



ADAPTATION FUND

Project Performance Report

Overview

Period of Report (Dates)	2/2/2022 - 2/1/2023
Project Title	Enhancing adaptive capacity of Andean communities through climate services
Project Summary	<p>The Andean region has considerable water resources but unevenly distributed over time and location due to strong seasonal to interannual precipitation variability and local weather. Countries in the region are under the influence of the ENSO phenomenon and the Inter Tropical Convergence Zone (ITCZ), which is strongly modulated by the sea surface temperatures in the tropical Pacific. Colombia, Peru and Chile have requested support to implement the Global Framework for Climate Services (GFCS) and develop climate services for reducing the vulnerability of key societal and economic sectors and building resilience to climate change. This project proposal responds to these requests and provides support by WMO and regional partners to these countries. The present project will assess the impacts of climate variability and change on water, which in turn will provide information for subsequent assessments of climate impacts in other sectors and systems, in particular, food security and food production, hydropower generation and competitive uses of water (e.g. by cities, towns and for irrigation), and ecosystem and biodiversity preservation.</p>
Database Number	AF00000124
Implementing Entity (IE)	World Meteorological Organization
Type of IE	Multilateral Implementing Entity
Country(ies)	Regional (Chile, Colombia, Peru)
Relevant Geographic Points (i.e. cities, villages, bodies of water)	<ul style="list-style-type: none">• Chile: (i) The Aconcagua River Basin in central Chile and (ii) the Chilean electricity sector from Arica to Chiloé.• Colombia: (i) the Río de las Piedras Basin and (ii) the Los Cerrillos region, both in the Municipio of Popayán.• Peru: (i) The middle and upper basins of the Rímac River near Lima, and (ii) the Huallaga River basin in the eastern slopes of the Andes and the “Selva” region. &quot;
Name of Implementing Entity Focal Point	Christopher Hewitt (since November 2022), Project Executive Moyenda Chavonda (since December 2022), Focal Point at the Adaptation Fund Raul

	Polato, Project Manager
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Project Milestones	
AFB Approval Date	7/8/2019
IE-AFB Agreement Signature Date	11/13/2019
Start of Project/Programme	2/2/2021
Actual Mid-term Review Date (if applicable)	
Original Completion Date	2/1/2025
Revised Completion Date after approval of extension request (if applicable)	

Were there any approval condition for this Project?

Yes

List each approval condition, if any, and report on the status of meeting them	
Category of condition	Environmental and Social Safeguards
Condition or Requirement	[Conditions for 1st disbursement] The agreement should include a commitment from WMO that, prior to first disbursement, WMO will submit: i) a brief action plan describing how the project will take action in line with the Free, Prior and Informed Consent principle, to establish bottom up participation and consultation of the Indigenous groups; ii) a revision of the project outputs, as well as the results framework and budget to reflect the gender baseline assessment as a specific activity; and iii) a revision of the environmental and social impact assessment and plan to include a comprehensive risk identification and assessment in line with the ESP principles of the Fund, rather than by project activity. (Decision B.33-34/23)
Current Status	Condition met and cleared by the AFB Sec
Planned actions, including a detailed time schedule	1 (ESS). Brief Action plan describing how each EE will comply with AF ESP and National regulation on Free, Prior and Informed Consent, was prepared and annexed to Project Document Annexes as Annex 6. "Countries Action Plans for Bottom-up Participation and Consultation with Indigenous Groups". The Annex reports how EE will proceed with a detailed national workplan and associated project outputs. During the period of PPR1 field activities with local communities have been limited by COVID19 restrictions. Nevertheless in each country preparation activities were performed, such as the Identification of communities and coordination with national institution representing them, the invitation to participate to the project sent to communities' leaders/focal points, plus the the Registration of proposed Project activities at Ministerio del Interior and certification of presence of indigenous communities at the area, in the specific case of Colombia. National roadmaps will be

	<p>implemented as soon as COVID19 measurers will be relieved, as they are particularly strict in the case of rural/remote communities and indigenous people. 2 (Gender). Such a revision was carried out, generating a "Revised Project Document" dated 7th of November 2019. In the new version of the project doc, a specific mention to Gender Baseline was added to Output 2.1 "Output 2.1: Knowledge and action networks have been implemented that facilitate the design, production, delivery, and use of climate information and services; relevant strategic partners have been engaged; capability gaps in strategic partners have been identified and addressed; Gender Baseline Assessment undertaken" 3 (ESS). Such a revision was carried out, generating a "Revised Project Document" dated 7th of November 2019. It is annexed to project document as Annex 3 "Environmental and Social Impact Assessment (ESIA) and Environmental and Social Risk Management Plan (ESMRP) for Project ENANDES (Chile, Colombia and Peru)". Both ESIA and ESRMP were carried out by TRANSFORMA, a Colombian non-profit organization that envisions and enables systemic changes towards making sustainable and regenerative development a reality, working hand in hand with EEs. As a result of the screening process this consultancy found that 12 out of the 15 principles do apply to the ENANDES project, and that 9 of the 12 applicable principles ought to be considered in the assessment stage. Results of both a desk phase and a consultation process were taken in to account when rating identified overarching risks. As a result of this process most of the identified overarching risks were considered moderate and each of them has different levels of impact and probability of occurrence. Detailed information can be found in the above mentioned Annex 3. The same document highlights "Measures to Avoid, Minimize or Mitigate Potential Risks" as well as "Monitoring Indicators and Institutional Arrangements" and a "Suggested methodology for screening and risk assessment for potential new activities that can result during the implementation of the project".</p>
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List (only) inception report/ extension request(s)/ MTR that have been prepared for the project and provide date(s) of submission for each

Notification of Delay of ENANDES Project Inception (submitted on 15th June 2020) Project Inception Workshop Report (submitted to Adaptation Fund on 12th March 2021) Project Progress Report Year 1 (submitted on 12 May 2022, final approval on 26 October 2022). Request for DPS by WMO to DMC (approved by AF Board on 17 March 2023 by B.39-40/12)

List the Website address (URL) of project

<https://public.wmo.int/en/projects/enhancing-adaptive-capacity-of-andean-communities-through-climate->

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Financial Data

Disbursement of AF grant funds	
Cumulative total disbursement from Trustee to IE as of date (\$)	\$4,110,000.00
Estimated cumulative total disbursement from IE to EEs as of date (\$)	\$1,454,176.00
Project disbursement rate (%)	60
Project execution rate (%)	21.23
Add any comments on AF Grant Funds	<p>Second Grant disbursement was received on 29 November 2022 - US\$ 2.055.000,00 for execution costs - US\$ 174.600,00 for IE fees Corresponding to the US\$ 2.229.600, 00 as second disbursement according to the agreed disbursement schedule and to a total amount received by IE of US\$ 4.459,200. Executing Entities EEs received their first disbursement according to Implementation Agreements signed with WMO, during first year of implementation, generating an overall disbursement/transfer of 979.920,00 USD. IA with</p>

	<p>SENAMHI was signed on February 2022 and first disbursement of US\$ 474.256,00 was realized during second reporting period, on March 2022. Overall disbursement to project partners to date is US\$ 1,454,176 Project expenditure (execution costs and activities) - US\$ 1.434.959.28 executed by IA and EEs according to following detail: DMC US\$ 16.177,77 IDEAM US\$ 419.043,73 SENAMHI US\$ 367.892,00 CIIFEN US\$ 180.129,60 WMO Execution Costs - US\$ 451.716.18 WMO Indirect costs US\$ 122,232.72 (WMO IE fees - US\$ 119.542.99 + Loss in currency exchange 1.533,34 + Bank Charges 1.156,39) Balance unspent as at 1 February 2023 on first disbursement: US\$ 738.808,00 Balance unspent as at 1 of February 2023 on total amount received: US\$ 2.902.008,00 Forecasted expenditures by 1 of February 2024: US\$ 2.358.281,96</p>
Investment Income (\$)	\$0.00
Cumulative Investment Income since inception (\$)	\$0.00

Expenditure Data	
Output	Amount (\$)
Output 1.1: National climatic and hydrological data management systems have been enhanced and updated through improved/new tools and processes. WIGOS implementation has been supported	\$106,319.99
1.1.1 Assess needs and gaps in climate/water observational systems.	\$21,637.53
1.1.2 Integrate different types of existing national databases (agroclimatic, hydrological, observation networks from different institutions).	\$19,445.00
1.1.3 Rescue undigitized critical climate and hydrological datasets (place priority on ENANDES pilot regions).	\$9,828.00
1.1.4 Strengthen and enhance as needed the Climate and Water Data Management System within each ENANDES country.	\$2,000.00
1.1.5 Develop, test, implement and document procedures to manage metadata for climate and hydrological data.	\$14,675.00
1.1.6 Develop, test, implement and document procedures to perform quality assurance tests on climate data from conventional and automatic weather stations.	\$15,630.00
1.1.7 Develop, identify, test, implement and document procedures to perform quality assurance tests on hydrological data from conventional and automatic measurements.	\$6,084.72
1.1.8 Develop, test, implement and document procedures to perform homogenization of climate data in pilot regions.	\$3,146.70
1.1.9 Identify, obtain and process relevant climate/hydrology variables or products from satellite-based sensors	\$13,873.04
Output 1.2: The characterization and communication of historical and recent states of climatic hazards have been improved through new/enhanced tools and processes	\$95,512.53
1.2.1 Identify the relevant climatic, hydrological and environmental variables that need to be routinely monitored and communicated (by themselves or as derived products) to characterize hazards and inform decisions in the target sectors and communities.	\$5,182.48
1.2.2. Define and generate “baseline products” which should be routinely monitored and communicated to support preparedness, risk management and adaptation decision on drought and floods.	\$10,750.00
1.2.3 Characterize the long-term statistics (“climatology”, "normals") of baseline	\$20,619.01

products relevant for the target sectors and communities.	
1.2.4 Analyse the characteristics (including recent trends) of extreme values in baseline products relevant for the target sectors and communities.	\$9,897.00
1.2.5 Produce agroclimatic zoning for agriculturally-important pilot regions.	\$17,617.04
1.2.6 Map hydroelectricity generation potential (based on "normal" conditions) for pilot regions or national levels.	\$31,447.00
Output 1.3: The production and dissemination of forecasts of high-impact weather has been improved through new models and processes	\$49,965.00
1.3.1 Strengthen national capabilities to produce weather forecasts, pushing the forecast horizon from 3 to 5 days ahead.	\$41,965.00
1.3.2 Develop and implement automated procedures to produce and validate forecasts of extreme weather events.	\$0.00
1.3.3 Enhance and strengthen procedures for communicating warnings ("avisos") of high-impact weather events.	\$8,000.00
1.3.4 Hands on training on the use and interpretation of NWP outputs to improve weather prediction	\$0.00
Output 1.4: The production and dissemination of sub-seasonal to seasonal (S2S) predictions of regional climate and hydrological conditions has been improved through new models and processes	\$47,578.82
1.4.1 Identify the relevant climatic variables/features that need to be routinely predicted on sub-seasonal to seasonal (S2S) scales to support adaptation and impact mitigation decisions in target sectors and communities.	\$5,000.00
1.4.2 Develop or enhance as needed the capabilities of participating NMHSs' to produce (or access from other sources) and analyse S2S statistical or dynamical forecasts of relevant climatic variables/features.	\$16,075.82
1.4.3 Implement, test and document procedures to evaluate the performance (skill) of S2S climate forecasts (statistical or dynamical) including standardized verification metrics.	\$0.00
1.4.4 Design, develop and implement a prototype regional subseasonal forecasting system for climatic and hydrological variables.	\$26,503.00
1.4.5 Develop, implement, test and document operational practices and consensus protocols to produce objective forecasts of regional climate, to interpret, to assess their performance and to estimate confidence measures. Work with IRI on sectors incl. agric.	\$0.00
Output 1.5: The access, processing and dissemination of multi-model projections of regional climate change (decadal to multi-decadal) from multiple institutions and models has been made easier by the development of new tools	\$0.00
1.5.1 Develop and implement procedures to obtain, pre-process and disseminate climate change scenarios from multiple sources (e.g., CMIP, CORDEX).	\$0.00
1.5.2 Document the multiple available sources of climate change projections, model evaluation and the assumptions and limitations involved for each set of projections.	\$0.00
1.5.3 Assess the consistency/agreement (or lack thereof) of projected conditions for the WSA region among multiple models/ensembles/scenarios and provide estimates of uncertainty.	\$0.00
Output 1.6: Procedures and tools have been implemented by NMHSs to downscale seasonal forecasts and climate change projections in space/time. Global forecasts/projections have been calibrated for the ENANDES region	\$10,627.00
1.6.1 Survey existing approaches for downscaling seasonal forecasts and climate projections in space and time.	\$0.00
1.6.2 Develop, test, implement and document procedures for downscaling seasonal forecasts and climate projections in space and time.	\$10,627.00
1.6.3 Develop, test and implement procedures and customized tools for region-specific post-processing of seasonal forecasts and climate change projections from dynamical model output (e.g., calibration, debiasing correction procedures).	\$0.00

Output 2.1: (a) Knowledge and action networks have been implemented that facilitate the design, production, delivery, and use of climate information and services; relevant strategic partners have been engaged; (b) capability gaps in strategic partners have been identified and addressed; and (c) Gender Baseline Assessment undertaken and used to monitor progress in gender issues	\$53,658.99
2.1.1 Map the landscape of relevant institutional and social actors from climate-sensitive sectors in pilot adaptation regions and nationally. Clarify the roles and responsibilities of all network actors. Include institutions that can contribute to understanding vulnerability to climate hazards. Establish User interfaces for the co-design, co-development and provision of feedback for the tailoring of climate information products and services	\$23,453.04
2.1.2 Secure the active engagement in ENANDES activities of key network members through formal institutional arrangements (strategic partnerships) or other commitments. Pay special attention to gender, age, income and ethnicity dimensions.	\$20,382.00
2.1.3 Identify major gaps in the capabilities needed for strategic partners (network members) to contribute effectively to ENANDES or an NFCS. Develop strategies to address gaps. Identify coordination and collaboration requirements which would allow leveraging of initiatives and resources with the ENANDES interventions. Where there are challenges in coordination and collaboration establish NFCS which should result in a national plan where the contributions of each initiative would be recorded	\$9,823.95
Output 2.2: The needs for tailored weather/climate information have been identified for target sectors in demonstration adaptation regions	\$10,357.00
2.2.1 Identify major impacts of weather/climate hazards on target sectors and pilot regions through literature reviews, expert consultations and search of any available impact databases.	\$1,500.00
2.2.2 Identify specific decisions in each sector and pilot region that might be modified/influenced given the availability of relevant information about weather/climate hazards.	\$1,500.00
2.2.3 Co-define (with stakeholders) the specific types of climate information (climatological, diagnostic or prognostic) that would be relevant to inform climate-sensitive decisions (see 2.2.2) in each sector and pilot region.	\$7,357.00
Output 2.3: Sectoral models have been used to “translate” observed/predicted weather/climate conditions into likely local impacts at demonstration sites	\$51,229.38
2.3.1 Survey the availability of statistical or process (mechanistic) models linking weather/climate hazards to sector-specific impacts on target sectors and pilot regions. Examples include crop models, hydrological models, etc.	\$44,229.38
2.3.2 Where necessary, design and implement calibration/validation efforts for process models in target sectors and regions.	\$0.00
2.3.3 Identify thresholds for monitored/predicted climate/water variables, products or indices beyond which significant impacts can be expected for a target sector and region.	\$7,000.00
2.3.4 Develop prototype systems to produce forecasts of climate-related risks and likely impacts in target sectors (agriculture, water, energy) for pilot regions.	\$0.00
Output 2.4: Communication and knowledge management strategies have been developed for ENANDES. Relevant information about observed/predicted weather/climate hazards and their likely impacts are routinely communicated through appropriate channels	\$72,636.88
2.4.1 Develop an ENANDES communication and knowledge management strategy to (a) disseminate relevant climate and weather information, and (b) increase awareness of climate and weather hazards, their impacts, and the possibility of supporting decisions through climate services and information. Place particular attention on ways to reach and engage poor and vulnerable communities, the elderly, and women.	\$19,137.39
2.4.2 Identify preferred media and information channels for dissemination of information about weather and climate, warnings, etc. select appropriate media to reach different genders, age groups, ethnic groups or any other dimension that might require different channels.	\$0.00
2.4.3 Routinely disseminate weather/climate information (e.g., baseline products) through	\$26,000.00

previously identified channels (see 2.4.1).	
2.4.4 Compile and disseminate narratives or vignettes illustrating successful use of ENANDES information to foster adaptation and climate risk mitigation.	\$2,000.00
2.4.5 Design and implement procedures to monitor and evaluate (a) the effectiveness of communication efforts and (b) actual access to, and use of ENANDES information.	\$23,499.49
2.4.6 Develop case studies, success stories or lessons learnt on communication aspects	\$0.00
2.4.7 Gender aspects in communication	\$2,000.00
Output 2.5: Multiple requisites of a National Framework for Climate Services. such as identification of stakeholders and information needs and implementation of national dialogs. have been addressed by ENANDES. thus contributing to NFCS implementation	\$31,691.02
2.5.1 Assess and summarize the lessons learned during ENANDES and other Regional or country projects, that are relevant to the production, dissemination and use of climate information as part of an NFCS.	\$19,157.00
2.5.2 Design a prototype User Interface Platform (UIP) based on ENANDES and other regional/country projects experience.	\$4,767.01
2.5.3 Design and implement a Climate Services Information System (CSIS), focusing on the associated regional and national elements, based on ENANDES experience; implement plan for regular updates.	\$4,767.01
2.5.4 Develop a plan (preliminary or final, according to national context) for implementation of a National Framework for Climate Services including sustained conduct of National Climate Forums (NCFs).	\$3,000.00
2.5.5 Identify gaps in scientific knowledge and propose an active research program to provide ongoing support to the various components of an NFCS (e.g., the UIP, the Climate Services Information System, others).	\$0.00
Output 3.1: The factors that determine vulnerability to climatic variability and change have been identified for the sectors and regions targeted	\$16,737.00
3.1.1 Conduct studies to understand the factors underlying vulnerability to hydroclimate variability and change hazards in each sector and region targeted.	\$16,737.00
Output 3.2: Capacity building and outreach efforts have improved the accessibility. comprehension and use of climate and water information for risk management and adaptation among local stakeholders and communities	\$61,533.90
3.2.1 Design and implement training efforts (e.g., "field schools") to increase the capacity of local authorities, boundary organizations and other stakeholders from each targeted sector/region to access, understand and use ENANDES climate information for management of, and adaptation to weather/climate hazards.	\$21,361.10
3.2.2 Implement, adapt, enhance, convene and evaluate “Mesas Agroclimáticas” to facilitate two-way dialog, dissemination and uptake of relevant agroclimatic information in pilot adaptation regions. [Activity common to all ENANDES countries]	\$20,714.00
3.2.3 Build on existing efforts to enhance dissemination of relevant hydroclimatic information in pilot adaptation regions.	\$4,369.80
3.2.4 Design and implement outreach and communication efforts to sensitize local communities to climate change and its plausible local impacts. Relate to individual experiences with climate variability.	\$2,023.00
3.2.5 Gender specific capacity building	\$13,066.00
Output 3.3: Context-appropriate preparedness and adaptation plans and actions to reduce local damages from climate variability and change have been designed through participatory processes. Demonstration activities have been implemented and monitored to test those plans and actions	\$117,502.86
3.3.1 Convene kick-off workshop in each pilot region to clarify objectives and purposes of adaptation efforts, confirm engagement of key actors, and identify any previously unengaged stakeholders that should be approached.	\$16,000.00
3.3.2 Implement, monitor and assess the proposed pilot actions to mitigate damages from, and	\$0.00

increase resilience to extreme weather hazards and climate variability in targeted sectors and regions. Revise and adapt as needed.	
3.3.3 Co-design, implement and monitor a portfolio of context-appropriate plans and actions at different levels (from national and regional governments to firms and individuals) to mitigate damages from, and increase resilience to extreme weather hazards and climate variability in targeted sectors and regions.	\$29,230.75
3.3.4 Co-design, implement and monitor a portfolio of context-appropriate plans and actions at different levels (from national and regional governments to firms and individuals) to adapt and mitigate the expected impacts of plausible climate change scenarios. Viable plans and actions are developed through participatory approaches and align with national climate action plans and goals, and with NDCs in water, energy and agriculture.	\$9,938.73
3.3.5 Develop actions to ensure the sustained engagement of women, elder, poor and vulnerable communities in all adaptation actions.	\$0.00
3.3.6 Explore additional tools (e.g., insurance) to complement management/mitigation of climate risks, and to enhance support nets and incomes of vulnerable populations/communities.	\$17,000.00
3.3.7 Seek to understand incentives for participation in risk management and adaptation actions by different types of actors.	\$431.73
3.3.8 Develop actions to enhance the engagement of the private sector in adaptation actions.	\$44,901.65
Output 3.4: Early-warning systems and enhanced processes for inter-institutional coordination have (i) strengthened national/local management of risks and (ii) reduced the negative impacts of droughts and floods for demonstration adaptation sites/sectors	\$72,831.00
3.4.1 Convene multi-institutional fora to enhance coordination and preparation for floods and droughts.	\$0.00
3.4.2 Conduct “time accelerated” simulations of preparation and mitigation decisions given various hypothetical climate scenarios. Assess responses and provide feedback to decision-makers.	\$36,831.00
3.4.3 Implement pilot drought and/or flood early warning systems in target regions. Include all elements of an early warning system and Impact Based-Forecasts and Warning Services (IBFWS). Linkages with EUROCLIMAS and CRC-SSA. External experts	\$20,000.00
3.4.4 Initiate efforts for the development of a national drought policy in each participating country.	\$16,000.00
3.4.5 Implement/enhance/support local, community-operated hydro-meteorological observation networks. Purchase of 2-3 agromet AWS per country for pilot areas and simple instruments: raingauges, termometers	\$0.00
Output 3.5: Evaluations of the socio-economic benefits of ENANDES demonstration adaptation actions have been carried out	\$7,540.72
3.5.1 Based on workshop on existing approaches for SEB estimation (see 4.3.4), select context-appropriate approaches to conduct one or more SEB studies in the different ENANDES pilot adaptation regions.	\$4,314.72
3.5.2 Where appropriate, conduct SEB study of short-term warnings or alerts of relevant extreme weather events (freezes, high rainfall, heatwaves, etc.).	\$0.00
3.5.3 Where appropriate, conduct study of the socio-economic benefits of monitoring and forecasts of regional climate conditions and their likely impacts in pilot adaptation regions.	\$3,226.00
Output 3.6: Useful lessons on local adaptation actions have been provided by an active project tracking effort (complementary to M&E efforts) that allowed active adaptation of goals. outcomes and outputs throughout the project	\$30,025.32
3.6.1 Conduct workshops early in the project aimed at reaching consensus and clarity on the desired outcomes, outputs and impacts of pilot risk management and adaptation actions proposed.	\$9,870.16
3.6.2 Refine originally proposed indicators of adaptation effectiveness as a function of what the pilot efforts are trying to achieve (i.e., the results from 3.6.1).	\$0.00
3.6.3 Design process to monitor possible unintended effects (cross-scale or cross-sector) and	\$0.00

maladaptation.	
3.6.4 Conduct surveys at project start to define baseline of proposed indicators (e.g., access to, and actual use of climate info).	\$6,000.00
3.6.5 Conduct surveys at end of project to assess status of proposed indicators.	\$3,226.00
3.6.6 Complement monitoring of quantitative metrics with narratives derived from the adaptation case studies describing “what went right?” and “what went wrong?”, i.e., focusing on assessing learning.	\$0.00
3.6.7 Conduct ongoing monitoring and assessment. Actively adapt project goals and activities in response to difficulties or emerging opportunities.	\$10,929.16
Output 4.1: Regional coordination activities like syntheses of surveys and needs, and regional expert meetings have been carried out to support the update of national climatic and hydrological data management systems, and the implementation of interoperable regional databases	\$37,781.20
4.1.1 Synthesize the baseline status surveyed by each participating NMHS and identify common needs for climate and hydrological (if applicable) data management capabilities. 	\$17,889.54
4.1.2 Integrate and synthesize national plans to strengthen climate and hydrological data management systems. Identify opportunities for specific collaborations on this topic among ENANDES countries.	\$17,047.22
4.1.3 Identify and make available key existing high-resolution gridded climate datasets for the sub-region.	\$2,844.44
4.1.4. Develop a digital repository of technical publications	\$0.00
Output 4.2: Regional coordination activities like consultations and expert meetings have been carried out to support and complement national strengthening of capacities for climate monitoring and prediction	\$7,182.22
4.2.1 Hold technical workshop to reach regional consensus on procedures for verification of S2S forecasts in ENANDES countries.	\$800.00
4.2.2 Share through web the information produced by the WMO GPCs in a regionally optimized manner.	\$6,382.22
"4.2.3 Assemble guidelines and good practices for subseasonal to seasonal climatic and hydrological prediction where best predictors can be identified and described for each country/season. "	\$0.00
4.2.4 Develop and implement routines to automate the creation and visualization of sectoral products derived of appropriately calibrated/bias-corrected model data from WMO GPCs-LRFs.	\$0.00
Output 4.3: Regional coordination activities like consultations and expert meetings have been carried out to support and complement national strengthening of capacities for climate services production, dissemination and uptake	\$41,759.05
4.3.1 Implement a virtual teleconferencing system for regional coordination and analysis of regional climate conditions.	\$24.91
4.3.2 Provide technical advice and guidance for implementation of local volunteer observation networks in ENANDES countries that need them.	\$12,071.09
4.3.3 Develop an online collection of best practices and lessons-learned on the implementation of climate services delivery at regional, national and local level.	\$3,267.91
4.3.4 Coordinate a workshop to review existing approaches to estimate socio-economic benefits of climate services, to support countries in selecting specific approaches for each pilot region.	\$26,395.14
Output 4.4: Regional Technical Working Groups have been re-convened, revitalized or established. Active liaison with other ongoing projects in the region has achieved positive synergies and enhanced economic efficiency	\$62,258.57
4.4.1 Implement or invigorate regional technical cooperation groups of data base developers, S2S prediction and Andean hydrology.	\$3,591.11

4.4.2 Strengthen the Regional Working Group on numerical climate modeling to define future needs and resources.	\$6,059.02
4.4.3 Foster increased collaboration and exchanges among members of the climate and hydrology communities in the region and establish a Task Force to develop an implementation plan for conducting a Regional Climate Forum (RCF) for WSA region on a regular basis involving both climate information providers and users.	\$0.00
4.4.4 Establish Regional Working Groups to conduct routine verification of S2S forecasts of regional climate.	\$800.00
4.4.5 Coordinate and leverage actions among climate-related projects and programs in the Andean region.	\$49,817.33
4.4.6 Implement coordination mechanisms between the RCC-WSA and other RCCs (especially in South America) with WMO support.	\$1,991.11
4.4.7 Improve the coordination with Global Producing Centres of Long-Range Forecasts (GPCLRFs).	\$0.00
4.4.8 Strengthen the coordination with WMO Regional Training Centers in South America and elsewhere.	\$0.00
Output 4.5: An ENANDES Climate Services Toolkit (CST) has been implemented that is tailored to the previously determined operational needs of ENANDES NMHSs	\$10,109.10
4.5.1 Develop and distribute coding style guides and standard documentation templates to facilitate sharing of ENANDES-developed tools among all participants.	\$3,982.22
4.5.2 Develop a customized Climate Services Toolkit including and documenting the specific tools and procedures developed in other ENANDES components to support adaptation activities.	\$5,259.02
4.5.3 Develop a regional CST portal along with a help desk to serve as an online resource for countries for data, software, guidance and troubleshooting.	\$867.86
Output 4.6: Capacity building efforts for ENANDES have been (i) defined by ENANDES participants. (ii) coordinated by CIIFEN/RCC-WSA and (iii) jointly planned and implemented by countries and WMO Regional Training Centers. WMO Training Activities Division and other institutions.	\$11,039.46
4.6.1 Survey needs and priorities for capacity building efforts across the ENANDES countries and the Andean region. Engage management and staff members in NMHSs as well as stakeholders.	\$5,107.20
4.6.2 Define learning outcomes and learning solutions (formal, informal, virtual, classroom-based) to be conducted on each project year. Consider mechanisms to ensure long-term impacts of training.	\$0.00
4.6.3 Design and conduct the training efforts defined in 4.6.3 in close coordination with RTCs. Utilize existing resources where possible.	\$2,883.38
4.6.4 Conduct formal assessment of all training efforts and impacts on service delivery in collaboration with RTCs.	\$3,048.88
Project management	\$429,082.27
Project Manager, Asunción, WMO-ROA	\$273,750.94
Technical Coordinator, Geneva	\$84,268.52
Project Support partners	\$33,050.33
Inception Workshop(s)	\$26,002.74
Travel, missions	\$12,009.74
Office Supplies (Furniture, Equipment, Software)	\$0.00
Monitoring and Evaluation (M & E)	\$0.00
M & E => Mid-term evaluation	\$0.00
M & E => Final Evaluation	\$0.00
IE fee (\$)	\$119,543.00

Execution cost (\$)	\$429,082.27
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Planned Expenditure Schedule		
Output	Projected Cost (\$)	Estimated Completion Date
Output 1.1: National climatic and hydrological data management systems have been enhanced and updated through improved/new tools and processes. WIGOS implementation has been supported	\$283,150.46	1/31/2024
1.1.1 Assess needs and gaps in climate/water observational systems.	\$28,783.00	12/31/2023
1.1.2 Integrate different types of existing national databases (agroclimatic, hydrological, observation networks from different institutions).	\$16,612.00	12/31/2023
1.1.3 Rescue undigitized critical climate and hydrological datasets (place priority on ENANDES pilot regions).	\$79,499.00	12/31/2023
1.1.4 Strengthen and enhance as needed the Climate and Water Data Management System within each ENANDES country.	\$12,000.00	7/31/2023
1.1.5 Develop, test, implement and document procedures to manage metadata for climate and hydrological data.	\$14,598.00	12/31/2023
1.1.6 Develop, test, implement and document procedures to perform quality assurance tests on climate data from conventional and automatic weather stations.	\$24,519.00	12/31/2023
1.1.7 Develop, identify, test, implement and document procedures to perform quality assurance tests on hydrological data from conventional and automatic measurements.	\$19,528.00	1/31/2024
1.1.8 Develop, test, implement and document procedures to perform homogenization of climate data in pilot regions.	\$40,584.00	12/31/2023
1.1.9 Identify, obtain and process relevant climate/hydrology variables or products from satellite-based sensors	\$47,027.46	12/31/2023
Output 1.2: The characterization and communication of historical and recent states of climatic hazards have been improved through new/enhanced tools and processes	\$164,050.00	12/31/2023
1.2.1 Identify the relevant climatic, hydrological and environmental variables that need to be routinely monitored and communicated (by themselves or as derived products) to characterize hazards and inform decisions in the target sectors and communities.	\$2,000.00	12/31/2023
1.2.2. Define and generate “baseline products” which should be routinely monitored and communicated to support preparedness, risk management and adaptation decision on drought and floods.	\$88,818.00	12/31/2023
1.2.3 Characterize the long-term statistics (“climatology”, “normals”) of baseline products relevant for the target sectors and communities.	\$6,815.00	12/31/2023
1.2.4 Analyze the characteristics (including recent trends) of extreme values in baseline products relevant for the target sectors and communities.	\$3,790.00	12/31/2023
1.2.5 Produce agroclimatic zoning for agriculturally-important pilot regions.	\$29,631.00	12/31/2023
1.2.6 Map hydroelectricity generation potential (based on “normal” conditions) for pilot regions or national levels.	\$32,996.00	12/31/2023
Output 1.3: The production and dissemination of forecasts of high-impact weather has been improved through new models and processes	\$213,391.00	12/31/2023
1.3.1 Strengthen national capabilities to produce weather forecasts, pushing the forecast horizon from 3 to 5 days ahead.	\$92,037.00	12/31/2023
1.3.2 Develop and implement automated procedures to produce and validate	\$75,045.00	6/30/2023

forecasts of extreme weather events.		
1.3.3 Enhance and strengthen procedures for communicating warnings ("avisos") of high-impact weather events.	\$26,309.00	12/31/2023
1.3.4 Hands on training on the use and interpretation of NWP outputs to improve weather prediction	\$20,000.00	12/31/2023
Output 1.4: The production and dissemination of sub-seasonal to seasonal (S2S) predictions of regional climate and hydrological conditions has been improved through new models and processes	\$190,846.20	12/31/2023
1.4.1 Identify the relevant climatic variables/features that need to be routinely predicted on sub-seasonal to seasonal (S2S) scales to support adaptation and impact mitigation decisions in target sectors and communities.	\$2,000.00	7/31/2023
1.4.2 Develop or enhance as needed the capabilities of participating NMHSs' to produce (or access from other sources) and analyze S2S statistical or dynamical forecasts of relevant climatic variables/features.	\$29,300.00	12/31/2023
1.4.3 Implement, test and document procedures to evaluate the performance (skill) of S2S climate forecasts (statistical or dynamical) including standardized verification metrics.	\$79,018.20	12/31/2023
1.4.4 Design, develop and implement a prototype regional subseasonal forecasting system for climatic and hydrological variables.	\$60,528.00	12/31/2023
1.4.5 Develop, implement, test and document operational practices and consensus protocols to produce objective forecasts of regional climate, to interpret, to assess their performance and to estimate confidence measures. Work with IRI on sectors incl. agric.	\$20,000.00	12/31/2023
Output 1.5: The access, processing and dissemination of multi-model projections of regional climate change (decadal to multi-decadal) from multiple institutions and models has been made easier by the development of new tools	\$25,000.00	12/31/2023
1.5.1 Develop and implement procedures to obtain, pre-process and disseminate climate change scenarios from multiple sources (e.g., CMIP, CORDEX).	\$20,000.00	7/31/2023
1.5.2 Document the multiple available sources of climate change projections, model evaluation and the assumptions and limitations involved for each set of projections.	\$5,000.00	12/31/2023
1.5.3 Assess the consistency/agreement (or lack thereof) of projected conditions for the WSA region among multiple models/ensembles/scenarios and provide estimates of uncertainty.	\$0.00	12/31/2023
Output 1.6: Procedures and tools have been implemented by NMHSs to downscale seasonal forecasts and climate change projections in space/time. Global forecasts/projections have been calibrated for the ENANDES region	\$73,776.00	12/31/2023
1.6.1 Survey existing approaches for downscaling seasonal forecasts and climate projections in space and time.	\$1,000.00	12/31/2023
1.6.2 Develop, test, implement and document procedures for downscaling seasonal forecasts and climate projections in space and time.	\$32,776.00	7/31/2023
1.6.3 Develop, test and implement procedures and customized tools for region-specific post-processing of seasonal forecasts and climate change projections from dynamical model output (e.g., calibration, debiasing correction procedures).	\$40,000.00	12/31/2023
Output 2.1: (a) Knowledge and action networks have been implemented that facilitate the design, production, delivery, and use of climate information and services; relevant strategic partners have been engaged; (b) capability gaps in strategic partners have been identified and addressed; and (c) Gender Baseline Assessment undertaken and used to monitor progress in gender issues	\$124,569.10	12/31/2023
2.1.1 Map the landscape of relevant institutional and social actors from	\$30,171.00	12/31/2023

climate-sensitive sectors in pilot adaptation regions and nationally. Clarify the roles and responsibilities of all network actors. Include institutions that can contribute to understanding vulnerability to climate hazards. Establish User interfaces for the co-design, co-development and provision of feedback for the tailoring of climate information products and services		
2.1.2 Secure the active engagement in ENANDES activities of key network members through formal institutional arrangements (strategic partnerships) or other commitments. Pay special attention to gender, age, income and ethnicity dimensions.	\$30,198.00	12/31/2023
2.1.3 Identify major gaps in the capabilities needed for strategic partners (network members) to contribute effectively to ENANDES or an NFCS. Develop strategies to address gaps. Identify coordination and collaboration requirements which would allow leveraging of initiatives and resources with the ENANDES interventions. Where there are challenges in coordination and collaboration establish NFCS which should result in a national plan where the contributions of each initiative would be recorded	\$64,200.10	12/31/2023
Output 2.2: The needs for tailored weather/climate information have been identified for target sectors in demonstration adaptation regions	\$34,531.00	12/31/2023
2.2.1 Identify major impacts of weather/climate hazards on target sectors and pilot regions through literature reviews, expert consultations and search of any available impact databases.	\$16,309.00	12/31/2023
2.2.2 Identify specific decisions in each sector and pilot region that might be modified/influenced given the availability of relevant information about weather/climate hazards.	\$0.00	12/31/2023
2.2.3 Co-define (with stakeholders) the specific types of climate information (climatological, diagnostic or prognostic) that would be relevant to inform climate-sensitive decisions (see 2.2.2) in each sector and pilot region.	\$18,222.00	12/31/2023
Output 2.3: Sectoral models have been used to “translate” observed/predicted weather/climate conditions into likely local impacts at demonstration sites	\$5,785.00	12/31/2023
2.3.1 Survey the availability of statistical or process (mechanistic) models linking weather/climate hazards to sector-specific impacts on target sectors and pilot regions. Examples include crop models, hydrological models, etc.	\$2,000.00	12/31/2023
2.3.2 Where necessary, design and implement calibration/validation efforts for process models in target sectors and regions.	\$0.00	12/31/2023
2.3.3 Identify thresholds for monitored/predicted climate/water variables, products or indices beyond which significant impacts can be expected for a target sector and region.	\$3,785.00	12/31/2023
2.3.3 Identify thresholds for monitored/predicted climate/water variables, products or indices beyond which significant impacts can be expected for a target sector and region.	\$0.00	12/31/2023
Output 2.4: Communication and knowledge management strategies have been developed for ENANDES. Relevant information about observed/predicted weather/climate hazards and their likely impacts are routinely communicated through appropriate channels	\$35,654.00	12/31/2023
2.4.1 Develop an ENANDES communication and knowledge management strategy to (a) disseminate relevant climate and weather information, and (b) increase awareness of climate and weather hazards, their impacts, and the possibility of supporting decisions through climate services and information. Place particular attention on ways to reach and engage poor and vulnerable communities, the elderly, and women.	\$5,942.00	12/31/2023
2.4.2 Identify preferred media and information channels for dissemination of information about weather and climate, warnings, etc. select appropriate media to reach different genders, age groups, ethnic groups or any other dimension	\$13,712.00	7/31/2023

that might require different channels.		
2.4.3 Routinely disseminate weather/climate information (e.g., baseline products) through previously identified channels (see 2.4.1).	\$10,000.00	12/31/2023
2.4.4 Compile and disseminate narratives or vignettes illustrating successful use of ENANDES information to foster adaptation and climate risk mitigation.	\$0.00	12/31/2023
2.4.5 Design and implement procedures to monitor and evaluate (a) the effectiveness of communication efforts and (b) actual access to, and use of ENANDES information.	\$2,000.00	1/31/2024
2.4.6 Develop case studies, success stories or lessons learnt on communication aspects	\$0.00	12/31/2023
2.4.7 Gender aspects in communication	\$4,000.00	12/31/2023
Output 2.5: Multiple requisites of a National Framework for Climate Services, such as identification of stakeholders and information needs and implementation of national dialogs, have been addressed by ENANDES, thus contributing to NFCS implementation	\$96,885.00	12/31/2023
2.5.1 Assess and summarize the lessons learned during ENANDES and other Regional or country projects, that are relevant to the production, dissemination and use of climate information as part of an NFCS.	\$1,262.00	12/31/2023
2.5.2 Design a prototype User Interface Platform (UIP) based on ENANDES and other regional/country projects experience.	\$54,650.00	12/31/2023
2.5.3 Design and implement a Climate Services Information System (CSIS), focusing on the associated regional and national elements, based on ENANDES experience; implement plan for regular updates.	\$3,000.00	5/31/2023
2.5.4 Develop a plan (preliminary or final, according to national context) for implementation of a National Framework for Climate Services including sustained conduct of National Climate Forums (NCFs).	\$27,664.00	12/31/2023
2.5.5 Identify gaps in scientific knowledge and propose an active research program to provide ongoing support to the various components of an NFCS (e.g., the UIP, the Climate Services Information System, others).	\$10,309.00	12/31/2023
Output 3.1: The factors that determine vulnerability to climatic variability and change have been identified for the sectors and regions targeted	\$55,468.00	12/31/2023
3.1.1 Conduct studies to understand the factors underlying vulnerability to hydroclimate variability and change hazards in each sector and region targeted.	\$55,468.00	12/31/2023
Output 3.2: Capacity building and outreach efforts have improved the accessibility, comprehension and use of climate and water information for risk management and adaptation among local stakeholders and communities	\$87,876.00	12/31/2023
3.2.1 Design and implement training efforts (e.g., "field schools") to increase the capacity of local authorities, boundary organizations and other stakeholders from each targeted sector/region to access, understand and use ENANDES climate information for management of, and adaptation to weather/climate hazards.	\$12,500.00	12/31/2023
3.2.2 Implement, adapt, enhance, convene and evaluate "Mesas Agroclimáticas" to facilitate two-way dialog, dissemination and uptake of relevant agroclimatic information in pilot adaptation regions. [Activity common to all ENANDES countries]	\$13,771.00	12/31/2023
3.2.3 Build on existing efforts to enhance dissemination of relevant hydroclimatic information in pilot adaptation regions.	\$51,558.00	12/31/2023
3.2.4 Design and implement outreach and communication efforts to sensitize local communities to climate change and its plausible local impacts. Relate to individual experiences with climate variability.	\$5,047.00	12/31/2023
3.2.5 Gender specific capacity building	\$5,000.00	12/31/2023
Output 3.3: Context-appropriate preparedness and adaptation plans and actions	\$65,745.00	12/31/2023

to reduce local damages from climate variability and change have been designed through participatory processes. Demonstration activities have been implemented and monitored to test those plans and actions		
3.3.1 Convene kick-off workshop in each pilot region to clarify objectives and purposes of adaptation efforts, confirm engagement of key actors, and identify any previously unengaged stakeholders that should be approached.	\$8,465.00	7/31/2023
3.3.2 Implement, monitor and assess the proposed pilot actions to mitigate damages from, and increase resilience to extreme weather hazards and climate variability in targeted sectors and regions. Revise and adapt as needed.	\$0.00	12/31/2023
3.3.3 Co-design, implement and monitor a portfolio of context-appropriate plans and actions at different levels (from national and regional governments to firms and individuals) to mitigate damages from, and increase resilience to extreme weather hazards and climate variability in targeted sectors and regions.	\$12,617.00	12/31/2023
3.3.4 Co-design, implement and monitor a portfolio of context-appropriate plans and actions at different levels (from national and regional governments to firms and individuals) to adapt and mitigate the expected impacts of plausible climate change scenarios. Viable plans and actions are developed through participatory approaches and align with national climate action plans and goals, and with NDCs in water, energy and agriculture.	\$0.00	12/31/2023
3.3.5 Develop actions to ensure the sustained engagement of women, elder, poor and vulnerable communities in all adaptation actions.	\$11,523.00	12/31/2023
3.3.6 Explore additional tools (e.g., insurance) to complement management/mitigation of climate risks, and to enhance support nets and incomes of vulnerable populations/communities.	\$25,570.00	12/31/2023
3.3.7 Seek to understand incentives for participation in risk management and adaptation actions by different types of actors.	\$0.00	12/31/2023
3.3.8 Develop actions to enhance the engagement of the private sector in adaptation actions.	\$7,570.00	12/31/2023
Output 3.4: Early-warning systems and enhanced processes for inter-institutional coordination have (i) strengthened national/local management of risks and (ii) reduced the negative impacts of droughts and floods for demonstration adaptation sites/sectors	\$152,019.00	12/31/2023
3.4.1 Convene multi-institutional fora to enhance coordination and preparation for floods and droughts.	\$31,607.00	12/31/2023
3.4.2 Conduct “time accelerated” simulations of preparation and mitigation decisions given various hypothetical climate scenarios. Assess responses and provide feedback to decision-makers.	\$0.00	12/31/2023
3.4.3 Implement pilot drought and/or flood early warning systems in target regions. Include all elements of an early warning system and Impact Based-Forecasts and Warning Services (IBFWS). Linkages with EUROCLIMAS and CRC-SSA. External experts	\$66,412.00	12/31/2023
3.4.4 Initiate efforts for the development of a national drought policy in each participating country.	\$8,000.00	12/31/2023
3.4.5 Implement/enhance/support local, community-operated hydro-meteorological observation networks. Purchase of 2-3 agromet AWS per country for pilot areas and simple instruments: raingauges, termometers	\$46,000.00	7/31/2023
Output 3.5: Evaluations of the socio-economic benefits of ENANDES demonstration adaptation actions have been carried out	\$12,084.00	12/31/2023
3.5.1 Based on workshop on existing approaches for SEB estimation (see 4.3.4), select context-appropriate approaches to conduct one or more SEB studies in the different ENANDES pilot adaptation regions.	\$8,084.00	5/31/2023
3.5.2 Where appropriate, conduct SEB study of short-term warnings or alerts of	\$2,000.00	12/31/2023

relevant extreme weather events (freezes, high rainfall, heatwaves, etc.).		
3.5.3 Where appropriate, conduct study of the socio-economic benefits of monitoring and forecasts of regional climate conditions and their likely impacts in pilot adaptation regions.	\$2,000.00	12/31/2023
Output 3.6: Useful lessons on local adaptation actions have been provided by an active project tracking effort (complementary to M&E efforts) that allowed active adaptation of goals, outcomes and outputs throughout the project	\$44,609.00	12/31/2023
3.6.1 Conduct workshops early in the project aimed at reaching consensus and clarity on the desired outcomes, outputs and impacts of pilot risk management and adaptation actions proposed.	\$17,641.00	12/31/2023
3.6.2 Refine originally proposed indicators of adaptation effectiveness as a function of what the pilot efforts are trying to achieve (i.e., the results from 3.6.1).	\$9,000.00	12/31/2023
3.6.3 Design process to monitor possible unintended effects (cross-scale or cross-sector) and maladaptation.	\$0.00	12/31/2023
3.6.4 Conduct surveys at project start to define baseline of proposed indicators (e.g., access to, and actual use of climate info).	\$3,322.00	7/31/2023
3.6.5 Conduct surveys at end of project to assess status of proposed indicators.	\$0.00	12/31/2023
3.6.6 Complement monitoring of quantitative metrics with narratives derived from the adaptation case studies describing “what went right?” and “what went wrong?”, i.e., focusing on assessing learning.	\$4,416.00	12/31/2023
3.6.7 Conduct ongoing monitoring and assessment. Actively adapt project goals and activities in response to difficulties or emerging opportunities.	\$10,230.00	12/31/2023
Output 4.1: Regional coordination activities like syntheses of surveys and needs, and regional expert meetings have been carried out to support the update of national climatic and hydrological data management systems, and the implementation of interoperable regional databases	\$11,715.54	1/31/2024
4.1.1 Synthesize the baseline status surveyed by each participating NMHS and identify common needs for climate and hydrological (if applicable) data management capabilities.	\$7,235.55	1/31/2024
4.1.2 Integrate and synthesize national plans to strengthen climate and hydrological data management systems. Identify opportunities for specific collaborations on this topic among ENANDES countries.	\$1,991.11	1/31/2024
4.1.3 Identify and make available key existing high-resolution gridded climate datasets for the sub-region.	\$2,488.88	1/31/2024
4.1.4. Develop a digital repository of technical publications	\$0.00	1/31/2024
Output 4.2: Regional coordination activities like consultations and expert meetings have been carried out to support and complement national strengthening of capacities for climate monitoring and prediction	\$51,937.76	1/31/2024
4.2.1 Hold technical workshop to reach regional consensus on procedures for verification of S2S forecasts in ENANDES countries.	\$13,226.66	1/31/2024
4.2.2 Share through web the information produced by the WMO GPCs in a regionally optimized manner.	\$38,711.10	3/31/2023
4.2.3 Assemble guidelines and good practices for subseasonal to seasonal climatic and hydrological prediction where best predictors can be identified and described for each country/season. "	\$0.00	12/31/2023
4.2.4 Develop and implement routines to automate the creation and visualization of sectoral products derived of appropriately calibrated/bias-corrected model data from WMO GPCs-LRFs.	\$0.00	12/31/2023
Output 4.3: Regional coordination activities like consultations and expert meetings have been carried out to support and complement national	\$63,673.28	1/31/2024

strengthening of capacities for climate services production. dissemination and uptake		
4.3.1 Implement a virtual teleconferencing system for regional coordination and analysis of regional climate conditions.	\$7,335.55	1/31/2024
4.3.2 Provide technical advice and guidance for implementation of local volunteer observation networks in ENANDES countries that need them.	\$34,615.53	3/31/2023
4.3.3 Develop an online collection of best practices and lessons-learned on the implementation of climate services delivery at regional, national and local level.	\$5,244.44	1/31/2024
4.3.4 Coordinate a workshop to review existing approaches to estimate socio-economic benefits of climate services, to support countries in selecting specific approaches for each pilot region.	\$16,477.76	1/31/2024
Output 4.4: Regional Technical Working Groups have been re-convened. revitalized or established. Active liaison with other ongoing projects in the region has achieved positive synergies and enhanced economic efficiency	\$84,968.86	1/31/2024
4.4.1 Implement or invigorate regional technical cooperation groups of data base developers, S2S prediction and Andean hydrology.	\$12,226.66	1/31/2024
4.4.2 Strengthen the Regional Working Group on numerical climate modeling to define future needs and resources.	\$7,226.66	1/31/2024
4.4.3 Foster increased collaboration and exchanges among members of the climate and hydrology communities in the region and establish a Task Force to develop an implementation plan for conducting a Regional Climate Forum (RCF) for WSA region on a regular basis involving both climate information providers and users.	\$17,217.77	4/30/2023
4.4.4 Establish Regional Working Groups to conduct routine verification of S2S forecasts of regional climate.	\$3,991.11	1/31/2024
4.4.5 Coordinate and leverage actions among climate-related projects and programs in the Andean region.	\$7,071.11	1/31/2024
4.4.6 Implement coordination mechanisms between the RCC-WSA and other RCCs (especially in South America) with WMO support.	\$28,991.11	7/31/2023
4.4.7 Improve the coordination with Global Producing Centres of Long-Range Forecasts (GPCLRFs).	\$1,244.44	1/31/2024
4.4.8 Strengthen the coordination with WMO Regional Training Centers in South America and elsewhere.	\$7,000.00	1/31/2024
Output 4.5: An ENANDES Climate Services Toolkit (CST) has been implemented that is tailored to the previously determined operational needs of ENANDES NMHSs	\$23,064.44	1/31/2024
4.5.1 Develop and distribute coding style guides and standard documentation templates to facilitate sharing of ENANDES-developed tools among all participants.	\$1,991.11	1/31/2024
4.5.2 Develop a customized Climate Services Toolkit including and documenting the specific tools and procedures developed in other ENANDES components to support adaptation activities.	\$19,082.22	4/30/2023
4.5.3 Develop a regional CST portal along with a help desk to serve as an online resource for countries for data, software, guidance and troubleshooting.	\$1,991.11	1/31/2024
Output 4.6: Capacity building efforts for ENANDES have been (i) defined by ENANDES participants. (ii) coordinated by CIIFEN/RCC-WSA and (iii) jointly planned and implemented by countries and WMO Regional Training Centers. WMO Training Activities Division and other institutions.	\$87,483.32	1/31/2024
4.6.1 Survey needs and priorities for capacity building efforts across the ENANDES countries and the Andean region. Engage management and staff members in NMHSs as well as stakeholders.	\$3,244.44	1/31/2024

4.6.2 Define learning outcomes and learning solutions (formal, informal, virtual, classroom-based) to be conducted on each project year. Consider mechanisms to ensure long-term impacts of training.	\$8,244.44	1/31/2024
4.6.3 Design and conduct the training efforts defined in 4.6.3 in close coordination with RTCs. Utilize existing resources where possible.	\$74,244.44	1/31/2024
4.6.4 Conduct formal assessment of all training efforts and impacts on service delivery in collaboration with RTCs.	\$1,750.00	1/31/2024
Project management	\$185,000.00	1/31/2024
Project Manager, Asunción, WMO-ROA	\$140,000.00	1/31/2024
Technical Coordinator, Geneva	\$0.00	1/31/2024
Project Support partners	\$10,000.00	1/31/2024
Inception Workshop(s)	\$0.00	1/31/2024
Travel, missions	\$10,000.00	1/31/2024
Office Supplies (Furniture, Equipment, Software)	\$0.00	1/31/2024
Monitoring and Evaluation (M & E)	\$25,000.00	1/31/2024
M & E => Mid-term evaluation	\$0.00	1/31/2024
M & E => Final Evaluation	\$0.00	1/31/2024
IE fee (\$)		\$65,210.00
Execution cost (\$)		\$185,000.00

Actual co-financing (if the MTR or TE have not been undertaken this reporting period, do not report on actual co-financing)	
Does this Project have Co-Financing ?	No
How much of the total co-financing as committed in the Project Document has actually been realized? (\$)	\$0.00
Estimated cumulative actual co-financing as verified during Mid-term Review (MTR) or Terminal Evaluation (TE). (\$)	\$0.00
Add any comments on actual co-financing in particular any issues related to the realization of in-kind, grant, credits, loans, equity, non-grant instruments and other types of co-financing.	

Risk Assessment

Identified Risks		
List all Risks identified in project preparation phase and what steps are being taken to mitigate them		
Identified Risk	Current Status	Steps taken to mitigate risk
Devaluation of currency in ENANDES countries	Moderate	"Funds received from Adaptation Fund are registered and maintained in CHF (in accordance to WMO financial regulations), with disbursements being made to partners in USD and converted into local currency as soon as they get to national bank accounts. Currency exchange fluctuations between the USD and CHF can have slight impacts on project funds. However the exchange rates between USD and local currencies show a more relevant variation over the last 10 therefore, the exchange rate risk for the

		Implementation Agreements with EEs, made in USD is high. To reduce the exchange rate risk for EEs, transactions will be converted and reporting to WMO using the weighted average rate of exchange corresponding to the ratio of USD sent by WMO / local currency received by EEs. Exchange risk will remain high for WMO being bound to CHF/USD UN exchange rate which can vary greatly along the implementation of the project. The trust fund created to manage the grant is permanently monitored and to mitigate currency fluctuation effects, disbursements to partners are aimed to be conducted as quickly as possible after receipt of funds from the Adaptation Fund. Note that the initial delay between receipt of funds from Adaptation Fund and disbursements being made to partners was due to the slow formalization of IAs due to national contingencies already described within this risk matrix. YEAR2: Keeping a limited number of transactions and being USD relatively stable in relation with local currencies, no relevant devaluation or loss in resources have been reported by project partners, so no additional mitigation measures were put in place."
Change of government or key officials in ENANDES countries that negatively affect the project	Moderate	Since the inception all of the three beneficiary countries have changed their maximum national authority after presidential elections and faced relevant turnover among executive officers in national institutions. Peru changed 2 times the President of SENAMHI but ENANDES Focal Points were able to keep the new executives informed and engaged. This limited the impacts on project implementation, avoiding disruptions to the execution but rather generating some delays in expenditures. Colombia also changed the Director of IDEAM, and with her several officers changed their functions within the institution. Most of ENANDES team members in IDEAM have signed a consultancy contract which needs to end with the financial year (31st of December). In order to avoid the risk of non renewal of contracts and consequent loss of key professionals, WMO is hiring directly some of them to keep them in their functions and reduce the discontinuity of their contracts. In Chile, no changes occurred within DMC or ENANDES core team.
Tensions between government and community institutions that – even if unrelated to project - affect implementation	Low	"The strict prevention and mitigation measures applied for the COVID19 pandemic have limited the involvement of local population in demonstration areas. No tensions are expected, but it will be clearer after the beginning of field operations. YEAR2: Field activities have started with local inceptions and information workshops. No tensions have been recorded during such events."
Acceptance of the project slows down project inception.	Low	During 2022, with the release of COVID19 prevention restrictions, fields activities and community engagement have started and project partners registered a very positive attitude towards the project and ease in beneficiaries involvement.
Communities in demonstration adaptation areas lose interest in the project.	Low	No loss of interest was reported among beneficiaries.
Tension between ethnic communities or with peasant organizations affects project implementation.	Low	Not reported during Year 1, nor Year 2.
Lack of	Moderate	Not reported during Year 1, nor Year 2.

coordination between participating local, regional, and national entities.		
Delays of contract approvals and release of funds to implementation partners.	Moderate	"Changes of high level executives and election processes in all ENANDES countries have slowed down Implementing Arrangement Negotiations, so at the end of first year one of the 4 partners haven't signed the Arrangement yet, even though the content is already agreed YEAR2: All the partners received their first tranche of funding and most of them either spent or committed more then 70% during reporting period. Second tranche has been received and already disbursed to partners, so further delays in expenditures and implementation are not foreseen."

Critical Risks Affecting Progress (Not identified at project design)

Are there any critical risks with a 50% or > likelihood of affecting progress of project? Yes

Identify Risks with a 50% or > likelihood of affecting progress of project

Identified Risk	Current Status	Steps taken to mitigate risk
"Administrative barriers for hiring experts and purchases directly by EEs have been encountered due to national rules or specific contingencies such as presidential election process. The issue is also applicable to potential agreements between DMC and international institutions. Due to national rules, it is not possible for DMC to elaborate bilateral agreements with international institutions using the ENANDES budget that is already in DMC accounts.	High	We have taken this issue into account and to overcome this inconvenience in years 2-4 of the project-.WMO will coordinate the needed authorizations with AF Board and amend IAs accordingly with EEs in order to execute part of national budget to hire experts and sign/manage agreement/contracts with international strategic partners.
Lack of participation of key sectorial national institutions that may limit the interinstitutional articulation at national level and the decision making processes in specific sectors (Case of General Directorate of Water - DGA in Chile)	High	"DGA declared limited capacities and resources to be actively engaged in the project. This is mainly due to concerns on taking any steps into operations dealing with ""water management"" at field level with potential political questioning/controversies. The formal procedure for WMO is to inform, engage and involve the DGA Hydrology Advisor at WMO. Three different official communications from the Director of WMO regional Office for the Americas, ENANDES Project Manager and National PR, didn't get any response. The risk is to have a have a very soft approach on water sector, since DGA is the National Authority. In coordination with NMHS, IE decided to escalate the level of communication, informing DGA Director (Mit Measure 1) , If it won't work IE will escalate to the Ministry of Infrastructure (Mit. Measure 2). If even

		<p>the escalation won't be effective, we will call for a sectoral workshop creating a roundtable focused on hydrometeorology, and trying to make other national institutions to liaise for DGA participation.</p> <p>YEAR2: During reporting period, several intents have been made to renew the interest of DGA for the project. Unfortunately none of them had positive outcomes, so DMC after generating the Energy Roundtable and the Participatory Agroclimatic Roundtable, proposed updated its workplan addressing water sector with a focus on hydrometeorology and strengthening the relevance of related variables rather than on "water resource management".</p>
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Risk Measures

Were there any risk mitigation measures employed during the current reporting period? If so, were risks reduced? If not, why were these risks not reduced?

"The Implementing Entity has been conducting regular risk monitoring with the identification of mitigation measures since the inception of the project. The results are permanently tracked and reported in WMO's internal monitoring system/Project risk Matrix. Risk mitigation measures as indicated above will be executed as needed, ensuring that the likelihood of occurrence of any risks will decrease compared to the evaluation at the time of project submission and did not affect project implementation. The implementation of first-year activity is severely impacted by the Covid-19 Pandemic situation and delays in decision making processes/agreement negotiations and operations are relevant. Nevertheless vaccination campaigns and the reduction of pandemic impacts on global and national health systems, has been permitting a higher degree of mobility by the end of the year, allowing the elaboration of missions and training schedule will be perform at the beginning of Year 2 . The management of risks has been facilitated through close and open communications with and regular interaction among project partners at the regional and national level.

YEAR2: Significant effort has been done to foreseen with EEs any further needs for supporting budget execution by WMO, as to say providing DPS to EEs. The process already identified specific needs that have been analysed in order to provide all needed documentation to AF Board for a RDPS. At the time of preparing PPR2, IDEAM was waiting for the enrolment of the new Executive Director with whom preparing the request for endorsement to National Designated Authority."

ESP Compliance

Section 1: Identified ESP Risk Management

Was the ESP risks identification complete at the time of funding approval? Yes

1.Compliance with the law

Are environmental or social risks present as per table II.K (II.L for REG) of the proposal?	Yes
During project/programme formulation, an impact assessment was carried out for the risks identified. Have impacts been identified that require management actions to prevent unacceptable impacts? (as per II.K/II.L)	Yes
List the identified impacts for which safeguard measures are required (as per II.K/II.L)	Weak inter-institutional coordination and articulation for the project design and implementation (both amongst national institutions and between national and sub-national levels) causing weak alignment of

	the ENANDES project with national regulatory frameworks in Peru, Chile and Colombia
List here the safeguard measures (i.e. avoidance, management or mitigation) identified for each impact that are supposed to be (or had to be) implemented during the reporting period. Please break down the safeguard measures by activity.	1. Formalization of the project governance including: I) Identification of regional, national, subnational and local strategic partners and their roles in project, II) establishment of participatory and decision-making instances, III) Identification of coordination mechanisms with existing processes related to climate change management, IV) identification and formalization of working agreements in order to ensure constant and articulated participation."
List the monitoring indicator(s) for each impact identified.	_One (1) document (inception report), as result of the inception workshop with the including main findings regarding roles and responsibilities, as well as the organigram and the terms of reference for different project instances and roles.
State the baseline condition for each monitoring indicator	No standard Governance document available
Describe each safeguard measure that has been implemented during the reporting period	1 Document on Project Governance drafted and reviewed by Executing Entities. The COVID restrictions did not allow to organize a face to face annual meeting with all project partners representatives, national allies and external advisors during year 1 and part of year 2. On July and December 2022, in Cartagena de Indias (Colombia) and Guayaquil (Ecuador) respectively, Project Steering Committee members were able to meet and to endorse Governance structures. In both the events, representatives of strategic allies at national level were also invited and participated in thematic working groups addressing field implementation and interinstitutional coordination.
Describe the residual impact for each impact identified - if any - using the monitoring indicator(s)	Coordination and articulation within project partnership is outstanding even without specific protocols, any residual risk is mainly due to other national institution rather than Executing Entities. In the specific case of Chile, the National Water Authority (DIRECCION GENERAL DE AGUAS - DGA) misunderstood the call for collaboration and appeared not keen to participating in the activities even though most of them were providing training rather than asking for project support. WMO sent official communications that were not addressed by DGA and that required a modification of DMC strategy, switching from "hydrological approach" to a "hydrometeorological approach" focused on different set of variables. The effort to involve DGA haven't be suspended yet and will go on during year 3.
Describe remedial action for residual impacts that will be taken	Any single case of lack of support/engagement will be evaluate and specific measures will be put in place. An escalation protocol will be elaborated in case of limited capacity of lobby/liaise at national level. As previously described regarding DGA of

	Chile, a change of approach was combined with a soft political lobby with the Ministry of Public Works which is responsible for DGA. IE and EEs are confident to fill this gap during year 3.
2. Access and equity	
Are environmental or social risks present as per table II.K (II.L for REG) of the proposal?	Yes
During project/programme formulation, an impact assessment was carried out for the risks identified. Have impacts been identified that require management actions to prevent unacceptable impacts? (as per II.K/II.L)	Yes
List the identified impacts for which safeguard measures are required (as per II.K/II.L)	Low availability and access to climate services developed in the framework of the ENANDES project due to: 1. Availability; i) insufficient mechanisms to exchange quality information among regional, national and subnational levels. 2. Access; i) lack of context-specific communication channels to facilitate close interactions between scales, ii) unclear information /inability to bridge the gap between information developed by scientists and the practical needs of end-users.
List here the safeguard measures (i.e. avoidance, management or mitigation) identified for each impact that are supposed to be (or had to be) implemented during the reporting period. Please break down the safeguard measures by activity.	1. Establish, socialize and agree with relevant stakeholders of the project at the regional, national, subnational and local level, clear protocols for information exchange, including, when necessary, the identification of existing gaps and measures to overcome them (e.g. confidentiality agreements) 2. Conduct a characterization of context specific communication channels in order to define which means of communication are more frequently and effectively used by community stakeholders in the specific intervention area. This document should serve as an input for the communication strategy of the project."
List the monitoring indicator(s) for each impact identified.	One (1) document containing the protocols and agreements for use and management of the information generated within the framework of the ENANDES project. The document should contribute to the identification of gaps and good practices for exchanging information at the ENANDES project, considering context specific conditions for each of the three countries.
State the baseline condition for each monitoring indicator	No specific protocol available
Describe each safeguard measure that has been implemented during the reporting period	Each project partner is subject to specific national regulations that guarantee the exchange of data and information. - Chile/DMC: is currently working on a data policy. In addition, as a public entity DMC is governed by Law 20285 on Access to Public Information and the Principle of Transparency, so public bodies have the obligation to facilitate public access to information. This policies include protocols and rules for information sharing and delivery

	<p>between institutions and with final users, identifying gaps and best practices - Colombia/IDEAM: Is aligned with the guidelines of Ideam and is Integrated Management System (SGI), Generation of hydrometeorological data and information for decision making (Data Policy), implementation of quality controls for the network of stations in the ENANDES demonstration areas. Besides the project is supporting the formulation of national WIGOS Plan. - Peru / SENAMHI: During 2022, an assessment on communications in the pilot areas and strategy proposals were made. By 2023, criteria will be established for the implementation of the strategy and the respective follow-up will be carried out</p>
Describe the residual impact for each impact identified - if any - using the monitoring indicator(s)	<p>The residual impact is low. In all the three countries specific tools are in use to permit the access to the information generated reaching final users until last miles. Even though the sectors and stakeholders involved are different among the three countries, national hydrometeorological services have been able to set up roundtables capable of articulating different actors and bring the information at different level. For instance, DMC in Chile is tightly collaborating with the Ministry of Energy and with the Energy Utilities Corporations to generate a co-designed, accessible and inclusive climate services for this sector. On the other hand, IDEAM in Colombia is leveraging on three decades of field work carried out by local civil society in order to engaging rural communities and farmers into the Technical Agroclimatic Roundtables, where information on weather and climate are used to promote adaptation measures.</p>
Describe remedial action for residual impacts that will be taken	<p>No specific remedial actions are required at the time of the reporting.</p>
3.Marginalized and vulnerable Groups	
Are environmental or social risks present as per table II.K (II.L for REG) of the proposal?	<p>Yes</p>
During project/programme formulation, an impact assessment was carried out for the risks identified. Have impacts been identified that require management actions to prevent unacceptable impacts? (as per II.K/II.L)	<p>Yes</p>
List the identified impacts for which safeguard measures are required (as per II.K/II.L)	<p>1. Insufficient participation of key stakeholders due to i) mistrust between national and subnational actors, ii) lack of participatory platforms / mechanisms, and iii) gaps in existing mappings of key stakeholders and beneficiaries. 2. Unexpected uses of information produced in the context of the ENANDES Project could eventually result in new or increased socio- environmental conflicts (INDIRECT)&quot;</p>
List here the safeguard measures (i.e. avoidance, management or mitigation) identified for each impact	<p>1. Exhaustive mapping of beneficiaries based on their main needs and uses of information and on their</p>

<p>that are supposed to be (or had to be) implemented during the reporting period. Please break down the safeguard measures by activity.</p>	<p>relationship to main factors of vulnerability 2.1 To put together a baseline on previous experiences on producing weather/climate information highlighting associated stakeholders, interests and conflicts. 2.2 Installation of an auditing unit composed by land use planning authorities, natural protected areas authorities and regional or local authorities responsible of adaptation and GHG mitigation measures in each sector in the areas of intervention, among other relevant actors to comment and approve the climatic services to be provided within ENANDES project</p>
<p>List the monitoring indicator(s) for each impact identified.</p>	<p>1 Number of beneficiaries mapping in each country for each sector Number of capacity building programs for local stakeholders Number of studies to identify favourable conditions for effective participation Percentage of tasks and activities assigned and implemented in collaboration with communities 2.1 Number of documents relating lessons learnt from previous experiences on producing climate/weather information and the kind of projects and interventions developed afterwards using such information/data 2.2 Baseline and monitoring system of land uses, deforestation levels, natural protected areas, soil erosion, their main drivers and the enabling conditions for mitigation and adaptation measures.</p>
<p>State the baseline condition for each monitoring indicator</p>	<p>1. No complete stakeholders/ final beneficiaries mapping available beside project preparation documents 2.1 No systematization of lessons learned available. 2.2 No State of Land use change at local level available</p>
<p>Describe each safeguard measure that has been implemented during the reporting period</p>	<p>1. Each EE has performed a desk based mapping of National, Subnational and local institutions and organization that may collaborate, be involved or receive institutional benefits through the project. Most of these actors have been invited at Regional Inception Workshop, as well as to attend remotely National Inceptions. - Chile/DMC: Stakeholder Mapping has been consolidated into a Report on Primary Stakeholders of ENANDES Project - Colombia /IDEAM: A final document called "Location of local and regional stakeholders in the ENANDES project's pilot area" was prepared and was built with the collaboration of local stakeholders (river basins of Palac#233;, Vinagre or San Francisco, Molino, PISOJ#233; and Piedras) - Peru/SENAMHI: also counts with a consolidated map of local stakeholders in the demonstration areas 2. During reporting period different documents were collected, reviewed and/or prepared: - Chile: 5 main documents were identified: 1) CIREN/MINAGRI/FIA: Estudio Incorporaci#243;n de nuevas especies</p>

	<p>productivas sobre la base de modelaciones climáticas a 15, 30 y 45 años en la cuenca del río Aconcagua. 2) NIA: Principales limitantes que presentan suelos del valle de Aconcagua para el cultivo de la vid de mesa. 3) Universidad de Chile: Indicadores para el monitoreo de la calidad del suelo en áreas periurbanas. Valle de Quillota, cuenca del Aconcagua, Chile. 4) CIREN: Determinación de la erosión actual y potencial de los suelos de Chile Región de Valparaíso. 5) Municipalidad de San Felipe: Plan Regulador Comunal de San Felipe. - Colombia: a Document with "Systematization of the Lessons Learned in the ENANDES Project" was prepared by IDEAM project team. - Peru: There is no record of lessons learned with the use of TAC information previously. A report has been considered for the workplan of 2023.</p>
Describe the residual impact for each impact identified - if any - using the monitoring indicator(s)	n/a
Describe remedial action for residual impacts that will be taken	n/a
4.Human rights	
Are environmental or social risks present as per table II.K (II.L for REG) of the proposal?	No
During project/programme formulation, an impact assessment was carried out for the risks identified. Have impacts been identified that require management actions to prevent unacceptable impacts? (as per II.K/II.L)	
List the identified impacts for which safeguard measures are required (as per II.K/II.L)	
List here the safeguard measures (i.e. avoidance, management or mitigation) identified for each impact that are supposed to be (or had to be) implemented during the reporting period. Please break down the safeguard measures by activity.	
List the monitoring indicator(s) for each impact identified.	
State the baseline condition for each monitoring indicator	
Describe each safeguard measure that has been implemented during the reporting period	
Describe the residual impact for each impact identified - if any - using the monitoring indicator(s)	
Describe remedial action for residual impacts that will be taken	
5.Gender equality and women's empowerment	
Are environmental or social risks present as per table II.K (II.L for REG) of the proposal?	Yes

<p>During project/programme formulation, an impact assessment was carried out for the risks identified. Have impacts been identified that require management actions to prevent unacceptable impacts? (as per II.K/II.L)</p>	<p>Yes</p>
<p>List the identified impacts for which safeguard measures are required (as per II.K/II.L)</p>	<p>Lack of a clear gender perspective in the ENANDES projects as a result of it not being explicitly included in the results framework in terms of associated targets, indicators or baselines.</p>
<p>List here the safeguard measures (i.e. avoidance, management or mitigation) identified for each impact that are supposed to be (or had to be) implemented during the reporting period. Please break down the safeguard measures by activity.</p>	<p>1. Incorporation of specific gender-related activities, targets and indicators in the results framework of the ENANDES Project, following WMO Gender Equality Policy 2. Consolidation of a “gender equity committee” in each one of the implementing countries.</p>
<p>List the monitoring indicator(s) for each impact identified.</p>	<p>1. Number of explicit references to gender equity included in the results framework 2.Number of “Gender equity committees” created for the ENANDES Project</p>
<p>State the baseline condition for each monitoring indicator</p>	<p>No data on gender perspective applied to national operation and projects</p>
<p>Describe each safeguard measure that has been implemented during the reporting period</p>	<p>1. As reported in the Gender Policy Compliance the project logframe incorporate specific gender responsive elements, such as activities and indicators. Gender specific indicators are integrated in the monitoring of: Outputs 2.1 and 2.4, OUTCOME 3, Outputs 3.2, 3.3 and 3.4. Inclusion of specific activities addressing gender sensitive and responsive implementation: 2.1.2: Secure the active engagement in ENANDES activities of key network members through formal institutional arrangements (strategic partnerships) or other commitments. Pay special attention to gender, age, income and ethnicity dimensions. 2.4.2 Identify preferred media and information channels for dissemination of information about weather and climate, warnings, etc. select appropriate media to reach different genders, age groups, ethnic groups or any other dimension that might require different channels. 2.4.7 Gender aspects in communication 3.2.5 Gender specific capacity building 3.3.5 Develop actions to ensure the sustained engagement of women, elder, poor and vulnerable communities in all adaptation actions. 2. The consolidation of National Gender Committees are in process. Most of engaged authorities that are collaborating and participating in the project do have Gender Policies, or Guidelines or institutional protocols and roundtables. For instance: - SENAMHI has a gender and interculturality committee created in 2019 and its members are part of the ENANDES technical group. - In Colombia, IDEAM is subjected to the sectoral guidelines for the application of the gender approach in planning and budgeting, monitoring and analysis of progress in</p>

	<p>indicators as part of the National Policy on Climate Change of the Ministry of Environment and Sustainable Development (Minambiente) . Besides National Plan for Adaptation to Climate Change &quot;ADAPTING IS A MATTER OF GENDER&quot; constitute a serie of recommendations for integrating the gender perspective in the management of adaptation to climate change. IDEAM is also collaborating with other authorities such as the Ministry of Agriculture and Rural Development (MADR) and its Vice-Ministry of Rural Development that count with a Rural Women&#39;s Directorate, which is in charge of implementing Law 731 of 2002 &quot;Rural Women Law&quot; and the The Ministry of Health and Social Protection that has the mandate to apply the National Policy on Gender Equity for Women, led by the Presidential Advisory Office for Women&#39;s Equity. In Chile, DMC has established a tight collaboration with the Ministry of Agriculture and the Ministry of Energy. Both these institutions hold a Gender Policy and implement related activities. For instance the first carries out capacity building on Gender and Agriculture and the latter developed a Workshop on Gender Wage Gaps, applying a Guide on gender and energy for trainers and managers of public policies and projects and a Manual to promote gender equality in the supply chain in its operations and capacity building. Besides this close institutions, DMC is also coordinating with other national bodies that beholds gender addressing policies or strategies: the Ministry of Science and Technology, Knowledge and Innovation comply with the National Policy on Gender Equality in Science, Technology, Knowledge and Innovation; The Ministry of Defence endorse the Second National Action Plan for the Implementation of the United Nations Security Council Resolution on Women, Security and Peace; the Ministry of Mining leads a Gender Committee of the Under-Secretariat of Mining; Ministry of Public Works integrates a Gender Equity, Inclusion and Non-Discrimination Unit.</p>
Describe the residual impact for each impact identified - if any - using the monitoring indicator(s)	n/a
Describe remedial action for residual impacts that will be taken	n/a
6.Core labour rights	
Are environmental or social risks present as per table II.K (II.L for REG) of the proposal?	No
During project/programme formulation, an impact assessment was carried out for the risks identified. Have impacts been identified that require management actions to prevent unacceptable	

impacts? (as per II.K/II.L)	
List the identified impacts for which safeguard measures are required (as per II.K/II.L)	
List here the safeguard measures (i.e. avoidance, management or mitigation) identified for each impact that are supposed to be (or had to be) implemented during the reporting period. Please break down the safeguard measures by activity.	
List the monitoring indicator(s) for each impact identified.	
State the baseline condition for each monitoring indicator	
Describe each safeguard measure that has been implemented during the reporting period	
Describe the residual impact for each impact identified - if any - using the monitoring indicator(s)	
Describe remedial action for residual impacts that will be taken	
7.Indigenous people	
Are environmental or social risks present as per table II.K (II.L for REG) of the proposal?	Yes
During project/programme formulation, an impact assessment was carried out for the risks identified. Have impacts been identified that require management actions to prevent unacceptable impacts? (as per II.K/II.L)	Yes
List the identified impacts for which safeguard measures are required (as per II.K/II.L)	Indigenous and peasant beneficiary families not adequately informed and engaged in order to access the range of the project's benefits.
List here the safeguard measures (i.e. avoidance, management or mitigation) identified for each impact that are supposed to be (or had to be) implemented during the reporting period. Please break down the safeguard measures by activity.	Documenting evidences, lessons learned and good practices of consultations to the rural communities with which the Project is going to develop activities.
List the monitoring indicator(s) for each impact identified.	1. Number of meetings held for consultations to the rural communities with which the project is designing/developing activities. 2. One (1) document with good participation practices and lessons learned from indigenous and peasant communities at co-design of climate change activities within the framework of national climate services.
State the baseline condition for each monitoring indicator	No meetings have been carried out on a regular based before project inception
Describe each safeguard measure that has been implemented during the reporting period	After the release of COVID19 prevention measures the opportunities to hold consultations and meetings at institutional and field level increased. Especially during the second semester on 2022 it was possible to schedule face to face meetings at national and at regional level. - In Chile DMC held 13 meetings were hold and managed remotely through on-line platforms:: 7 meeting with the Technical Working Group on Energy, promoted and established by the

	<p>project and facilitated by the Ministry of Energy with the participation of energy providers and consumers associations/committees. 6 meetings with final users of agrometeorological information at Quillacota and Llay Llay, in addition to kick-off of agrometeorological local activities (on-line). - In Colombia IDEAM finalize a Systematization on Lessons Learned during project implementation and held 30 meetings with local stakeholders focused on the Agro and Water Sectors. 17 Meeting were hold addressing Agrometeorology: four (4) meetings in the municipality of Totor&#243;, Palac&#233; sub-basin, three (3) meetings, in the municipality of Purac&#233;, Vinagre sub-basin and ten (10) in the municipality of Popay&#225;n, Piedras, Molino and Pisoj&#233; sub-basins. On Water sector 13 meetings have been scheduled and carried out: two (2) in the municipality of Totor&#243;, Palac&#233; sub-basin, two (2) in Purac&#233;, Vinagre sub-basin and nine (9) in Popay&#225;n, Piedras, Molino and Pisoj&#233; sub-basins. - In Peru SENAMHI held three (3) meetings with the indigenous population of pilot areas and organized a fair during the last quarter of the year, achieving to sign a memorandum with indigenous representatives in the area of San Martin in order to commit their participation to the project and the access to any information or output generated by ENANDES.</p>
Describe the residual impact for each impact identified - if any - using the monitoring indicator(s)	n/a
Describe remedial action for residual impacts that will be taken	n/a
8.Involuntary resettlement	
Are environmental or social risks present as per table II.K (II.L for REG) of the proposal?	No
During project/programme formulation, an impact assessment was carried out for the risks identified. Have impacts been identified that require management actions to prevent unacceptable impacts? (as per II.K/II.L)	
List the identified impacts for which safeguard measures are required (as per II.K/II.L)	
List here the safeguard measures (i.e. avoidance, management or mitigation) identified for each impact that are supposed to be (or had to be) implemented during the reporting period. Please break down the safeguard measures by activity.	
List the monitoring indicator(s) for each impact identified.	
State the baseline condition for each monitoring indicator	

Describe each safeguard measure that has been implemented during the reporting period	
Describe the residual impact for each impact identified - if any - using the monitoring indicator(s)	
Describe remedial action for residual impacts that will be taken	
9. Protection of natural habitats	
Are environmental or social risks present as per table II.K (II.L for REG) of the proposal?	No
During project/programme formulation, an impact assessment was carried out for the risks identified. Have impacts been identified that require management actions to prevent unacceptable impacts? (as per II.K/II.L)	
List the identified impacts for which safeguard measures are required (as per II.K/II.L)	
List here the safeguard measures (i.e. avoidance, management or mitigation) identified for each impact that are supposed to be (or had to be) implemented during the reporting period. Please break down the safeguard measures by activity.	
List the monitoring indicator(s) for each impact identified.	
State the baseline condition for each monitoring indicator	
Describe each safeguard measure that has been implemented during the reporting period	
Describe the residual impact for each impact identified - if any - using the monitoring indicator(s)	
Describe remedial action for residual impacts that will be taken	
10. Conservation of biological diversity	
Are environmental or social risks present as per table II.K (II.L for REG) of the proposal?	No
During project/programme formulation, an impact assessment was carried out for the risks identified. Have impacts been identified that require management actions to prevent unacceptable impacts? (as per II.K/II.L)	
List the identified impacts for which safeguard measures are required (as per II.K/II.L)	
List here the safeguard measures (i.e. avoidance, management or mitigation) identified for each impact that are supposed to be (or had to be) implemented during the reporting period. Please break down the safeguard measures by activity.	
List the monitoring indicator(s) for each impact identified.	
State the baseline condition for each monitoring indicator	
Describe each safeguard measure that has been	

implemented during the reporting period	
Describe the residual impact for each impact identified - if any - using the monitoring indicator(s)	
Describe remedial action for residual impacts that will be taken	
11.Climate change	
Are environmental or social risks present as per table II.K (II.L for REG) of the proposal?	No
During project/programme formulation, an impact assessment was carried out for the risks identified. Have impacts been identified that require management actions to prevent unacceptable impacts? (as per II.K/II.L)	
List the identified impacts for which safeguard measures are required (as per II.K/II.L)	
List here the safeguard measures (i.e. avoidance, management or mitigation) identified for each impact that are supposed to be (or had to be) implemented during the reporting period. Please break down the safeguard measures by activity.	
List the monitoring indicator(s) for each impact identified.	
State the baseline condition for each monitoring indicator	
Describe each safeguard measure that has been implemented during the reporting period	
Describe the residual impact for each impact identified - if any - using the monitoring indicator(s)	
Describe remedial action for residual impacts that will be taken	
12.Pollution prevention and resource efficiency	
Are environmental or social risks present as per table II.K (II.L for REG) of the proposal?	No
During project/programme formulation, an impact assessment was carried out for the risks identified. Have impacts been identified that require management actions to prevent unacceptable impacts? (as per II.K/II.L)	
List the identified impacts for which safeguard measures are required (as per II.K/II.L)	
List here the safeguard measures (i.e. avoidance, management or mitigation) identified for each impact that are supposed to be (or had to be) implemented during the reporting period. Please break down the safeguard measures by activity.	
List the monitoring indicator(s) for each impact identified.	
State the baseline condition for each monitoring indicator	
Describe each safeguard measure that has been implemented during the reporting period	

Describe the residual impact for each impact identified - if any - using the monitoring indicator(s)	
Describe remedial action for residual impacts that will be taken	
13.Public health	
Are environmental or social risks present as per table II.K (II.L for REG) of the proposal?	No
During project/programme formulation, an impact assessment was carried out for the risks identified. Have impacts been identified that require management actions to prevent unacceptable impacts? (as per II.K/II.L)	
List the identified impacts for which safeguard measures are required (as per II.K/II.L)	
List here the safeguard measures (i.e. avoidance, management or mitigation) identified for each impact that are supposed to be (or had to be) implemented during the reporting period. Please break down the safeguard measures by activity.	
List the monitoring indicator(s) for each impact identified.	
State the baseline condition for each monitoring indicator	
Describe each safeguard measure that has been implemented during the reporting period	
Describe the residual impact for each impact identified - if any - using the monitoring indicator(s)	
Describe remedial action for residual impacts that will be taken	
14.Physical and cultural heritage	
Are environmental or social risks present as per table II.K (II.L for REG) of the proposal?	No
During project/programme formulation, an impact assessment was carried out for the risks identified. Have impacts been identified that require management actions to prevent unacceptable impacts? (as per II.K/II.L)	
List the identified impacts for which safeguard measures are required (as per II.K/II.L)	
List here the safeguard measures (i.e. avoidance, management or mitigation) identified for each impact that are supposed to be (or had to be) implemented during the reporting period. Please break down the safeguard measures by activity.	
List the monitoring indicator(s) for each impact identified.	
State the baseline condition for each monitoring indicator	
Describe each safeguard measure that has been implemented during the reporting period	
Describe the residual impact for each impact	

identified - if any - using the monitoring indicator(s)	
Describe remedial action for residual impacts that will be taken	
15.Lands and soil conservation	
Are environmental or social risks present as per table II.K (II.L for REG) of the proposal?	No
During project/programme formulation, an impact assessment was carried out for the risks identified. Have impacts been identified that require management actions to prevent unacceptable impacts? (as per II.K/II.L)	
List the identified impacts for which safeguard measures are required (as per II.K/II.L)	
List here the safeguard measures (i.e. avoidance, management or mitigation) identified for each impact that are supposed to be (or had to be) implemented during the reporting period. Please break down the safeguard measures by activity.	
List the monitoring indicator(s) for each impact identified.	
State the baseline condition for each monitoring indicator	
Describe each safeguard measure that has been implemented during the reporting period	
Describe the residual impact for each impact identified - if any - using the monitoring indicator(s)	
Describe remedial action for residual impacts that will be taken	

Section 2: Monitoring for unanticipated impacts / corrective actions required

Has monitoring for unanticipated ESP risks been carried out?	Yes
Have unanticipated ESP risks been identified during the reporting period?	No
If unanticipated ESP risks have been identified, describe the safeguard measures that have been taken in response and how an ESMP has been prepared/updated	

Section 3: Categorisation

Is the categorisation according to ESP standards still relevant?	Yes
If No, please describe the changes made at activity, output or outcome level, approved by the Board, that resulted in this change of categorization.	

Section 4: Implementation arrangements

What arrangements have been put in place by the Implementing Entity during the reporting period to implement the required ESP safeguard measures?	No measures needed to be implemented yet. However Implementing arrangements have been signed with Executing Entities and external technical allies. In all of this very specific agreement the
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	Project Document is attached, with the ESP Assessment and proposed mitigation measures. The document is part of the agreement and will work as guideline to move through risks monitoring and management plan for the IE and EEs.
Have the implementation arrangements been effective during the reporting period?	Yes
What arrangements have been put in place by each Executing Entity during the reporting period to implement the required ESP safeguard measures?	The Implementing Arrangement signed between Implementing Agency and EES which is the reference document that is binding both IA and EEs to implement ESP safeguard measures. These bilateral IA were into force and effective during reporting period.
Have the implementation arrangements at the EEs been effective during the reporting period?	Yes

Section 5: Projects/programmes with unidentified sub-projects (USPs). This section needs to be completed only if the project/proramme includes USPs.

Have the arrangements for the process described in the ESMP for ESP compliance for USPs been put in place?	No
Is the required capacity for ESMP implementation present and effective with the IE and the EE(s)? Please provide details.	No
Have all roles and responsibilities adequately been assigned and positions filled?	No
Has the overall ESMP been updated with the findings of the USPs that have been identified in this reporting period?	No

Identified USPs in the reporting period	Application of ESMP to the USP	ESP risks identified for the USP	Has an impact assessment been carried out?	Consultation held for risks and impacts identification for USP	Gender disaggregation to identify risks and impacts	Safeguard measures identified for the USP	Monitoring indicator(s) for each impact
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Section 6: Grievances

Was a grievance mechanism established capable and known to stakeholders to accept grievances and complaints related to environmental and social risks and impacts?	Yes
Were grievances received during the reporting period?	No

List all grievances received during the reporting period regarding environmental and social impacts; gender related matters; or any other matter of project/programme activities	For each grievance, provide information on the grievance redress process	Provide the status/outcome
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Comments

On Grievance: "By the time being both the WMO and each national executing entities are using their institutional grievance mechanisms. Most of these mechanisms can be accessed through the respective institutional websites or in person at the national offices. and can be used to submit concerns. The following links contain the specific grievance mechanisms for the Implementing Entity and Execution Focal Points: • WMO: <https://public.wmo.int/en/about-us/planning-finance-accountability/internal-oversight-office/report-fraud-corruption-or-abuse> ; • DMC: <https://www.dgac.gob.cl/oirs/> ; • IDEAM: <http://www.ideam.gov.co/web/atencion-y-participacion-ciudadana/contactenos> ; and • SENAMHI: <https://www.senamhi.gob.pe/?&p=libro-reclamaciones>. Nevertheless ENANDES is working on developing a procedure to submit and address project-related grievances that will integrate gender, cultural, ethnic and age considerations. Since according to IE Communication Policy ENANDES cannot have a specific web domain, separated from WMO domain, the partners already agreed on creating a more specific project space through the information and training platform that CIIFEN will generate. Any open, accessible and inclusive participatory space generated by the project to achieve project objectives, may be considered as a proper place to share complaints, address issues and reach consensus on common concerns/problems. Mesas Tecnicas Agroclimaticas MTA are among those foreseen spaces, and being multisectoral and multistakeholders may bring to positive results. Even though the level of field implementation is still too limited to have evidences of a clear involvement, project staff do believe in the opportunity offered by the MTA in this sense."

GP Compliance

Section 1: Quality at entry

Was an initial gender assessment conducted during the preparation of the project/programme's first submission as a full proposal? Yes

Does the results framework include gender-responsive indicators broken down at the different levels (objective, outcome, output)? Yes

List the gender-responsive elements that were incorporated in the project/programme results framework

Gender-responsive element	Level	Indicator	Baseline	Target	Rated result for the reporting period
Gender Baseline Assessment	Output	Output 2.1 No. of stakeholder institutions in which women play an important role (high percentage of membership, positions in organization, gender perspective is explicitly considered)	Total: 28 = 7 (Colombia) + 11 (Chile) + 10 (Peru)"	No. of stakeholder institutions in which women play an important role has increased by at least 1/3 since baseline (9-10 Institutions)	Good
Gender Sensitive Communication	Output	Output 2.4 No. of local women playing important roles in disseminating	Total 10 = 7 (Colombia) + 3 (Chile) + 0 (Peru) "	To be assessed according to baseline and expected increase	Good

		climate information to their communities.		(Possibly 1/3 increase)	
Engaged and empowered stakeholders have participated in the co-development and implementation of local plans and activities for adaptation to climate variability and change that rely on climate/water information	Outcome	Outcome 3 No. of community adaptation plans that integrate climate and weather information.	Total 13 = 4 (Colombia) +8 (Chile) + 1 (Peru) "	Women and indigenous/peasant communities have had comparable participation and leadership in all adaptation activities.	Good
Capacity building and outreach efforts have improved the accessibility, comprehension and use of climate and water information for risk management and adaptation among local stakeholders and communities.	Output	Output 3.2 1. No. of participants attending field schools and Roving Seminars, broken down by gender, age or ethnicity. 2.No. of previously published studies reviewed to identify successful case studies and good practices for stakeholders' engagement (including gender and ethnicity dimensions); review is aimed at identifying conditions for effective participation prior to ENANDES activities.	1. No field school or rowing seminars held in demonstration areas. 2. No Project Inception Workshops have taken place yet. 2. No data Available	At least one field school per project year, targeting local authorities and leaders of community organizations, including significant participation by women and members of different communities. At least one field school per project year, targeting local authorities and leaders of community organizations, including significant participation by women and members of different communities.	Satisfactory
Context appropriate preparedness and adaptation plans and actions to reduce local	Output	Output 3.3: 1. No. of stakeholders/partners attending Project Inception Workshop -PIW	1. No Project Inception Workshops have taken place yet. 2.No meeting before project	1&2. Gender balanced access to and participation during the PIW, at least 50%	Satisfactory

<p>damages from climate variability and change have been designed through participatory processes. Demonstration projects have been implemented and monitored to test those plans and actions.</p>		<p>(broken down by gender, age, ethnicity). No. of meetings with execution partners and local stakeholders (including peasant and indigenous communities & women's groups) to co-design adaptation activities in each demonstration area (broken down by gender/ethnicity)&quot;</p> <p>3. No. of local adaptation activities that specifically address possible gender-specific differences in access, comprehension and use of ENANDES climate information</p> <p>4. No. of stakeholders who are engaged in demonstration adaptation activities in any way (numbers broken down by gender, age, ethnicity and vulnerability).</p>	<p>implementation</p> <p>3. No local adaptation activities that specifically address possible gender-specific differences</p>	<p>2. Not defined</p> <p>3. Gender balanced representation of stakeholders, at least 50%</p>	
<p>Early warning systems and enhanced processes for inter-institutional coordination have (i) strengthened national/local management of risks and (ii)</p>	<p>Output</p>	<p>Output 3.4 No. of stakeholders who (i) have heard about the existence of EWSs in their demonstration sites, or (ii) have received alerts or information from those EWSs</p>	<p>To be assessed</p>	<p>Gender balanced representation of stakeholders covered by EWS(s) in demonstration areas, at least 50%</p>	<p>Satisfactory</p>

have reduced the negative impacts of droughts and floods for demonstration adaptation sites/sectors		(Numbers broken down by gender, age and ethnicity) (Not Chile).			
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Section 2: Quality during implementation and at exit

List gender equality and women's empowerment issues encountered during implementation of the project/programme. For each gender equality and women's empowerment issue describe the progress that was made as well as the results.

Gender equality and women's empowerment issues	Rated result for the reporting period	Provide justification of the rating provided
N/A - to be completed for final PPR as per guidance.		N/A - to be completed for final PPR as per guidance.

Section 3: Implementation arrangements

What arrangements have been put in place by the Implementing Entity during the reporting period to comply with the GP	During the implementation of ENANDES Project, WMO was applying the principles of two relevant resolutions: (1) Resolution 59 (Cg-17) – Gender Equality and Empowerment of Women and (2) Resolution 82 (Cg-18) - WMO Gender Action Plan 2020–2023, which have as final goal the achievement of gender equality and building resilience through the provision of gender-sensitive weather, hydrological and climate services which respond to the specific needs and socioeconomic circumstances of women and men. At regional level, WMO also started the process of integrating a gender focal point within regional structures and possibly a specific and focused working group.
Have the implementation arrangements at the IE been effective during the reporting period?	Yes
What arrangements have been put in place by each Executing Entity during the reporting period to comply with the GP?	Even though the gender perspective is a sensitive topic in most of the region and even more when considering cultural identity and tradition, each EE is implementing with a gender sensitive approach in all project activities, assessing gender-specific potential differences in access, comprehension and use of weather/climate information as well as identifying differences in role when designing and proposing adaptation measures. SENAMHI in Peru is engaging local communities and carrying out assessment according to the principle of the "Reglamento Interno del Grupo de Trabajo para la Igualdad Género e Interculturalidad del Servicio Nacional de Meteorología e Hidrología de Perú – SENAMHI" and has a focal point for monitoring its accomplishment. CIIFEN has elaborated in the framework of a complementary project funded by EUROCLIMA+ Programme a Guideline on

	Agroclimatic Risk management with a gender approach., as a theoretical orientation that contributes to gender-differentiated understanding, awareness and action. IDEAM has prepared a METHODOLOGICAL PROPOSAL FOR THE SUSTAINED PARTICIPATION OF WOMEN AND POOR COMMUNITIES IN ALL ADAPTATION MEASURES and Finalized and Assessment of "Roles according to gender" in all target communities of Popayan Municipality.
Have the implementation arrangements at the EE(s) been effective during the reporting period?	Yes
Have any capacity gaps affecting GP compliance been identified during the reporting period and if so, what remediation was implemented?	No

Section 4: Grievances

Was a grievance mechanism established capable and known to stakeholders to accept grievances and complaints related to gender equality and women's empowerment?	Yes
Were grievances received during the reporting period?	No

List all grievances received through the grievance mechanism during the reporting period regarding gender-related matters of project/programme activities [6]	For each grievance, provide information on the grievance redress process used	Provide the status/outcome

Comments

Nothing to report

Rating

Implementing Entity

Project components/outcomes	Alignment with AF outcomes	Expected Progress	Progress to date	Rating
OUTCOME 1: Enhanced design, production and communication of climate/water information and services.	Outcome 2	"Output 1.1. National climatic and hydrological data management systems have been enhanced and updated through improved/new tools and processes. WIGOS implementation has been supported. Output 1.2. The characterization and communication of historical and recent states of climatic hazards have been improved through new/enhanced tools and processes. Output 1.3. The production and dissemination of forecasts of high-impact weather has been improved through new models and processes.	Ontrack	Satisfactory

		1.4. The production and dissemination of sub-seasonal to seasonal (S2S) predictions of regional climate and hydrological conditions has been improved through new models and processes. Output 1.5: The access, processing and dissemination of multi-model projections of regional climate change (decadal to multi-decadal) from multiple institutions and models has been made easier by the development of suitable tools. Output 1.6: Procedures and tools have been implemented by NMHSs to downscale seasonal forecasts and climate change projections in space/time. Global forecasts/projections have been calibrated for the ENANDES region"		
<p>OUTCOME 2: Strengthened institutional coordination and value-adding tools and processes allow climate/weather information to be tailored and translated into user-centric and sector-specific adaptation actions.</p>	Outcome 4	<p>"Output 2.1: Knowledge and action networks have been implemented that facilitate the design, production, delivery, and use of climate information and services; relevant strategic partners have been engaged; capability gaps in strategic partners have been identified and addressed; Gender Baseline Assessment undertaken Output 2.2: The needs for tailored weather/climate information have been identified for target sectors in demonstration adaptation regions. Output 2.3: Sectoral models have been used to “translate” observed/predicted weather/climate conditions into likely local impacts at demonstration sites Output 2.4: Communication and knowledge management strategies have been developed for ENANDES. Relevant information about observed/predicted weather/climate hazards and their likely impacts are routinely communicated through appropriate channels. Output 2.5: Multiple requisites of a National Framework for Climate Services, such as identification of stakeholders and information needs and implementation of national dialogs, have been addressed by ENANDES, thus contributing to NFCS implementation.</p>	Ontrack	Satisfactory
<p>OUTCOME 3: Engaged and empowered stakeholders have participated in the co-development and implementation of local plans and activities for adaptation to climate variability and change that rely on climate/water information.</p>	Outcome 3	<p>"Output 3.1: The factors that determine vulnerability to climatic variability and change have been identified for the sectors and regions targeted. Output 3.2: Capacity building and outreach efforts have improved the accessibility, comprehension and use of climate and water information for risk management and adaptation among local stakeholders and communities Output 3.3: Context-appropriate preparedness and adaptation plans and actions to reduce local damages from climate variability and monitored to test those plans and actions</p>	Ontrack	Marginally Satisfactory

		Output 3.4: Early-warning systems and enhanced processes for inter-institutional coordination have (i) strengthened national/local management of risks and (ii) reduced the negative impacts of droughts and floods for demonstration adaptation sites/sectors Output 3.5: Evaluations of the socio-economic benefits of ENANDES demonstration adaptation actions have been carried out Output 3.6: Useful lessons on local adaptation actions have been provided by an active project tracking effort (complementary to M&E efforts) that allowed active adaptation of goals, outcomes and Outputs throughout the project"		
OUTCOME 4: Regional and global coordination and cooperation mechanisms are strengthened; lessons, tools and approaches from ENANDES help others to provide climate services and replicate adaptation actions elsewhere.	Outcome 8	"Output 4.1: Regional coordination activities like syntheses of surveys and needs, and regional expert meetings have been carried out to support the update of national climatic and hydrological data management systems, and the implementation of interoperable regional databases Output 4.2: Regional coordination activities like consultations and expert meetings have been carried out to support and complement national strengthening of capacities for climate monitoring and prediction Output 4.3: Regional coordination activities like consultations and expert meetings have been carried out to support and complement national strengthening of capacities for climate services production, dissemination and uptake Output 4.4: Regional Technical Working Groups have been re-convened, revitalized or established. Active liaison with other ongoing projects in the region has achieved positive synergies and enhanced economic efficiency Output 4.5: An ENANDES Climate Services Toolkit (CST) has been implemented that is tailored to the previously determined operational needs of ENANDES NMHSs Output 4.6: Capacity building efforts for ENANDES have been (i) defined by ENANDES participants, (ii) coordinated by CIIFEN/RCC-WSA and (iii) jointly planned and implemented by countries and WMO Regional Training Centres, WMO Training Activities Division and other institutions.	Ontrack	Satisfactory

Please provide the Name and Contact information of the person(s) responsible for completing the Rating section

Name	Email
Raul Polato, ENANDES Project Manager	rpolato@wmo.int

Please justify your rating. Outline the positive and negative progress made by the project since it started. Provide specific recommendations for next steps.

"The project inception as well as the initial implementation have been affected by the covid-19 outbreak. Inception was indeed postponed of 6 months, and finally carried out on February 2 to 4 2021. Inception Workshop permitted a general review of the workplan and of priorities, reaching consensus on specific needs and opportunities. Unfortunately during 2021 presidential elections took place in Peru and Chile, having an impact on national bureaucracy and especially on the national reviews of Implementing Arrangements. Also Colombia started facing some administrative constraints due to the presidential elections scheduled for 2022. As a result of the elections in Peru and Chile, even though they generated a turn over in the NMHS, leading to a change of PR in Peru, there were no major impacts on project feasibility, surely a delay in decision making processes. For those reasons, the access to project resources by Executing Entities was delayed and most of the activities planned for the first year have been postponed to the second year as any exchange and knowledge transfer has been limited to the remote/virtual modality. Nevertheless even though limitation to mobility and missions have affected the progress on financial execution, free technology available for frequent remote meetings have supported several negotiations, reaching consensus of important agreements that generated an overall obligation by WMO only of more than 500.000 USD to be executed along year 2. It is expected that by the end of Year 2 major activities will be on schedule in line with milestones in the logframe. During the second year of implementation COVID19 restrictions have been released and it was possible to schedule several activities including face to face training, meeting sessions of governing bodies and field activities with direct beneficiaries and information users. Even though some Output are still facing a delay, we may consider that the project could accelerate the execution and achieve an excellent level of articulation among partners during the second year, strengthening the regional approach and offering opportunities of information sharing and knowledge transfers well beyond pilot areas or national implementation. We can consider the achieved pace satisfactory. "

Executing Entity / Project Coordinator

Project components/outcomes	Alignment with AF outcomes	Expected Progress	Progress to date	Rating
OUTCOME 1: Enhanced design, production and communication of climate/water information and services.	Outcome 2	"Output 1.1. National climatic and hydrological data management systems have been enhanced and updated through improved/new tools and processes. WIGOS implementation has been supported. Output 1.2. The characterization and communication of historical and recent states of climatic hazards have been improved through new/enhanced tools and processes. Output 1.3. The production and dissemination of forecasts of high-impact weather has been improved through new models and processes. 1.4. The production and dissemination of sub-seasonal to seasonal (S2S) predictions of regional climate and hydrological conditions has been improved through new models and processes. Output 1.5: The access, processing and dissemination of multi-model projections of regional climate change (decadal to multi-decadal) from multiple institutions and models has been made easier by the	Ontrack	Satisfactory

		development of suitable tools. Output 1.6: Procedures and tools have been implemented by NMHSs to downscale seasonal forecasts and climate change projections in space/time. Global forecasts/projections have been calibrated for the ENANDES region		
<p>OUTCOME 2: Strengthened institutional coordination and value-adding tools and processes allow climate/weather information to be tailored and translated into user-centric and sector-specific adaptation actions.</p>	Outcome 4	<p>"Output 2.1: Knowledge and action networks have been implemented that facilitate the design, production, delivery, and use of climate information and services; relevant strategic partners have been engaged; capability gaps in strategic partners have been identified and addressed; Gender Baseline Assessment undertaken Output 2.2: The needs for tailored weather/climate information have been identified for target sectors in demonstration adaptation regions. Output 2.3: Sectoral models have been used to “translate” observed/predicted weather/climate conditions into likely local impacts at demonstration sites Output 2.4: Communication and knowledge management strategies have been developed for ENANDES. Relevant information about observed/predicted weather/climate hazards and their likely impacts are routinely communicated through appropriate channels. Output 2.5: Multiple requisites of a National Framework for Climate Services, such as identification of stakeholders and information needs and implementation of national dialogs, have been addressed by ENANDES, thus contributing to NFCS implementation.</p>	Ontrack	Satisfactory
<p>OUTCOME 3: Engaged and empowered stakeholders have participated in the co-development and implementation of local plans and activities for adaptation to climate variability and change that rely on climate/water information.</p>	Outcome 3	<p>"Output 3.1: The factors that determine vulnerability to climatic variability and change have been identified for the sectors and regions targeted. Output 3.2: Capacity building and outreach efforts have improved the accessibility, comprehension and use of climate and water information for risk management and adaptation among local stakeholders and communities Output 3.3: Context-appropriate preparedness and adaptation plans and actions to reduce local damages from climate variability and monitored to test those plans and actions Output 3.4: Early-warning systems and enhanced processes for inter-institutional coordination have (i) strengthened national/local management of risks and (ii) reduced the negative impacts of droughts and floods for demonstration adaptation sites/sectors Output 3.5: Evaluations of the</p>	Ontrack	Satisfactory

		socio-economic benefits of ENANDES demonstration adaptation actions have been carried out Output 3.6: Useful lessons on local adaptation actions have been provided by an active project tracking effort (complementary to M&E efforts) that allowed active adaptation of goals, outcomes and Outputs throughout the project"		
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Please provide the Name and Contact information of the person(s) responsible for completing the Rating section

Name	Email	Institution
Lina María Pico Roa	lpico@ideam.gov.co	IDEAM

Please justify your rating. Outline the positive and negative progress made by the project since it started. Provide specific recommendations for next steps.

"For the period of the current report in the pilot area of project ENANDES, it goes through the socialization of the ENANDES project with the one in charge and the respective leaders of each community, knowing that most of the territory is occupied by peasants and indigenous people. In February 2022, activities were initiated by the ENANDES interdisciplinary technical team; field activities with communities began in April. The products were generated according to the projected Work Plan 2022 and compliance with each of the ENANDES components, indicators and products. Progresses have been achieved with the agro-climatic, agricultural, livestock, climate, hydrological, meteorological and hydrological data and networks, socio-environmental and participatory components, communications, design and dissemination, cartography and information technology. For this purpose, Ideam contracted the services of 19 professionals to provide specific technical support for the fulfillment of objectives. Collaborative work was achieved with peasant and indigenous communities, which made it possible to create spaces for dialogue and local adaptation actions were carried out, with the specific focus on the generation of climate services that would enable the understanding of all the information generated by Ideam and lead to appropriate and timely decision making by the communities. The ""ENANDES Community Agroclimatic Tables"" and the ""ENANDES Field Schools"" were created as local adaptation supporting tools and as spaces for dialogue that strengthen the use of local climate services in each of the 5 micro-basins. Seven ENANDES Agroclimatic Bulletins were generated, which were co-designed by the community and ENANDES professionals. It should be noted that all community activities were developed with a cross-cutting gender approach. A document of lessons learned from the community with a gender perspective was prepared. For the 2022 fiscal year, the project had a financial execution of 96.17%. For the optimal fulfillment of the activities in the territory, it was necessary to carry out an articulated and joint work with the communities and local allies, therefore Agreement No. 400 was signed with the Procuencia Río las Piedras Foundation for the development of various field activities (logistics, technical support, supply and displacement) to strengthen dialogue spaces such as the ENANDES Community Agroclimatic Roundtables and ENANDES Field Schools, Strengthening of the Early Warning System - EWS, simulation exercises and provision of basic emergency response elements prioritized with the communities, Flood and Drought Forum (dialogue between communities and experts), implementation of measures for adaptation to climate change and variability, installation of 11 rain gauges and the involvement of 8 local ENANDES promoters. The ""Technical Tables of the agreement"" were created to plan the activities, with the participation of professionals from Ideam - ENANDES, Fundación Río Piedras and the strategic alliance with the team of the Environmental Division of Empresa de Acueducto y Alcantarillado de Popayán S.A. E.S.P

Other

Project components/outcomes	Alignment with AF outcomes	Expected Progress	Progress to date	Rating

<p>OUTCOME 4: Regional and global coordination and cooperation mechanisms are strengthened; lessons, tools and approaches from ENANDES help others to provide climate services and replicate adaptation actions elsewhere.</p>	<p>Outcome 8</p>	<p>"4.1: Regional coordination activities like syntheses of surveys and needs, and regional expert meetings have been carried out to support the update of national climatic and hydrological data management systems, and the implementation of interoperable regional databases 4.2: Regional coordination activities like consultations and expert meetings have been carried out to support and complement national strengthening of capacities for climate monitoring and prediction 4.3: Regional coordination activities like consultations and expert meetings have been carried out to support and complement national strengthening of capacities for climate services production, dissemination and uptake 4.4: Regional Technical Working Groups have been reconvened, revitalized or established. Active liaison with other ongoing projects in the region has achieved positive synergies and enhanced economic efficiency 4.5: An ENANDES Climate Services Toolkit (CST) has been implemented that is tailored to the previously determined operational needs of ENANDES NMHSs 4.6: Capacity building efforts for ENANDES have been (i) defined by ENANDES participants, (ii) coordinated by CIIFEN/RCC-WSA and (iii) jointly planned and implemented by countries and WMO Regional Training Centers, WMO Training Activities Division and other institutions</p>	<p>Ontrack</p>	<p>Satisfactory</p>
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Please provide the Name and Contact information of the person(s) responsible for completing the Rating section

Name	Email
Elba Fiallo-Pantziou	

Please justify your rating. Outline the positive and negative progress made by the project since it started. Provide specific recommendations for next steps.

Overall Rating

Overall rating

Please justify your rating. Outline the positive and negative progress made by the project since it started. Provide specific recommendations for next steps.

Project Indicators

List of indicators

Type of Indicator (indicators towards Objectives, Outcomes, etc...)	Indicator	Baseline	Progress Since Inception	Target for Project End
Outcomes	<p>OUTCOME1 Categories assigned to NMHSs for each component of the WMO Checklist for Climate Services Indicators (CCSI).</p>	<p>Classification received by ENANDES NMHSs during the recent survey of WMO members to develop a baseline of climate services delivery.</p>	<p>To be measured at the end of project</p>	<p>Moving the classification of each ENANDES NMHS in the WMO Checklist for Climate Services Indicators at least one category up.</p>
Outputs	<p>Output 1.1 No. of weather and hydrological stations in demonstration sites for which: historical daily climate/water records have been imaged and digitized (number of records); quality control has been performed.</p>	<p>Section on Observing networks, data and data management in the WMO CCSI</p>	<p>YEAR 1: 0 1. Gaps analysis conducted by DMC and IDEAM 2. Elaboration of joint ToR to proceed with purchase of Automatic Weather Stations (AWS) in Chile and Peru YEAR 2: Chile DMC: 2 weather stations in the Aconcagua River basin that provided daily records on precipitation and permitted to digitize 2,221 pluviograms. (Station 1, Calle Larga - nr 32004 with historical series of the period 05.APR.1993-02.JAN.201 and Station 2: Olmué, Pelumpén - 330088 with 30.NOV.1992-04.JAN.2016) . No station with homogenization or quality control performed. Colombia IDEAM: Peru SENAMHI: 60% of the data provided by the 92 weather stations in pilot areas have been digitized</p>	<p>- All meteorological and hydrological stations within the demonstration areas have been subjected to gap analysis and national reports are available - set of high-quality stations will be selected by some countries (Colombia) for subsequent analyses. - All available records on paper support have been digitized for all or selected (Colombia) stations within demonstration areas. "</p>

<p>Outputs</p>	<p>Output 1.1 No. of documents with procedural guidelines and good practices about management of climate and water data.</p>	<p>Few datasets are registered in WMO Information System WIS.</p>	<p>YEAR 1: 1. Survey on level of the implementation of WIGOS/WIS in ENANDES Countries + all the other RAIII countries 2. WIGOS & WIS 2.0 Workshop designed and scheduled for all of RAIII countries according to survey output 3. Negotiated an agreement with the National Institute for Spatial Research of Brazil (INPE) to made available to NMHSs satellite based information on precipitation and water availability at ground/soil level Year 2: 29 existing documents + 19 new documents available among the 3 countries. Chile DMC: 8 internal quality control protocols are available in DMC + 1 report on basin stations integration to OSCAR. Still no access to hydrological data to be provided by DGA. Colombia IDEAM: 29 documents have been identified with procedures, protocols, instructions, manuals and others, contained in the "Methodological guide to the statistical operation of meteorological variables - Ideam" 9 New documents</p>	<p>- Data for all or selected (Colombia) meteorological and hydrological stations within the demonstration areas have been quality controlled - Procedures and guidelines are available for management of climate/water data and metadata. - Periodic summaries are received by NMHSs on the operational status of each observation station.</p>
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			<p>have been prepared for the project: - Gaps assessment in scientific knowledge in Colombia. - Plan for the improvement of the National System of Data from the Data Quality Management System. - Report on steps to integrate WIGOS and OSCAR into the Ideam data system - Inventory of the different hydrological and meteorologica databases which includes stations features and characteristics. - Gap analysis and strategy for the databases integration - Evaluation of the meteorological and hydrological networks: data quality, methods, measurement procedures, verification, and data storage. - Proposal for an articulation strategy to resolve the integrated meteorological data system incompatibilities. Meteorological and Hydrological networks management reports. - Reports on the Ideam data management implementation. - Document to stablish criteria, procedures, scripts and other tools to improve data validation and generate</p>	
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			reconstruction databases for the historical series according to WIGOS requirements. Peru SENAMHI: has available 2 out of the 3 documents planned to establish the quality protocols of hydrometeorological data. "	
Outputs	Output 1.2. No. of products describing (a) climatological values or (b) current status of weather/water variables.	Section on Observing networks, data and data management in the WMO CCSI	Chile DMC: 5 periodical products have been generated: daily bulletin, seasonal forecast, heat waves, cold waves, monitoring of minimum and maximum Temperature values Colombia IDEAM: 4 documents and seven 7 agro-climatic bulletins produced with ENANDES. - Evaluation of meteorological and hydrological information from the networks: data quality, methods, measurement procedures, verification, validation and storage. - Analysis of the information from hydrometeorological stations in the hydrographic sub-areas associated with the ENANDES project, which will be used to validate the information from remote sensors. - Long-term statistics (""climatology"",""normal""), trends, of the agrometeorological	Climatological (historical) values and diagnostic products of climatic variables and hazards is completed for the demonstration areas

			reference products relevant to the sectors and communities targeted by the project. - ENANDES baseline document (maps and climatograms). Peru SENAMHI: No document yet available but 3 are under construction that will describe the variables in the pilot area .	
Outputs	Output 1.2. No. of products describing extreme values of weather/water variables.	Limited availability of organized information about extremes	Chile DMC: 2 (Annual Bulletin and a power point presentation) Colombia IDEAM: 3 - Progress report on the evaluation of drought and/or excess water indicators in the study areas. - Report on extreme weather, climate and hydrological events threatening communities and agricultural and livestock production systems - ENANDES project study area. - Document with the identification of thresholds for monitored/forecast climate/water variables, products or indices beyond which significant impacts can be expected for a target sector and region. Peru SENAMHI: 5 of 6 products describing extreme values i) Very short-term rainfall warning (Nowcasting) ii) Short-term heavy	Climatological (historical) values and diagnostic products of climatic variables and hazards is completed for the demonstration areas

			rainfall warning (Nowcasting) iii) National weather warning (extended term) iv) Daily weather monitoring (v) Extreme event statistics (vi) Pilot impact-based rainfall forecasting for the Rima Basin	
Outputs	Output 1.2. No. of products showing derived climate/water indices to monitor recent conditions.	No products available	Chile DMC: 2 products Colombia IDEAM: 3 products - Protocol for field evaluation of drought and excess precipitation indicators in the ENANDES project study area. - Document with the evaluation of existing tools that support the generation of climate services, for application in the ENANDES project. - Document with the adjustment and validation of the drought monitor for its application in the ENANDES project. Peru SENAMHI: 2 out of 3 planned products showing climate indices	Climatological (historical) values and diagnostic products of climatic variables and hazards is completed for the demonstration areas
Outputs	Output 1.2. No. of stakeholders who expressed favourable opinion about the climatological and diagnostic products provided by ENANDES.	To be assess	Chile DMC: not yet assessed Colombia IDEAM: 27 The ENANDES agro-climatic bulletin was built and adjusted according to the community's requirements, and therefore has the favourable opinion of five (5) indigenous reserves, five (5) peasant associations, eight	Climate (historical) values and diagnostic products of climatic variables and hazards is completed for the demonstration areas

			(8) community action boards and nine (9) educational institutions. Peru SENAMHI: 16 out of 50 stakeholders (representatives of institutions) who have a favourable opinion on hydro-meteorological hydrometeorological products within the framework of ENANDES. "	
Outputs	Output 1.3 No. of tools or procedures implemented and tested to forecast extreme weather events, and that reflect the needs of users.	Section on forecasting systems in the WMO CCSI identified the need for this output.	Chile DMC: 1. There is a tool for internal use by NAC forecasters that contains thresholds. Annual subscription of the European model data. Colombia IDEAM: As general advance, the GOES16 based precipitation product was validated on a monthly scale to feed the GR2M model. Although it does not present very high errors, the bias and certainty are not good; the search for a methodology to obtain intraday scale flows necessary to feed an EWS must continue; the GeoGloows product is outlined to be used in the daily hydrological forecasting phase. There are nine (9) documents showing this progress. - Analysis of statistical or process models that relate meteorological/climate hazards to sector-specific impacts on	Weather forecasting systems that focus on multiple types of hazards.

			<p>target sectors and pilot regions. - Identification of thresholds for monitored/forecast climate/water variables, products or indices beyond which significant impacts can be expected for a target sector and region. - Modelling strategy involving modelling aimed at forecasting and/or prediction of floods, flash floods, droughts or torrential floods, according to the hazard prioritization performed. - Analysis of the modelling strategy oriented to flood forecasting in the pilot basins and recommendations for operational applications. - Results of the application of forecast-oriented modelling to a watershed within the pilot area. - Proposed application of forecast-oriented modelling within the pilot area. - Analysis of inputs available at Ideam on seasonal hydrological forecasting and recommendations for improvement. - Results of the forecast-oriented modelling, validation of results, tools and requirements for operational application. - Final document with a summary of the</p>	
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			proposed processes, information sources, tools and information flows for forecast-oriented hydrological modelling. Peru SENAMHI: 3 protocols are under construction with improved procedures for information and nowcasting and a proposed guideline for impact-based forecasting";	
Outputs	Output 1.3 No. of risk management stakeholders who expressed favourable opinion about the forecasts provided by ENANDES.	Weather forecasting systems focusing on multiple types of hazards do not exist.	Chile DMC: No information yet Colombia IDEAM: Departmental Committee for Disaster Risk Management of Cauca and Municipal Committees and Participants the Community Agro-climatic Tables Peru SENAMHI: It is foreseen to engage 15 institutions in DRR";	Reduced uncertainty in weather forecasts.
Outputs	Output 1.4. No. of products that show sub-seasonal and seasonal forecasts of expected regional climate conditions in demonstration sites.	Limited number of seasonal products are available. Very few products are available for sub-seasonal scales.";	WMO: 1. WMO engaged the International Research Institute for Climate and Society of University of Columbia to design a rainfall subseasonal forecast system based on IRI Extended Logistic Regression (ELR) Global Subseasonal Forecast System. The system was implemented and IRI experts trained key personnel of DMC, IDEAM and SENAMHI on its application. A full	Sub-seasonal to seasonal products are generated and used for decision making in the demonstration areas and for priority sectors. S2S forecasts in the demonstration areas are registered in WIS. ";

			technical user manual is under construction. Chile DMC: 2 products available Colombia IDEAM: 2 products available Peru SENAMHI: 2 products available out of the 4 planned for pilot areas	
Outputs	Output 1.4. No. of metrics implemented to assess the skill of S2S forecasts.	Few forecast products have public reports describing performance evaluation and quantification of uncertainties.	Metrics not yet implemented To be measured at PPR3	Values of metrics used to assess the skill of S2S forecasts have improved by project's end.
Outputs	Output 1.5 No. of tools developed to facilitate NMHS access to climate change projections.	Each NMHS has to develop its own approaches to fetch and analyse projections of regional climate change from multiple institutions and models.	Chile DMC: No tools available yet Colombia IDEAM: 1 joint methodology developed with IRI and based on NextGen using NMME assembly and spatial pattern calibration. Peru SENAMHI: No tools available yet"	Tools have been implemented and shared among ENANDES NMHSs to fetch and analyse projections of regional climate change from multiple institutions and models.
Outputs	Output 1.5 No. of institutions and/or models for which projections have been made available.	Each NMHS has to develop its own approaches to fetch and analyse projections of regional climate change from multiple institutions and models.	Chile DMC: 1 facilitated by the Centro de Ciencia y Clima y Resiliencia (CR2) affiliated to the University of Chile. Colombia IDEAM: The latest projections used were those of the 3rd National Communication on Climate Change (2015). Peru SENAMHI: Not available yet"	Tools have been implemented and shared among ENANDES NMHSs to fetch and analyse projections of regional climate change from multiple institutions and models.
Outputs	Output 1.6 No. of tools implemented to downscale seasonal forecasts in space/time.	No region-specific calibration procedures of climate forecast outputs performed in this region	Chile DMC: 3 (1 for each variable, precipitation, minimum Temperature, Maximum Temperature) Colombia IDEAM:	Seasonal forecasts downscaled, at least for demonstration adaptation areas.

			No calibration available yet Peru SENAMHI: 2 procedures for seasonal prediction"	
Outputs	Output 1.6 No. of tools and products showing bias-corrected seasonal forecasts and climate change projections.	Collaboration with academia/research institutions to improve forecasting systems and products is limited.	Chile DMC: 3 (1 for each variable, precipitation, minimum Temperature, Maximum Temperature) Colombia IDEAM: not available Peru SENAMHI: 3 procedures implemented to increase the spatial resolution of increasing the spatial resolution of future climate scenarios"	"Bias-corrected forecasts and climate change projections available, at least for demonstration sites. The number of academia/research institutions collaborating with NMHSs on forecasting systems has increased at least by 33%."
Outcomes	OUTCOME 2 Components of a National Framework for Climate Services to which ENANDES has made contributions.	0	"Chile DMC: NFCS not yet available Colombia IDEAM: As Colombia was the only country progressing on NFCS roadmap, some steps further have been made with ENANDES, three (3) documents available: - Proposed document of a research program to support components of the NCSF. - Preliminary action plan for the full implementation of Colombia's National Framework for Climate Services. - action plan for the agricultural sector for the implementation of the NCSF. Peru SENAMHI: Currently Peru does not have NFSC"	All relevant stakeholders have been approached and invited to participate in ENANDES. All institutions who agreed to participate in ENANDES have remained engaged and making contributions to the project.
Outcomes	OUTCOME 2 No. of formal agreements with different	"Weak institutional coordination and articulation.	"Chile DMC: 8 Agreement/MoU signed by	All relevant stakeholders have been approached and

	institutions from climate-sensitive sectors.	Mechanisms for NMHSs to receive stakeholder feedbacks on products/services are limited."	DMC/DGAC with different national institutions (Fundación para el Desarrollo Fruticola, Instituto Nacional de Investigación Agraria, Ministerium de Agricultura, Commission Nacional para el Medioambiente, Portal Fruticola, Fundación para la Inovacion Agraria. Colombia IDEAM: 5 Agreement signed with different institution of joint implementation of projects and programs: Proyecto EUROCLIMA + (CIIFEN-IDEAM), Proyecto CAF-CIAT-IRI-IDEAM, Convenio DIMAR-IDEAM, Convenio UPRA-IDEAM, Convenio WFA-IDEAM. Peru SENAMHI: Has signed MoU with 2 Institutions out of 6 identified as strategic allies."	invited to participate in ENANDES. All institutions who agreed to participate in ENANDES have remained engaged and making contributions to the project.
Outcomes	OUTCOME 2 No. of sectoral models used to translate climate conditions into expected outcomes.	Tools and mechanisms to translate and tailor climate information are not integrated into NMHS operational procedures.	"1 Model for Agriculture. No sectoral models have been introduced into NMHSs routines, nevertheless WMO provided training to Chile, Colombia and Peru on the application of CLIMADAPT and INCLICS in order to use homogenised precipitation series to evaluate variation to crop calendars."	All relevant stakeholders have been approached and invited to participate in ENANDES. All institutions who agreed to participate in ENANDES have remained engaged and making contributions to the project.
Outputs	Output 2.1: Maps of stakeholders in each demonstration area,	No regular interactions with users to identify	Chile DMC: Yes Colombia IDEAM: Yes Peru	Maps of stakeholders with relevant regional,

	including roles, functions and relevance to ENANDES (Yes/No).	requirements are in place	SENAMHI: Yes	national subnational and local strategic partners completed for each demonstration area and reported.
Outputs	Output 2.1: No. of stakeholder mapping exercises completed in each country and for each sector.	no mapping available	Chile DMC: 5 exercises Colombia IDEAM: 5 exercise of 1 day each. 1 exercise for each sub-watershed (Piedras, Palacé, Pisoje, Molino y Vinagre) Peru SENAMHI: 1 exercise completed	Maps of stakeholders with relevant regional, national subnational and local strategic partners completed for each demonstration area and reported.
Outputs	Output 2.1: No. of sectoral institutions approached as potential ENANDES partners.	Sporadic assistance to users to interpret/use climate predictions and products. Weak relationship and communication channels with users.	Chile DMC: 13 institutions have been approached since inception. 7 of them were already collaborating with DMC Colombia IDEAM: 19 Institutions have been approached. 3 were already collaborating before the project inception. An increase of 16. Peru SENAMHI: 9 Institutions were identified as relevant actors and approached to engage them.	No specific target
Outputs	Output 2.1: No. of stakeholder institutions in which women play an important role (high percentage of membership, positions in organization, gender perspective is explicitly considered).	Gender Baseline Assessment to be done in the first year of the project to serve as baseline for measuring progress	Chile DMC: not yet assessed, to be done by PPR3 Colombia IDEAM: 7 Institutions with women playing relevant roles. Secretaría de Agricultura, Medio Ambiente y Desarrollo Rural and the DRR Office of TOTORO Municipality, Red Cross, CORPORACIÓN AUTÓNOMA REGIONAL DEL	No. of stakeholder institutions in which women play an important role has increased by at least 1/3 since baseline.

			CAUCA / C.R.C. (Decentralized Unit of the Ministry of Environment), EMPRESA de ACUEDUCTO y ALCANTARILLADO de Popayán S.A. E.S.P, Fundación Procuena río Las Piedras, CORPORACIÓN colombiana de investigación agropecuaria AGROSAVIA. Peru SENAMHI: 2 collaborating institutions are promoting women role and empowerment	
Outputs	Output 2.1: No. of formal agreements signed with potential ENANDES partners from multiple sectors.	No agreement in place	Chile DMC: No agreements in place Colombia IDEAM: 2 Agreements in place (Fundación Rio Piedras y Fundación Ecohabitats) Peru SENAMHI: 2 Agreements signed	No specific target
Outputs	Output 2.1: No. of lessons learned regarding successful local participation platforms and processes	No systematization available	Chile DMC: 2 Documents available Colombia IDEAM: A document was elaborated that gathers the lessons learned in the different activities of the ENANDES project in Cauca: Socialization, evaluation of the Community EWS, baseline, Community Agroclimatic Tables, Field Schools, Co-design and implementation of adaptation measures, gender roles, vulnerability and adaptive capacity. Peru SENAMHI: 2	A document reviewing good practices and lessons learned to foster effective engagement of indigenous and peasant communities in co-designing local climate adaptation activities

			reports with lessons learned on community engagement	
Outputs	Output 2.2: No. of “mental models” studies of climate perceptions to learn what stakeholders know or think they know about their climate.	A gap exists between the information developed by NMHSs and the needs of users.	Chile DMC: No mental models studies carried out Colombia IDEAM: No mental models studies carried out Peru SENAMHI: No mental models studies carried out	A document reviewing good practices and lessons learned to foster effective engagement of indigenous and peasant communities in co-designing local climate adaptation plans and activities and necessary climate services.
Outputs	Output 2.2: No. of interactions with stakeholders to discuss needs and expectations and to show available climate services.	A gap exists between the information developed by NMHSs and the needs of users.	Colombia IDEAM: 4 Initiatives. IDEAM is using the Agroclimatic Committee model (Mesas Tecnicas Agroclimaticas) as a multistakeholders and multilevel participatory platform to discuss and reach consensus of common interests and possible strategies to cope with adaptation needs. During reporting period IDEAM could set up Community Roundtables in the pilot areas as well as consolidate the Departamental RoundTable of Cauca. At the same time it implemented Field Schools with local population and seminar on drought. At the same time IDEAM hold monthly meetings with the National Council for Operation in Electricity Sector (Consejo Nacional	A document reviewing good practices and lessons learned to foster effective engagement of indigenous and peasant communities in co-designing local climate adaptation plans and activities and necessary climate services.

			<p>de Operación del sector eléctrico) and the Committee of public and private energy providers (SURER). This exchange is supporting a permanent dialogue among IDEAM and the sector. Chile, DMC: 7 Initiatives. With the support of Ministry of Energy created an Energy Roundtable to address the needs of energy utilities and providers and find possible new services of interest for that sector. During 2022 DMC could progress with 7 new initiatives: presentation event, national launch, Agrometeo launch, reparation of Participatory Agroclimatic Roundtables, Energy Roundtables, Coordination meetings with ONEMI, and with CONADI. Peru SENAMHI: 6 Initiatives to present the project in demonstration areas and engage authorities, communities and producers.</p>	
Outputs	Output 2.2: No. of climate products for which original and/or revised design/formats has been discussed with stakeholders/partners	Limited mechanisms in place for evaluating users' uptake and satisfaction about products/services.	<p>Chile DMC: 3 Colombia IDEAM: The design of climate products such as maps, graphs and bulletins have been discussed with local stakeholders Peru SENAMHI: No products have been</p>	A document reviewing good practices and lessons learned to foster effective engagement of indigenous and peasant communities in co-designing local climate adaptation

			finalized yet, but SENAMHI plans to elaborate 4 of them, co-designed with end users.	plans and activities and necessary climate services.
Outputs	Output 2.2: No. of project activities that explicitly assess gender-specific potential differences in access, comprehension and use of weather/climate information.	Limited mechanisms in place for evaluating users' uptake and satisfaction about products/services.	Chile DMC: 1 Agreement signed with the "Instituto de Desarrollo Agropecuario " (INDAP) Colombia IDEAM: No specific agreement Peru SENAMHI: Not yet assessed	A document reviewing good practices and lessons learned to foster effective engagement of indigenous and peasant communities in co-designing local climate adaptation plans and activities and necessary climate services.
Outputs	Output 2.2: Percentage of users surveyed who report satisfaction with the contents of services provided.	No mechanism in place to receive feedback about climate products/services on a regular basis.	Chile DMC: Not yet assessed Colombia IDEAM: Not yet assessed Peru SENAMHI: Not yet assessed	A document reviewing good practices and lessons learned to foster effective engagement of indigenous and peasant communities in co-designing local climate adaptation plans and activities and necessary climate services.
Outputs	Output 2.2: Percentage of users surveyed who report understanding of the information produced.	No mechanism in place to receive feedback about climate products/services on a regular basis.	Chile DMC: Not yet assessed Colombia IDEAM: Not yet assessed Peru SENAMHI: Not yet assessed	A document reviewing good practices and lessons learned to foster effective engagement of indigenous and peasant communities in co-designing local climate adaptation plans and activities and necessary climate services.
Outputs	Output 2.2: Percentage of users surveyed who report having used the information produced to modify any of their decisions/actions.	No mechanism in place to receive feedback about climate products/services on a regular basis.	Chile DMC: Not yet assessed Colombia IDEAM: Not yet assessed Peru SENAMHI: Not yet assessed	A document reviewing good practices and lessons learned to foster effective engagement of indigenous and peasant communities in co-designing local climate adaptation

				plans and activities and necessary climate services.
Outputs	Output 2.3: No. of statistical or process models implemented to convert sub-seasonal and seasonal forecasts into sectoral outcomes.	Limited experience in operational linkage of climate information with process models (hydrological, agronomic).	Agriculture sector has been address involving the University of Tarragona in order to transfer approach and models to estimate how precipitation scenarios may affect crops calendars of relevant crops. Training Agenda finalized for the three countries.	Agroclimatic reports for main crops in demonstration sites.
Outputs	Output 2.3: Results of calibration/validation analyses for "translation" models in demonstration areas.	Limited availability of Agroclimatic indices for some of the demonstration sites.	Chile DMC: Not yet implemented Colombia IDEAM: The hydrological model was calibrated with 6 different precipitation forcing, with the purpose of establishing which of these is the best entry to it. CHIRPS IRE is the one that produces better simulated results. Although it's not detailed in the potential evapotranspiration , the increase of stations at local level could improve the performance. Peru SENAMHI: The calibration/validation of conversion" models with respect to the hydrologic model in the demonstration areas was carried out.	Agroclimatic reports for main crops in demonstration sites.
Outputs	Output 2.3: No. of consultations with local authorities, resource managers or technical advisors to judge appropriateness of	Experience limited to the Agro-Climatic Committees of Colombia	Chile DMC: No Chile DMC: No consultations yet Colombia IDEAM: The risk management plans of the municipalities	Agroclimatic reports for main crops in demonstration sites.

	the climate-impacts linkages established.		of Popayán, Purace and Totoró were consulted. Peru SENAMHI: No consultations yet	
Outputs	Output 2.3: No. of consultations in which peasants and indigenous communities have contributed local knowledge to “translation” of impacts in the absence of process models.	Experience limited to the Agro-Climatic Committees of Colombia	Chile DMC: No consultations yet Colombia IDEAM: 6 Community meetings for EWS assessment with indigenous and farmer that allowed to identifying potential climate impacts at the local level. Peru SENAMHI: No consultations yet consultations yet	Agroclimatic reports for main crops in demonstration sites.
Outputs	Output 2.3: No. of consultations with users on perceived significant impact thresholds for climate risks.	Limited assessment of agroclimatic risks.	Chile DMC: 1 consultation hold that combined with earlier studies reviews and platforms meetings have produced useful information at the sectoral level Colombia IDEAM: No consultations yet Peru SENAMHI: No consultations yet	Assessment of agroclimatic risks for demonstration sites.
Outputs	Output 2.4: No. of outreach efforts conducted each month (general audience articles, short videos, web site articles, blog entries, presentations at public fora). Broken down by month/year.	Insufficient mechanisms to exchange quality information among institutions at regional, national and subnational level Lack of context-specific communication channels to facilitate close interactions between	Chile DMC: No outreach efforts implemented yet Colombia IDEAM: 67 publications end twitter and 28 in Instagram along 2022 Peru SENAMHI: 16 actions and products for dissemination and visibility of ENANDES' progress in the two pilot areas.	At least 10 outreach actions per month during ENANDES lifetime. Content of ENANDES web site, blog or social networks updated at least six times per month.
Outputs	Output 2.4: No. of messages, products (diagnostics, forecasts), and warnings disseminated via	Insufficient mechanisms to exchange quality information among institutions at regional, national	Chile DMC: 6 Messages disseminated during the first 2 years Colombia IDEAM: Not done yet Peru	At least 10 outreach actions per month during ENANDES lifetime. Content of ENANDES web site, blog or social

	various media (email, social networks, web, radio, TV, SMS). Broken down by month/year.	and subnational level Lack of context-specific communication channels to facilitate close interactions between	SENAMHI: 16 messages disseminated through the media per year and for both zones.	networks updated at least six times per month.
Outputs	Output 2.4: Access statistics for ENANDES and NMHSs web sites (for NMHSs, sections related to ENANDES). Breakdown by location, month, year.	Insufficient mechanisms to exchange quality information among institutions at regional, national and subnational level Lack of context-specific communication channels to facilitate close interactions between	Chile DMC: Yes on a monthly basis Colombia IDEAM: Not done yet Peru SENAMHI: Not done yet	At least 10 outreach actions per month during ENANDES lifetime. Content of ENANDES web site, blog or social networks updated at least six times per month.
Outputs	Output 2.4: No. of products, tutorials or any other electronic content downloaded. Breakdown by location, time.	Insufficient mechanisms to exchange quality information among institutions at regional, national and subnational level Lack of context-specific communication channels to facilitate close interactions between	Chile DMC: At the moment only number of views are registered Colombia IDEAM: Not done yet Peru SENAMHI: Not done yet	At least 10 outreach actions per month during ENANDES lifetime. Content of ENANDES web site, blog or social networks updated at least six times per month.
Outputs	Output 2.4: No. of social media entries liked, re-sent, or commented	Insufficient mechanisms to exchange quality information among institutions at regional, national and subnational level Lack of context-specific communication channels to facilitate close interactions between	Chile DMC: 11 Tweets with 1-17 average likes and 1-6 shares; 6 Facebook publications, with 3-17 average likes, 0 shares; 6 Instagram posts, with 20-80 average likes. Colombia IDEAM: 67 publications end twitter, 212 likes, 28 retweet, 28 publications end Instagram, likes 712, 14 publications 358 likes 35 shares, 2 publications in a local newspaper. Peru SENAMHI: SENAMHI reports 160 interactions with	At least 10 outreach actions per month during ENANDES lifetime. Content of ENANDES web site, blog or social networks updated at least six times per month.

			social medias on ENANDES related issues and news.	
Outputs	Output 2.4: No. of local women playing important roles in disseminating climate information to their communities.	Insufficient mechanisms to exchange quality information among institutions at regional, national and subnational level Lack of context-specific communication channels to facilitate close interactions between	Chile DMC: 16 local women are playing a relevant role in disseminating the information. Colombia IDEAM: 8 local women belonging to local communities and "juntas de accion". Peru SENAMHI: 19 women are recognized to play a relevant role in the 2 pilot areas.	At least 10 outreach actions per month during ENANDES lifetime. Content of ENANDES web site, blog or social networks updated at least six times per month.
Outputs	Output 2.4: No. of members of indigenous or peasant communities playing important roles in disseminating climate information to their peers.	Insufficient mechanisms to exchange quality information among institutions at regional, national and subnational level Lack of context-specific communication channels to facilitate close interactions between	Chile DMC: Not yet assessed Colombia IDEAM: 27 persons among members of Sectorial Associations (ASOCAMPO; ASOPROVIT, ASOPESCA etc), local communities (Resguardos Poblazon, Quintana, Purace, Polindara y Novirao) and the "Juntas de Accion Comunales" (Pisojè Bajo y Alto, El Hogar, EL Sendero, Santa Barbara, San Alfonso, Union Cabrera, Claridad). Peru SENAMHI: 40 members of indigenous and non-indigenous communities recognized as climate informants	At least 10 outreach actions per month during ENANDES lifetime. Content of ENANDES web site, blog or social networks updated at least six times per month.
Outputs	Output 2.5: No. of meetings coordinated in relation to NFCS planning.	0	To be measured at the end of project	"At least 80% of NFCS steps have received specific contributions from ENANDES activities. The outline and general structure of national Strategic Plans for

				NFCS implementation have been completed."
Outputs	Output 2.5: No. of steps/activities completed in the GFCS protocol for NFCS.	0	To be measured at the end of project	"At least 80% of NFCS steps have received specific contributions from ENANDES activities. The outline and general structure of national Strategic Plans for NFCS implementation have been completed."
Outputs	Output 2.5: No. of agreements and protocols established to support NFCS.	0	To be measured at the end of project	"At least 80% of NFCS steps have received specific contributions from ENANDES activities. The outline and general structure of national Strategic Plans for NFCS implementation have been completed."
Outcomes	OUTCOME 3: No. of community adaptation plans that integrate climate and weather information.	Isolated adaptation actions implemented in areas of the ENANDES region by previous initiatives.	To be measured at the end of project	All local adaptation actions proposed in ENANDES have been implemented.
Outcomes	OUTCOME 3:No. of early warning systems in place.	Very few of these activities are operationalized.	Chile DMC: There is 1 National EWS that integrate all Colombia IDEAM: 15 Community Early Warning Systems were strengthened. Through the participatory evaluation of the EWS, training in first aid and community emergency plan, simulation, provision of elements to communities to improve their response capacity and preparation of community	Women and indigenous/peasant communities have had comparable participation and leadership in all adaptation activities.

			emergency plans. Peru SENAMHI: 2 local EWS in progress	
Outcomes	OUTCOME 3: Estimated socio-economic benefits of climate services and adaptation actions.	No studies available	To be measured at end of project	Socio-economic benefits (SEB) of demonstration adaptation actions have been estimated, at least for one action in each demonstration area
Outputs	Output 3.1: No. of vulnerability assessments performed in demonstration adaptation region.	Earlier studies in demonstration regions may have produced useful information on vulnerability.	Chile DMC: 5 in synergy with EUROCLIMA+ Project addressing citrus agroclimatic risk zone and avocado in the Aconcagua river basin. Colombia IDEAM: Not yet finalized Peru SENAMHI: Not yet finalized	ALL demonstration adaptation areas have undergone vulnerability assessments.
Outputs	Output 3.1: No. of earlier vulnerability studies or publications reviewed.	Earlier studies in demonstration regions may have produced useful information on vulnerability.	Chile DMC: 4 studies reviewed Colombia IDEAM: 2 Studies reviewed Peru SENAMHI: 1 Study reviewed	ALL demonstration adaptation areas have undergone vulnerability assessments.
Outputs	Output 3.1: No. of vulnerability-reduction actions that resulted or emerged from these assessments.	Earlier studies in demonstration regions may have produced useful information on vulnerability.	Chile DMC: 3 actions identified Colombia IDEAM: 8 possible measures to be implemented in pilot areas Peru SENAMHI: Not yet finalized	ALL demonstration adaptation areas have undergone vulnerability assessments.
Outputs	Output 3.1: No. of vulnerability-reduction actions resulting from these assessments that represent contributions from local knowledge and expertise.	Earlier studies in demonstration regions may have produced useful information on vulnerability.	Chile DMC: 3 actions identified Colombia IDEAM: 8 possible measures to be implemented in pilot areas Peru SENAMHI: Not yet finalized	ALL demonstration adaptation areas have undergone vulnerability assessments.
Outputs	Output 3.2: No. of “field schools” conducted in demonstration adaptation sites.	No field schools or Roving Seminars have taken place yet in adaptation sites.	Chile DMC: 1 field school Colombia IDEAM: 3 field schools organized during 4 meetings Peru SENAMHI:	At least one field school per project year, targeting local authorities and leaders of community

			Not yet finalized	organizations, including significant participation by women and members of different communities.
Outputs	Output 3.2: No. of “Roving Seminars” conducted in demonstration adaptation sites.	No field schools or Roving Seminars have taken place yet in adaptation sites.	Chile DMC: Not yet Colombia IDEAM: 4 Workshops Peru SENAMHI: Not yet finalized	A document has been produced reviewing good practices and lessons learned during ENANDES about how to foster effective engagement of vulnerable groups (e.g., rural communities, women’s groups) in co-designing local climate adaptation activities.
Outputs	Output 3.2: No. of participants attending field schools and Roving Seminars, broken down by gender, age or ethnicity.	No field schools or Roving Seminars have taken place yet in adaptation sites.	Chile DMC: Not yet measurable Colombia IDEAM: 150 participants (75 men and 75 women), 20 young people (8 men and 12 women), 25 elderly people (13 men and 12 women) and 60 indigenous people (28 men and 32 women). Peru SENAMHI: Not yet measurable	A document has been produced reviewing good practices and lessons learned during ENANDES about how to foster effective engagement of vulnerable groups (e.g., rural communities, women’s groups) in co-designing local climate adaptation activities.
Outputs	Output 3.2: Metrics of learning and appropriation for field schools and Roving Seminars.	No methodology available/applied	Chile DMC: Not yet elaborated Colombia IDEAM: 1 methodology was elaborated and applied Peru SENAMHI: Not yet finalized	A document has been produced reviewing good practices and lessons learned during ENANDES about how to foster effective engagement of vulnerable groups (e.g., rural communities, women’s groups) in co-designing local climate adaptation activities.

Outputs	Output 3.2: No. of women trained in accessing and interpreting information produced by ENANDES.	No training carried out	Chile DMC: Not yet measurable Colombia IDEAM: 75 Peru SENAMHI: Not yet measurable	A document has been produced reviewing good practices and lessons learned during ENANDES about how to foster effective engagement of vulnerable groups (e.g., rural communities, women's groups) in co-designing local climate adaptation activities.
Outputs	Output 3.2: No. of members from peasant/indigenous communities trained in accessing and interpreting information produced by ENANDES.	No training carried out	Chile DMC: Not yet measurable Colombia IDEAM: 150 Peru SENAMHI: Not yet measurable	A document has been produced reviewing good practices and lessons learned during ENANDES about how to foster effective engagement of vulnerable groups (e.g., rural communities, women's groups) in co-designing local climate adaptation activities.
Outputs	Output 3.2: No. of previously published studies reviewed to identify successful case studies and good practices for stakeholders' engagement (including gender and ethnicity dimensions); review is aimed at identifying conditions for effective participation prior to ENANDES activities	No review/systematization available	Chile DMC: 3 Documents: Climate Change Adaptation Practices and Adaptation Perception and Practices by the Centre for Climate and Resilience (CR2), and the Strategic Plan for Water Management in the Aconcagua Basin (section Water Governance at the Basin level) of Ministry of Public Colombia IDEAM: 30 documents were reviewed Peru SENAMHI: 2 Reports on Lessons Learned on Climate	A document has been produced reviewing good practices and lessons learned during ENANDES about how to foster effective engagement of vulnerable groups (e.g., rural communities, women's groups) in co-designing local climate adaptation activities.

			Services implementation have been reviewed	
Outputs	Output 3.2: Has a document been produced reviewing good practices and lessons learned during ENANDES about how to foster effective engagement of vulnerable groups (e.g., peasant and indigenous communities, women's groups) in co-designing local climate adaptation plans and activities? (Yes/No).	No review/systematization available	Chile DMC: Not yet Colombia IDEAM: Such a topic is included in the Systematization of Lessons Learned during ENANDES implementation so far Peru SENAMHI: Not yet elaborated, planned for 2024	A document has been produced reviewing good practices and lessons learned during ENANDES about how to foster effective engagement of vulnerable groups (e.g., rural communities, women's groups) in co-designing local climate adaptation activities.
Outputs	Output 3.3: Project Inception Workshops (PIWs) conducted in all demonstration sites (Yes/No).	No local Project Inception Workshops have taken place yet.	Chile DMC: 1, National Kick Off Colombia IDEAM: 16 meetings for community information and engagement Peru SENAMHI: 2 Information workshop in the demonstration areas	ALL PIWs held.
Outputs	Output 3.3: No. of stakeholders/partners attending PIW (broken down by gender, age, ethnicity).	No local Project Inception Workshops have taken place yet.	Chile DMC: 57 (27 female, 28 male) Colombia IDEAM: 246 people participated (123 men and 123 women), 15 young people (4 men and 11 women), 37 elderly people (16 men and 21 women) and 57 Indigenous people (33 men and 24 women) Peru SENAMHI: 91 people participated in the 2 kick off events at local level	ALL PIWs held.
Outputs	Output 3.3: Reports from PIWs prepared and disseminated (Yes/No).	No local Project Inception Workshops have taken place yet.	Chile DMC: Yes Colombia IDEAM: Yes, plus 23 agreements signed	ALL PIWs held.

			with communities in pilot areas Peru SENAMHI: Yes	
Outputs	Output 3.3: No. of meetings held for consultations with the rural communities which will be involved in co-designing and implementing local adaptation activities.	No meeting agenda in place	Chile DMC: 13 meetings (7 with the Energy Roundtable at national level and 6 with Agrometeorology focus) Colombia IDEAM: 11 Meetings Peru SENAMHI: Note yet	All PIW reports completed and disseminated.
Outputs	Output 3.3: No. of meetings held for consultations with women groups which will be involved in co-designing and implementing local adaptation activities.	No meeting agenda in place	Chile DMC: Not yet Colombia IDEAM: 11 Meetings Peru SENAMHI: Yes	All PIW reports completed and disseminated.
Outputs	Output 3.3: No. of meetings with execution partners and local stakeholders (including peasant and indigenous communities & women's groups) to co-design adaptation activities in each demonstration area (broken down by gender/ethnicity).	No meeting agenda in place	Chile DMC: Not yet Colombia IDEAM: 11 meetings with the participation of 165 people in total (81 men and 84 women), out of which 38 Indigenous people (21 men and 17 women). Peru SENAMHI: Note yet	All PIW reports completed and disseminated.
Outputs	Output 3.3: No. of local adaptation activities implemented in each demonstration site.	No adaptation plans/strategy in place	Chile DMC: Not yet Colombia IDEAM: 109 adaptation measures were implemented at community level Peru SENAMHI: Note yet	All local adaptation activities planned for each demonstration site have been implemented.
Outputs	Output 3.3: No. of local adaptation activities that specifically address possible gender-specific differences in access, comprehension and use of ENANDES climate information	No adaptation plans/strategy in place	Chile DMC: Not yet Colombia IDEAM: 44 adaptation measures are led by women. Peru SENAMHI: Note yet	All local adaptation activities planned for each demonstration site have been implemented.

	(not Chile).			
Outputs	Output 3.3: No. of stakeholders who are engaged in demonstration adaptation activities in any way (numbers broken down by gender, age, ethnicity and vulnerability).	No adaptation plans/strategy in place	To be measured since PP3	All local adaptation activities planned for each demonstration site have been implemented.
Outputs	Output 3.3: Percentage of tasks and activities assigned and implemented in collaboration with local communities. city and vulnerability).	No adaptation plans/strategy in place	Chile DMC: Not yet Colombia IDEAM: 23 Agreements signed with local communities in order to commit them to 16 concrete activities Peru SENAMHI: Note yet	All local adaptation activities planned for each demonstration site have been implemented.
Outputs	Output 3.3: N° of communities contributing with their local or traditional knowledge to the adaptation planning processes.	No adaptation plans/strategy in place	Chile DMC: Not yet assessed Colombia IDEAM: 18 Communities: (5 indigenous reservations, 5 peasant associations, 8 Community Action Boards). Peru SENAMHI: Note yet assessed	All local adaptation activities planned for each demonstration site have been implemented.
Outputs	Output 3.3: N° of good practices in climate change adaptation implemented by women and considered for local adaptation plans.	No adaptation plans/strategy in place	Chile DMC: Not yet Colombia IDEAM: 20 adaptation measures were implemented with women heads of household. Peru SENAMHI: Note yet	All local adaptation activities planned for each demonstration site have been implemented.
Outputs	Output 3.3: N° of technical working groups on climate and agriculture that involve participation of indigenous peoples.	No adaptation plans/strategy in place	Chile DMC: Not yet Colombia IDEAM: 4 Community Agro-climatic Roundtables were held in each sub-basin, in thirteen (13) meeting spaces with the participation of indigenous people. Peru SENAMHI: Note yet	All local adaptation activities planned for each demonstration site have been implemented.
Outputs	Output 3.4: No. of early warning systems (EWSs)	No operational EWS in place in demonstration areas	Chile DMC: not applicable since EWS is at National	At least one EWS implemented per country that intends

	implemented in demonstration adaptation areas (Note: Peru does not seek to reach full implementation of an EWS; this country will develop an advanced prototype).		level Colombia IDEAM: 15 Community EWS Early Warning Systems were strengthened. Through the participatory evaluation of the EWSs, training in first aid and community emergency plans, drills, provision of elements to the communities to improve their response capacity and development of community emergency plans. Peru SENAMHI: Note yet implemented	to implement them (except Peru).
Outputs	Output 3.4: No. of alerts/warnings issued by each EWS. Broken down by month, year.	No operational EWS in place in demonstration areas	To be measured since PP3	At least one EWS implemented per country that intends to implement them (except Peru).
Outputs	Output 3.4: Performance statistics for each EWS (hits, misses, false alarms in particular).	No operational EWS in place in demonstration areas	To be measured since PP3	At least one EWS implemented per country that intends to implement them (except Peru).
Outputs	Output 3.4: No. of stakeholders who (i) have heard about the existence of EWSs in their demonstration sites, or (ii) have received alerts or information from those EWSs (Numbers broken down by gender, age and ethnicity) (Not Chile).	No operational EWS in place in demonstration areas	Chile DMC: Not yet assessed Colombia IDEAM: The Community EWS of 15 groups were strengthened with training in first aid, community emergency plan, simulation. 356 people participated (174 men and 174 women); 24 were young people (21 men and 23 women); 56 were elderly people (31 men and 25 women); 139 were indigenous (84 men and 55 women).	At least 50% of stakeholders and 75% of institutions have taken any kind of action in response to a warning received from an EWS.

			Peru SENAMHI: Not yet assessed	
Outputs	Output 3.4: No. of stakeholders who expressed favorable opinion about the info provided by the EWS.	No operational EWS in place in demonstration areas	To be measured at end of project	At least 50% of stakeholders and 75% of institutions have taken any kind of action in response to a warning received from an EWS.
Outputs	Output 3.4: No. of stakeholders and institutions who have taken any kind of action in response to a warning received.	No operational EWS in place in demonstration areas	Chile DMC: 1 the Servicio Nacional de Prevención y Respuesta ante Desastres, SENAPRED (formerly known as Oficina Nacional de Emergencia del Ministerio del Interior y Seguridad Pública – ONEMI) Colombia IDEAM: Not yet assessed Peru SENAMHI: Not yet assessed	At least 50% of stakeholders and 75% of institutions have taken any kind of action in response to a warning received from an EWS.
Outputs	Output 3.4: Magnitude of losses reduced through provision of climate services and information.	No operational EWS in place in demonstration areas	To be measured at end of project	At least 50% of stakeholders and 75% of institutions have taken any kind of action in response to a warning received from an EWS.
Outputs	Output 3.5: No. of SEB studies conducted.	No SEB studies in adaptation sites have taken place yet.	To be measured at end of project	At least ONE SEB per demonstration site.
Outputs	Output 3.5: No. of reports produced with SEB results.	No SEB studies in adaptation sites have taken place yet.	To be measured at end of project	At least ONE SEB report produced per demonstration site.
Outputs	Output 3.5: No. of general audience communications about SEB progress and results (not Chile).	No SEB studies in adaptation sites have taken place yet.	To be measured at end of project	At least ONE SEB report produced per demonstration site.
Outputs	Output 3.6: No. of tracking activities performed (surveys, questionnaires, focus groups).	No tracking efforts have taken place yet.	To be measured since PP3 and at the end of the project	Tracking activities and analyses of results performed at least twice per project year.
Outcomes	OUTCOME 4: No. of national weather stations for which	Limited regional exchange of climate data exists, limit	Chile DMC: 72 shared with WIS Argentina; DMC	All active stations are shared

	data are freely shared among ENANDES participants.	interoperability of regional databases needs to be updated.	stations are available for everyone online at www.meteochile.gob.cl) Colombia IDEAM: 26 stations are accessible SENAMHI Peru: data sharing not yet addressed CIIFEN: The regional database began to be designed, and data availability queries were made with the technicians of the Working Group on Infrastructure and Technological Development	
Outcomes	OUTCOME 4: No. of meetings held by the active regional technical groups	Regional technical groups are not active in the region.	CIIFEN: Working Group of RA III are active and have a new Working Plan. 1 in-person meeting with the Working Group on Hydrological and Water Resources was held in Bogota-Colombia on December 2022	One meeting per project year has been convened for each Regional Working Training Group.
Outcomes	OUTCOME 4: No. of training activities implemented by the ENANDES Project	Human capacities of the NMHSs are insufficient to support operational climate services production.	During Year 2 ENANDES supported the realization of 7 Technical Trainings: - 3 workshops (Colombia, Peru, Chile) on data homogenization and crop calendar conducted by José Guijarro, Ana Boque and Jon Olana from the Universitat Rovira i Virgili, Spain. - 1 training on S2S prediction for precipitation (in progress) conducted by IRI - 1 webinar on Vulnerability 4 hours June 2nd, 2022 80 participants:	Five training activities completed and evaluated during ENANDES implementation.

			<p>56 women and 24 men, activity coordinated by WMO and RTC Lima. - 1 exchange Workshop on methodologies for the analysis of socioeconomic benefits of climate services, Cartagena - Colombia, July 18-19, 2022; hybrid workshop: 17 people in Cartagena (9 men and 8 women) and 9 people connected via Zoom (5 women and 4 men). - 1 workshop on "Homogenised data management" "Gestión de datos homogenizations", 7 hours, Guayaquil - Ecuador, November 28th, 2022, hybrid workshop: 10 participants (5 women and 5 men) organized by RCC-WSA and the WMO-WG on Technological Development. - 1 workshop on "Planning for climate change adaptation" Santiago de Chile, March 29-31, 2023; 25 participants: 14 women and 11 men. Activity evaluated according to the WMO standards.</p>	
Outcomes	<p>OUTCOME 4: No. of meetings held to coordinate activities between Regional Training Centers and NMHSs.</p>	<p>Limited coordination among WMO regional Training centers and NMHSs.</p>	<p>ENANDES Team has established a permanent dialogue with RTC in Lima and coordinate information, awareness and training activities with its</p>	<p>RTCs and ENANDES NMHSs have met virtually at least twice a year for coordination purposes.</p>

			<p>representatives. RTC was involved in the organization of: 1 hybrid meeting to agreed on the priorities for training topics held November 28, 2023. 1 virtual meeting between CIIFEN technicians and WMO's Training Activities Division to know the procedures to be used in order to evaluate the training sessions (March 24th, 2023). 1 virtual meeting between the Responsible of the RTC in Lima and ENANDES Focal Point in CIIFEN to agreed on the evaluation forms to be applied in the Workshop on Planning for Adaptation. Regular communication via e-mail or WhatsApp between the responsible of the RTC in Lima and ENANDES Focal Point in CIIFEN.</p>	
Outcomes	<p>OUTCOME 4: No. of adaptation actions replicated outside demonstration areas in ENANDES countries, and in neighboring countries.</p>	<p>Procedures defined to coordinate activities between regional training centers and NMHSs.</p>	<p>To be measured at the end of project</p>	<p>At least five adaptation actions replicated outside ENANDES demonstration areas.</p>
Outputs	<p>Output 4.1: The synthesis of weather station assessments performed by each country has been completed and published by CIIFEN/RCC-WSA (Yes/No).</p>	<p>Section on Observing networks, data and data management in the WMO CCSI identified the need for this output. All ENANDES NMHSs have expressed some dissatisfaction with</p>	<p>The assessment on national observation networks has been performed by the countries, with gaps analysis focused on demonstration areas and the identification of possible solution to fill those gaps.</p>	<p>Synthesis of weather station assessments performed by each country completed and published by CIIFEN/RCC-WSA (Yes/No).</p>

		their current climate data management system.	The assessment is at 40%. Potential sources for the acquisition of information were identified: WIS (daily and monthly), GCOS CLIMAT (monthly), and the NMHS web services (SACLIM, ONSC).The global report has not been consolidated yet, nor published. It is planned for YEAR 3.	
Outputs	Output 4.1: The synthesis of national plans for climate data management activities performed by each country has been completed and published by CIIFEN/RCC-WSA (Yes/No).	Few datasets from ENANDES region are registered in WMO Information System WIS.	It was made a ""Report on the improvements in data management planned within the framework of the ENANDES project"" which is pending publication on the CRC-OSA website. Completed at 90%	Synthesis of national plans for climate data management activities has been completed and published by CIIFEN/RCC-WSA (Yes/No).
Outputs	Output 4.1: No. of global or regional gridded climate data sets compiled.	Limited numbers of global or regional gridded datasets available to NMHSs.	The 20 global model databases were selected in consensus with ENANDES NMHS. The selected databases are: ERA5 (prec, tmax, tmin, surface winds, soil moisture), CHIRPS (prec), GPCP (prec), NASA POWER (prec, tmax, tmin, relative humidity, soil moisture), NOAA-CPC (prec, tmax, tmin), NCAR/UCAR (SST, surface wind, atm. pressure, geopotential height), PERSIANN-CCS-CDR (prec). There are 2/20 databases already compiled.	At least 20 global or regional gridded data sets compiled for different climate variables.
Outputs	Output 4.2: No. of tools developed to	No regional or widely shared tools	The contract for a consultancy to	Access tools have been developed to

	facilitate access to seasonal forecast and climate projections from global centers.	exist to access seasonal forecast and climate projections from global centers.	identified along with Western South American NMHS the most suitable climate projections models for the region has been signed. It was developed the terms of reference of the consultancy which will develop the analysis and the access tool.	access seasonal forecast and climate projections from at least 5 global centers.
Outputs	Output 4.3: No. of volunteer weather/water observers engaged.	Some volunteer observing networks exist.	Negotiations are being made to enter the volunteers of the Rio Piedras network in the computer platform of the Volunclima network. Level of progress 10%	At least 20 observers in each site where volunteers are sought.
Outputs	Output 4.3: Workshop to review SEB approaches and reach consensus has been conducted (Yes/No).	0	Yes, a workshop to review the SEB methodologies was conducted in Cartagena-Colombia on July 2022.	A workshop has been conducted to review SEB approaches and reach consensus.
Outputs	Output 4.3: Collation/publication of best practices on implementation of climate services in western South America completed (Yes/No).	No compilation of best practices on implementation of climate services in the region is available.	Some examples (health and agriculture) of practices in climate services was presented in XXII WCSACOF. Level of progress is 20%	1 Systematization of best Practices
Outputs	Output 4.4: No. of Regional Technical Working Groups (RTWGs) coordinated each year	Regional Technical Working Groups exist, but some have had limited recent activity or have been completely inactive.	For the period 2022-2023 three (3) meetings were carried out in the following groups: Infrastructure and Technological Development, Weather and Climate, and Hydrology and Water Resources.	At least three Regional Technical Working Groups are functioning (meeting regularly, defining common activities) in western South America.
Outputs	Output 4.4: No. of specific actions or activities completed by RTWGs.	Regional Technical Working Groups exist, but some have had limited recent activity or have been	During reporting period, two (2) actions have been taken to address RTWGs priorities: 1	At least three new actions have been addressed by each active RTWG.

		completely inactive.	Workshop on Homogenised (homogenizations) Data Management organized by RCC-WSA and the Working Group on Technological Development, hold in Guayaquil, November 28th, 2023. 2 Coordination efforts along 2022 between RCC-WSA and the Working Group on Climate and Weather and SISSA project to conduct a training course on climate prediction.	
Outputs	Output 4.5: No. of ENANDES tools implemented and documented within a CST.	An ENANDES CST does not exist.	The concept of the CST was presented at the face to face meeting of technical committee of ENANDES (Guayaquil-Ecuador, November 2022), feedback was also received:	"At least 80% of tools in CST have been coded according to the style guidelines provided. A tool in the CST should be available for at least 60% of products (diagnostics, forecasts) produced by ENANDES. No. of technical experts participating in development of CST tools (broken down by country, age and gender)."
Outputs	Output 4.5: No. of technical experts participating in development of CST tools (broken down by country, age and gender).	An ENANDES CST does not exist.	The structure of CST was discussed within WMO involving senior scientific officers who are managing relevant projects such as a Pilot Project in Buthan that provided fundamental insight on the structure of a National CS Toolkit components	"At least 80% of tools in CST have been coded according to the style guidelines provided. A tool in the CST should be available for at least 60% of products (diagnostics, forecasts) produced by ENANDES. No. of technical experts participating in development of CST tools (broken down

				by country, age and gender)."
Outputs	Output 4.6: Has a workshop to reach consensus on training needs and priorities been convened? (Yes/No).	No ENANDES training efforts have taken place yet. Limited coordination exists among NMHSs and WMO RTCs.	Yes, Inception Workshop dedicated a specific Working Session with representatives of NMHSs capacity building and training departments. Inception Report updated and validated priority training topics needs. During the last face to face working session of ENANDES technical committee meeting in Guayaquil on December 2022, training priorities were discussed in order to generate a Capacity Building and Training Calendar to be implemented along 2023.	One Inception report with validation of priorities
Outputs	Output 4.6: Has a summary report been produced from this workshop? (Yes/No).	No ENANDES training efforts have taken place yet. Limited coordination exists among NMHSs and WMO RTCs.	Yes, Inception Report detailed the work done by Working Group 4 on Training Needs Assessment and during the Event in Guayaquil on December 2022 a Capacity Building Gantt Chart was elaborated (see link in Library sheet)	One Inception report with validation of priorities
Outputs	Output 4.6: No. of coordination meetings between NMHSs and WMO Iberoamerican Regional Training Centers.	No ENANDES training efforts have taken place yet. Limited coordination exists among NMHSs and WMO RTCs.	During Year 1, three (3) meetings were held to elaborate and coordinate with RTC of Lima the event on Technical Agroclimatic Roundtables. During Year 2 RTC of Lima and of Buenos Aires attended other two (2) articulation	At least five coordination meetings between NMHSs and WMO Iberoamerican Regional Training Centers have taken place.

			meetings during tENANDES Technical committee sessions in Cartagena-Colombia (July 2022) and (Guayaquil-Ecuador, November 2022).	
Outputs	Output 4.6: No. of people attending in-person training efforts (broken down by gender).	No ENANDES training efforts have taken place yet. Limited coordination exists among NMHSs and WMO RTCs.	Regarding the 3 workshops on data homogenization and crop calendar the global features are: 41 participants (19 women and 22 men), according to the following detail: - Bogota-Colombia, April 2022 16 participants: 5 women and 11 men - Lima-Peru, June 2022, 17 participants: 9 women and 8 men - Santiago-Chile, July 2022, 12 participants: 9 women and 3 men Seventeen (17) officers attended the Exchange Workshop on SEB methodologies in Cartagena-Colombia, (July 2022): 8 women and 9 men"	At least two in-person courses and three virtual courses on topics to be defined by consensus among ENANDES partners.
Outputs	Output 4.6: No. of people completing virtual training efforts (broken down by gender).	No ENANDES training efforts have taken place yet. Limited coordination exists among NMHSs and WMO RTCs.	105 people attended virtual training workshops 69 women and 36 men: - 1 training on S2S prediction for precipitation. 16 participants: 8 women and 8 men - 1 webinar on vulnerability, June 2022, 80 participants: 56 women and 24 men - 1 exchange workshop on SEB methodologies.	No specific target

			Cartagena-Colombia, July 2022, 9 virtual participants: 5 women and 4 men	
Outputs	Output 4.6: Has a consultant been identified and tasked with formal assessment of training activities? (Yes/No).	No ENANDES training efforts have taken place yet. Limited coordination exists among NMHSs and WMO RTCs.	Not yet.	All ENANDES training efforts have been formally assessed using accepted procedures and metrics.
Outputs	Output 4.6: Proportion of training efforts that have been evaluated using accepted procedures and metrics.	No ENANDES training efforts have taken place yet. Limited coordination exists among NMHSs and WMO RTCs.	To be measured since PPR3	Results from assessment of training efforts provided to Project Manager and National Steering Committees.
Outputs	Output 4.6: No. of training efforts developed by ENANDES that have been used by institutions outside the project (e.g., by a WMO RTC).	No ENANDES training efforts have taken place yet. Limited coordination exists among NMHSs and WMO RTCs.	To be measured since PPR4	No specific target

Comments

Lessons Learned

Implementation and Adaptive Management

Describe any changes undertaken to improve results on the ground or any changes made to project outputs (i.e. changes to project design)	Challenges	No relevant changes have been made to project design, but in some cases it was necessary to engage the National Authority on Water (DGA), an alternative plan for the pilot region. In Colombia: some delays related to the launch of an international adaptation planning. In Peru some activities need to be rescheduled in order not to reformulate the deliverable related to Activity 1.2.5, focusing on the characterization
Have the environmental and social safeguard measures that were taken been effective in avoiding unwanted negative impacts?	Challenges	ESP related risks have been monitored and kept under control. No negative impacts from fieldwork activities of the project started and progressed during second half of 2020
How have gender considerations been	Challenges & Opportunities	Reporting period still faced constraints during the first few months in moving to field activities and beneficiaries engagement became a priority. All the three countries

<p>taken into consideration during the reporting period? What have been the lessons learned as a consequence of inclusion of such considerations on project performance or impacts? List lessons learned specific to gender, detailing measures and project/programme-specific indicators highlighting the role of women as key actors in climate change adaptation.</p>		<p>most vulnerable groups, such as women, children and the elderly was promoted in early warning systems; the community Agroclimatic Tables - MAC; the analysis of workshops on gender roles, vulnerability and adaptation. A methodology was developed. The following are the Conclusions (C) and Lessons Learned (La) on gender roles, vulnerability and adaptation. The systematized lessons learned so far into a document https://wmoomm.sharepoint.com/:document?d=740E47A92CB6%7D&file=1.%20Sistematizaci%C3%B3n%20lecciones%20de%20la%20experiencia%20de%20los%20resguardos%20de%20la%20zona%20piloto%20de%20San%20Mart%C3%ADn%20de%20Andaluc%C3%ADa</p> <p>LA1 - Tendency to present families where the man assumes all the household roles at the indigenous and peasant level. C1- In the pilot area of the project there is a significant number of community and social productive projects with different age ranges. C2 - The participation of women in the cultural dynamics, in which gender roles regarding responsibilities within the household and above, as a way of survival and permanence of indigenous and peasant peoples. C3 - 48% of the total population of which 477 were women, i.e. 48%. These results support the capacity of women to participate in the ENANDES project, it was identified that in 7 organizations, women (indigenous) are remaining 16 actors, equivalent to 52% of the organizations, also have women in leadership positions. ENANDES project occupy positions of leadership (legal representation), a figure of 100% and at the community level, the perception of vulnerability with a gender perspective is shared and assume in many of their households and in the organizational and training processes. C4 - At the local community promoters, with a gender equity approach to support the implementation of the project generate greater responsibility and commitment from men to help assume the role of the woman as a way to prepare the family as a whole to respond with resilience to the threats of climate change. C5 - value the roles of men and women when they were isolated in their homes. C8 - Women are contributing to improving adaptive capacity and in other households increase the inequity gap, so that women who are still culturally resistant to balanced roles. C9 - It should be noted that the project guarantee food sovereignty and security and the reduction of agro-climatic risks so that indigenous women are incorporated in the responses to climate change, the community level through different organizational, political, social and productive processes, since women are aware of gender equity that family and community life needs, in order to face the challenges of the next phase of the project: Number of women heads of households; Number of women actively participating in training and in the execution of environmental, economic and social projects. In the case of the resguardos of the ENANDES pilot area, the results in terms of female participation in the indigenous resguardo of Poblaz&#243;n; and for the first time a woman in leadership at the community level permitted to assess that in San Mart&#237;n, one of the pilot areas. This difference is most probably related to the characteristics of the territory and to the</p>
<p>Were there any delays in implementation? If so, include any causes of delays. What measures have been taken to reduce delays?</p>	<p>Challenges</p>	<p>As mentioned above, all national partners and their workplans were affected by re-structuring of financial execution during second year. Also institutional rules and protocols on contracts were updated by: rescheduling of field work; promptly reporting to new authorities; intensifying</p>
<p>What implementation issues/lessons, either positive or negative, affected progress?</p>	<p>Challenges & Opportunities</p>	<p>The consequences of COVID19 pandemic and associated restrictions still generate delays in the implementation. During the second year all of Executing Entities received first disbursement and execution was then more relevant than in the first year and this permitted to face, in Chile: Administrative barriers at DGAC-DMC delayed the spending of first tranche of the project, which delays the process of hiring consultants. This has led to accounting the commitment of the project. The Law of Electoral Guarantees during Presidential Election has shifted significantly the implementation with less impact on the workplan. The law says that public institutions are not allowed to carry out election activities went from 13 March to 29 of May 2022, therefore affected directly the implementation. In Peru: authorities and executives led to delay in finalizing MoU and agreement with strategic partners. In Chile that cannot go beyond 31 December, generated disruption in key consultants engaged in the project. The systematized lessons learned so far into a document https://wmoomm.sharepoint.com/:document?d=740E47A92CB6%7D&file=1.%20Sistematizaci%C3%B3n%20lecciones%20de%20la%20experiencia%20de%20los%20resguardos%20de%20la%20zona%20piloto%20de%20San%20Mart%C3%ADn%20de%20Andaluc%C3%ADa</p> <p>Peru: During the reporting period Peru faced the substitution of President of the Republic, which because executive officers are more stable and permanent. As lessons learned from</p>

		weekly monitoring of activities, iii) virtual meetings and remote working.
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Has the project already reached mid term or project completion?(yes/no).

Yes

Climate Resilience Measures	
What have been the lessons learned, both positive and negative, in implementing climate adaptation measures that would be relevant to the design and implementation of future projects/programmes for enhanced resilience to climate change?	The Participatory Platforms, such as the Technical Agroclimatic Roundtables or the Energy Table, generated or scaled up in the framework of ENANDES, demonstrated their fundamental role in decision making processes when dealing with multi-stakeholders sectors. Such platforms, when properly articulated at the different scale (local to subnational to national levels) may make the difference and bring together the producers of relevant information, who can process it and finally who need to use it in order to guarantee livelihood systems and/or basic services provision.
What is the potential for the climate resilience measures undertaken by the project/programme to be replicated and scaled up both within and outside the project area?	The project represents a multi-country scale up of a previous successful initiative called CLIMANDES funded by the Swiss International Cooperation. The same donor was capable to appreciate the potential of ENANDES and has already signed an agreement with WMO in order to involve 3 more countries (Argentina, Bolivia and Ecuador) almost achieving the full coverage of the Andean region. The project strategy may be adapted and replicated in any other eco-regional context where still the information on weather, water and climate is underused or not accessible.
Readiness Interventions (Applicable only to NIEs that received one or more readiness grants)	
What have been the lessons learned, both positive and negative, in accessing and implementing climate finance readiness support that would be relevant to the preparation, design and implementation of future concrete adaptation projects/programmes?	N/A
How have the outputs (such as manuals, guidelines, procedures or the experience from providing peer support, etc) from employing readiness grants been used to inform institutional capacity needs, gender issues, and environmental and social aspects in developing and implementing concrete projects/programmes for enhanced resilience to climate change?	N/A
Concrete Adaptation Interventions	
What have been the lessons learned, both positive and negative, in implementing concrete adaptation interventions that would be relevant to the design and implementation of future projects/programmes implementing concrete adaptation interventions?	N/A - Adaptation activities are not fully implemented yet. Lessons learned will be recollected by PRR3.

What is the potential for the concrete adaptation interventions undertaken by the project/programme to be replicated and scaled up both within and outside the project area?	N/A - Adaptation activities are not fully implemented yet. Lessons learned will be recollected by PRR3.
Knowledge Management	
How has existing information/data/knowledge been used to inform project development and implementation? What kinds of information/data/knowledge were used?	Implementing and Executing Entities have performed an in-depth review of available literature on several topics related to projects technical areas and socio-economic interests. Such reviews have been systematized and recollected in specific documents accessible accessible through the links listed in the las sheet of the attached PPR2 in the original excel format called " Library_Links to Documents".
Has the existing information/data/knowledge been made available to relevant stakeholder? If so, what chanelns of dissemination have been used?	The information generated is not yet fully accessible to stakeholder. It is still under internal review and used to move steps further in producing project outputs.
Please list any knowledge products generated and include hyperlinks whenever possible (e.g. project videos, project stories, studies and technical reports, case studies, tranining manuals, handbooks, strategies and plans developed, etc.)	All the knowledge products generated by the project and for achieving project outcomes are accessible through the links listed in the las shhet of this document, called " Library_Links to Documents"
If learning objectives have been established, have they been met? Please describe.	Capacity building and training activities have started this year and are following an agreed and organized agenda.
Describe any difficulties there have been in accessing or retrieving existing information (data or knowledge) that is relevant to the project. Please provide suggestions for improving access to the relevant data.	Project partners did not face any specific barriers in accessing to relevant information or litterature. As already mentioned in Chile it has become difficult the engagement and exchange of information with the Water Authority (DGA). Nevethless DMC has already elaborated a strategy to address water sector witha different focus.
Has the identification of learning objectives contributed to the outcomes of the project? In what ways have they contributed?	N/A - to be filled at PPR 3
Innovation	
Describe any innovative practices or technologies that figured prominently in this project.	Considering the global emergency generated by COVID19 pandemic and related mobility restrictions, the fast improvement of digital communication and progresses regarding online conference platforms have permitted to remotely kick off, coordinate meetings and finally manage project implementation. The creation of multi-stakeholders participatory platform to bring together information providers and users to plan adaptation together can be considered an essential practice to support decision making processes related to several "glocal" issues, such as adaptation to climate change, community resilience building and DRR.
Complementarity/ Coherence with other climate finance sources	
Has the project been scaled-up from any other	Yes

climate finance? Or has the project build upon any other climate finance initiative?	
<p>If you answered yes, kindly specify the name of the Fund/Organization.</p>	<p>During reporting period WMO negotiated a contribution from the Swiss Agency for Development and Cooperation (SDC) to scale up the project and enforcing a more regional approach. SDC finally signed a contribution agreement for 5,8 Millions CHF to fund the project &quot;Building Regional Adaptive capacity and resilience to climate Variability and change in vulnerable sectors in the Andes&quot; (ENANDES+) – allowing for the inclusion of Argentina, Bolivia and Ecuador to the three original ENANDES countries, and resulting in the involvement of all WMO regional institutions in South America, with the inclusion of the Regional Climate Centres for the South and West of South America, and the Regional Training Centres in Peru and Argentina. MeteoSwiss will also contribute to the project, mainly through knowledge and expertise sharing. The project has started in November 2022 and will finalize by end of October 2026, being implemented in one transnational and one national intervention area: the Pilcomayo River Basin which spans across Argentina and Bolivia, and the Upper Basin of the Pastaza River in Ecuador. Identified priority sectors include water management, agriculture and food security, and disaster risk reduction. More information on the official launch of the scale up available at https://public.wmo.int/en/media/news/scaling-climate-adaptation-and-resilience-andes.</p>

Results Tracker

Goal: Assist developing-country Parties to the Kyoto Protocol and the Paris Agreement that are particularly vulnerable to the adverse effects of climate change in meeting the costs of concrete adaptation projects and programmes in order to implement climate-resilient measures.

Impact: Increased resiliency at the community, national, and regional levels to climate variability and change.

Is this the mid-term or terminal project performance report?

Impact: Increased resiliency at the community, national, and regional levels to climate variability and change

Core Indicator: No. of beneficiaries				
		Total	% of female beneficiaries	% of Youth beneficiaries
Baseline information	Direct beneficiaries supported by the project	0	0	0

Baseline information	Indirect beneficiaries supported by the project	0	0	0
Baseline information	Total (direct + indirect beneficiaries)	0	0	0
Target performance at completion	Direct beneficiaries supported by the project	11500000	50	16
Target performance at completion	Indirect beneficiaries supported by the project	0	50	16
Target performance at completion	Total (direct + indirect beneficiaries)	11500000	50	16
Performance at mid-term	Direct beneficiaries supported by the project			
Performance at mid-term	Indirect beneficiaries supported by the project			
Performance at mid-term	Total (direct + indirect beneficiaries)	0	0	0
Performance at completion	Direct beneficiaries supported by the project			
Performance at completion	Indirect beneficiaries supported by the project			
Performance at completion	Total (direct + indirect beneficiaries)	0	0	0

Outcome 1: Reduced exposure to climate-related hazards and threats

Indicator 1: Relevant threat and hazard information generated and disseminated to stakeholders on a timely basis

	Number of targeted stakeholders - Total	Number of targeted stakeholders - % of female targeted	Hazards information generated and disseminated	Overall effectiveness
Baseline information	0	50	Drought	2: Partially effective
Target performance at completion	0	50	Drought	4: Effective
Performance at mid-term				
Performance at completion				

Output 1.1 Risk and vulnerability assessments conducted and updated

Indicator 1.1: No. of projects/programmes that conduct and update risk and vulnerability assessments

	No. of projects/programmes that conduct and update risk and vulnerability assessments	Sector	Scale	Status
Baseline information	0	Multi-sector	Regional	1: No plans conducted or updated
Target performance at completion	6	Multi-sector	Local	3: Risk and vulnerability assessments completed or updated
Performance at mid-term				
Performance at completion				

Output 1.2 Targeted population groups covered by adequate risk reduction systems

Core Indicator 1.2: No. of Early Warning Systems

	No. of adopted Early Warning Systems	Category targeted	Hazard	Geographical coverage	Number of municipalities
Baseline information	0	1: Risk knowledge	Drought	Local	0
Baseline information	0	2: Monitoring and warning service	Drought	Local	0
Baseline information	0	3: Dissemination and communication	Drought	Local	0
Baseline information	0	4: Response capability	Drought	Local	0
Baseline information	0	1: Risk knowledge	Drought	Local	0
Baseline information	0	2: Monitoring and warning service	Drought	Local	0
Baseline information	0	3: Dissemination and communication	Drought	Local	0
Baseline information	0	4: Response capability	Drought	Local	0
Target performance at completion	6	1: Risk knowledge	Drought	Local	3
Target	6	2: Monitoring	Drought	Local	3

performance at completion		and warning service			
Target performance at completion	6	3: Dissemination and communication	Drought	Local	
Target performance at completion	6	4: Response capability	Inland flooding	Local	2
Target performance at completion	1	1: Risk knowledge	Inland flooding	Local	2
Target performance at completion	1	2: Monitoring and warning service	Inland flooding	Local	2
Target performance at completion	1	3: Dissemination and communication	Inland flooding	Local	2
Target performance at completion	1	4: Response capability	Inland flooding	Local	1
Performance at mid-term					
Performance at completion					

Outcome 2: Strengthened institutional capacity to reduce risks associated with climate-induced socioeconomic and environmental losses

Indicator 2: Capacity of staff to respond to, and mitigate impacts of, climate-related events from targeted institutions increased

	Number of staff targeted - Total	Number of staff targeted - % of female targeted	Sector	Capacity level
Baseline information	0	50	Multi-sector	2: Low capacity
Target performance at completion	250	50	Multi-sector	4: High capacity
Performance at mid-term				
Performance at completion				

Output 2.1 Strengthened capacity of national and sub-national centres and networks to respond rapidly to extreme weather events

Indicator 2.1.1: No. of staff trained to respond to, and mitigate impacts of, climate-related events

	Total staff trained	% of female staff trained	Type
Baseline information	0	0	Public
Target performance at completion	250	50	Public
Performance at mid-term			
Performance at completion			

completion			
Indicator 2.1.2: No. of targeted institutions with increased capacity to minimize exposure to climate variability risks			
	Type	Scale	Capacity Level
Baseline information			
Target performance at completion			
Performance at mid-term			
Performance at completion			

Output 2.2. Increased readiness and capacity of national and sub-national entities to directly access and program adaptation finance

Indicator 2.2.1: No. of targeted institutions benefitting from the direct access and enhanced direct access modality

	Number of beneficiaries	Scale	Sector	Capacity Level
Baseline information				
Target performance at completion				
Performance at mid-term				
Performance at completion				

Outcome 3: Strengthened awareness and ownership of adaptation and climate risk reduction processes

Indicator 3.1: Increase in application of appropriate adaptation responses

	Percentage of targeted population applying adaptation measures	Sector
Baseline information	0	Multi-sector
Target performance at completion	50	Multi-sector
Performance at mid-term		
Performance at completion		

Output 3.1: Targeted population groups participating in adaptation and risk reduction awareness activities

Indicator 3.1.1: Percentage of targeted population awareness of predicted adverse impacts of climate change, and of appropriate responses

	No. of targeted beneficiaries	% of female participants targeted	Level of awareness
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Baseline information	0	50	1: Aware of neither
Target performance at completion	0	50	4: Mostly aware
Performance at mid-term			
Performance at completion			

Output 3.2: Stenghtened capacity of national and subnational stakeholders and entities to capture and disseminate knowledge and learning

Indicator 3.2.1: No. of technical committees/associations formed to ensure transfer of knowledge

	No. of technical committees/associations	% of women represented in committes/associations	Level of awareness
Baseline information			
Target performance at completion			
Performance at mid-term			
Performance at completion			

Indicator 3.2.2: No. of tools and guidelines developed (thematic, sectoral, institutional) and shared with relevant stakeholders

	No. of tools and guidelines	Type	Scale
Baseline information			
Target performance at completion			
Performance at mid-term			
Performance at completion			

Outcome 4: Increased adaptive capacity within relevant development sector services and infrastructure assets

Indicator 4.1: Increased responsiveness of development sector services to evolving needs from changing and variable climate

	Project/programme sector	Geographical scale	Response level
Baseline information	Multi-sector	Regional	1: Non responsive (Lacks all elements)
Target performance at completion	Multi-sector	Regional	3: Moderately responsive (Some defined elements)
Performance at mid-term			
Performance at completion			

Core Indicator 4.2: Assets produced, developed, improved or strengthened

	Sector	Targeted asset	Changes in asset (quantitative or qualitative)
Baseline information	Agriculture	2: Physical asset (produced/improved/strengthened)	1: Not improved
Baseline information	Water management	1: Health and Social Infrastructure (developed/improved)	1: Not improved
Baseline information	Disaster risk reduction	1: Health and Social Infrastructure (developed/improved)	1: Not improved
Baseline information	Other	2: Physical asset (produced/improved/strengthened)	1: Not improved
Target performance at completion	Agriculture	2: Physical asset (produced/improved/strengthened)	4: Mostly Improved
Target performance at completion	Water management	1: Health and Social Infrastructure (developed/improved)	4: Mostly Improved
Target performance at completion	Disaster risk reduction	1: Health and Social Infrastructure (developed/improved)	4: Mostly Improved
Target performance at completion	Other	2: Physical asset (produced/improved/strengthened)	3: Moderately improved
Performance at mid-term			
Performance at completion			

Indicator 4.1.1: Vulnerable development sector services and infrastructure assets strengthened in response to climate change impacts, including variability

Indicator 4.1.1: No. and type of development sector services to respond to new conditions resulting from climate variability and change

	Number of services	Type	Sector
Baseline information	0		Agriculture
Baseline information	0		Water management
Target performance at completion	6		Agriculture
Target performance at completion	6		Water management
Performance at mid-term			
Performance at completion			

Outcome 5: Increased ecosystem resilience in response to climate change and variability-induced stress

Indicator 5: Ecosystem services and natural resource assets maintained or improved under climate change and variability-induced stress

	Natural resource improvement level	Sector	Type
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Baseline information			
Target performance at completion			
Performance at mid-term			
Performance at completion			

Output 5: Vulnerable ecosystem services and natural resource assets strengthened in response to climate change impacts, including variability

Core Indicator 5.1: Natural Assets protected or rehabilitated

	Natural asset or Ecosystem (type)	Total number of natural assets or ecosystems protected/rehabilitated	Unit	Effectiveness of protection/rehabilitation
Baseline information				
Target performance at completion				
Performance at mid-term				
Performance at completion				

Outcome 6: Diversified and strengthened livelihoods and sources of income for vulnerable people in targeted areas

Indicator 6.1: Increase in households and communities having more secure access to livelihood assets

	No. of targeted households	% of female headed households	Improvement level
Baseline information	0	36	1: No improvement
Target performance at completion	0	36	4: High improvement
Performance at mid-term			
Performance at completion			

Indicator 6.2: Increase in targeted population's sustained climate-resilient alternative livelihoods

	No. of targeted households	% of female headed households	% increase in income level vis-à-vis baseline	Alternate Source
Baseline information				
Target performance at completion				
Performance at mid-term				
Performance at completion				

Output 6 Targeted individual and community livelihood strategies strengthened in relation to climate change impacts, including variability

Indicator 6.1.1: No. and type of adaptation assets created or strengthened in support of individual or community livelihood strategies

	Number of Assets	Type of Assets	Sector	Adaptation strategy
Baseline information	0	Adaptation strategies	Agriculture	Supporting livelihoods
Target performance at completion	5	Adaptation strategies	Agriculture	Supporting livelihoods
Performance at mid-term				
Performance at completion				

Core Indicator 6.1.2: Increased income, or avoided decrease in income

	Number of households (total number in the project area)	Income source	Income level (USD)
Baseline information			
Target performance at completion			
Performance at mid-term			
Performance at completion			

Outcome 7: Improved policies and regulations that promote and enforce resilience measures

Indicator 7: Climate change priorities are integrated into national development strategy

	Integration level
Baseline information	
Target performance at completion	
Performance at mid-term	
Performance at completion	

Output 7: Improved integration of climate-resilience strategies into country development plans

Indicator 7.1: No. of policies introduced or adjusted to address climate change risks

	No. of Policies introduced or adjusted	Sector	Scale	Type
Baseline information				
Target performance at completion				
Performance at mid-term				
Performance at completion				

Indicator 7.2: No. of targeted development strategies with incorporated climate change priorities enforced

	No. of Development strategies	Regulation	Effectiveness
Baseline information			
Target performance at completion			
Performance at mid-term			
Performance at completion			

Outcome 8: Support the development and diffusion of innovative adaptation practices, tools and technologies

Indicator 8: Innovative adaptation practices are rolled out, scaled up, encouraged and/or accelerated at regional, national and/or subnational level

	Sector of innovative practice	Geographic Scale	Type
Baseline information			
Target performance at completion			
Performance at mid-term			
Performance at completion			

Output 8: Viable innovations are rolled out, scaled up, encourages and/or accelerated

Indicator 8.1: No. of innovative adaptation practices, tools and technologies accelerated, scaled-up and/or replicated

	No. of innovative practices/ tools technologies	Sector	Status	Effectiveness
Baseline information				
Target performance at completion				
Performance at mid-term				
Performance at completion				

Indicator 8.2: No. of key findings on effective, efficient adaptation practices, products and technologies generated

	No. of key findings generated	Type	Effectiveness
Baseline information			
Target performance at completion			
Performance at mid-term			
Performance at completion			

