGRI, Instituto de Montaña and Sernanp	2024-2030	Cusco	Complementarity will be sought in the implementation of EbA (Ecosystem-based Adaptation) measures in the territory, identifying districts not covered by the Puna Project.
Building a program for adaptation and resilience to climate change of Andean local communities and ecosystems in Peru	Profonanpe	2024-2028	Cajamarca, Loreto, San Martín y Ancash	The projects overlap in two regions, but their articulation can create valuable synergies: the new project could replicate measures in buffer zones, while the monitoring and conservation systems of this project could strengthen the new initiative. Together, they contribute complementarily to climate adaptation in the Peruvian Andes.
Andean Forests Regional Programme (ANFOR / Bosques Andinos)	HELVETAS Swiss Intercooperation	2014-2021	Abancay, Apurímac	Lessons learned from the project will be identified, and complementarities in overlapping region.
Scaling Up Mountain Ecosystem-based Adaptation: Building Evidence, Replicating Success, and Informing Policy (Mountain EBA Perú)	The Mountain Institute – IUCN	2017-2020	Cañete, Lima	Not overlapping Thematic Complementarity
Natural Infrastructure for Water Security in Peru (NIWS)	Forest Trends, CONDESAN, SPDA	2017-2022	Piura, Lima, Arequipa, Cusco	Lessons learned from the project will be identified, and complementarities in overlapping region.
Adaptation to Climate Change Impacts on Andean Water Resources (AICCA)	CONDESAN	2017-2022	Piura, Ancash, Cajamarca	Lessons learned from the project will be identified, and complementarities in overlapping region.
Adaptation at Altitude: taking action in the mountains	CONDESAN	2020-2023	Support the iMHEA Network (Lima)	Not overlapping Thematic Complementarity
Andes Resilient to Climate Change (Andes	HELVETAS Swiss	2020-2024	Cusco, Puno	Lessons learned from the project will be identified, and complementarities in

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Resilientes)	Intercooperation			overlapping region.

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

Knowledge management in this project will be a cross-cutting and strategic axis that will enable the capitalization of experiences generated through the interventions, support continuous improvement, and provide useful evidence for decision-making in climate adaptation policies, plans, and programs. In addition, component 4 will focus on the project knowledge management strategy.

In Component 1, knowledge management will focus on documenting pilot experiences in implementing EbA (Ecosystem-based Adaptation) measures in prioritized areas. Lessons learned will be systematized from processes such as participatory planning, territorial selection, technical implementation, community management, and ecological and social monitoring. The results will be transformed into technical and community-oriented dissemination products to facilitate the replication and scaling-up of successful measures in other contexts across the country.

In Component 2, knowledge generation will be promoted around adaptive productive diversification, integrating agroecological approaches, sustainable resource management, and resilient commercialization strategies. Experiences will be collected and systematized related to sustainable practices implemented by local actors (agroecology, responsible aquaculture, etc.), market access processes, use of sustainability certifications, and experiences of alignment with sectoral and investment programs.

In Component 3, the knowledge management approach will focus on documenting best practices in territorial climate governance, multi-level coordination mechanisms, and capacity-building experiences in planning and public investment with an adaptation lens. Lessons will also be drawn from the use of the AdaptaAcción Program and engagement with private sector actors. These learnings will be transformed into case studies and knowledge exchange spaces targeted at decision-makers, technical teams, and development partners.

Component 4 will serve as the core axis for project-wide learning. Participatory tools will be developed for monitoring adaptation measures, integrating social, biophysical, and institutional management indicators. The information generated will feed into national platforms such as SIMOM and support the production of periodic reports at the local and regional levels. In addition, spaces for dialogue and exchange will be facilitated, enabling the sharing of experiences across basins, sectors, and diverse stakeholders. The systematization and dissemination of results will aim to foster a culture of adaptive learning, demonstrate the project's impacts, and influence public adaptation policy.

All training and capacity-building activities will include simple feedback mechanisms—such as surveys and short evaluations—to assess their effectiveness. This will allow for adjustments to training content and methods to better meet local needs and ensure more targeted and impactful results.

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.

The concept note has been developed in close coordination with the General Directorate of Climate Change and Desertification of the Ministry of the Environment, taking into account the country's needs regarding adaptation management and the fulfillment of the Nationally Contributions, in alignment with the National Adaptation Plan. Additionally, meetings were held with representatives from key sectors related to both the project's activities and the implementation of the NDCs in the thematic areas of water, agriculture, health, forests, fisheries, and aquaculture. Among the institutions consulted were the National Institute for Research on Glaciers and Mountain Ecosystems (INAIGEM), the National Water Authority (ANA), the Ministry of Health (MINSA), and the Ministry of Production (PRODUCE).

During these meetings, the project proposal—including its components and activities—was presented with the aim of gathering technical feedback and input. Comments and recommendations were received to complement and strengthen the planned interventions, ensuring their coherence with sectoral and territorial policies. Likewise, the discussions included an assessment of the progress of current adaptation measures, in order to identify synergies, needs, and opportunities for coordination that would contribute to a more effective implementation of climate actions within the

framework of the NDCs.

Annex 3 provides a summary of the meetings held with the aforementioned stakeholders in the context of preparing this concept note.

During the full proposal phase, consultation workshops and further analysis will be developed. Women and youth will be included during consultation workshops through the following activities:

Information: Based on the results of the gender assessment and social consultation workshops, the situation of women and men, girls and boys, adolescents and youth, older adults, and rural communities in relation to different uses of water in the basin will be identified. Their diverse needs, priorities, concerns, and aspirations regarding water use and productive activities will be assessed. Participatory tools and methods will also be identified to help ensure open expression and foster intercultural dialogue.

Preparation: From the planning stage, it will be important to consider the necessary conditions to enable the active participation of these groups. Meetings, workshops, and other exchange spaces will be organized and planned taking into account the specific needs and characteristics of each group and their cultural and geographic contexts. Logistical aspects such as appropriate scheduling and locations, as well as strategies to promote intercultural, intergenerational, and gender-sensitive dialogue will be considered.

For example, to ensure the participation of women, meeting spaces will include childcare areas and support staff, or the meeting dynamics will be designed to allow women to participate while performing caregiving tasks. Activity schedules will also take into account the productive calendars and working hours of participants.

Outreach: Efforts will be made to ensure that invitations and calls to participate effectively reach the identified individuals and groups, and follow-up will be carried out to encourage and confirm their attendance.

Participation: During meetings, workshops, and other dialogue spaces, participatory tools and methods will be used to facilitate intercultural dialogue and to include the perspectives, priorities, concerns, and viewpoints of women and men, youth and older adults. For instance, women-only focus groups will be organized to allow them to express themselves more freely and comfortably.

Communication: Inclusive language will be used throughout the entire process—from planning to dissemination—and in the development of communication materials, to ensure that all individuals feel identified and represented.

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

The funding requested from the Adaptation Fund is essential to implement a comprehensive set of measures aimed exclusively at reducing vulnerability and increasing the climate resilience of communities and ecosystems in the Andean-Amazonian landscapes of Peru, where the impacts of climate change are already affecting water security, livelihoods, biodiversity, and basic infrastructure.

Without this intervention, local communities—highly dependent on ecosystem services—would remain exposed to increasing risks from hazards such as prolonged droughts, glacier retreat, extreme rainfall, landslides, and shifts in seasonal rainfall patterns. These impacts exceed the capacity of traditional responses and require specific adaptation actions which, although promoted in the country, are not sufficient to cover the entire territory.

The project does not aim to replace ongoing development processes but rather to act directly on the impacts of climate-related hazards through four strategic lines of action:

- Design and implementation of pilot ecosystem-based adaptation (EbA) measures to reduce climate risks and restore key ecological functions (such as water regulation and protection against extreme events), which are often not financed under traditional public investment schemes.
- Diversification and strengthening of sustainable and climate-resilient livelihoods, focused on productive and social adaptation to climate change. This includes agroecological practices, market access, and organizational capacity building with a resilience focus. These interventions aim to reduce dependence on climate-sensitive practices and would not be justifiable solely based on short-term economic criteria.

- Strengthening governance and climate-informed public investment, enabling the integration of adaptation as a structural criterion in territorial planning and public spending, while building sustainable local capacities. This enabling dimension directly addresses the need to institutionalize adaptation beyond the life of the project.

- Knowledge management, participatory monitoring, and adaptive learning, ensuring continuous improvement, replication, and scaling of adaptation measures. These actions generate both technical and community-based evidence on what works, for whom, and under what conditions—reinforcing the cost-effectiveness approach of the intervention.

While other sources may complement certain project activities, the proposed actions—independent of external co-financing—will achieve the objectives of the Adaptation Fund, delivering direct and measurable benefits in reducing climate risk, strengthening ecosystem resilience, and ensuring the sustainability of local livelihoods.

The following description will provide a more detailed justification for the outcomes of the project:

Outputs	Trend scenario	Scenario with AF resources
Output 1: Pilot adaptation measures identified, prioritized, and participatorily implemented for the reduction of climate and ecosystem risks	Local institutions lack technical and financial capacity to identify and implement EbA measures. Actions remain fragmented and reactive, with limited community participation.	The AF will finance a participatory and technically sound process to identify, prioritize, and implement EbA measures in vulnerable watersheds. This ensures alignment with national priorities, strong community ownership, and measurable ecosystem resilience outcomes.
Output 2.1: Sustainable and climate-resilient livelihoods are strengthened and linked to markets and investment.	Livelihoods remain vulnerable and poorly adapted to climate change. Limited market access and low technical capacity reduce income opportunities and increase climate risks.	AF resources will enable targeted technical assistance, investment in climate-resilient practices, and market linkages, especially for women and youth. This will diversify incomes and improve food and economic security under changing climate conditions.
Output 2.2: Vulnerable populations adopt healthy and safe practices to cope with extreme climate events and protect their livelihoods.	Populations lack access to knowledge, early warning systems, and adaptive practices. Climate events continue to cause severe livelihood losses and health risks.	The AF will fund capacity-building, communication, and behavior change strategies tailored to local contexts. This will reduce vulnerability and enhance preparedness through informed decision-making at the household and community levels.
Output 3.1: Territorial planning instruments and coordination mechanisms are strengthened.	Territorial and sectoral planning instruments do not fully integrate climate risk or EbA. Coordination between local and regional governments is weak and inconsistent.	AF resources will strengthen planning instruments by integrating climate risk, EbA principles, and DRM. It will also support the establishment and institutionalization of coordination platforms among relevant stakeholders.
Output 3.2 Technical assistance is provided for the financial sustainability, monitoring, and scalability of adaptation measures.	There is limited expertise or resources to ensure long-term sustainability, monitoring, or upscaling of adaptation actions. Projects remain isolated and lack follow-up.	The project will provide technical support to design sustainability strategies (e.g., linkages to public budgets, incentives), robust M&E systems, and scaling-up pathways aligned with national and local frameworks.
Output 4.1 Professionals, technicians, communities, and decision-makers are sensitized and trained in adaptation management, including its monitoring and reporting	Capacity gaps persist among institutions and communities. Training remains ad-hoc, poorly funded, and not tailored to EbA or climate risks.	The project will finance structured, inclusive training programs with feedback mechanisms, tailored to local contexts and aligned with national standards. This will build long-term capacities in adaptation planning, implementation, and reporting.
Output 4.2: Relevant knowledge management products are developed and	Existing knowledge is fragmented and not systematized or shared.	The project will enable the documentation and dissemination of lessons, tools, and practices through appropriate channels. This will foster

disseminated among key stakeholders.	Valuable lessons from local initiatives are lost or not scaled.	learning, replication, and innovation among practitioners, institutions, and communities.

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

The project will be implemented by PROFONANPE, as the accredited implementing entity before the Adaptation Fund, and the Ministry of the Environment of Peru, through the Directorate-General for Climate Change and Desertification and its line agency, the Directorate for Climate Change Adaptation and Desertification, will act as the executing entity.

The sustainability of the project's results has been considered in a cross-cutting manner throughout its design, ensuring that the interventions generate lasting benefits at environmental, social, institutional, and economic levels. The adopted approach recognizes that climate resilience is not achieved solely through isolated actions but through sustainable transformations in livelihoods, territorial governance, and knowledge management.

Component 1 focuses on the design and implementation of pilot ecosystem-based adaptation (EbA) measures, prioritizing low- or medium-cost practices with high ecological impact that restore critical services such as water regulation, soil protection, and risk reduction from extreme events. These interventions will be developed through participatory processes, ensuring local ownership and cultural adaptability, which facilitates their maintenance and scaling. Additionally, the proposed solutions are directly aligned with the National Adaptation Plan and sectoral adaptation documents, as well as with territorial planning instruments, reinforcing their political and institutional sustainability.

Component 2 aims to diversify and strengthen the livelihoods of local populations, through sustainable production models that integrate climate resilience criteria, ecosystem conservation, and food and nutritional security. Agroecological systems, agroforestry practices, sustainable value chains, and efficient water use will be promoted, contributing to the reduction of socioeconomic vulnerability to climate change. This strategy improves household economic autonomy while reducing pressure on ecosystems, promoting a virtuous cycle between local development and conservation.

Component 3 addresses the strengthening of territorial and inter-institutional governance for adaptation, integrating the implemented measures into local and regional planning instruments and consolidating multisectoral and multilevel coordination spaces. At the same time, it promotes the mobilization of public, private, and international cooperation funding, creating conditions for the continuity and scaling of the measures beyond the project's implementation period. Linkages with national programs such as AdaptaAcción and the development of climate risk analyses reinforce the institutionalization of adaptation, facilitating its integration into public policy, investment, and planning decisions, in alignment with the commitments under the NDCs and the National Adaptation Plan.

Component 4 will ensure the sustainability of the project through the strengthening of local and institutional capacities and the development of participatory monitoring tools, which will allow continuity of the implemented measures beyond the execution period. Linkages with national systems such as SIMON and the integration of lessons learned into local and regional planning instruments will foster the replicability and scaling of the interventions, ensuring that local actors have the knowledge, tools, and networks necessary to sustain and improve adaptation processes over the long term.

The adaptation benefits generated by this project are designed to be sustained beyond its implementation period through institutional, social, and financial mechanisms. These include: (i) the restoration and protection of critical ecosystems that continue to provide regulating services and reduce climate risks over time; (ii) the adoption of climate-resilient livelihood practices that enhance food and income security in the face of climate variability; and (iii) the strengthening of local and regional governance structures that institutionalize climate adaptation in territorial planning and public investment processes. The participatory methodologies, technical tools, and planning instruments developed during the project will be embedded in local government capacities and planning cycles, enabling continued implementation. Moreover, these tools and approaches are designed to be replicable and adaptable to other Andean-Amazonian basins and territories with similar socio-ecological characteristics. The project promotes financial sustainability through linkages to public programs and national funds, creating a pathway for replication and scale-up by subnational governments and other development actors. In addition, the systematization and dissemination of knowledge products and lessons learned will provide concrete inputs for informing national policies and enabling the design of future Ecosystem-based Adaptation (EbA) interventions across Peru and potentially in other Andean countries.

Financial, social, regulatory, and institutional resources play a central role in ensuring the long-term sustainability of the project's outcomes. By embedding adaptation measures into local and regional planning instruments, strengthening institutional capacities, and aligning with public funding mechanisms (such as national programs and regional budgets), the project creates enabling conditions for continuity. Additionally, social sustainability is reinforced through strong community ownership, inclusive participation, and local knowledge integration, which contribute to the long-term maintenance and relevance of the adaptation actions.

Finally, sustainability is reinforced through an intersectoral and multi-stakeholder approach, linking communities, governments, academia, and the private sector. This articulation generates collective ownership and installed capacity, ensuring that the project's results can be maintained, adapted, and replicated in the medium and long term, both in the prioritized territories and in other areas with similar characteristics.

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

The project is not anticipated to cause negative environmental or social impacts. Nonetheless, given that specific implementation sites have not yet been defined at the concept stage, certain activities may involve a low level of risk. Therefore, the project is provisionally categorized as Category B. During the full proposal development phase, detailed assessments will be conducted to ensure full compliance with the Adaptation Fund's environmental, social, and gender policies and principles.

Checklist of environmental and social principles	No further assessment required for compliance	Potential impacts and risks – further assessment and management required for compliance
Compliance with the Law		**Low Risk:** The project is aligned with the national and international legal frameworks on climate change, environment, and human rights. However, some activities (e.g., natural infrastructure, wetland management, aquaculture, or rural tourism) may require environmental, water, or sanitary permits, and delays in obtaining them could affect the project schedule. Through the ESMP, the project will establish mechanisms to ensure the timely compliance with environmental, water, and sanitary permits in order to guarantee the legality of the interventions.
Access and Equity		**Low risk:** Certain groups such as women, communities, and youth may face barriers in accessing the project's benefits equitably. The project's participatory and gender approach will mitigate this risk by ensuring fair and equitable access to project benefits for all participants who meet the eligibility criteria. A stakeholder engagement plan and a gender action plan will be developed and implemented for the project.
Marginalized and Vulnerable Groups		**Low Risk:** Marginalized and vulnerable groups, especially women, will be consulted during the proposal preparation process to ensure that threats, priorities, and necessary mitigation measures for their participation in the project are reflected. Participation of target groups will be closely monitored through the monitoring and evaluation system, and the grievance mechanism will also serve as a key tool in case individuals or communities feel excluded or marginalized from project benefits. As mentioned in table 1, vulnerable groups face risks regarding exclusion from participation spaces and decision-making, food insecurity, loss of ancestral knowledge, among others. The project will attend those risks with the proposed activities and will consider them in the environmental and social instruments developed.
Human Rights		**No risk**: The project promotes human rights such as participation, access to information, and dignified livelihoods, without coercion or discrimination. Empowering communities, especially vulnerable groups, will strengthen the realization of internationally recognized human rights.

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Gender Equality and Women's Empowerment		**Low risk**: Vulnerable groups, especially women, will be consulted during the proposal preparation process to ensure that threats, priorities, and necessary mitigation measures for their participation in the project are reflected. The project will mitigate potential risks to women's access to project benefits through the development and implementation of a gender action plan, ensuring women's leadership in training, governance, and entrepreneurship processes. Meetings, workshops, and other knowledge-sharing spaces will be organized and planned taking into account women's needs and specific local conditions, including logistical aspects such as appropriate timing and locations for activities, and strategies to facilitate intercultural and gender-sensitive dialogue.
Core Labour Rights		**No risk:** The project will ensure full compliance with international and national labor laws and standards. In the event of potential risks related to inadequate labor conditions for local workers, core labor rights will be strictly respected and integrated into both the design and implementation of activities. To guarantee adherence to relevant labor legislation, all stakeholders will be actively involved in the planning and execution of project interventions
Indigenous Peoples	X	**No risk**: The project does not involve activities on Indigenous Peoples' lands.
Involuntary Resettlement	X	**No risk:** The proposed project activities do not include involuntary resettlement.
Protection of Natural Habitats	X	**No risk**: The project activities are not designed to have negative impacts on natural habitats, including those that are legally protected or recognized as protected natural areas.
Conservation of Biological Diversity		**Low risk:** The project aims to strengthen the conservation and restoration of strategic ecosystems through the implementation of ecosystem-based adaptation (EbA) measures and the promotion of sustainable livelihoods, contributing positively to the conservation of local biodiversity. No conversion of natural habitats or use of invasive exotic species is expected. However, there is a low risk of indirect impacts on biodiversity if productive activities (such as agroforestry systems, sustainable fishing, ecotourism, or the use of natural resources) are not implemented with adequate ecological sustainability criteria or are located near sensitive habitats. To prevent this, territorial selection criteria will be applied, prioritizing the conservation of ecological corridors, water recharge zones, and ecosystem services. The use of native species and traditional biodiversity-compatible practices will be promoted. In addition, participatory monitoring measures will be integrated to track the condition of the intervened ecosystems and adjust actions if unintended effects are identified.
Climate Change	X	**No risk**: The project's central objective is to increase climate resilience. Furthermore, the proposed project does not intend to increase greenhouse gas emissions or contribute to the drivers of climate change.
Pollution Prevention and Resource Efficiency		**Low risk:** The project will promote sustainable productive practices that reduce agrochemical use and encourage efficient management of soil, water, and biodiversity in the prioritized areas. No significant sources of pollution are expected. Training and monitoring activities will be included to ensure the rational use of resources and prevent indirect environmental impacts.
Public Health	X	**No risk**: No health risks are expected; instead, the project is expected to have positive effects by reducing exposure to extreme events and improving livelihoods
Physical and Cultural Heritage	X	**No risk:** The project will not harm the physical or cultural heritage of the intervention areas.

Lands and Soil Conservation	X	**No risk:** The project directly contributes to land and soil conservation through the implementation of EbA measures in strategic areas for water recharge, erosion reduction, and restoration of vegetative cover. It also promotes sustainable productive practices such as agroecology and diversified crop management.

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PART III: IMPLEMENTATION ARRANGEMENTS

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

Project Objective(s)[1]	Project Objective Indicator(s)	Fund Outcome	Fund Outcome Indicator	Grant Amount (USD)
To strengthen the climate resilience of populations and their livelihoods in vulnerable Andean-Amazonian landscapes in Peru through the implementation of ecosystem-based adaptation (EbA) measures to address climate-related hazards	-Number of people with climate resilience strengthened. -Number of hectares of ecosystems in prioritized Andean-Amazonian landscapes benefiting from adaptation measures implemented to reduce their climate vulnerability	**Outcome 5**: Increased ecosystem resilience in response to climate change and variability-induced stress	5. Ecosystem services and natural assets maintained or improved under climate change and variability-induced stress	US$ 10,000,000
Outcome 1: Increased resilience of vulnerable populations and ecosystems in prioritized landscapes.	Hectares of ecosystems in prioritized Andean-Amazonian landscapes benefiting from adaptation measures implemented to reduce their climate vulnerability	**Outcome 5**: Increased ecosystem resilience in response to climate change and variability-induced stress	Ecosystem services and natural assets maintained or improved under climate change and variability-induced stress	US$3,000,000
Outcome 2: Climate-resilient and diversified local livelihoods are strengthened.	- Number of sustainable productive initiatives implemented or strengthened with a climate change adaptation approach in the intervention areas.	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	US$3,500,000
Outcome 3: Territorial governance and public investment for adaptation are strengthened.	-Number of people (disaggregated by sex and age group) sensitized and trained through communication and technical assistance activities.	**Outcome 7:** Improved policies and regulations that promote and enforce resilience measures	7. Climate change priorities are integrated into national development strategy	US$ 570,000

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		Outcome 2: Strengthened institutional capacity to reduce risks associated with climate-induced socioeconomic and environmental losses	2.1. No. and type of targeted institutions with increased capacity to minimize exposure to climate variability risks	US$ 430,000
Outcome 4: Monitoring and knowledge management are strengthened for adaptation planning and implementation in vulnerable Andean-Amazonian landscapes.	- Number of prioritized watersheds with participatory monitoring systems implemented and linked to the National System for Monitoring Adaptation and Mitigation Measures (SIMOM).	**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	US$ 916,977
Project Outcome(s)	**Project Outcome Indicator(s)**	**Fund Output**	**Fund Output Indicator**	**Grant Amount (USD)**
Output 1: Pilot adaptation measures identified, prioritized, and participatorily implemented for the reduction of climate and ecosystem risks	Number of ecosystem-based adaptation (EbA) measures designed and implemented through participatory processes, disaggregated by watershed and gender of participants.	**Output 5:** Vulnerable physical, natural, and social assets strengthened in response to climate change impacts, including variability	5.1. No. and type of natural resource assets created, maintained or improved to withstand conditions resulting from climate variability and change (by type of assets)	US$3,000,000
Output 2.1: Sustainable and climate-resilient livelihoods are strengthened and linked to markets and investment.	Number of people (disaggregated by sex and age group) with income-generating capacity adapted to climate change.	**Output 6:** Targeted individual and community livelihood strategies strengthened in relation to climate change impacts, including variability	6.1.1.No. and type of adaptation assets (physical as well as knowledge) created in support of individualor community-livelihood strategies	US $3,331,000.00
Output 2.2: Vulnerable populations adopt healthy and safe practices to cope with extreme climate events and protect their	Number of households adopting risk-reducing practices to cope with extreme climate events	**Output 6:** Targeted individual and community livelihood strategies	6.1.1.No. and type of adaptation assets (physical as	US $169,000.00

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livelihoods.		strengthened in relation to climate change impacts, including variability	well as knowledge) created in support of individualor community-livelihood strategies	
Output 3.1: Territorial planning instruments and coordination mechanisms are strengthened.	Number of regional or local planning instruments updated or developed that integrate climate adaptation measures.	Output 7: Improved integration of climate-resilience strategies into country development plans	7.2. No. or targeted development strategies with incorporated climate change priorities enforced	US$ 570,000
Output 3.2 Technical assistance is provided for the financial sustainability, monitoring, and scalability of adaptation measures.	Number of adaptation actions with technical assitance to financial sustainability developed and validated by local institutions.	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	US$ 430,000
Output 4.1 Professionals, technicians, communities, and decision-makers are sensitized and trained in adaptation management, including its monitoring and reporting	Number of people trained (disaggregated by gender and stakeholder group) in adaptation planning, monitoring, and reporting.	**Output 3**: Targeted population groups participating in adaptation and risk reduction awareness activities	3.1.1 No. and type of risk reduction actions or strategies introduced at local level	US $423,023.00
Output 4.2: Relevant knowledge management products are developed and disseminated among key stakeholders.	Number of knowledge products on adaptation (e.g., policy briefs, manuals, case studies) produced and disseminated to target audiences.	**Output 3**: Targeted population groups participating in adaptation and risk reduction awareness activities	3.1.2 No. of news outlets in the local press and media that have covered the topic	US $493,954.04

Project Objective(s)[1]	Project Objective Indicator(s)	Adaptation Fund Outcome	Adaptation Fund Outcome Indicator	Grant Amount (USD)
To strengthen the climate resilience of populations and their livelihoods in vulnerable Andean-Amazonian landscapes in Peru through the implementation of ecosystem-based adaptation (EbA) measures to address climate-related hazards	-Number of people with climate resilience strengthened.	**Outcome 2:** Strengthened institutional capacity to reduce risks associated with climate-induced socioeconomic and environmental losses	2.1. Capacity of staff to respond to, and mitigate impacts of, climate-related events from targeted institutions increased	US$ 430,000
		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	$916,977
		Outcome 5: Increased ecosystem resilience in response to climate change and variability-induced stress	5. Ecosystem services and natural assets maintained or improved under climate change and variability-induced stress	US$3,000,000
		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 alternative livelihoods	$3.500.000,00
		Outcome 7: Improved policies and regulations that promote and enforce resilience measures	**7.** Climate change priorities are integrated into national development strategy	US$ 570,000
Total outcome level grant amount				**$8,416,977**
Project Outcome(s)	**Project Outcome Indicator(s)**	**Adaptation Fund Output**	**Adaptation Fund Output Indicator**	**Grant Amount (USD)**

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Outcome 1: Increased resilience of vulnerable populations and ecosystems in prioritized landscapes.	Hectares of ecosystems in prioritized Andean-Amazonian landscapes benefiting from adaptation measures implemented to reduce their climate vulnerability	**Output 5:** Vulnerable ecosystem services and natural resource assets strengthened in response to climate change impacts, including variability	5.1. No. of natural resource assets created, maintained or improved to withstand conditions resulting from climate variability and change (by type and scale)	US$3,000,000
Outcome 2: Climate-resilient and diversified local livelihoods are strengthened.	Number of sustainable productive initiatives implemented or strengthened with a climate change adaptation approach in the intervention areas.	**Output 6:** Targeted individual and community livelihood strategies strengthened in relation to climate change impacts, including variability	6.1.1. No. and type of adaptation assets (tangible and intangible) created or strengthened in support of individual or community livelihood strategies	$3,500,000.00
Outcome 3: Territorial governance and public investment for adaptation are strengthened.	-Number of people (disaggregated by sex and age group) sensitized and trained through communication and technical assistance activities.	**Output 7:** Improved integration of climate-resilience strategies into country development plans	7.2. No. of targeted development strategies with incorporated climate change priorities enforced	US$ 570,000
		Output 2.1: Strengthened capacity of national and sub-national centres and networks to respond rapidly to extreme weather events	2.1.1. No. of staff trained to respond to, and mitigate impacts of, climate-related events (by gender)	US$ 430.000
Outcome 4: Monitoring and knowledge management are strengthened for adaptation planning and implementation in vulnerable Andean-Amazonian landscapes.	Number of local and regional individuals and institutions that use information or tools generated by the project (monitoring, systematization, or training) to plan, implement, or evaluate ecosystem-	**Output 3.2:** Strengthened capacity of national and subnational stakeholders and entities to capture and disseminate knowledge and learning	3.2.2 No. of tools and guidelines developed (thematic, sectoral, institutional) and shared with relevant stakeholders	$916,977

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	based adaptation measures.			
Total output level grant amount				**$8,416,977**

[1] The AF utilized OECD/DAC terminology for its results framework. Project proponents may use different terminology but the overall principle should still apply

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

A. Record of endorsement on behalf of the government[15]

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

Name: Silvia Cristina Rodríguez Valladares Position: Director General of Climate Change and Desertification Ministry: Ministerio del Ambiente	Date*: November,25, 2025*

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

I certify that this proposal has been prepared in accordance with guidelines provided by the Adaptation Fund Board, and prevailing National Development and Adaptation Plans (National Adaptation Plan and National Contributions) and subject to the approval by the Adaptation Fund Board, commit to implementing the project/programme in compliance with the Environmental and Social Policy and the Gender Policy of the Adaptation Fund and on the understanding that the Implementing Entity will be fully (legally and financially) responsible for the implementation of this project/programme.

Anton Willems Delanoy Implementing Entity Coordinator	
Date: *(July, 10, 2025)*	Tel. and email: (511) 218 1097 awillems@profonanpe.org.pe
Project Contact Person: Claudia Godfrey Ruiz	
Tel. And Email: (511) 218 1097 cgodfrey@profonanpe.org.pe	

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

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Lima, 01 de diciembre del 2025

LETTER N° 00187-2025-MINAM/VMDERN/DGCCD

Messrs.
The Adaptation Fund Board
c/o Adaptation Fund Board Secretariat Washington
United States
Email: Secretariat@adaptation-fund.org
Fax: 202 522 3240/5

Subject : Endorsement of the project "Climate Resilience in Andean-Amazonian Landscapes of Peru: Ecosystem-based Adaptation and Sustainable Livelihoods"

The Ministry of the Environment of Peru is the national authority on climate change and is responsible for coordinating the implementation of the National Strategy on Climate Change and the National Adaptation Plan to Climate Change. It also the entity responsible for reporting, on behalf of the Peruvian State, on the progress of the Nationally Determined Contributions (NDCs) to the United Nations Framework Convention on Climate Change (UNFCCC).

In this context, we have reviewed the Concept Note entitled "Climate Resilience in Andean-Amazonian Landscapes of Peru: Ecosystem-based Adaptation and Sustainable Livelihoods", presented by Profonanpe in its capacity as an accredited implementing entity before the Adaptation Fund, and prepared by the Directorate of Climate Change Adaptation and Desertification of the Ministry of Environment.

This proposal will make a significant contribution to strengthen the climate resilience of populations and their livelihoods in vulnerable Andean-Amazonian landscapes in Peru through the implementation of ecosystem-based adaptation (EbA) measures to address climate-related hazards.

Therefore, I am pleased to express the Ministry of the Environment's support for this Concept Note, and we kindly request that it be considered for funding by the Adaptation Fund.

If approved, the Ministry of the Environment, as the executing entity, will ensure that the project is aligned with the country's adaptation objectives and will be implemented in coordination with Profonanpe, in its role as implementing entity.

Sincerely,

CRISTINA RODRIGUEZ VALLADARES
General Director for Climate Change and Desertification Directorate
Ministry of the Environment – Republic of Peru

Documento electrónico firmado digitalmente en el marco de la Ley N°27269, Ley de Firmas y Certificados Digitales, su Reglamento y modificatorias. La integridad del documento y la autoría de la(s) firma(s) pueden ser verificadas en: https://apps.firmaperu.gob.pe/web/validador.xhtml

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This is a printable, authentic copy of a document archived at the Ministry of the Environment, in accordance with Article 25 of Supreme Decree No. 070-2013-PCM and the Third Final Complementary Provision of Supreme Decree No. 026-2016-PCM. Its authenticity and integrity can be verified at the following website: https://ecodoc.minam.gob.pe/verifica/view by entering the following code.: **tvtfom**

ADAPTATION FUND

Revised PFG Submission Form[1]

Project Formulation Grant (PFG)

Submission Date: August 10th, 2025

Adaptation Fund Project ID:
Country/ies: Peru
Title of Project/Programme: Climate Resilience in Andean-Amazonian Landscapes of Peru: Ecosystem-based Adaptation and Sustainable Livelihoods
Type of IE (NIE/RIE/MIE): National Implementing Entity
Implementing Entity: Profonanpe
Executing Entity/ies: Profonanpe

A. Project Preparation Timeframe

Start date of PFG	October 2025
Completion date of PFG	March 2026

B. Proposed Project Preparation Activities ($)

List of Proposed Project Preparation Activities	Output of the PFG Activities	US$ Amount	Budget note[2]
1. Gender and Environmental and Social risk analyses and formulation of Environmental and Social Management Plan and Gender Action Plan	Environmental and Social Management Plan and Gender Action Plan	US$ 45,000	EIA and Environmental and Social Management Plan (lump-sum consultancy)
2. Local consultations, and workshops to validate the project	Workshop reports, validated project design	US$ 34,650	Gender Action Plan (lump-sum consultancy)
3. Assessments at regional level, including risk assessment identifying hazards and	Assessment report, validated intervention areas and beneficiaries.	US$ 25,000	Report of local consultations and workshops (lump-sum consultancy)

[1] As presented in AFB/PPRC.33/40 Annex 1.
[2] The proposal should include a detailed budget with budget notes indicating the break- down of costs at the activity level. It should also include a budget on the Implementing Entity management fee use.

vulnerabilities, and assessments to determined beneficiaries and districts of intervention.			Includes travel: airfare and ground transportation expenses for field visits and workshops in each of the five regions.
4. Full project proposal development	Full Project Proposal developed	US$ 30,000	Expert to develop the full proposal (lump-sum consultancy)
5. Costs of translating documents	Documents translated	US$ 2,600	Expert for translating documents into English (lump-sum consultancy)
6. Implementing Entity's Management Fee		US$ 12,750	8.5% fee
Total Project Formulation Grant		**US$ 150,000**	

Please describe below each of the PFG activities and provide justifications for their need and for the amount of funding required:

1. **Gender and Environmental and Social risk analyses and formulation of Environmental and Social Management Plan and Gender Action Plan**

The Gender and Environmental and Social Risk Analyses will assess the potential environmental impacts of the project to ensure it does not negatively affect the environment, as well as analyze the different impacts of climate change on men and women, ensuring that the project's strategies are gender-responsive. This process will include an assessment to determine the need for an Environmental Impact Assessment (EIA), identification of potential impacts on natural resources and ecosystems, the proposal of mitigation strategies to address negative effects, stakeholder consultations to gather feedback, and documentation of the findings in a comprehensive report.

As a result, an Environmental and Social Management Plan (ESMP) will be developed to appropriately monitor the project's environmental effects, ensure compliance with mitigation measures, and adapt strategies as needed to address unforeseen impacts. In addition, a Gender Action Plan will be prepared, outlining measures to overcome gender-related barriers to adaptation, and to enhance women's and youth's access to resources, information, and decision-making processes within the project framework.

2. **Local consultations, and workshops to validate the project**

The organization of workshops with key stakeholders is essential to validate the project design and gather inputs for the development of the final proposal. These spaces will involve the participation of various actors, including local populations, representatives from ministries, local authorities, non-governmental organizations, specialists, and other relevant stakeholders. It is estimated that five workshops will be held in the regions and one in Lima. During the workshops, the preliminary project design will be presented, and feedback, observations, and recommendations will be collected. This participatory approach allows for the integration of local knowledge and promotes community ownership of the project. The inputs gathered will be used to refine the proposal.

3. Assessments at regional level, including risk assessment identifying hazards and vulnerabilities, and assessments to determined beneficiaries and districts of intervention.

This activity involves the development of comprehensive assessments at the regional level to inform the design and geographic focus of the project. It includes two key components:

Climate Risk Assessment: This sub-activity will identify climate-related hazards and assess the exposure, sensitivity, and adaptive capacity of communities and ecosystems in the target regions. The assessment will draw on existing climate data, local knowledge, and scientific models to generate a risk map and prioritize areas where vulnerabilities are highest.

Socioeconomic and beneficiary analysis: In parallel, a socioeconomic assessment will be conducted to identify the most vulnerable populations (e.g., women, smallholder farmers, youth) and determine the districts and communities with the greatest need for intervention. Criteria will include poverty levels, exposure to climate hazards, limited access to basic services, and dependence on natural resources. This process will guide the selection of direct beneficiaries.

4. Full project proposal development

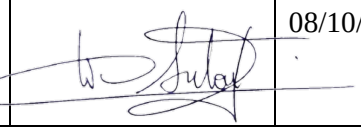
This activity involves preparing a complete and technically project proposal that meets the requirements of the Adaptation Fund and national priorities. This process requires technical expertise, participatory engagement, and coordination with national stakeholders. Financing ensures a high-quality, context-relevant proposal.

5. Costs of translating documents

This activity covers the professional translation of the full project proposal and its annexes, between Spanish and English.

C. Implementing Entity

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

Implementing Entity Director, IE Name	Signature	Date (Month, day, year)	Project Contact Person	Telephone	Email Address
Anton Willems Delanoy - Profonanpe		08/10/2025	Claudia Godfrey	(511) 218 1097	cgodfrey@profonanpe.org.pe

Annexes

Annex 1: Map of river basins within the project's scope
Annex 2: Theory of change of the project
Annex 3: Summary of meetings with relevant stakeholders

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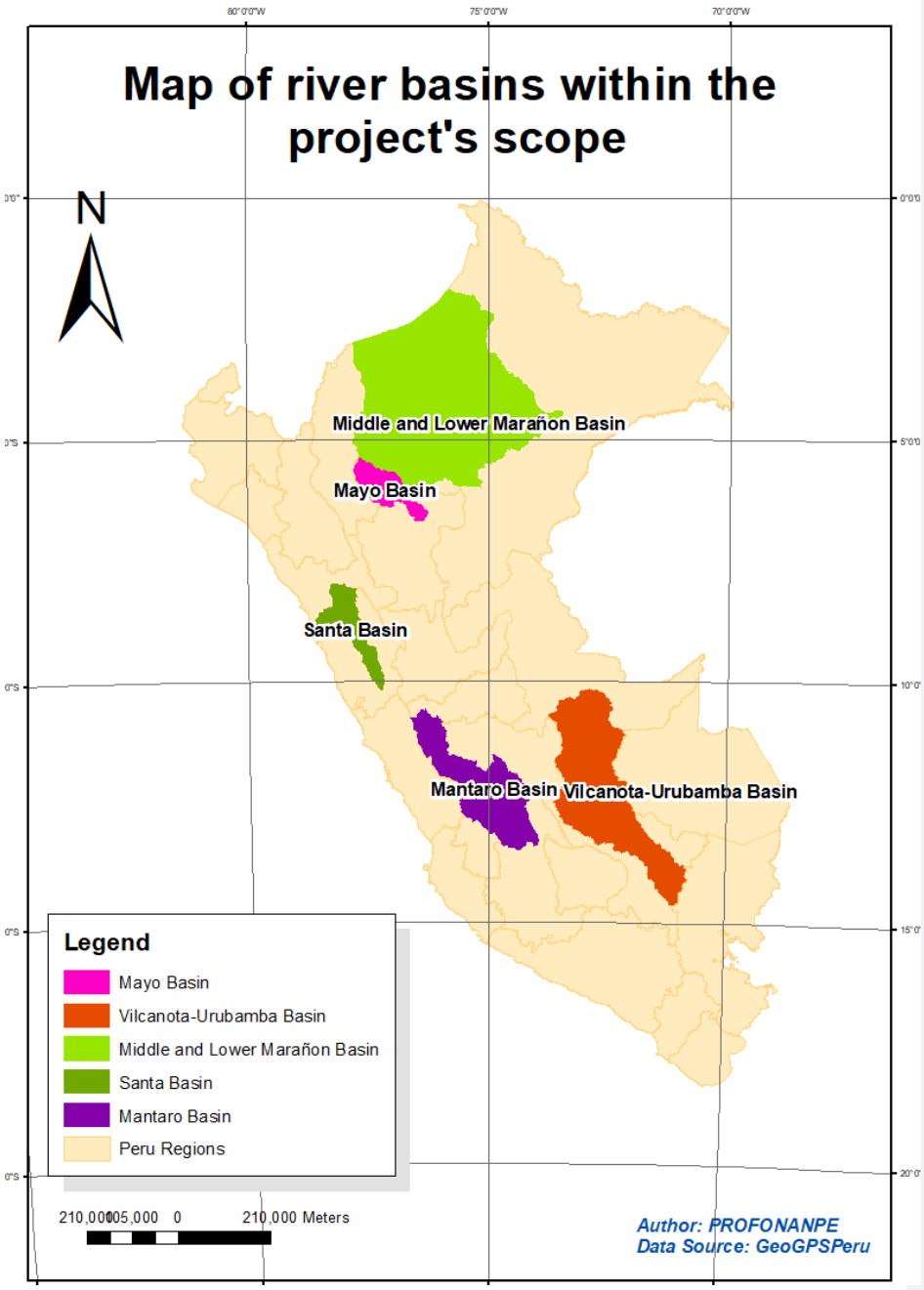
Annex 1 Map of river basins within the project's scope



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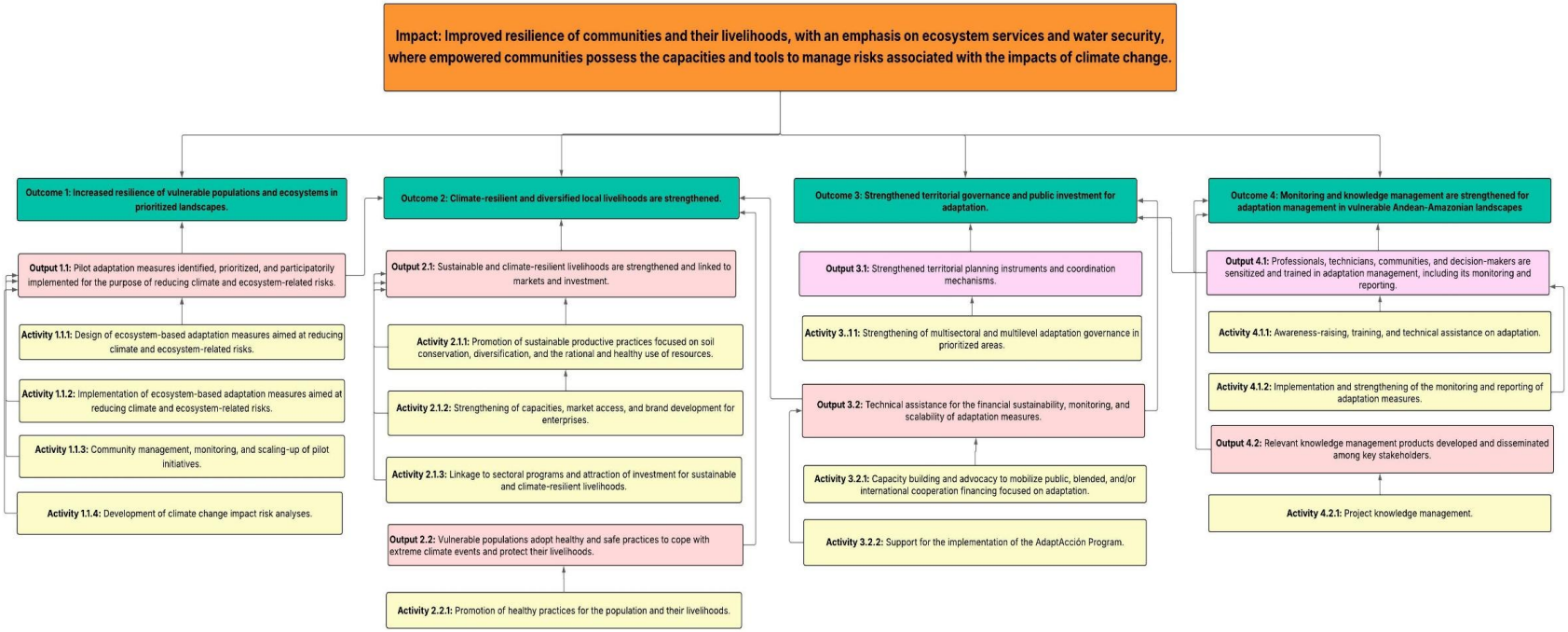
Annex 2 Theory of change of the project



Assumptions

1. **Community engagement:** Local communities will actively participate in the design and implementation of adaptation measures.
2. **Institutional stability:** Public institutions will maintain support and coherence in climate-related policies throughout the project.
3. **Available financing:** Public, private, and international resources will be mobilized to sustain interventions over time.
4. **Local technical capacity:** Local actors will have or develop the necessary skills to implement and manage adaptation actions.
5. **Access to climate information:** Timely and relevant data will be available for monitoring and informed decision-making.
6. **Political will for EbA integration:** Sectoral policies will incorporate ecosystem-based adaptation (EbA) in territorial planning and budgeting.

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Climate risks and relation with project outcomes and outputs.

Climate Risk	Component	Outcome	Output	Response Strategy
Droughts, water stress, floods erosion, frost, temperature changes, landslides, wetland degradation, desertification and loss of fertile soil	Component 1	Outcome 1	Output 1	Implementation of ecosystem restoration and water regulation measures (e.g., reforestation, wetland recovery). Nature-based solutions for runoff control and slope stabilization. Selection of resilient native species and agroecological practices adapted to climatic variability. Protective vegetation barriers and restoration of degraded ecosystems. Restoration of high Andean wetlands (bofedales) to improve water retention. Recovery of native vegetation and ecosystem connectivity. Agroforestry systems and soil conservation techniques.
Crop loss due to water scarcity, crop failure, food insecurity, economic pressure on ecosystems, habitat fragmentation	Component 2	Outcome 2	Output 2.1, 2.2	Promotion of diversified, climate-resilient crops with efficient irrigation systems. Strengthening food production systems through technical assistance and improved practices. Promotion of sustainable family farming and nutritional education. Development of resilient economic alternatives (e.g., ecotourism, bio-businesses).

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Anexo 3: Summary of meetings with relevant stakeholders

Meeting with the National Institute for Research on Glaciers and Mountain Ecosystems (INAIGEM)

Date	July 8 2025
Place	Google meets
Participants	
MINAM	Zynthia Andrea Bellota Mejia - Ecosystem-based Adaptation Specialist
Profonanpe	Lizeth Morante – Especialista de Innovación y Gestión Estratégica
	Lisseth Malpica - Consultora
INAIGEM:	Beatriz Fuentealba Durand – Executive President
	Janet Coral Calvo Vargas - Advisor on Mountain Ecosystems Research
	Francisco Medina Castro - Director of Mountain Ecosystem Research

Summary:

- Profonanpe presented the project proposal.
- INAIGEM inquired about the method for measuring results in the natural components and ecosystems following project implementation—specifically, whether the project intends to generate evidence from the execution of pilot interventions.
- INAIGEM was asked whether they possess information or evidence on adaptation measures applicable to the intervention territories. INAIGEM responded that the available information is primarily derived from the IPCC, and their institutional focus has been on research related to ecosystem restoration and the recovery of high Andean wetlands (bofedales). They highlighted the carbon-related impacts of effective bofedal management and expressed their intent to advance mitigation work in Andean peatlands.
- INAIGEM is also conducting research on grassland ecosystems, which they identified as both widespread and under-addressed. Their work includes examining potential hydrological impacts associated with these ecosystems. They noted that they are currently analyzing the effects of nature-based infrastructure interventions—such as infiltration trenches—acknowledging that such measures do not always yield significant hydrological benefits.
- Regarding engagement with regional and local governments, it was emphasized that it is crucial to incorporate climate adaptation considerations into official management instruments. Enhancing the design of investment projects and building technical capacities—especially for project formulation and implementation—was highlighted as a priority. INAIGEM expressed interest in contributing to the improvement of investment projects developed under this initiative.
- Additionally, INAIGEM reported that they are conducting a study to define a parameter for climate vulnerability that will help better identify the most vulnerable ecosystems. The expected outcome is a decision-making tool in the form of a map to support national planning. They are also working on a second national inventory of bofedales and gathering complementary information on ecosystem degradation to support evidence-based decision-making.
- At the regional level, they participate in Regional Environmental Commissions. In Cusco, there is a Regional Committee on Climate Change and regional risk management commissions, which are mainly involved in monitoring glacier-related hazards.

Meeting with the Ministry of Health

Date	July 8th2025
Place	Google meets
Participants	
MINAM	Zynthia Andrea Bellota Mejia - Ecosystem-based Adaptation Specialist
Profonanpe	Lizeth Morante – Innovation and Strategic Management Specialist

	Lisseth Malpica - Consultant
MINSA:	Invonne Benites Toledo - Deputy Executive
	Diana Porles, Climate change mitigation and adaptation specialist
	Giovanna Pinasco- Adaptation specialist

Summary:

- Profonanpe presented the project proposal.
- MINSA noted that the proposed project represents a valuable opportunity to align with the work they are currently undertaking with the regional health directorates, which have developed a roadmap on climate change.
- MINSA suggested that under Component 1, during the participatory identification of ecosystem-based adaptation (EbA) measures, it would be beneficial to also identify the specific climate hazards to which each locality is exposed. This would allow for the development of more tailored educational materials by region.
- It was noted that MINSA has developed community educational materials to promote healthy practices at the local level and to train staff to understand what climate change is and how to address it within the community.
- MINSA also has community health agents, who are not healthcare professionals but rather local community leaders who serve as liaisons between the population and health posts. General informational documents have been developed for these agents, and there is interest in adapting these materials to make them more specific to each territory.
- Additionally, MINSA mentioned the need for funding to conduct training workshops for communities, community health agents, and health personnel, as these actors will serve as the voice of the community. They also suggested including schoolteachers in these training activities, given their role as leaders in many communities and population centers.

Meeting with the National Water Authority

Date	July 8th 2025
Place	Google meets
Participants	
MINAM	Zynthia Andrea Bellota Mejia - Ecosystem-based Adaptation Specialist
Profonanpe	Lizeth Morante – Innovation and Strategic Management Specialist
	Lisseth Malpica - Consultant
ANA	Enesto Fonseca - Technical Focal Point Directorate for Quality and Evaluation of Water Resources (DECRH).
	Moemi Motta - Directorate for Quality and Evaluation of Water Resources (DECRH).

Summary:

- Profonanpe presented the project proposal.
- ANA (National Water Authority) indicated that it will be important to reach out to and engage with the Watershed Councils, as they are actively implementing field activities related to natural infrastructure and are continually seeking funding opportunities.
- They also mentioned the existence of a tariff charged to water operators, in coordination with the Watershed Councils or local water authorities, intended to finance investment projects in natural infrastructure; however, progress in this area has been limited.
- Additionally, ANA is currently identifying activities and projects carried out by the Watershed Councils and

other line directorates to report on the progress of the adaptation measures assigned to ANA.

- Regarding the "Sierra Azul" programs, they recommended that communication be established directly through MIDAGRI (Ministry of Agrarian Development and Irrigation).

Meeting with the Ministry of Production (PRODUCE)

Date	July 10 2025
Place	Google meets
Participants	
MINAM	Zynthia Andrea Bellota Mejia - Ecosystem-based Adaptation Specialist
Profonanpe	Lizeth Morante – Innovation and Strategic Management Specialist
	Lisseth Malpica - Consultant
PDRODUCE:	Giancarlo Ríos Cruz - Climate Change Analyst - Directorate General for Environmental, Fisheries and Aquaculture Affairs
	Camilo Rios Horna - Directorate-General for Environmental, Fisheries and Aquaculture Affairs

Summary:

- Profonanpe presented the project proposal.
- PRODUCE commended the initiative and reported that they are about to launch a project funded by the Adaptation Fund focused on implementing aquaculture technologies in the regions of Huánuco, Junín, and Puno. The goal is to strengthen food security in the face of extreme events related to climate change. In this regard, they suggested identifying complementarities and reviewing the activities outlined in their project so that they may be considered and incorporated into the new proposal, particularly in relation to aquaculture.
- They mentioned the opportunity to develop an activity focused on the creation of early warning systems and capacity-building for the development of contingency plans—identified as a critical need for aquaculture producers facing flood risks, and aligned with Adaptation Measure "PAC 5."
- PRODUCE stated that the sector's priority is to support the generation of timely climate information systems to aid decision-making processes and reduce the impact of climate variability on aquaculture productivity. Such efforts could help communities generate income or safeguard food security.
- PRODUCE also inquired about the governance structure of the project and requested that sectoral coordination be included in the governance model. They proposed that PRODUCE be designated as the lead agency for one of the activities related to the fisheries and aquaculture sector.