



ADAPTATION FUND

ADAPTATION FUND BOARD SECRETARIAT TECHNICAL REVIEW OF PROJECT/PROGRAMME PROPOSAL

PROJECT/PROGRAMME CATEGORY:

Country/Region: Peru/Latin America

Project Title: Building a program for adaptation and resilience to climate change of Andean local communities and ecosystems in Peru

Thematic Focal Area: Multisectoral

Implementing Entity: PROFONANPE

Executing Entities: HELVETAS Swiss Intercooperation

AF Project ID:

IE Project ID:

Requested Financing from Adaptation Fund (US Dollars): USD 5,465,145

Reviewer and contact person: Micol Ullmann Auger **Co-reviewer(s):**

IE Contact Person:

Technical Summary

The project "Building a program for adaptation and resilience to climate change of Andean local communities and ecosystems in Peru" aims to increase the adaptive capacity of the productive systems of the Andean rural communities and to reduce the vulnerability of the Peruvian Andean ecosystems (Andean forests, paramos and bofedales). This will be done through the three components below:

Component 1: Development and implementation of monitoring tools for Andean ecosystems (USD 1,000,000).

Component 2: Implementation of best practices for landscape protection and restoration of Andean ecosystems in conservation mosaics. (USD 1,850,000)

Component 3: Increasing resilience and sustainability of local productive systems in rural communities in Andean ecosystem landscapes. (USD 1,750,000).

Requested financing overview:

Project/Programme Execution Cost: USD 437,000

Total Project/Programme Cost: USD 5,037,000

Implementing Fee: USD 428,145

Financing Requested: USD 5,465,140

	The initial technical review raises several issues, such as the need to carry out a consultative process involving all key stakeholders, vulnerable groups, including gender considerations, to include an initial gender analysis, to identify all relevant potentially overlapping projects / programmes, to specify the projects' alignment with the Adaptation Fund strategic results framework, and provide more details on social sustainability, as is discussed in the number of Clarification Requests (CRs) and Corrective Action Requests (CARs) raised in the review.
Date:	January 23, 2022

Review Criteria	Questions	Comments
Country Eligibility	1. Is the country party to the Kyoto Protocol?	Yes.
	2. Is the country a developing country particularly vulnerable to the adverse effects of climate change?	Yes. Peru is facing hazards including increasing temperature variability and decreasing rainfall, changes in aridity, floods, and glacier retreat. These impacts are mainly felt in the rural Andean communities and in the productive systems (mainly rainfed agriculture and livestock grazing on which they depend. As such climate change impacts, together with environmental damage and land-use, increase the risk of food insecurity and the reduction of the current and potential economic livelihoods.
Project Eligibility	1. Has the designated government authority for the Adaptation Fund endorsed the project/programme?	Yes, as per the Endorsement letter dated January 10,2022.
	2. Does the length of the proposal amount to no more than Fifty pages for the project/programme concept, including its annexes?	Yes.
	3. Does the project / programme support concrete adaptation actions to assist the country in addressing adaptive capacity to the adverse effects of climate change and build in climate resilience?	Yes. The proposed activities address the climate change impacts identified and can produce substantial tangible outcomes. Mapping and monitoring of forests and other Andean ecosystems will support decision making at a national and sub national level. The project will enhance the resilience of the Andean ecosystems and increase livelihoods of rural communities in the project areas.

	<p>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?</p>	<p>Yes. At least 25 rural communities have been identified in the three project areas as beneficiaries of project activities.</p> <p>Social benefits: The project will strengthen the capacity of communities reduce their vulnerability to the impacts of the climate change, and at the same time strengthen the participation of vulnerable groups (youth and women) in the decision-making regarding the use of the resources and services provided by the ecosystems. This will contribute to reducing social conflicts and improving the environmental conditions that support the means of living of the communities.</p> <p>Economic benefits: The project will promote the participation of the local communities in a biodiversity-based business model and strengthen the resilience and sustainability of their productive systems, increasing the possibilities to maintain the local economy in the face of changing climate conditions in the Andean ecosystem. By involving local governments (District or Provincial Municipalities), the project will strengthen the promotion of rural economic development in the project areas.</p> <p>Environmental benefits: Project activities will focus on ecological restoration, reducing the incidence of wildfire and preventing loss of biodiversity.</p> <p>The project is expected to be classified as category C. However, this categorization should be revisited by fully-developed project stage, as activities are further elaborated and considered in light of the Adaptation Fund's Environmental and Social Policy.</p> <p>CR1: Please identify vulnerable groups that will benefit from project activities, and how the project will ensure the equitable distribution of benefits. Please quantify benefits whenever possible.</p> <p>CAR1: Please provide an initial gender analysis to determine the different needs, capabilities, roles and knowledge resources of women and men, and/or identify how changing gender dynamics might drive lasting change.</p> <p>Answer CR1 - CAR1:</p> <p>A preliminary analysis of the information provided by the Census of Peasant Communities and the National Population Census (National Institute of Statistics and Informatics, 2017) shows that there are differences in relation to the percentage of men and women in the three intervention sites: in the north and south the percentages between both groups is similar (50%) and in the center the percentage of men is higher (53%). In the case of the</p>
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		<p>population under 18 years of age and over 65 years of age, in the center and south they represent between 40%-45% and in the north around 60%.</p> <p>Studies and research conducted in the Apurímac region (southern zone of the intervention) have been able to identify and make visible ancestral knowledge and differentiated participation of women and men in the communities around biodiversity, use of wild species, agroforestry practices and soil and water management and conservation, forest recovery and protection, fire prevention, family livelihoods, economic activities, among others (Mathez-Stiefel et al, 2016; Kometter and Huasquiche 2017; Kometter, 2018). Women play a key role in seedling production, construction of q'ochas (artificial wetlands), livestock, firewood collection, seed management, planting, post-harvest management and sales; while men are responsible for the transfer of seedlings, tools and inputs, soil management, house construction, tool making, harvesting and product transfer (Andean Forests Program, 2019c; Mathez-Stiefel, 2016, Andean Forests Program, 2021). Initially, it can be assumed that the situation is similar in the central and northern zones, so the gender analysis to be carried out at the beginning of project implementation will be an opportunity to guide and better define the intervention strategy, as well as to unify information on this issue in the country's protected areas.</p> <p>In all cases, the heads of the protected areas in the intervention sites implement actions to formalize (through "conservation agreements") the economic activities developed by the local population inside and outside the zones. This relationship will serve as a basis for strengthening the process of equitable benefit sharing in the economic activities supported and developed by the project.</p>
	5. Is the project / programme cost effective?	Yes.
	6. Is the project / programme consistent with national or sub-national sustainable development strategies, national or sub-national development plans, poverty reduction	Yes. The project is consistent with: <ul style="list-style-type: none"> • National Policy of the Environment, • Framework Law on Climate Change (Law 30754) and its regulations • National Strategy of Climate Change, currently being updated • National Plan of Climate Change Adaptation of Peru • Proposal on National Policy of Glaciers and Mountain Ecosystems

	strategies, national communications and adaptation programs of action and other relevant instruments?	<ul style="list-style-type: none"> • Action Plan in Gender and Climate • Regional Climate Change Strategies • Law of Mechanisms of Retribution Ecosystems Services • General Dispositions for the Multisectoral and Decentralized Management of Wetlands • Intervention Strategies for 2030 of the National Program of Forest Conservation • Andean Initiative of Mountains of which Peru is the Regional Coordinator Pro-Tempore • Declaration of Madrid worldwide (COP25) signed by Peru in the framework of the Initiative 20x20 													
	7. Does the project / programme meet the relevant national technical standards, where applicable, in compliance with the Environmental and Social Policy of the Fund?	<p>Yes. Project activities in the three conservation areas will respect the normative framework established by the SERNANP for the development of activities in protected areas and by the SERFOR, reducing possible environmental negative impacts generated by the project.</p> <p>The project is in line with the transversal approaches (gender, intercultural and intergenerational) and of human rights established by the NAP Peru in agreement with the Regulation of the Framework Law on Climate Change, as well as those established by the National Policy of the Gender Equality and the law N° 28983, Law of Equal Opportunities for men and women.</p>													
	8. Is there duplication of project / programme with other funding sources?	<p>Unclear. A joint meeting will be organized to clarify the collaboration framework with all partners, and key stakeholders will be invited to the steering committees.</p> <p>Five major projects/programs are listed, but a full inventory of projects/programs has not yet been included.</p> <p>CR2: Please provide a list of all relevant potentially overlapping projects / programmes and describe any lack of overlap or complementarity.</p> <p>Answer CR2:</p> <table border="1"> <thead> <tr> <th rowspan="2">Project</th><th rowspan="2">Status</th><th colspan="2">Overlap or Complementarity</th><th rowspan="2">Implications</th></tr> <tr> <th>geographical</th><th>thematic</th></tr> </thead> <tbody> <tr> <td></td><td></td><td></td><td></td><td></td></tr> </tbody> </table>			Project	Status	Overlap or Complementarity		Implications	geographical	thematic				
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	Project "Patrimonio Natural del Perú - Amazonía" (GEF6):	Under implementation	Overlap with protected area SN Tabaconas Namballe	Output 2.1.2	SN Tabaconas Namballe would not be included as part of Output 2.1.2.
	Project "Improvement of the Biodiversity Conservation Service of Huascarán National Park" (SNIP code N° 360714 - Public Investment Project)	Without funding	Overlap with protected area PN Huascarán	Output 2.1.1	This project is not expected to be implemented until after the start of the project submitted to the Adaptation Fund.
	Project "Recovery of natural infrastructure in natural protected areas of the Andean region to increase resilience in watersheds vulnerable to climate change in Peru" (IKI)	Proposal submitted to the International Climate Initiative (IKI)	Overlap with protected area PN Huascarán	Output 2.1.1 Output 3.1.1 Output 3.1.2	If the IKI project is approved before the project submitted to the Adaptation Fund is initiated, the resources foreseen for PN Huascarán would be invested in the NPAs SN Calipuy, RN Calipuy and ZR Huayhuash.
	Project "Strengthening landscape management to reduce vulnerability to climate effects in natural protected areas and other conservation modalities"	Concept Note on design	Overlap with protected area PN Huascarán	Output 2.1.1 Output 3.1.1 Output 3.1.2	Approval is not expected until after the project submitted to the Adaptation Fund has been initiated.

		(Green Climate Fund)				
		Project "Resilient Puna: Ecosystem-based Adaptation for Sustainable High Andean Communities and Landscapes in Peru" (Green Climate Fund)	Concept Note approved and Project under development	Possible overlap with intervention zone in Apurimac and Cusco (to be defined)	Output 2.1.1 Output 3.1.1 Output 3.1.2	Not expected to be approved until after the start of the project submitted to the Adaptation Fund.
	9. Does the project / programme have a learning and knowledge management component to capture and feedback lessons?	<p>Unclear. Knowledge management and sharing of lessons learned are planned to be cross-cutting activities in all three components of the project, however the KM activities have not yet been included or specified in the project components section.</p> <p>The concept describes plans to create a knowledge management strategy with two paths: knowledge facilitated by the project and knowledge resulting from project activities. In the first case, research or systematization of “cases” will be facilitated to fill knowledge gaps in the sectors and areas of the project; and in the second case, project reports will have guidelines for the systematization of activities, experiences, results and conclusions that respond to project objectives and the information and knowledge needs of key stakeholders.</p> <p>The knowledge generated by this project will be shared and disseminated at the national level via the web portals of PROFONANPE, MINAM, SERNANP, INAIGEM and PNCB-MINAM, considering the strategic communication actions established by NAP Peru for its implementation. Project experiences will be shared on global web portals for knowledge management on climate change or mountain ecosystems such as WeADAPT or The Mountain Partnership, and its contribution through key messages at the COPs on Climate Change and Biodiversity and at the meetings of the Andean Mountain Community.</p>				

		<p>CR3: Please clarify whether the systemization of cases, is referring to lessons learned and best practices from other projects and programs. Please add the above-mentioned knowledge management activities to the components section.</p> <p>Answer CR3: The main purpose of the Project is focused on facilitating the implementation of Peru's National Climate Change Adaptation Plan. Therefore, the three components of the Project are formulated according to the adaptation measures indicated in the concept note and knowledge management is proposed as a cross-cutting work approach, linked to monitoring and evaluation activities, under a logic of constant feedback. This means that at the beginning of the Project a Knowledge Management Strategy will be formulated that incorporates the following elements:</p> <ul style="list-style-type: none"> • Analysis of knowledge gap filling needs for the full implementation of activities in the three components of the Project. • Capacity building needs analysis, especially to achieve the expected result of component 3 "Increased resilience of productive activities in peasant communities in three prioritized conservation mosaics". • Generation of information through the systematization of experiences and reporting of results of monitoring Andean ecosystems, implementation of interventions for better conservation and resilience of landscapes and local productive systems. • Dissemination of information through selected communication channels according to each type of target audience (communities, local stakeholders, decision makers, general public, etc.). • Linkage to the Project's monitoring and evaluation system and to the institutional knowledge management strategy of the project's counterparts (especially SERNANP), PROFONANPE and the implementing entity.
	10. Has a consultative process taken place, and has it involved all key stakeholders, and vulnerable groups, including gender considerations in compliance with the	<p>No. PROFONANPE, MINAM and SERNANP were consulted in the preparation of the concept note and their inputs were included, but a consultative process with the communities and vulnerable groups has not yet been carried out.</p>

	<p>Environmental and Social Policy and Gender Policy of the Fund?</p>	<p>CAR2: Please carry out a consultative process with key stakeholders of the project/programme, including vulnerable and marginalized groups and gender considerations.</p> <p>Answer CAR2: The project does not involve environmental or social risks; on the contrary, it promotes benefits in both aspects by promoting monitoring and resilience to climate change in Andean ecosystems, as well as the sustainability of livelihoods and production chains, without involving risks such as the displacement of vulnerable populations inside and outside the protected areas. It should also be noted that SERNANP has already established forms of community participation and involvement in the management of protected areas through their management committees, which coordinate their own actions for the implementation of the Master Plans for these conservation areas. Likewise, SERNANP was consulted for the development of the concept note precisely because of the relationship with and knowledge of the peasant communities that work around the protected areas.</p> <p>On the other hand, in the area of influence of the three selected mosaics, there are some precedents of successful experiences for the implementation of good ecosystem conservation practices at the local level, which can be scaled up to other localities within the buffer zones of the same mosaics, and for which there is evidence of positive and proactive involvement of the communities.</p> <p>Considering the above, it is considered that in the case of this Project it will be effective to implement an initial consultation process during the formulation stage, and a more in-depth consultation process at the beginning of its implementation, since components 2 and 3 will necessarily involve the selection of site-specific activities with a high level of detail, such as the identification of conservation and restoration practices for degraded areas that are most appropriate for the biophysical conditions of each mosaic and the preferences of the communities themselves (prioritization of ecosystem services); as well as the selection of high potential productive chains to focus on strengthening the technical productive capacities of vulnerable groups, for sustainability and resilience with high market acceptance.</p>
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	11. Is the requested financing justified on the basis of full cost of adaptation reasoning?	Yes. As outlined in Chart 2 of Section A, the project will contribute to the implementation of the NAP Peru by supporting ten adaptation objectives and contributing to the targets of its indicators in Andean ecosystems of Peru, considered the most vulnerable to climate change. In accordance with the recommendations of the NAP Peru, synergies between the measures of the three thematic areas addressed by the project (Water, Forest, Agriculture) will be promoted in the prioritized conservation areas.												
	12. Is the project / program aligned with AF's results framework?	No. The project does not specify alignment with AF's results framework. CAR3: Please specify the projects' alignment with Adaptation Fund revised strategic results framework adopted in 2019 https://www.adaptation-fund.org/wp-content/uploads/2019/10/Adaptation-Fund-Strategic-Results-Framework-Amended-in-March-2019-2.pdf Answer CAR3: <table><tr><th>Project Objective(s)</th><th>Project Objective Indicator(s)</th><th>Fund Outcome</th><th>Fund Outcome Indicator</th></tr><tr><td>Development and implementation of monitoring tools for Andean ecosystems</td><td>No. of monitoring systems in operation</td><td><u>Outcome 2:</u> Strengthened institutional capacity to reduce risks associated with climate-induced socioeconomic and environmental losses</td><td><u>2.1.2 No. of targeted institutions with increased capacity to minimize exposure to climate variability risks (by type, sector and scale)</u></td></tr><tr><td>Implementation of best practices for landscape protection and restoration of Andean ecosystems in conservation mosaics.</td><td>No. of hectares conserved and/or restored</td><td><u>Outcome 5:</u> Increased ecosystem resilience in response to climate change and variability-induced stress</td><td><u>5.1. No. of natural resource assets created, maintained or improved to withstand conditions resulting from</u></td></tr></table>	Project Objective(s)	Project Objective Indicator(s)	Fund Outcome	Fund Outcome Indicator	Development and implementation of monitoring tools for Andean ecosystems	No. of monitoring systems in operation	<u>Outcome 2:</u> Strengthened institutional capacity to reduce risks associated with climate-induced socioeconomic and environmental losses	<u>2.1.2 No. of targeted institutions with increased capacity to minimize exposure to climate variability risks (by type, sector and scale)</u>	Implementation of best practices for landscape protection and restoration of Andean ecosystems in conservation mosaics.	No. of hectares conserved and/or restored	<u>Outcome 5:</u> Increased ecosystem resilience in response to climate change and variability-induced stress	<u>5.1. No. of natural resource assets created, maintained or improved to withstand conditions resulting from</u>
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					<u>climate variability and change (by type and scale)</u>
		Increasing resilience and sustainability of local productive systems in rural communities in Andean ecosystem landscapes.	No. of people receiving technical assistant	Outcome 6: Diversified and strengthened livelihoods and sources of income for vulnerable people in targeted areas	<u>6.2. Percentage of targeted population with sustained climate-resilient alternative livelihoods</u>
	13. Has the sustainability of the project/programme outcomes been taken into account when designing the project?	<p>Potentially. Institutional sustainability will be ensured by the involvement of governmental organizations and ministries in the formulation of the proposal in the proposal which enables the implementation of Peru's National Climate Change Adaptation Plan, and guarantees the long-term sustainability of monitoring actions (Outcome 1) and the closing of gaps for protected areas in Andean ecosystems (Outcome 2).</p> <p>At the sub-national level (regional governments), the linkage of project activities with regional climate change agendas and/or strategies will promote the incorporation of actions in support of the implementation of the NAP Peru in the programmatic and budgetary planning instruments of regional governments.</p> <p>The participatory approach envisaged by the proposal and planned community involvement can support local ownership of project activities, especially the improved productive systems and capacity in sustainable land management and environmental restoration practices for both economic and environmental sustainability. However local ownership does not guarantee gender equality and social sustainability of project activities. Consider a grievance mechanism.</p> <p>CR4: Please include more details on how to ensure social sustainability of project outcomes.</p> <p>Answer CR4:</p> <p>Component 3 of the Project is based on the process led by SERNANP to involve the communities in the co-management of the protected areas in the</p>			

		<p>conservation mosaics, in this case through the organization of the productive activities carried out by the communities, the signing of the so-called "conservation agreements" and subsequently the signing of a SEAP (Sustainable Economic Activities) contract. This encourages productive activities to reduce their impact and increase opportunities for biodiversity use. Thus, SERNANP not only promotes the signing of these agreements, but through the "Allies for Conservation" brand it hopes to contribute to improving the commercialization channels for bio-businesses developed in and around protected areas. In this context, the project, as indicated above, will provide detailed evaluations for gender-sensitive activities such as productive and restoration activities, which will serve as a basis to adequately design the intervention strategy and become part of the protocols to be implemented by SERNANP in relation to the promotion of bio-businesses and productive activities with the communities.</p> <p>Likewise, within the framework of SERNANP's relations with the communities, and for the implementation of the project, a Complaints and Claims Attention Mechanism (MAQR) will be implemented based on PROFONANPE's experience in projects with native Amazonian communities. (https://profonanpe.org.pe/wp-content/uploads/2020/11/Mecanismo-de-Atencion-de-Quejas.pdf)</p>
	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?	<p>Yes. Risks have been identified against each of the 15 ESP principles, as per section K.</p> <p>The proposal classifies the project as a category C.</p> <p>Access and equity, marginalized and vulnerable groups, gender equality and women's empowerment are all flagged as potential risks or impacts, however, no initial gender analysis or consultations with vulnerable, marginalized, or minority groups have been carried out.</p> <p>Please see CAR 2.</p>
Resource Availability	1. Is the requested project / programme funding within the cap of the country?	Yes.

	2. Is the Implementing Entity Management Fee at or below 8.5 per cent of the total project/programme budget before the fee?	Yes.
	3. Are the Project/Programme Execution Costs at or below 9.5 per cent of the total project/programme budget (including the fee)?	Yes.
Eligibility of IE	1. Is the project/programme submitted through an eligible Implementing Entity that has been accredited by the Board?	Yes, PROFONANPE is an accredited implementing entity of the Board.
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 the execution costs included?	n/a at concept stage
	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

PROJECT/PROGRAMME PROPOSAL TO THE ADAPTATION FUND

PART I: PROJECT/PROGRAMME INFORMATION

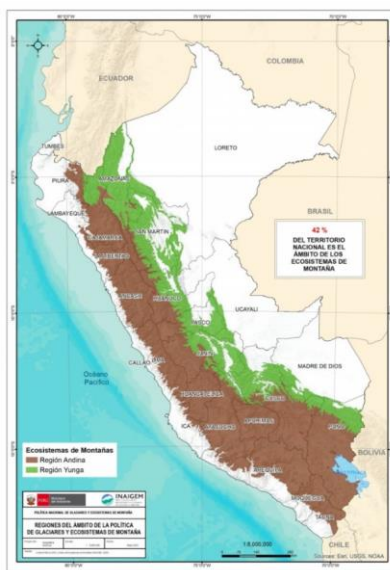
Project Category	: Single Country Proposal
Country	: Perú
Title of Project	: Building a program for adaptation and resilience to climate change of Andean local communities and ecosystems in Peru
Type of Implementing Entity	: National
Implementing Entity	: PROFONANPE
Executing Entity	: To define
Amount of Financing Requested	: 5,465,145.00 (in U.S Dollars Equivalent)

Project Background and Context

The mountain ecosystems in Peru are located in both sides of the Andes Mountains (Figure 1) covering 48 million hectares distributed in 19 departments¹, and they are part of the Hotspot of biodiversity Tropical Andes considered as the most biodiverse of the planet and that offers important ecosystem services such as the hydrological regulation (CEPF, 2021)². The target ecosystems of this proposal are the ones that are located in the western slope of the mountain known as "Andes region" called "Andes ecosystems". They cover an extension of 32.9 million hectares³ and the Ministry of Environment in Peru (MINAM for its initials in spanish) estimated an area of 316, 566. 49 hectares of damaged Andean ecosystems in 2020³, considering the negative tendency of the net primary productivity or the change in the plant cover⁴, although there is not a specific monitoring system for these ecosystems in Peru. In chart 1, a type of Andean ecosystem is shown, as well as its extension and damaged surface in 2020.

The protected natural areas (PNA) have an important role in ecosystem conservation and the adaptation to the climate change. There are approximately 2.3 million hectares of Andean ecosystems that are preserved under different categories of conservation (national, regional or private) recognized by the Peruvian government through the National Service of Protected Natural Areas (SERNANP for its initials in Spanish). Some of the national protected natural areas, from the north to the south of the country include: the Tabaconas-Namballe National Sanctuary, Huascaran National Park, Junin National Reserve, Nor Yauyos-Cochas Reserve, Ampay National Reserve, Aguada Blanca and Salinas National Reserve, and the Titicaca National Reserve. Species of fauna that indicate the state of preservation of these ecosystems are the spectacled bear (*Tremarctus ornatus*), the

Figure 1. Location of mountain ecosystem in Perú



¹ Ministry of Environment, 2018. Map of Ecosystems of Perú (Ministerial Resolution 440-2018-MINAM).

² Critical Ecosystem Partnership Fund, 2021. Tropical Andes Biodiversity Hotspot: Ecosystem Profile Update 2021. <https://www.cepf.net/sites/default/files/tropical-andes-ecosystem-profile-2021-english.pdf>

³ <https://geoservidor.minam.gob.pe/monitoreo-y-evaluacion/restauracion-de-areas-degradadas/>

⁴ Ministry of Environment, 2019. National Map of Degraded Areas in Terrestrial Ecosystems: Descriptive Memory. <https://geoservidor.minam.gob.pe/wp-content/uploads/2020/02/Mapa-Nacional-de-%c3%81reas-Degradadas-Terrestres.pdf>

mountain tapir (*Tapirus pinchaque*), the Andean condor (*Vultur gryphus*) and the suri (*Rea pennata*). The Andean ecosystems are also a source of forest genetic resources (*Polylepis* o *Podocarpus*, for example) and a great agrobiodiversity represented by grains, legumes, roots and tubers, vegetables, herbs, and fruits (CIP, 2021)⁵.

Chart 1. Andean ecosystems of Perú

Ecosystem	Area in 2018 (hectares)	PNA Areas in 2020 (hectares)	Degraded areas in 2020 (hectares)	Threats
Dry puna grassland	4,887,184.29	560,379.40	22,095.81	• Agricultural expansion
Wet puna grassland	11,981,918.13	517,838.03	111,356.91	
Jalca	1,340,320.57	177,392.62	14,182.11	• Livestock overgrazing
Bofedal	548,176.14	43,188.56	16,002.45	
Páramo	82,948.54	21,643.02	1,731.79	• Illegal extraction
Andean scrubland	10,304,035.93	232,718.67	85,136.22	
High-Andean relict forest (Queñoal trees and others)	156,972.02	19,265.83	651.87	• Groundwater drainage (in wetlands)
Western slope montane relict forest	90,703.86	13,674.80	4,995.63	
Meso-Andean relict forest	24,964.55	18,838.72	54.63	• Mining
Inter-Andean seasonally dry forest (Marañón, Mantaro, Pampas y Apurímac)	535,867.36	8,906.79	39,276.63	
Periglacial and Glacial Landscape	2,959,578.37	676,985.37	19,072.44	• Fire
Total	32,912,669.76	2,290,831.81	314,546.49	

Source: National Map of Ecosystems (MINAM; 2018)¹; MINAM Map Server (2021)²; SERNANP (2020); MINAM (2021)⁶.

The importance of these Andean ecosystems in Peru is reflected on the provision of the hydrological regulation service: the Pacific slope gets the waters from the western side of the Andes mountains, and though it only concentrates 2.18% of the water volume of the country, it is the home of 65.98% of the population of the country (more than 16.3 million people) and it is the area where 80.4% of the national GDP is produced (INAIGEM, 2021)⁷. 80% of the river basins of the country are located in the Protected Natural Areas (PNA), and the protection of the main headwaters of the basins is an important task performed by the Peruvian government: In the country, at least 16 PNA provide water of good quality to 12 service provider companies (EPS for his initial in Spanish) who offer potable water to more than 4 million people, and about 61% of the hydroelectrical energy is produced with water coming from the PNA; for example, that situation occurs in Junin national reserve who supports the Mantaro interconnected system (Leon, 2007)⁸. In the ideal 2050 scenario of the prospective study of the biodiversity of Peru (DGDB-MINAM, 2020), the effective management of PNAs is a way of contributing in reducing the deterioration of the ecosystems.

Locally, people benefit from these ecosystems through economic activities (productive chain) linked to forest products (wood and non-wood), agrobiodiversity, raising of Andean camelid animals and tourism. The local population are mainly organized in rural communities, formally recognized by the State⁹, of which 96.6% are

⁵ International Potato Center. 2021. The Andean and the food for the future.

⁶ Ministry of Environment. 2021. National Plan of Climate Change Adaptation of Peru: a supply for the update of the National Strategy before the Climate Change

⁷ National Institute of Research on Glaciers and Mountain Ecosystem, 2021. Design of the National Policy of Glaciers and Mountain Ecosystem: <https://inaigem.gob.pe/web2/politicas-importancia/>

⁸ León, F. 2007. The Contribution of the Natural Protected Areas to the National Economy. National Institute of Natural Resources. Lima.

⁹ Government of Perú. 1992. Law N° 24656. General Law of Rural Communities. Lima, Perú

in mountains ecosystems (INAIGEM, 2021)⁴, and are in the medium and high levels of poverty, according to the National Institute of Statistics and Informatics (INEI, for its initials in Spanish)¹⁰.

In the Americas, the climate change is affecting the biodiversity at genetic, species and ecosystem level and it will continue to do so, therefore it is important to broaden the monitoring systems to increase the knowledge about these trends (IPBES, 2018)¹¹ and get to know the limits of the adaptive capacity of the ecosystems and the socio-ecological systems in the mountains, especially under conditions of glacial retreat. On the other side, the regional climatic situation in South America shows the increase in the frequency of fires, especially in the south of Peru, as well as the reduction of the flow of the rivers due to the glacier loss (IPCC, 2021)¹². Therefore, among the main challenges for the sustainable management of the mountain ecosystems include land-use change caused for the intensive agriculture and the mining, the growing threat about the water scarcity due to glacial retreat (IPBES, 2021)¹³ and the generation and strengthening effective mechanism of social participation and institutionalization of the relevant local knowledge for the adaptation (Dupuits, 2021)¹⁴. One of the main reasons of the vulnerability of the mountain ecosystems to the climate change is the richness in the biodiversity and endemism in the Andes (Botero, 2015)¹⁵, with more risk of extinction in higher latitudes and the tops of the mountains (Herzog, S.K. et al, 2010¹⁶; Martinez, Jørgensen, P. M., & Tiessen, 2012¹⁷), where a vertical migration of the species is expected and it is imperative to preserve microclimate refuges to attenuate this tendency (Cuesta et al, 2017)¹⁸.

Concerns regarding the Andean ecosystems in Peru linked to the climate change include: (i) increased flow variability and significant reductions in watershed regulation capacity and water yield due to human intervention regardless of the hydrological conditions of the original biome in the case of páramo, bofedales and puna (Ochoa-Tocachi et al, 2016¹⁹; Planas-Clarke et al, 2020²⁰; Cervantes et al, 2021²¹), (ii) the increase risk of disasters due to mass movements of mass caused by the deglaciation and the erosion that affects the hydraulic, hydroenergetic and potable water infrastructure (MINAM, 2021⁵; López Gonzales et al, 2020²²), and the generation of natural sources of polluting effluents such as the Acid Rock Drainage due to loss glaciers (INAIGEM, 2021)⁶.

According to the National Plan of Adaptation to the Climate Change of Peru (MINAM, 2021)⁵, the climate scenarios for 2030 and 2050, show a higher increase of low and high temperatures in the Andes, and regarding the total rainfall show that for the horizon 2030, in the Andes, it is reduced up to 30% in the western, central and southern slope; however, the rest of the mountains shows an increase up to 30% and for the horizon 2050, part of the central and southern Andes register a higher reduction in the rainfall up to 45%. Figure 2 shows a percentual change of the maximum temperature (above) and minimum temperature (below) for 2030 (left) and

¹⁰ National Institute of Statistics and Informatics. 2021. Evolution of monetary poverty 2009-2020. Technical Report. https://www.inei.gob.pe/media/MenuRecursivo/publicaciones_digitales/Est/pobreza2020/Pobreza2020.pdf

¹¹ IPBES (2018): The IPBES regional assessment report on biodiversity and ecosystem services for the Americas. Rice, J., Seixas, C. S., Zaccagnini, M. E., Bedoya-Gaitán, M., and Valderrama N. (eds.). Secretariat of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services, Bonn, Germany. 656 pages.

¹² Arias, P.A. et al. 2021. Technical Summary. In Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change. <https://www.ipcc.ch/report/ar6/wg1/#TS>

¹³ Pörtner, H.O. et al. 2021. IPBES-IPCC co-sponsored workshop report on biodiversity and climate change; IPBES and IPCC. DOI:10.5281/zenodo.4782538

¹⁴ Dupuits É. 2021. Status of the policies about climate change and the adaptation strategies in the Andes: a multisectoral look from the mountains. Quito: CONDESAN-COSUDE.

¹⁵ Uribe Botero, E. (2015). The climate change and its effects on biodiversity in Latin America. <https://www.cepal.org/es/publicaciones/39855-cambio-climatico-sus-efectos-la-biodiversidad-america-latina>

¹⁶ Herzog, S.K., P.M. Jørgensen, R. Martínez Güingla, C. Martius, E.P. Anderson, D.G. Hole, T.H. Larsen, J.A. Marengo, D. Ruiz Carrascal, H. Tiessen (2010). Effects of the climate change on the biodiversity of the tropical Andes: the status of the scientific knowledge. Summary for decision makers and responsible for the formulation of public policies. Instituto Interamericano para la Investigación del Cambio Global (IAI), São José dos Campos, Brasil

¹⁷ Martinez, R., Jørgensen, P. M., & Tiessen, H. (2012). Climate Change and biodiversity in the Tropical Andes. S. K. Herzog (Ed.). MacArthur Foundation.

¹⁸ Cuesta, F., Muriel, P., Llambí, L. D., Halloy, S., Aguirre, N., Beck, S., ... & Gosling, W. D. (2017). Latitudinal and altitudinal patterns of plant community diversity on mountain summits across the tropical Andes. *Ecography*, 40(12), 1381-1394.

¹⁹ Ochoa-Tocachi, B. F., Buytaert, W., De Bievre, B., Céleri, R., Crespo, P., Villacis, M., ... & Arias, S. (2016). Impacts of land use on the hydrological response of tropical Andean catchments. *Hydrological Processes*, 30(22), 4074-4089.

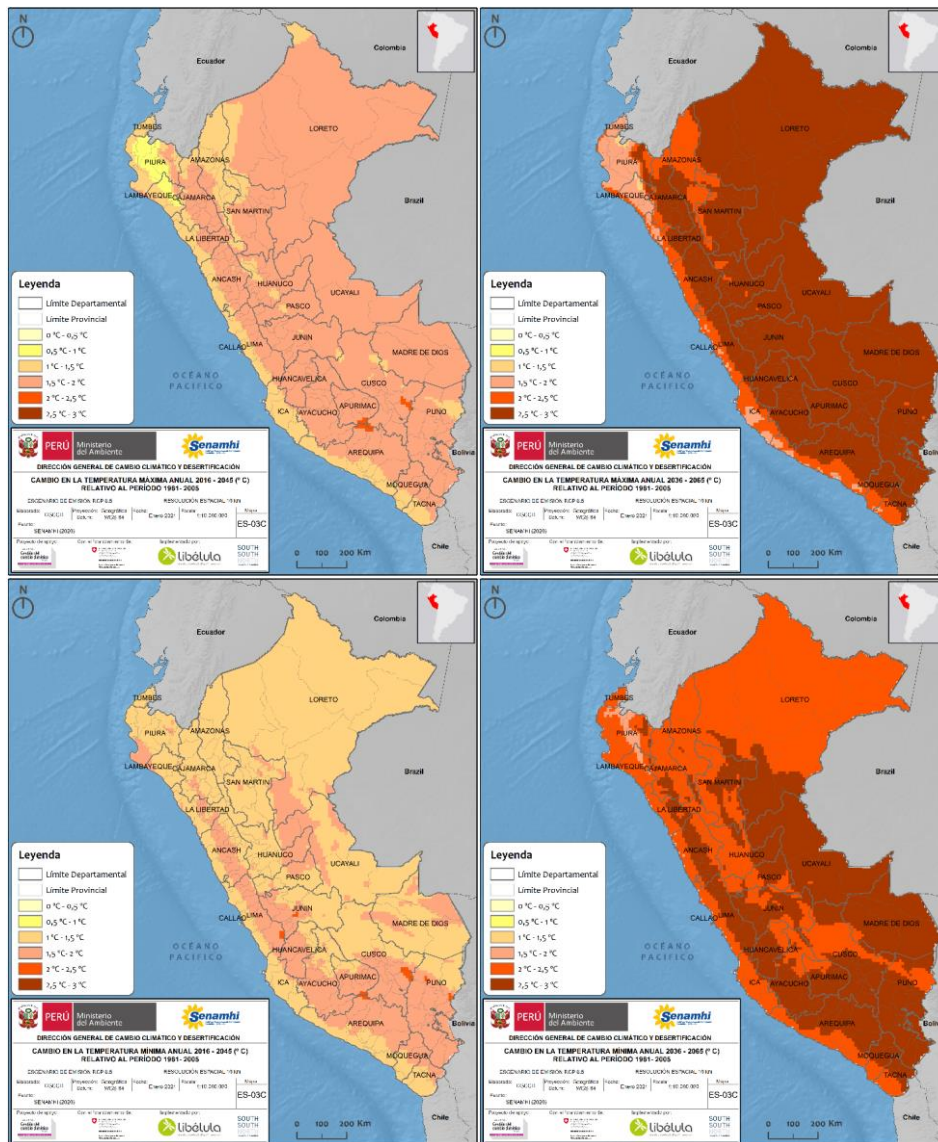
²⁰ Planas-Clarke, A.M., Chimner, R.A., Hribljan, J.A. et al. The effect of water table levels and short-term ditch restoration on mountain peatland carbon cycling in the Cordillera Blanca, Peru. *Wetlands Ecol Manage* 28, 51–69 (2020). <https://doi.org/10.1007/s11273-019-09694-z>

²¹ Cervantes, R., Sánchez, J.M., Alegre, J., Rendon, E., Baiker, J.R., Locatelli, B., & Bonnesoeur, V. (2021). Contribution of the high-Andean ecosystems of the hydric regulation ecosystem service. *Ecología Aplicada*, 20(2).

²² López Gonzales M, Hergoualc'h K, Angulo Núñez Ó, Baker T, Chimner R, del Águila Pasquel J, del Castillo Torres D, Freitas Alvarado L, Fuentealba Durand B, García Gonzales E et al. 2020. What do we know about Peruvian peatlands? Occasional Paper 210. Bogor, Indonesia: CIFOR

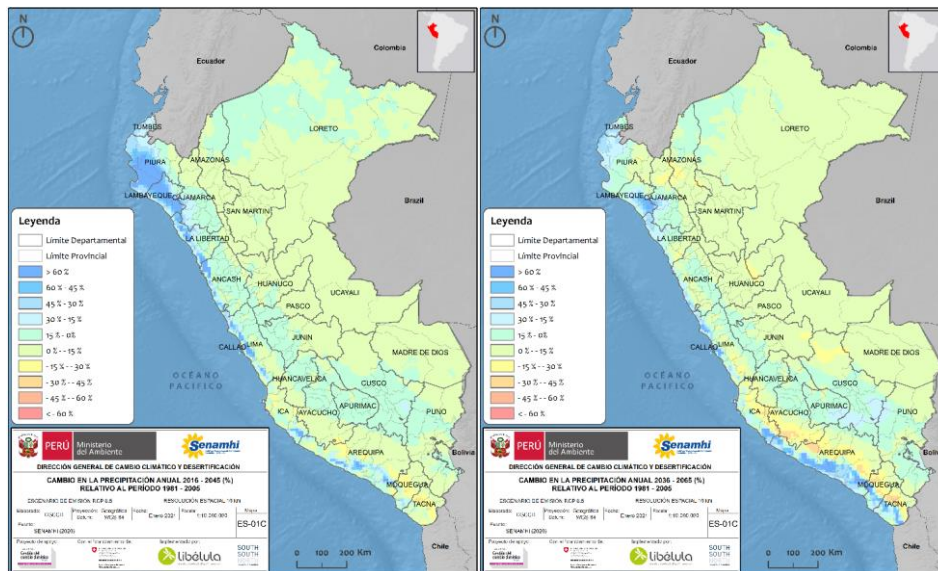
2050 (right), and in figure 3, the maps of variation of the total annual rainfall in 2030 (left) and 2050 (right).

Figure 2. Percentage change of the maximum and minimum temperature for 2030 and 2050.



Source: National Plan of Climate Change Adaptation of Peru (MINAM; 2021)

Figure 3. Maps of total annual precipitation variation in Perú for 2030 and 2050.



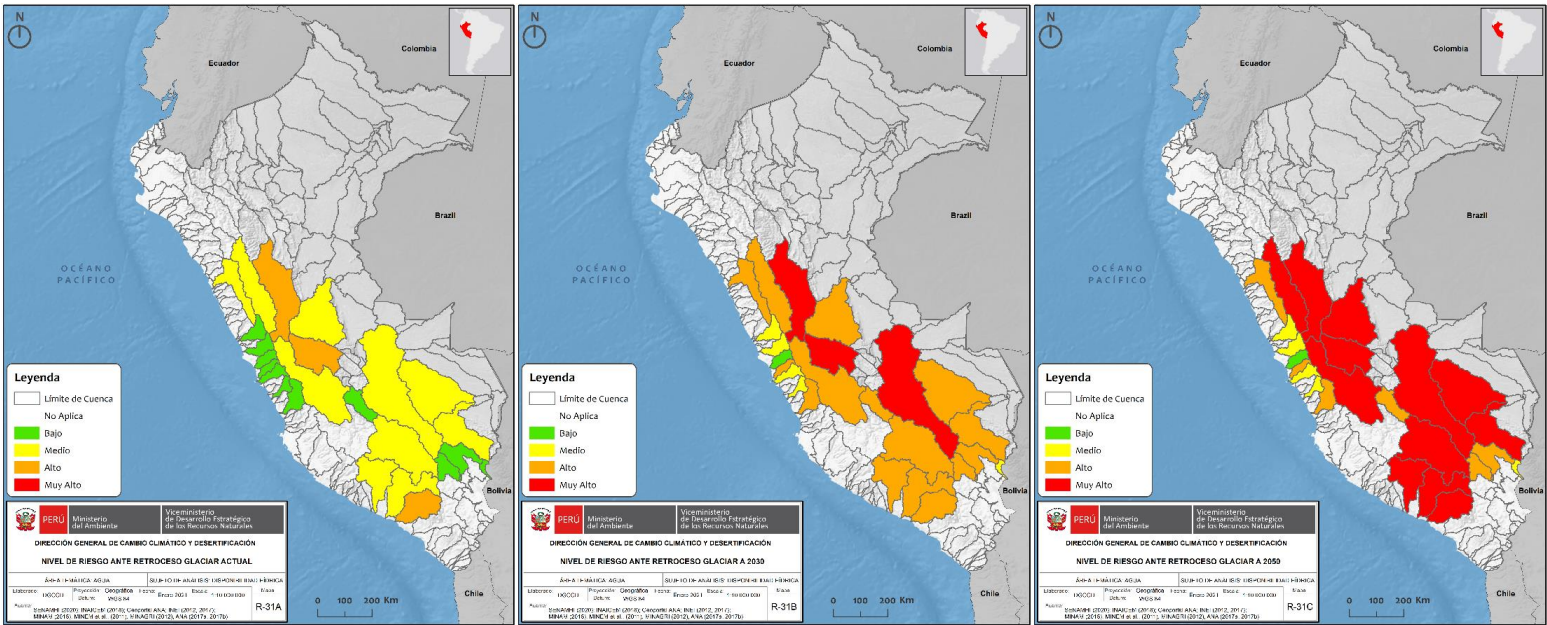
Source: National Plan of Climate Change Adaptation of Peru (MINAM; 2021)

Changes in climate averages and climate variability generate a series of hazards, of which Peru have focused on four: mass movements, floods, change in the aridity conditions and glacial retreat. This prioritization reflects the conceptual framework of the National Adaptation Plan (NAP)⁵, which is based on the risk management of the impact of climate change on the socioeconomic and ecological systems in five thematic areas: Water, Agriculture, Forests, Fishing and Aquaculture and Health.

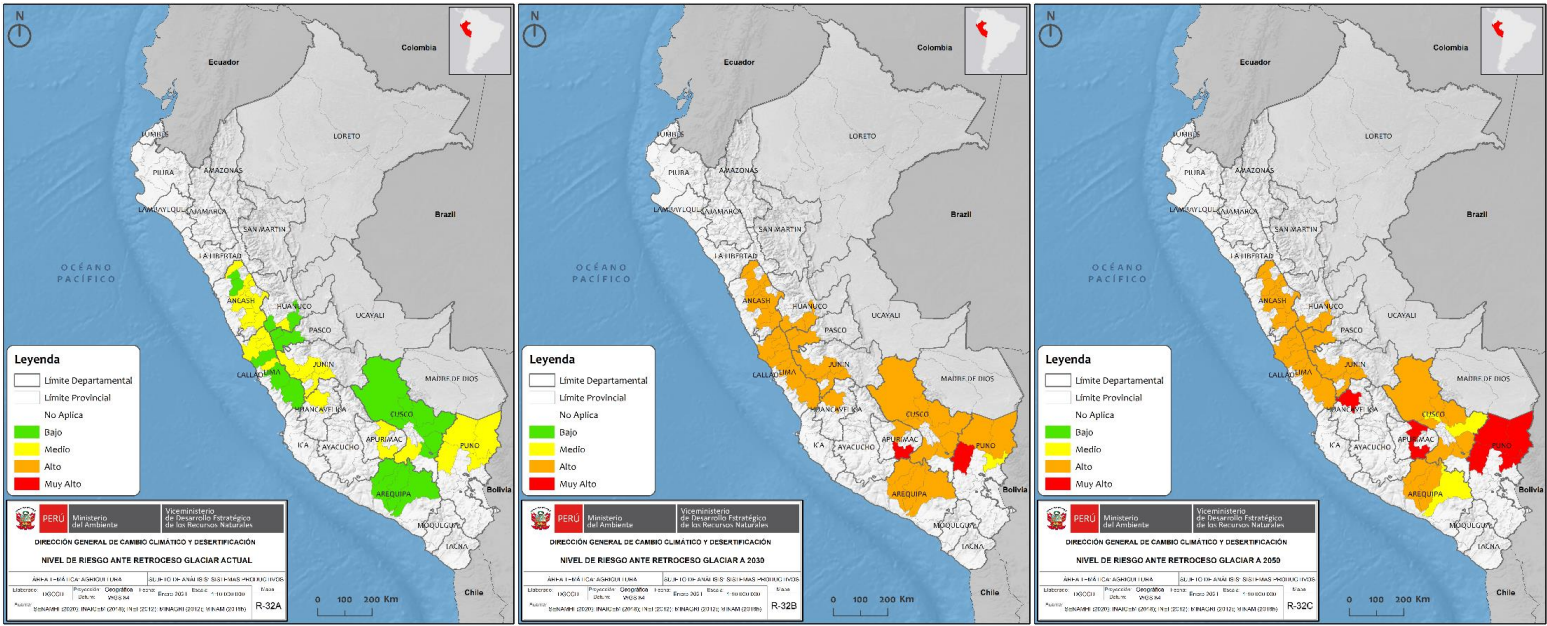
These hazards were quantitatively characterized in the risk analysis considering the climatic scenarios developed by the National Service of Meteorology and Hydrology of Peru (SENAMHI by its initials in Spanish) under the RCP 8.5 emissions scenario and considering as a main climate agent the average total rainfall. An adaptation of this methodology proposed by the IPCC was used in its fifth report of evaluation (AR5) aligned with the Regulation of the Framework Law on Climate Change of Peru, considering 1981-2005 as a reference period and 2006-2065 as the future period. The correction of the systematic mistake was made to the results of the climate modelling of 12 km and 16 km, taking into consideration the data provided by Peruvian Interpolated Data of Senamhi's Climatological and Hydrological Observations (PISCO), and after that, an average of the three simulations was estimated getting the climate situations to 10 km for Peru.

The results of this climate risk analysis for the thematic areas prioritized by the project (water, forests, and agriculture) and for the major hazards for the Andean ecosystems (mass movements, change in aridity conditions or glacial retreat) are shown in the Figures 4 to 7.

Figure 4. Probable trend in the level of risk for water availability, by glacial retreat and by basin: currently, 2030 and 2050.

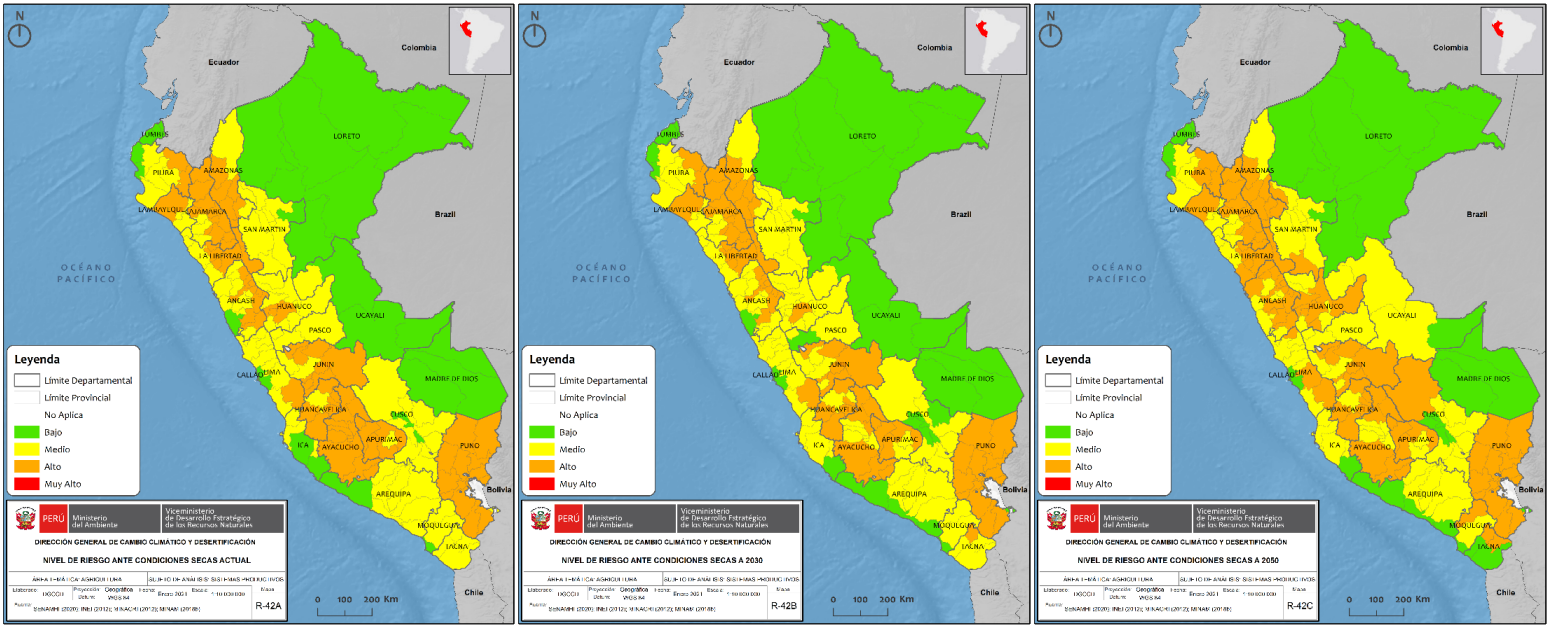


Figur5. Probable trend in the level of risk to agriculture systems, by to glacial retreat and by department: currently, 2030 and 2050.



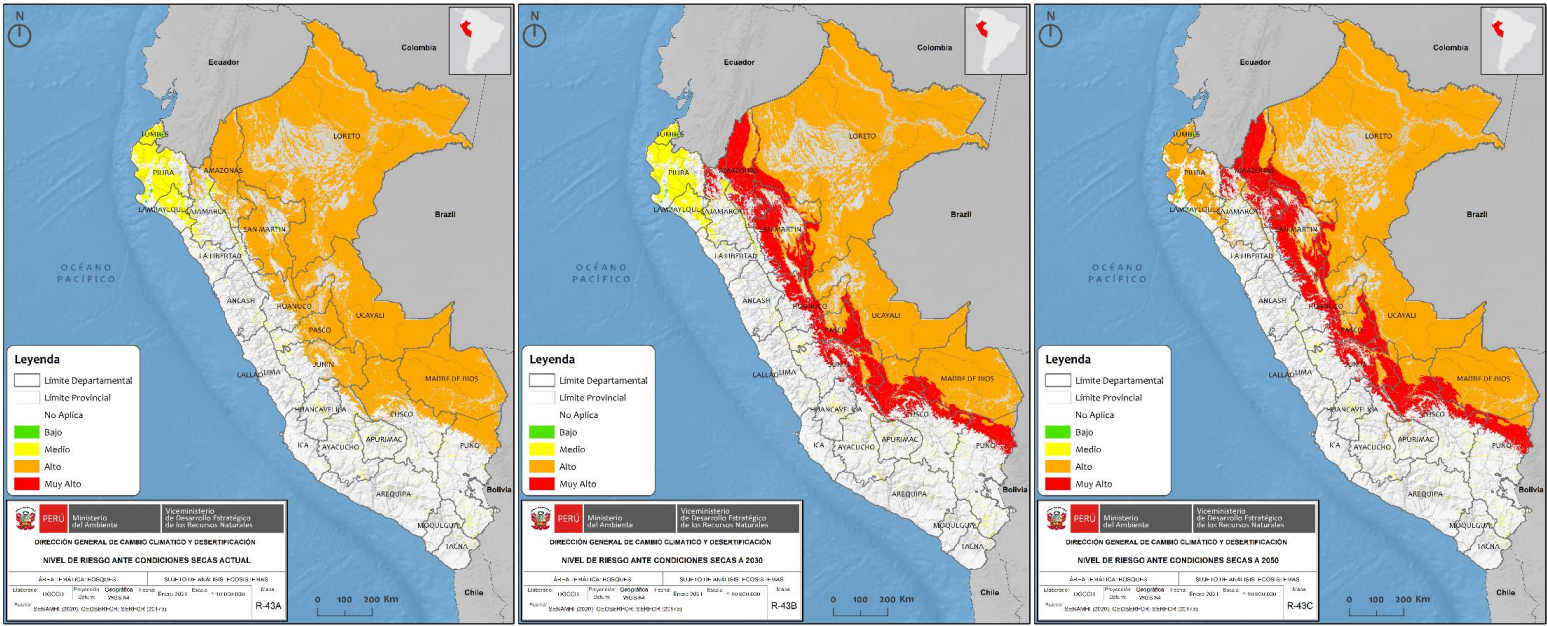
Source: National Plan of Climate Change Adaptation of Peru (MINAM; 2021)

Figure 6. Probable trend in the level of risk to agriculture systems, by change of aridity conditions and by department: currently, 2030 and 2050.



Source: National Plan of Climate Change Adaptation of Peru (MINAM; 2021)

Figura 7. Probable trend in the level of risk for forest ecosystems (seasonally dry and amazonian), by aridity conditions and by department: currently, 2030 and 2050.



Source: National Plan of Climate Change Adaptation of Peru (MINAM; 2021)

The analysis in the NAP doesn't specifically include Andean forests or other Andean ecosystems of interest for the project (paramo, wetlands and grasslands), only mountain forests of the western slope (Andean Amazonian), however; those located in the northern extreme of Peru are essential for the crops of agro-export in the coastal area of Piura and Lambayeque and they are of interest to the project.

In this scenario, the main people affected are the rural Andean communities and their productive systems (mainly rainfed agriculture and livestock grazing) that depend directly on changes in climate, which, together with environmental damage and land-use change (affecting the biophysical component on which they depend), increase the risk of food insecurity and the reduction of the current and potential economic livelihoods of vulnerable populations. For this reason, is necessary to consider the local population as the main axis for the design of adaptation actions in Andean ecosystems.

The current condition of preservation of the Peruvian Andean ecosystems is the result of a long process of transformation of the landscape by occupation and productive use (agriculture, livestock, mining, fires) and by the biophysical and climate characteristics typical to these ecosystems (Postigo, 2019)²³. The capacity of adaptation and resilience before the pressure and threats to these ecosystems depends on its integrity as well as the capacity of the local population to reduce the effects of the climate change (Vasquez Jara, et al., 2017)²⁴. The Andean ecosystems offer contributions to the people especially those referred to the service of hydric regulation, and they will be affected by the variations on the climate: its dynamic, composition and distribution will change with the rise of the temperature which will have an effect on the use of soil (migration of crops to proper agroclimatic areas) and the priorities of conservation (migration of species to higher latitudes, changes in the phenology, prioritization of environmental services). Also, in the last decades, droughts have been registered more frequently and with more intensity, which would worsen the intensity of fires, though these ones directly depend on the bad agricultural practices that are implemented in the dry season of the Andes. Therefore, it is necessary not just improving the alert systems early, but also strengthen the local equipment and capacity for the early answer.

The NAP⁵, in agreement with the Framework Law on Climate Change, aims at anticipating and/or reducing the current risk and/or avoid the generation of future risks before the effects of the climate change, to reduce or avoid the potential damage, loss or alterations in the ecosystems, basin, territories, livelihoods, population, infrastructure, goods and services, as well as take advantage of the opportunities that offers the adaptation to the climate change for the sustainable development. In this way, the NAP has identified 92 regulations grouped in five thematic areas prioritized to focus on four specific problems.

The project will focus on two of these specific problems: low adaptive capacity of the population and high vulnerability of the ecosystems before the dangers associated with the climate change. To do that, the implementation of ten (10) of the identified measures will be supported in the thematic areas Water, Forests and Agriculture. Also, the generation of enabling conditions will be supported to continue with the implementation of the ten measures, especially those referred to the interinstitutional articulation and the financing. One of the financing options identified by the NAP is the submission of proposals to the Adaptation Fund, which will serve as a basis for mobilizing public and private resources for its implementation.

Project Objectives

The project will contribute to increase the adaptive capacity of the productive systems of the Andean rural communities and to reduce the vulnerability of the Peruvian Andean ecosystems (Andean forests, paramos and bofedales).

To achieve these objectives, three outcomes are considered:

- To map and monitor forests and other Andean ecosystems to support decision making at a national and sub national level (regional governments).
- To enhance resilience capacity of the Andean ecosystems in three conservation mosaics.
- To enhance resilience capacity of productive activities in rural communities of three conservation mosaics.

²³ Postigo, J. 2019. Diagnosis of mountain ecosystems as a supply for the formulation of the national policy of glaciers and mountain ecosystems – Final Report. Andean Forests Programme

²⁴ Vásquez Jara, R., Tovar Narváez, A., Palma Pecho, A., Mercado Curi, W. y Gómez Moncada, H., (2017). Vulnerability of forests and other Andean ecosystems of Saywite-Choquequirao-Ampay to the climate change and the human-induced pressures. Lima: HELVETAS Swiss Intercooperation y el Consorcio para el Desarrollo Sostenible de la Ecorregión Andina (CONDESAN).

Project Components and Cost

Project Components	Expected Outcomes	Expected Concrete Outputs	Amount (US\$)
1. Development and implementation of monitoring tools for Andean ecosystems	1.1. Mapping and monitoring of forests and other andean ecosystems to support decision making at a national and subnational level	1.1.1. Monitoring system of the climate change impact on Andean forests implemented. 1.1.2. Monitoring system of degradation and deforestation of Andean forests implemented.	1,000,000.00
2. Implementation of best practices for landscape protection and restoration of Andean ecosystems in conservation mosaics.	2.1. Enhancing of the resilience capacity of Andean ecosystems in three prioritized conservation mosaics.	2.1.1. Rural communities Implement conservation and restoration practices in degraded areas inside and outside (buffer zones) of prioritized protected natural areas. 2.1.2. "Peru's Natural Heritage Initiative – Andes" approved and in implementation 2.1.3. Incorporation of the climate change adaptation and disaster risk reduction approach in planning instruments of three conservation mosaics of Andean ecosystems	1,850,000.00
3. Increasing resilience and sustainability of local productive systems in rural communities in Andean ecosystem landscapes.	3.1. Enhancing of the resilience capacity of productive activities in rural communities of the three prioritized conservation mosaics.	3.1.1. Rural communities with technical productive capacities to reduce vulnerability of value chain inside and outside (buffer zone) prioritized protected natural areas. 3.1.2. Design, evaluation, and implementation of adaptation measures of productive chains linked to the market.	1,750,000.00
6. Project Execution cost (up 9.5% of Total Project Cost)			437,000.00
7. Total Project Cost			5,037,000.00
8. Project Cycle Management Fee charged by the Implementing Entity (up 8,5% of Project Execution Cost + Total Project Cost)			428,145.00
Amount of Financing Requested			5,465,145.00

Projected Duration: 4 años (48 meses)

Project Calendar

Milestones	Expected Dates
Start of Project/Programme Implementation	August 2022
Mid-term Review (if planned)	September 2024
Project/Programme Closing	July 2026
Terminal Evaluation	October 2026

PART II: PROJECT JUSTIFICATION

A. Project components

The Andean ecosystems of Peru and the population who live there are highly vulnerable to the climate change. In the northern extreme of the Peruvian Andes, there are no glaciers and there are only paramos and Andean forests that are responsible for offering the hydrological regulation service to the coastal areas of the departments of Piura and Lambayeque, including irrigation projects for agroexport companies (Alban, 2017)²⁵. In the central and southern Andes, 2,259 glaciers and 8,577 lakes were reported, distributed in ten departments, according to the National Inventory of Glaciers, elaborated in 2018 by the National Institute of Research on Glaciers and Ecosystems of Mountain (INAIGEM for its initials in Spanish), which will condition future water flows for agricultural, energy and population use. The central Andes and, specially, the southern Andes are significantly less humid than the northern Andes, and a long history of wildfire and increasing drought periods are reported. On the other side, in the expected situations foreseen by the NAP, by the year 2030 and 2050, the local population (rural and with high levels of poverty) will see their productive systems affected linked to the agricultural and livestock activities mainly.

Three conservation mosaics of landscape Andean ecosystems (including protected natural areas and agricultural landscapes) have been identified based on the maps of probable risk level for the thematic areas of water, forest, and agriculture of NAP Peru. These maps are based on the national level climate risk scenarios and will be complemented in the final design stage of the project with climate scenarios developed at the subnational²⁶ level in the departments where the conservation mosaics are located (if applicable). The three conservation mosaics identified are: the first one is located the north of Peru between the departments of Piura and Cajamarca and has 118,000 hectares of protected areas, being the most important one the Tabaconas Namballe National Sanctuary (31,143.08 hectares). The second one is located, in the central Andes of the country between the departments of La Libertad, Ancash, Huanuco and Lima and it includes four protected areas: The Calipuy National Sanctuary (4,500 hectares), The Calipuy National Reserve (64,000 hectares), the Huascaran National Park (339,231.91 hectares), nucleus area of the Biosphere Reserve of the same name, and the Reserved Zone called Huayhuash mountain chain (67,579.7 hectares). The third one is in the south of Peru between the departments of Apurimac and Cuzco departments, and it includes three protected areas: The Ampay National Sanctuary (3,181.76 hectares), the Choquequirao Regional Conservation Area (103,814.39 hectares) and the Machupicchu Historical Sanctuary (28,943.15 hectares).

The progress and achievements of the project will contribute to the fulfillment of the NAP Peru targets and will be reflected in the monitoring and evaluation system of Peru's NDC indicators. It is also expected to contribute to the national report of the new Post 2020 global biodiversity framework (CBD, 2021). The climate change adaptation measures to be supported by the project are shown in Table 2, and the full proposal document will detail the project's contributions to the national targets set by the NDCs.

Chart 2. Project contributions to the adaptation measures of the NAP Peru

Thematic Area	Adaptation measures	Indicator	National Target to 2030	Project
Water	Conservation and recovery of the natural infrastructure for the provision of hydrological ecosystem service in basins that are vulnerable to the climate change. (AGU.24)	Area (ha) of conserved and recovered ecosystems that provide hydrological regulation and provisioning services, in watersheds vulnerable to climate change.	97,842.8	To be defined in the complete project document
Forest	Implementation of ancestral practices in rural and native communities on the sustainable use of the goods and services of the ecosystems to adapt to the effects of the	Number of peasant and/or native communities implementing ancestral practices for the sustainable use of ecosystem goods and services to adapt to the effects of climate change.	150	6

²⁵ Albán, L. 2017. The Fondo del Agua Quiroz Chira: a mechanism for the management for the Piura (Perú) ecosystem mountain. Andean Forest Programme and Nature and Culture International Perú. <https://www.bosquesandinos.org/wp-content/uploads/2017/02/FAQCH-FINAL-WEB.pdf>

²⁶ Regional Governments with regional strategies updated or in process of updating according to the Regulation of the Framework Law on Climate Change

Thematic Area	Adaptation measures	Indicator	National Target to 2030	Project
	climate change (BOS.1)			
	Restoration of the ecosystems within of the National System of Natural Protected Areas (Sinanpe for its initials in English) to maintain landscape connectivity and reduce the impacts of the climate change (BOS.2)	Number of hectares of Sinanpe's PNAs with forest under restoration process reduce the impacts of extreme climate events.	19,630	3,038
	Implementation of a national forest dynamics monitoring program to measure the impact of climate change and adapt to its effects (BOS.3)	% Implementation of a national forest dynamics monitoring program to measure the impact of climate change and adapt to its effects.	100%	100%
	Implementation of sustainable practices for the conservation of ecosystems in watersheds of Protected Natural Areas vulnerable to extreme climate events (BOS.4)	Number of hectares of ecosystems in watersheds within the scope of the PNAs with sustainable conservation practices to reduce vulnerability to extreme climate events.	312,000	To be defined in the complete project document
	Implementation of a surveillance and control system in Protected Natural Areas to reduce vulnerability to climatic and non-climatic effects. (BOS.5)	Number of hectares in PNAs that implement monitoring and control actions to reduce vulnerability to climate and non-climate impacts.	13,619,539.9	To be defined in the complete project document
Agriculture	Strengthening forest fire risk management processes with a landscape approach in a context of climate change. (BOS.7)	% Decrease in the area of vegetation cover impacted by forest fires in the context of climate change	50%	To be defined in the complete project document
	Management of natural grasslands to ensure livestock feed and reduce their vulnerability to climate change (AGRI.7)	Number of hectares of natural grasslands managed in areas vulnerable to climate change.	5,873,638	To be defined in the complete project document
	Implementation of adaptive technological innovation services for climate change in agricultural value chains. (AGRI.15)	Number of agricultural producers with technical assistance for technological innovation adaptive to climate change in agricultural value chains.	10,978	To be defined in the complete project document
	Implementation of business strategies that incorporate risk and opportunity management in the face of climate change. (AGRI.17)	Number of agricultural producers with business plans incorporating climate change risk and opportunity management in value chains.	32,248	To be defined in the complete project document

Source: National Plan of Climate Change Adaptation of Peru (MINAM; 2021)

Component 1. Development and implementation of monitoring tools in Andean ecosystems, aims to improve capacities of national state organizations for decision making on sustainable management of Andean ecosystems: (a) indicators will be identified and incorporated for monitoring the impact of climate change on the biodiversity and functionality of Andean forest ecosystems, as well as implementing long-term monitoring plots and elaborate their baselines in coordination with SERNANP and INAIGEM (BOS.3), and (b) support the design and implementation of monitoring system of degradation and deforestation of Andean forests, the base for intervention of the National Forest Conservation Program of the Ministry of Environment (PNCB-MINAM)²⁷. Both monitoring systems will be linked to the early warning systems for forest fires (SERFOR and MINAM) and drought (SENAMHI).

²⁷ According to the PNCB-MINAM Intervention Strategy to 2030, the goal is to monitor 808,513.00 hectares distributed in 19 departments, of which 121,271 hectares are peasant community lands.

Component 2. Implementation of best practices for the protection and restoration of Andean ecosystem landscapes in three conservation mosaics, aims to improve the resilience of Andean ecosystems through: (a) implementing conservation and restoration practices for degraded areas identified in the PNAs and their buffer zones, in coordination with at least 25 peasant communities linked to them, and promoting the participation of the corporate and impact investment business sector, through mechanisms identified by NAP Peru such Works for Taxes mechanism (OxI), public-private partnerships (APP) or mechanisms of retribution for water ecosystem services (such as the one promoted by the National Superintendence of Sanitation Services - SUNASS, in the Cañete river basin with PNA Nor Yauyos Cochas Landscape Reserve) or impact investment in restoration; (b) incorporation of the climate change adaptation and disaster risk reduction approach in planning instruments of PNAs and regional, municipal or local development plans (to be defined in the full proposal) in coordination with SERNANP, the Protected Area Management Committees and/or Watershed Water Resource Councils (where they exist) and the corresponding levels of government of the prioritized conservation mosaics (Regional Governments or Municipalities); and (c) extension of the Peru's Natural Heritage Initiative²⁸ to natural protected areas in Andean ecosystems (national, regional and private), currently being implemented for the Amazon biome, and which seeks to achieve a sustainable National System of Natural Protected Areas (Sinanpe) that allows biodiversity conservation, promotes development and improves the quality of life of the country's most vulnerable populations.

Component 3. Increasing resilience and sustainability of local productive systems in rural communities in landscapes of Andean ecosystems, aims to increase the resilience of productive activities in 25 rural communities in the three conservation mosaics: (a) development of productive technical capacities to reduce vulnerability of existing value chains linked to PNAs in the conservation mosaics (national, regional or private level), and (b) design, evaluate and implement adaptation measures for potential or new productive chains linked to sustainable and resilient markets.

The project components align with the strategic results framework of the Adaptation Fund as follows:

<u>Project Objective(s)</u>	<u>Project Indicator(s)</u>	<u>Fund Outcome</u>	<u>Fund Outcome Indicator</u>
<u>Development and implementation of monitoring tools for Andean ecosystems</u>	<u>No. of monitoring systems in operation</u>	<u>Outcome 2: Strengthened institutional capacity to reduce risks associated with climate-induced socioeconomic and environmental losses</u>	<u>2.1.2 No. of targeted institutions with increased capacity to minimize exposure to climate variability risks (by type, sector and scale)</u>
<u>Implementation of best practices for landscape protection and restoration of Andean ecosystems in conservation mosaics.</u>	<u>No. of hectares conserved and/or restored</u>	<u>Outcome 5: Increased ecosystem resilience in response to climate change and variability-induced stress</u>	<u>5.1. No. of natural resource assets created, maintained or improved to withstand conditions resulting from climate variability and change (by type and scale)</u>
<u>Increasing resilience and sustainability of local productive systems in rural communities in Andean ecosystem landscapes.</u>	<u>No. of people receiving technical assistant</u> <u>No. of producers with business plans</u>	<u>Outcome 6: Diversified and strengthened livelihoods and sources of income for vulnerable people in targeted areas</u>	<u>6.2. Percentage of targeted population with sustained climate-resilient alternative livelihoods</u>

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B. Economic, social and environmental benefits and mitigate of negative impacts, in compliance with the Environmental and Social Policy and Gender Policy of the Adaptation Fund

²⁸ <https://profonanpe.org.pe/proyectos/fondo-de-transicion-de-la-iniciativa-patrimonio-del-peru-para-las-areas-naturales-protégidas-del-bioma-amazonico-2/>

At least 25 rural communities have been previously identified (mainly rural families in poverty situation and with subsistence economies mainly) in the three conservation mosaics of landscapes of Andean ecosystems. The following social, economic, and environmental benefits have been expected:

Social benefits: The project will strengthen the capacity of the people to reduce their vulnerability to the impacts of the climate change, and at the same time strengthen the participation of vulnerable groups (youth and women) in the decision-making on the use of the resources and services provided by the ecosystems. This will contribute to reduce the social conflicts and maintain the environmental conditions that support the means of living of the communities.

Economic benefits: The project will promote the participation of the local people (including youth and women and other vulnerable groups) in biodiversity-based business model and strengthen the resilience and sustainability of their productive systems, increasing the possibilities to maintain the local economy in the face of changing climate conditions in the Andean ecosystem. By involving local governments (District or Provincial Municipalities), it will strengthen the promotion of the rural economic development in the areas of intervention of the project.

Environments benefits: The environmental benefits of this project will be reflected on the maintenance of the contribution of the Andean ecosystems to the people living inside and outside of them, promoting restauration and ecological recovery actions, which will result in an increase of the adaptative capacity of the ecosystem. It is also expected to contribute to reduce the incidence of wildfire in the three conservation mosaics, thereby reducing biodiversity loss.

The project is expected to be a C category according to the Adaptation Fund classification and it should not have any negative effect on the natural or social capital of the project intervention sites. Detailed studies will be carried out in the next phase of the project's development process to guarantee the environmental, social and gender policies and principles of the Adaptation Fund, if necessary

A preliminary analysis of the information provided by the Census of Peasant Communities and the National Population Census (National Institute of Statistics and Informatics, 2017) shows that there are differences in relation to the percentage of men and women in the three intervention sites: in the north and south the percentages between both groups is similar (50%) and in the center the percentage of men is higher (53%). In the case of the population under 18 years of age and over 65 years of age, in the center and south they represent between 40%-45% and in the north around 60%.

Studies and research conducted in the Apurímac region (southern zone of the intervention) have been able to identify and make visible ancestral knowledge and differentiated participation of women and men in the communities around biodiversity, use of wild species, agroforestry practices and soil and water management and conservation, forest recovery and protection, fire prevention, family livelihoods, economic activities, among others (Mathez-Stiefel et al. 2016; Kometter and Huasquiche 2017; Kometter, 2018). Women play a key role in seedling production, construction of q'ochas (artificial wetlands), livestock, firewood collection, seed management, planting, post-harvest management and sales; while men are responsible for the transfer of seedlings, tools and inputs, soil management, house construction, tool making, harvesting and product transfer (Andean Forests Program, 2019c; Mathez-Stiefel, 2016, Andean Forests Program, 2021). Initially, it can be assumed that the situation is similar in the central and northern zones, so the gender analysis to be carried out at the beginning of project implementation will be an opportunity to guide and better define the intervention strategy, as well as to unify information on this issue in the country's protected areas.

In all cases, the heads of the protected areas in the intervention sites implement actions to formalize (through "conservation agreements") the economic activities developed by the local population inside and outside the zones. This relationship will serve as a basis for strengthening the process of equitable benefit sharing in the economic activities supported and developed by the project.

C. Cost-effectiveness

The adaptation measures proposed in the project (ecosystem monitoring, strengthening of capacities, restoration activities, mobilization of financial resources), are shown to be cost-effective long-term solutions to develop resilience in the communities and conserve the functionality of Andean ecosystems, which implies

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continuing to provide contributions from nature to the local populations mainly. At the institutional level, the involvement of national-level sectorial governmental organizations with responsibilities in the implementation of the National Adaptation Plan will also contribute to the efficiency of the project: MINAM's National Forest Conservation Program, SERFOR and SERNANP, the three together in outcome 1, and SERNANP leading outcome 2 and 3.

The project intervention will generate direct impact on: (i) at least 1.7 million hectares of Andean ecosystems in protected areas through a financial strategy for gap closure, (ii) will contribute to monitoring the impact of climate change and deforestation on the more than 270,000 hectares of Andean relict forests, (iii) will strengthen capacities in at least 25 peasant communities (total population to be defined in the next stage of project development), and (iv) will facilitate the start of the intervention of the National Forest Conservation Program in Andean relict forests through the design and implementation of the degradation mapping and monitoring system for this type of ecosystem.

D. Consistency with national or sub-national strategies.

The national normative framework to which the project is linked to is the following:

- *National Policy of the Environment*, approved by Supreme Decree 023-2021-MINAM.
- *Framework Law on Climate Change (Law 30754)* and its regulations approved by Supreme Decree 013-2019-MINAM.
- *National Strategy of Climate Change* approved by Supreme Decree 011-2015-MINAM, and currently in updating process²⁹.
- *National Plan of Climate Change Adaptation of Peru*, approved by Ministerial Resolution 096-2021-MINAM.
- The proposal of *National Policy of Glaciers and Mountain Ecosystems*³⁰.
- *Action Plan in Gender and Climate Change – PAGCC Peru*³¹.
- *Regional Strategies of Climate Change*.
- *Law of Mechanisms of Retribution Ecosystems Services (Law 30215)*, its regulations approved by Supreme Decree 009-2016-MINAM, and Amendment of the Regulations approved by Supreme Decree No. Supreme Decree 033-2021-MINAM.
- *General Dispositions for the multisectoral and decentralized management of the wetlands*, approved by Supreme Decree 006-2021-MINAM.
- *Intervention Strategies for 2030 of the National Program of Forest Conservation*, approved by Resolution of Executive Coordination 026-2020-MINAM/VMDERN/PNCB.

At Andean regional level, the project is consistent with the *Andean Initiative of Mountains*³² of which Peru is the Regional Coordinator Pro-Tempore currently, and with Declaration of Madrid worldwide (COP25) signed by Peru in the framework of the *Initiative 20x20*³³.

E. Relevant national technical standards and complies with the Environmental and Social Policy of the Adaptation Fund

As previously stated, the project is in line with the transversal approaches (gender, intercultural and intergenerational) and of human rights established by the NAP Peru in agreement with the Regulation of the Framework Law on Climate Change, as well as the ones established by the National Policy of the Gender Equality and the law N° 28983, Law of Equal Opportunities for men and women. The Interventions in the conversation mosaics will respect the normative framework established by the SERNANP for the development of activities in protected areas and by the SERFOR inside and outside them, reducing to the minimum the possible environmental negative impacts generated by the project. Besides, environmental, and social policies of the Adaptation Fund will be respected for the final design of the project and its implementation.

²⁹ <https://www.gob.pe/institucion/minam/campa%C3%B1as/3453-estrategia-nacional-ante-el-cambio-climatico-al-2050>

³⁰ <https://inaigem.gob.pe/web2/politicas/>

³¹ https://cdn.www.gob.pe/uploads/document/file/374076/PLAN-G%C3%A9nero-y-CC-16-de-JunioMINAM_MIMP.pdf

³² The Andean Initiative of Mountains is a platform integrated by the countries who share the Andes Chains of Mountains: Argentina, Bolivia, Colombia, Chile, Ecuador, Peru and Venezuela, and that, of their own accord, aim at strengthening the regional dialogue to promote and take action in order to preserve and encourage the sustainable development of the Andean mountains. <https://iam-andes.org/>

³³ Initiative 20x20 is a country-led effort that aims to change the dynamics of land degradation in Latin America and the Caribbean. <https://initiative20x20.org/>

The project does not involve environmental or social risks; on the contrary, it promotes benefits in both aspects by promoting monitoring and resilience to climate change in Andean ecosystems, as well as the sustainability of livelihoods and production chains, without involving risks such as the displacement of vulnerable populations inside and outside the protected areas. It should also be noted that SERNANP has already established forms of community participation and involvement in the management of protected areas through their management committees, which coordinate their own actions for the implementation of the Master Plans for these conservation areas. Likewise, SERNANP was consulted for the development of the concept note precisely because of the relationship with and knowledge of the peasant communities that work around the protected areas.

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On the other hand, in the area of influence of the three selected mosaics, there are some precedents of successful experiences for the implementation of good ecosystem conservation practices at the local level, which can be scaled up to other localities within the buffer zones of the same mosaics, and for which there is evidence of positive and proactive involvement of the communities.

Considering the above, it is considered that in the case of this Project it will be effective to implement an initial consultation process during the formulation stage, and a more in-depth consultation process at the beginning of its implementation, since components 2 and 3 will necessarily involve the selection of site-specific activities with a high level of detail, such as the identification of conservation and restoration practices for degraded areas that are most appropriate for the biophysical conditions of each mosaic and the preferences of the communities themselves (prioritization of ecosystem services); as well as the selection of high potential productive chains to focus on strengthening the technical productive capacities of vulnerable groups, for sustainability and resilience with high market acceptance.

F. Other funding sources

Listed below are projects under design that involve some natural protected areas or plan to develop activities in the project intervention area (Outcome 2, Outcome 3). A joint meeting will be organized to clarify the collaboration framework with all partners and key stakeholders will be invited to the steering committees. In the next phase of the project development process, a full inventory of projects in design and implementation will be carried out:

1. Project "Patrimonio Natural del Perú - Amazonía" (GEF6): is updating the financial model for the Tabaconas Namballe National Sanctuary and plans to finance actions to close the gaps in this natural protected area.
2. Public Investment Project "Improvement of the Biodiversity Conservation Service of Huascarán National Park" (SNIP code N° 360714): its purpose is to recover 417.16 hectares inside the National Park.
3. Project submitted to IKI funds "Recovery of natural infrastructure in natural protected areas of the Andean region to increase resilience in watersheds vulnerable to climate change in Peru": one of the intervention areas is Huascarán National Park and where component 1 aims to develop actions for the recovery of degraded areas, as well as component 2 to promote and improve participatory pilots of payment mechanisms for ecosystem services that incorporate restoration and better livestock and agricultural practices, replicating models validated by SERNANP and other key actors (e.g., contracts for resource use and management of resources in protected areas, water and carbon MERESE, among others).
4. Project under design to present to the GCF "Strengthening landscape management to reduce vulnerability to climate effects in natural protected areas and other conservation modalities": has planned intervention in Huascarán National Park, and considers the creation of new conservation areas, implementing restoration actions and identifying development potential for the communities.
5. Concept Note of the Project "Resilient Puna: Ecosystem-based Adaptation for Sustainable High Andean Communities and Landscapes in Peru" approved for submission of full proposal to the GCF, which is currently under development: has planned interventions in wetlands and grasslands in 91 districts of the departments of Arequipa, Apurímac, Cusco and Puno through a financial mechanism to implement nature-based solutions and strengthen productive chains in high Andean ecosystems, in coordination with the Ministry of Agrarian Development and Irrigation.

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Below is a list summarizing the details of the projects/programs mentioned:

Project	Status	Overlap or Complementarity		Implications
		geographical	thematic	
Project "Patrimonio Natural del Perú - Amazonía" (GEF6):	Under implementation	Overlap with protected area SN Tabaconas Namballe	Output 2.1.2	SN Tabaconas Namballe would not be included as part of Output 2.1.2.
Project "Improvement of the Biodiversity Conservation Service of Huascarán National Park" (SNIP code N° 360714 - Public Investment Project)	Without funding	Overlap with protected area PN Huascarán	Output 2.1.1	This project is not expected to be implemented until after the start of the project submitted to the Adaptation Fund.
Project "Recovery of natural infrastructure in natural protected areas of the Andean region to increase resilience in watersheds vulnerable to climate change in Peru" (IKI)	Proposal submitted to the International Climate Initiative (IKI)	Overlap with protected area PN Huascarán	Output 2.1.1 Output 3.1.1 Output 3.1.2	If the IKI project is approved before the project submitted to the Adaptation Fund is initiated, the resources foreseen for PN Huascarán would be invested in the NPAs SN Calipuy, RN Calipuy and ZR Huayhuash.
Project "Strengthening landscape management to reduce vulnerability to climate effects in natural protected areas and other conservation modalities" (Green Climate Fund)	Concept Note on design	Overlap with protected area PN Huascarán	Output 2.1.1 Output 3.1.1 Output 3.1.2	Approval is not expected until after the project submitted to the Adaptation Fund has been initiated.
Project "Resilient Puna: Ecosystem-based Adaptation for Sustainable High Andean Communities and Landscapes in Peru" (Green Climate Fund)	Concept Note approved and Project under development	Possible overlap with intervention zone in Apurímac and Cusco (to be defined)	Output 2.1.1 Output 3.1.1 Output 3.1.2	Not expected to be approved until after the start of the project submitted to the Adaptation Fund.

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G. Knowledge management

Knowledge management and sharing of lessons learned will be cross-cutting activities in all three components of the project. At the beginning of the project, a knowledge management strategy will be developed with two paths: knowledge facilitated by the project and knowledge resulting from project activities. In the first case, research or systematization of cases will be facilitated to fill knowledge gaps in the sectors and areas of the project; and in the second case, project reports will have guidelines for the systematization of activities, experiences, results and conclusions that respond to its objectives and the information and knowledge needs of key stakeholders and strategic allies.

The knowledge generated by this project will be shared and disseminated at the national level via the web portals of PROFONANPE, MINAM, SERNANP, INAIGEM and PNCB-MINAM, considering the strategic communication actions established by NAP Peru for its implementation. It is planned to disseminate the project's experiences on global web portals for knowledge management on climate change or mountain ecosystems such as WeADAPT or The Mountain Partnership, and its contribution through key messages at the COPs on Climate Change and Biodiversity and at the meetings of the Andean Mountain Initiative.

The main purpose of the Project is focused on facilitating the implementation of Peru's National Climate Change Adaptation Plan. Therefore, the three components of the Project are formulated according to the adaptation measures indicated in the concept note and knowledge management is proposed as a cross-cutting work approach, linked to monitoring and evaluation activities, under a logic of constant feedback. This means that at the beginning of the Project a Knowledge Management Strategy will be formulated that incorporates the following elements:

- Analysis of knowledge gap filling needs for the full implementation of activities in the three components of the Project.
- Capacity building needs analysis, especially to achieve the expected result of component 3 "Increased resilience of productive activities in peasant communities in three prioritized conservation mosaics".
- Generation of information through the systematization of experiences and reporting of results of monitoring Andean ecosystems, implementation of interventions for better conservation and resilience of landscapes and local productive systems.
- Dissemination of information through selected communication channels according to each type of target audience (communities, local stakeholders, decision makers, general public, etc.).
- Linkage to the Project's monitoring and evaluation system and to the institutional knowledge management strategy of the project's counterparts (especially SERNANP), PROFONANPE and the implementing entity.

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H. Consultative process and compliance with environmental and social standards, policies and safeguards

PROFONANPE, MINAM and SERNANP were consulted in the preparation of this concept note and their inputs was included in the document. In the process of developing the complete project, consultation processes and local meetings will be held to better understand the interests and needs of the peasant communities and local authorities (including the review of work agendas and/or regional climate change strategies), as well as the relationship between the livelihoods of the local population (including and highlighting youth and women's groups), ecosystems, climate risks differentiated by user, power structures and decision-making spaces on the use and access to goods and services provided by the ecosystems.

Questions on benefits and impacts with a gender perspective will be considered in the consultations with organizations and institutions, and organizations whose institutional mission is related to the empowerment of women and/or addresses the needs of vulnerable groups will be identified. Consultations will also be held with private sector actors involved in the development of extractive economic activities in conservation mosaics and others interested in promoting impact investment. The consultations will provide more information on vulnerable groups in the conservation mosaics and opportunities for scaling up lessons learned from other projects activities.

The development of the full proposal will include a review and analysis of environmental and social impacts, and consideration has been given to the development of a Gender Plan for project implementation, in line with the Adaptation Fund's environmental, social and gender policy, and the three cross-cutting approaches (gender, intercultural and intergenerational) and human rights established by the NAP Peru in accordance with the Regulations of the Framework Law on Climate Change of Peru, which also include the National Policy on Gender Equality and Law No. 28983, Law on Equal Opportunities between Women and Men, and the provisions of the Action Plan on Gender and Climate Change of Peru (PAGCC Peru).

I. Justification for funding requested

The project will contribute to the implementation of the NAP Peru by supporting ten adaptation measures and contributing to the targets of its indicators in Andean ecosystems of Peru, considered the most vulnerable to climate change. In accordance with the recommendations of the NAP Peru, synergies between the measures of the three thematic areas addressed by the project (Water, Forest, Agriculture) will be promoted in the prioritized conservation mosaics in order to integrate all available resources in the most efficient way.

The project is structured in three components with three outcomes and seven outputs (see Project Components and Cost section). The first component (US\$ 1,000,000) will support SERNANP (MACC BOS.3) and MINAM's National Forest Conservation Program for the design and implementation of monitoring systems for forests and other Andean ecosystems. The second component (US\$ 1,850,000) will support restoration processes of Andean ecosystems in three conservation mosaics (AGU.24, BOS.2, BOS.4), the institutional articulation for the sustainable management of Andean ecosystem landscapes with a risk management

approach to climate change (BOS.1), and the closing of gaps in natural protected areas in Andean ecosystems through the extension of the Peruvian Natural Heritage Initiative to the Andes (BOS.5, BOS.7). Component 3 (US\$ 1,750,000) will strengthen capacities to reduce the vulnerability of current and potential local production systems and promote their access to green markets (AGRI.7, AGRI.15 and AGRI.16).

J. Outcome sustainability

The sustainability of the project's actions is guaranteed at the local level by the participation of the population through the peasant communities, owners of their territories and the main interested parties in maintaining their livelihoods and productive chains, including their diversification (Outcome 3). In this context, the participation of communities in the planning of activities in their territories will be guaranteed, ensuring adequate representation of women and vulnerable groups at all stages, including consultations for project formulation, in accordance with the Gender Policies of the Adaptation Fund and the cross-cutting approaches (gender, intercultural and intergenerational) of NAP Peru, and considering the preparation of a baseline study of gender conditions at the beginning of the project that will allow the identification of strategies for mainstreaming the approach in the implementation of project activities.

The project will promote a user-centered approach, iterative and open to innovation for the development of adaptation measures in local production systems. The annual project implementation plans will be designed in a participatory way, articulating its activities to those planned by the communities and public organizations involved in the project. Likewise, a reasonable duration will be considered to guarantee sufficient time for the consolidation of processes.

Community participation in decision-making on land management and rural development with a focus on climate change and risk management will be strengthened in the protected area management committees, where communities, municipalities, civil society, and the private sector also participate and planning the sustainable management of these conservation areas and their buffer zones (Outcome 2). At the sub-national level, coordination and participation spaces for the management of water resources (where they exist) and the departmental territory will also contribute to the sustainability of the project's actions, incorporating the climate change approach in their planning instruments (Outcome 2).

At the national level, the sectoral governmental organizations involved in the proposal are responsible for the implementation of Peru's National Climate Change Adaptation Plan, which guarantees the long-term sustainability of monitoring actions (Outcome 1) and the closing of gaps for protected areas in Andean ecosystems (Outcome 2). At the sub-national level (regional governments), the linkage of project activities with regional climate change agendas and/or strategies (where appropriate) will promote the incorporation of actions in support of the implementation of the NAP Peru in the programmatic and budgetary planning instruments of regional governments.

The participation of academia and research centers in mountain ecosystems will be promoted in order to take advantage of previously generated tools and knowledge that can be used by the project (Outcome 1, Outcome 2, and Outcome 3). This articulation will also allow the involvement of national universities in the mobilization of financial resources to support and expand the monitoring of Andean ecosystems. On the other hand, the generation of scientific knowledge on the impact of the activities will increase the evidence for monitoring the implementation of public policy on climate change.

Component 3 of the Project is based on the process led by SERNANP to involve the communities in the co-management of the protected areas in the conservation mosaics, in this case through the organization of the productive activities carried out by the communities, the signing of the so-called "conservation agreements" and subsequently the signing of a SEAP (Sustainable Economic Activities) contract. This encourages productive activities to reduce their impact and increase opportunities for biodiversity use. Thus, SERNANP not only promotes the signing of these agreements, but through the "Allies for Conservation" brand it hopes to contribute to improving the commercialization channels for bio-businesses developed in and around protected areas. In this context, the project, as indicated above, will provide detailed evaluations for gender-sensitive activities such as productive and restoration activities, which will serve as a basis to adequately design the intervention strategy and become part of the protocols to be implemented by SERNANP in relation to the promotion of bio-businesses and productive activities with the communities.

Likewise, within the framework of SERNANP's relations with the communities, and for the implementation of

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the project, a Complaints and Claims Attention Mechanism (MAQR) will be implemented based on PROFONANPE's experience in projects with native Amazonian communities (<https://profonanpe.org.pe/wp-content/uploads/2020/11/Mecanismo-de-Atencion-de-Quejas.pdf>)

K. Overview of the environmental and social impacts and risks identified as being relevant to the project

Checklist of environmental and social principles	No further assessment required for compliance	Potential impacts and risks – further assessment and management required for compliance
<i>Compliance with the Law</i>	X	
<i>Access and Equity</i>		X
<i>Marginalized and Vulnerable Groups</i>		X
<i>Human Rights</i>	X	
<i>Gender Equality and Women's Empowerment</i>		X
<i>Core Labour Rights</i>	X	
<i>Indigenous Peoples</i>	N/A	
<i>Involuntary Resettlement</i>	X	
<i>Protection of Natural Habitats</i>	X	
<i>Conservation of Biological Diversity</i>	X	
<i>Climate Change</i>	X	
<i>Pollution Prevention and Resource Efficiency</i>		X
<i>Public Health</i>	X	
<i>Physical and Cultural Heritage</i>		X
<i>Lands and Soil Conservation</i>	X	

In the complete document of the project, the possible risk and impact of the implementation of the project and the mechanisms of mitigation expected for each of the fifteen environmental and social principles shown in the table will be explained in detail.

PART III: IMPLEMENTATION ARRANGEMENTS

A. Describe the arrangements for project implementation

The institutional arrangements for the project management consider the following:

- PROFONANPE will be the National Implementing Entity (NIE)**, responsible for the supervision of the project. With this role, it will contribute to the preparation, implementation and monitoring of the project, and will offer assessment to the Executing Entity about fiduciary aspects and of acquisition related to the execution of the project, according to its policies and directives.
- HELVETAS Swiss Intercooperation will be the Executing Entity**, responsible for the implementation and monitoring of the project at a technical and administrative level. To do so, this entity will create a technical team, lead by a project coordinator. In the same way, the entity will be responsible for coordinating the design and implementation of the annual operative plans along with MINAM, SERNANP, PNCB-MINAM, INAIGEM, SERFOR, subnational governments and rural communities.
- Local partners will be identified at the sub-national level and will be defined in the following phases, especially in the consultation process for project formulation, and include NGOs, Natural Protected Area Management Committees and Peasant Communities, as well as Regional Governments. The following is a tentative list of potential local partners who will be contacted to explore collaboration opportunities:
 - In the conservation mosaic in the northern Andes: Nature and Culture International Peru and the Regional Governments of Piura and Cajamarca,
 - In the conservation mosaic in the central Andes: Instituto de Montaña Perú, and Regional Governments of La Libertad, Ancash, Huanuco and Lima.
 - In the conservation mosaic in the Southern Andes: CEDES Apurímac and Regional Governments of Apurímac and Cusco.
- A Project Steering Committee will be formed by PROFONANPE, MINAM, SERNANP, PNCB,

INAIGEM and HELVETAS (as Technical Secretary). Chaired by MINAM, this Committee will provide strategic guidance for the project.

5. The project also plans to establish a coordination network with other projects in Andean ecosystems financed by the Swiss Agency for Development and Cooperation (SDC) and implemented in Peru and other Andean countries.

Additional sections of this part will be completed in the full Project document.

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

A. Record of endorsement on behalf of the government

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: Rosa Mabel Morales Saravia Position: General Director of Climate Change and Desertification Ministry: Ministry of the Environment of Peru	Date: 01,10,2022
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B. Implementing Entity certification

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

I certify that this proposal has been prepared in accordance with guidelines provided by the Adaptation Fund Board, and prevailing National Development and Adaptation (Plans National Adaptation Plan and National Contributions) and subject to the approval by the Adaptation Fund Board, <u>commit to implementing the project/programme in compliance with the Environmental and Social Policy and the Gender Policy of the Adaptation Fund</u> and on the understanding that the Implementing Entity will be fully (legally and financially) responsible for the implementation of this project/programme.	
Name & Signature: Anton Willems Delanoy Implementing Entity Coordinator	
Date 01,10,2022	Tel. and email: (511) 315 5700 (511) 218 1097 awillems@profonanpe.org.pe
Project Contact Person: Claudia Godfrey Ruiz	
Tel. and Email: (511) 315 5700 (511) 218 1097 cgodfrey@profonanpe.org.pe	

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

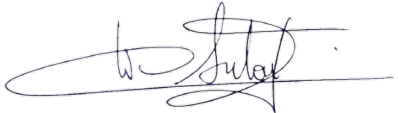
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Name & Signature: Anton Willems Delanoy  Implementing Entity Coordinator	
Date 01,10,2022	Tel. and email: (511) 315 5700 (511) 218 1097 awillems@profonanpe.org.pe
Project Contact Person: Claudia Godfrey Ruiz	
Tel. and Email: (511) 315 5700 (511) 218 1097 cgodfrey@profonanpe.org.pe	



PERÚ

Ministerio
del Ambiente

Viceministerio de
Desarrollo Estratégico de
los Recursos Naturales

Dirección General
de Cambio Climático
y Desertificación

"Decenio de la Igualdad de Oportunidades para mujeres y hombres"
"Año del Fortalecimiento de la Soberanía Nacional"

Lima, 10 de enero de 2022

LETTER N° 00005-2022-MINAM/VMDERN/DGCCD

Messrs.

The Adaptation Fund Board

c/o Adaptation Fund Board Secretariat

Email: Secretariat@adaptation-fund.org

Fax: 202 522 3240/5

Subject : Endorsement letter for the concept note "Building a program for adaptation and resilience to climate change of Andean ecosystems and populations in Peru"

The Ministry of the Environment of Peru is the governing body of the National Climate Change Strategy of Peru and is the ministry in charge of informing the United Nations Framework Convention on Climate Change on the commitments of Nationally Determined Contributions (NDC). Within this framework, the concept note "Building a program for adaptation and resilience to climate change of Andean ecosystems and populations in Peru" has been evaluated, to be presented to the Adaptation Fund. In this sense, the proposal contributes to increasing the adaptive capacity of the productive systems of rural Andean peasant communities and to reducing the vulnerability of the Peruvian Andean ecosystems (Andean forests, moors and wetlands).

In this vein, I am pleased to endorse the changes mentioned above with support from the Adaptation Fund. If approved, we will ensure that the project is aligned to our climate change adaptation targets, and that is duly coordinated between the environment and Profonampe.

We appreciate your attention very much, and thank you for your kind consideration.

Sincerely yours,

Rosa Morales Saravia

Head of the General Directorate of Climate Change and Desertification

Ministry of the Environment

Designated Authority

File number: 2022002330

This is an authentic printable copy of a document filed in the Ministry of the Environment, applying the provisions of Art. 25 of S.D. 070-2013-PCM and the Third Final Complementary Provision of the S.D. 026-2016-PCM. Its authenticity and integrity can be verified at the website: <https://ecodoc.minam.gob.pe/verifica/view> with the following password: **b1b45e**