

AFB/PPRC.22/20 9 March 2018

Adaptation Fund Board Project and Programme Review Committee Twenty-Second Meeting Bonn, Germany, 20-21 March 2018

Agenda Item 9 c)

PROPOSAL FOR (CHILE, COLOMBIA, PERU)

Background

1. The strategic priorities, policies and guidelines of the Adaptation Fund (the Fund), as well as its operational policies and guidelines include provisions for funding projects and programmes at the regional, i.e. transnational level. However, the Fund has thus far not funded such projects and programmes.

2. The Adaptation Fund Board (the Board), as well as its Project and Programme Review Committee (PPRC) and Ethics and Finance Committee (EFC) considered issues related to regional projects and programmes on a number of occasions between the Board's fourteenth and twenty-first meetings but the Board did not make decisions for the purpose of inviting proposals for such projects. Indeed, in its fourteenth meeting, the Board decided to:

(c) Request the secretariat to send a letter to any accredited regional implementing entities informing them that they could present a country project/programme but not a regional project/programme until a decision had been taken by the Board, and that they would be provided with further information pursuant to that decision

(Decision B.14/25 (c))

3. In its eighth meeting in March 2012, the PPRC came up with recommendations on certain definitions related to regional projects and programmes. However, as the subsequent seventeenth Board meeting took a different strategic approach to the overall question of regional projects and programmes, these PPRC recommendations were not included in a Board decision.

4. In its twenty-fourth meeting, the Board heard a presentation from the coordinator of the working group set up by decision B.17/20 and tasked with following up on the issue of regional projects and programmes. She circulated a recommendation prepared by the working group, for the consideration by the Board, and the Board decided:

- a. To initiate steps to launch a pilot programme on regional projects and programmes, not to exceed US\$ 30 million;
- b. That the pilot programme on regional projects and programmes will be outside of the consideration of the 50 per cent cap on multilateral implementing entities (MIEs) and the country cap;
- c. That regional implementing entities (RIEs) and MIEs that partner with national implementing entities (NIEs) or other national institutions would be eligible for this pilot programme, and
- d. To request the secretariat to prepare for the consideration of the Board, before the twenty-fifth meeting of the Board or intersessionally, under the guidance of the

working group set up under decision B.17/20, a proposal for such a pilot programme based on consultations with contributors, MIEs, RIEs, the Adaptation Committee, the Climate Technology Centre and Network (CTCN), the Least Developed Countries Expert Group (LEG), and other relevant bodies, as appropriate, and in that proposal make a recommendation on possible options on approaches, procedures and priority areas for the implementation of the pilot programme.

(Decision B.24/30)

5. The proposal requested under (d) of the decision above was prepared by the secretariat and submitted to the Board in its twenty-fifth meeting, and the Board decided to:

- a. Approve the pilot programme on regional projects and programmes, as contained in document AFB/B.25/6/Rev.2;
- b. Set a cap of US\$ 30 million for the programme;
- c. Request the secretariat to issue a call for regional project and programme proposals for consideration by the Board in its twenty-sixth meeting; and
- d. Request the secretariat to continue discussions with the Climate Technology Center and Network (CTCN) towards operationalizing, during the implementation of the pilot programme on regional projects and programmes, the Synergy Option 2 on knowledge management proposed by CTCN and included in Annex III of the document AFB/B.25/6/Rev.2.

(Decision B.25/28)

6. Based on the Board Decision B.25/28, the first call for regional project and programme proposals was issued and an invitation letter to eligible Parties to submit project and programme proposals to the Fund was sent out on 5 May 2015.

7. In its twenty-sixth meeting the Board decided to request the secretariat to inform the Multilateral Implementing Entities and Regional Implementing Entities that the call for proposals under the Pilot Programme for Regional Projects and Programmes is still open and to encourage them to submit proposals to the Board at its 27th meeting, bearing in mind the cap established by Decision B.25/26.

(Decision B.26/3)

8. In its twenty-seventh meeting the Board decided to:

- a. Continue consideration of regional project and programme proposals under the pilot programme, while reminding the implementing entities that the amount set aside for the pilot programme is US\$ 30 million;
- b. Request the secretariat to prepare for consideration by the Project and Programme Review Committee at its nineteenth meeting, a proposal for prioritization among regional project/programme proposals, including for awarding project formulation grants, and for establishment of a pipeline; and
- c. Consider the matter of the pilot programme for regional projects and programmes at its twenty-eighth meeting.

(Decision B.27/5)

9. The proposal requested in (b) above was presented to the nineteenth meeting of the PPRC as document AFB/PPRC.19/5. The Board subsequently decided:

- a) With regard to the pilot programme approved by decision B.25/28:
 - (*i*) To prioritize the four projects and 10 project formulation grants as follows:

1. If the proposals recommended to be funded in a given meeting of the PPRC do not exceed the available slots under the pilot programme, all those proposals would be submitted to the Board for funding;

2. If the proposals recommended to be funded in a given meeting of the PPRC do exceed the available slots under the pilot programme, the proposals to be funded under the pilot programme would be prioritized so that the total number of projects and project formulation grants (PFGs) under the programme maximizes the total diversity of projects/PFGs. This would be done using a three-tier prioritization system: so that the proposals in relatively less funded sectors would be prioritized as the first level of prioritization. If there are more than one proposal in the same sector: the proposals in relatively less funded regions are prioritized as the second level of prioritization. If there are more than one proposal in the same region, the proposals submitted by relatively less represented implementing entity would be prioritized as the third level of prioritization;

(ii) To request the secretariat to report on the progress and experiences of the pilot programme to the PPRC at its twenty-third meeting; and

b) With regard to financing regional proposals beyond the pilot programme referred to above:

(i) To continue considering regional proposals for funding, within the two categories originally described in document AFB/B.25/6/Rev.2: ones requesting up to US\$ 14 million, and others requesting up to US\$ 5 million, subject to review of the regional programme;

(ii) To establish two pipelines for technically cleared regional proposals: one for proposals up to US\$ 14 million and the other for proposals up to US\$ 5 million, and place any technically cleared regional proposals, in those pipelines, in the order described in decision B.17/19 (their date of recommendation by the PPRC, their submission date, their lower "net" cost); and

(iii) To fund projects from the two pipelines, using funds available for the respective types of implementing entities, so that the maximum number of or maximum total funding for projects and project formulation grants to be approved each fiscal year will be outlined at the time of approving the annual work plan of the Board.

(Decision B.28/1)

10. According to the Board Decision B.12/10, a project or programme proposal needs to be received by the secretariat no less than nine weeks before a Board meeting, in order to be considered by the Board in that meeting.

11. The following project pre-concept document titled "Enhancing adaptive capacity of Andean communities through climate services" was submitted by *the* World Meteorological Organization (WMO), which is a Multilateral Implementing Entity of the Adaptation Fund.

12. This is the first submission of the pre-concept project proposal, using the three-step approval process established for regional projects. The present submission was received by the secretariat in time to be considered in the thirty-first Board meeting. The secretariat carried out a technical review of the project proposal, assigned it the diary number LAC/MIE/DRR/2018/2, and completed a review sheet.

13. The secretariat is submitting to the PPRC the summary the final technical review of the pre-concept for a regional project, both prepared by the secretariat, along with the final submission of the proposal in the following section. The proposal is also submitted with changes between the initial submission and the revised version highlighted.

14. Lastly, the World Meteorological Organization has submitted a Project Formulation Grant Request, which is also available as an addendum to this document.

Project Summary

<u>Chile, Colombia, Peru</u> – Enhancing Adaptive Capacity of Andean Communities through Climate Services (ENACACS)

Implementing Entity: WMO Project/Programme Execution Cost: USD 650,000 Total Project/Programme Cost: USD 6,850,000 Implementing Fee: USD 548,000 Financing Requested: USD 7,398,000

Project Background and Context:

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 InterTropical 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.

<u>Component 1</u>: Identification of stakeholders, climate information requirements, and communication channels for service delivery (USD 1,200,000)

This component aims at establishing or strengthening multi stakeholder platforms to support codesign and co-production of tailored climate services.

<u>Component 2</u>: Improved regional-national operational climate monitoring and forecast system for improved adaptation and decision-making (USD 1,750,000)

Activities under this component will focus on strengthening the technical capacity of the National Meteorological and Hydrological Services (NMHSs) of Colombia, Peru and Chile to generate and disseminate tailored hydroclimate information and services to anticipate and respond to weather and climate hazards.

<u>Component 3</u>: End-to-end service through customization of climate information, communication and user feedback system (USD 1,450,000)

This component aims at sustaining the provision and use of regional climate information, and endto-end climate services through a demand-driven approach and stakeholder capacity development. Component 4: Capacity building (development and improvement) - (USD 1,200,000)

This component aims at improving the capacity of the NMHSs to generate high quality and high relevant climate products, at improving the capacity of the RCC to access regionally optimized climate date and forecasts from the WMO Global Producing Centers, and at improving the capacity of cities and communities to mainstream climate information in risk management.

<u>Component 5</u>: Quality assurance and documentation of socio-economic benefits (USD 600,000)

This component aims at developing guidelines on the production and use of climate services, and at developing adaptation plans based on socio-economic benefits measured by impacts on the use of climate and weather information.



ADAPTATION FUND BOARD SECRETARIAT TECHNICAL REVIEW OF PROJECT/PROGRAMME PROPOSAL

PROJECT/PROGRAMME CATEGORY: Pre-Concept for a Regional Project

Countries/Region:	Chile, Colombia, Peru	
Project Title:	Enhancing adaptive capacity of Andean communities through climate services	
Thematic focal area:	DRR	
Implementing Entity:	World Meteorological Organization	
Executing Entities:	National Meteorological and Hydrological Services of Colombia (IDEAM), Chile (DMC) and Peru	
-	(SENAMHI) and the WMO regional Climate Centre for Western South America (CIIFEN)	
AF Project ID: LAC/N	MIE/DRR/2018/2	
IE Project ID:	Requested Financing from Adaptation Fund (US Dollars): 7,398,000	
Reviewer and contac	ct person: Martina Dorigo Co-reviewer(s): Christian Severin	
IE Contact Person(s)): Jean-Paul Gaudechoux	

Questions **Comments 3 February 2018** Comments 20 **Review Criteria** February 2018 1. Are all of the Yes. participating countries party to the Kyoto Protocol? Yes, the participating countries are developing countries and the region 2. Are all of the is under the influence of El Nino Southern Oscillation (ENSO) participating countries **Country Eligibility** phenomenon and the Inter Tropical Convergence Zone (ITCZ). This developing countries impacts the spatial-temporal distribution of precipitation, cloud cover, particularly vulnerable availability of solar and wind resources, as well as food production and to the adverse effects agricultural waste. Climate Change is accelerating the progressive of climate change? retreat of the glaciers in the Andes that host more than 95% of the world's tropical glacier, providing water for drinking, small farms, etc.

Project Eligibility	 Have the designated government authorities for the Adaptation Fund from each of the participating countries endorsed the project/programme? 	Yes, letters of endorsement from the DA of Chile, Colombia and Peru have been received.	
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	2.	Has the pre-concept provided necessary information on the problem the proposed project/programme is aiming to solve, including both the regional and the country perspective?	 Partly, the overall issue that is to be addressed is described adequately. This project aims at assessing the impacts of climate variability and change on water (and consequently on other sectors and systems in particular food security and production). This will be reached by strengthening the capacities of the regional center and the National Meteorological and Hydrological Services (NMHSs) to better meet the needs of their countries and to achieve the relevant operational connections required to for an optimal climate information system. The project activities seem to focus more on the national planned investments, nevertheless without a stronger set of regional activities that ties the national activities together, this investment may as well be funded through three separate national proposals. CR 1: Please strengthen the regional set of activities that will elevate the national linkages. Please include activities that will elevate the national investments into regional capacity. Such as development of regional data sharing mechanisms, including agreements to host and maintain such mechanism. 	CR 1 : Addressed. The proponent provided additional information on the regional scope of the planned activities. Moreover, additional information with regard to the operational system was provided. From the additional information provided it is noted that the existing regional climate outlook forum, is a regional integration mechanism executed by the International Research Center on el Niño (CIIFEN) that has been providing regionally integrated climate forecasts uninterruptedly since 2003 in the region. This will be used to strengthen south-south cooperation to enhance the capacities of other NMHSs. However, in the development of the concept further describe or include information regarding the already existing/or to be signed agreement to host and maintain such mechanism in the long- term.
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	3. Have the project/programme objectives, components and financing been clearly explained?	Yes, however taking into account comment CR 1, please consider also to reduce the number of outputs listed, some outputs are formulated as activities and some might be overlapping. CR 2: Please consider simplifying the project components table. Also, please further elaborate on the M&E project component. Is this referred to the project cycle management fee or to activities to be taken as part of project implementation? This is unclear. If it is the former, these costs should be included as part of the Management Fee.	CR 2 : Addressed. The projects components table was simplified. Additionally, it is noted that the M&E for this project is included in the management fee. Under this component "Quality Assurance and Documentation of Socio-economic Benefits" you might want to consider, in the concept note preparation, to produce the socio-economic benefits assessment based on the impacts of the use of climate and weather information, also as a regional publication, to better disseminate lessons learned.
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4.	Has the project/programme been justified in terms of how: - it supports concrete adaptation actions? - it builds added value through the regional approach? - it promotes new and innovative solutions to climate change adaptation? - it is cost-effective? - it is consistent with applicable strategies and plans? - it incorporates learning and knowledge management?	Concrete adaptation actions: The project aims at strengthening the capacities of the regional centre and the NMHSs to better meet the needs of their countries. The resulting strengthened operational system will support climate services delivery in selected local communities affected by climate change. At concept stage further elaborate on how the project will support the delivery of climate services in the selected communities (periodicity, tools such as the mentioned local radios, accessibility). How the communities will be selected, has a vulnerability assessment been conducted? <u>Regional approach</u> : Partly, please see comment CR1 under point 2. There is a lack of explanation of the regional activities and how the different sets of national investments will further regional cooperation to increase adaptation capacity across the participating countries and communities. <u>Innovative solutions</u> : the project entails innovative deliverables such as: i) improved use and access to weather and data, remote sensing and modelling, to use by intensive and extensive agriculture; ii) services provided to the energy sector (databases, forecasts and scenarios for long term climatic variables, instrument calibration, etc.); and iii) water use based on resource monitoring and impact-oriented forecasts.	
	- it will be developed through a consultative process with particular	<u>Cost-effectiveness</u> : the proposed initiative should be cost-effective by having an enhanced on-going collection, updating and processing of the data at regional level, in delivering forecasts model outputs to countries, and tailoring products for country-level decision support systems.	

reference to vulnerable groups, including gender considerations, in compliance with the Environmental and Social Policy of the Adaptation Fund? - it will take into account sustainability?	At concept stage please elaborate on how this initiative would build upon the current CLIMANDES initiative implemented by WMO in Peru. <u>Consistency with strategies and plans</u> : yes, consistency with plans and strategies at national level is documented. CR 3 : Please include also, if applicable, information of this proposal consistency with regional strategies. <u>Learning and knowledge management</u> : The proposed set of investments present a good opportunity setting up regional "Communities of practice", in which the stakeholders will be able to share experiences and learn from each other. Moreover COPs, will also be a good mechanism to capture and distil lessons learned and best practices. <u>Consultative process</u> : the proposal was developed by national institutions, CIIFEN and WMO following national consultations. CR 4 : Please provide details on the consultations conducted so far (date, institutions). As a reminder, in the proposal stage consultations at community level, taking into account the most vulnerable groups, and including gender considerations have to be conducted. <u>Sustainability</u> : The climate service provision value chain will set up an example for the larger region that could be later scaled up to other countries supported by CIIFEN, such as: Bolivia, Ecuador and Venezuela. This project could also set an example to be scaled up in other world regions.	CR 3 : Addressed. CR 4 : Addressed, more details on the consultations conducted with national stakeholders in the 3 countries have been provided. In the concept stage information on consultations at community level should be also be provided, taking into account and incorporating considerations from the most vulnerable groups, including women and youth (if possible).
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	5. Does the pre-concept briefly explain which organizations would be involved in the proposed regional project/programme at the regional and national/sub-national level, and how coordination would be arranged? Does it explain how national institutions, and when possible, national implementing entities (NIEs) would be involved as partners in the project?	 Yes, partners have been identified at regional and national level in Colombia, Chile and Peru. CIIFEN, the WMO Regional Climate Center based in Ecuador, will support WMO and national institutions for project implementation of the regional activities. The NMHSs in each participating country will be leading national consultations and climate information co-production. The engagement of the NIEs in Chile (AGCI) and Peru (PROFONANPE) is not contemplated in this regional proposal. CR 5: Please explain the reason, and if possible seek collaboration with them, and explain their role in the programme implementation arrangements. As a suggestion, you might want to think what are the opportunities to engage with private sector, other than on an ad-hoc basis, but throughout the project implementation? (i.e. output 3.5: private institutions are involved to support and contribute in the climate information communication chain). Please consider if the private sector can be part of project steering committee. 	CR 5 : Addressed. It is noted that that this programme will seek collaboration with the NIEs in Peru and Chile, on which more information will be provided at the concept stage.
	 Is the requested project / programme funding within the funding windows of the pilot programme for regional projects/programmes? 	Yes, the total requested funding is USD 7,398,000.	
Resource Availability	 Are the administrative costs (Implementing Entity Management Fee and Project/ Programme Execution Costs) at or below 20 per cent of the total project/programme budget? 	Yes, the administrative costs correspond to 1,198,000 USD or 17.49% of the total project's budget.	

Eligibility of IE 8.	Is the project/programme submitted through an eligible Implementing Entity that has been accredited by the Board?	Yes, the proposal has been submitted through the World Meteorological Organization (WMO), a multilateral implementing entity accredited by the Board.	
Summary	communities in Peru, Co better manage water for The initial technical revie justification and added v following comments sho CR 1: Please strengther Please include activities development of regional mechanism; CR 2: Please consider s project component. Is th of project implementatio Management Fee; CR 3: Please include, if CR 4: Please provide fur institutions consulted an CR 5: As part of the prog Implementing Entities (N Final review: The final technical review current submission have	In the regional set of activities and description of the regional/na that will elevate the national investments into regional capacity data sharing mechanisms, including agreements to host and n implifying the project components table. Also, please further ela is referred to the project cycle management fee or to activities to n? This is unclear. If it is the former, these costs should be inclu- applicable, information of this proposal consistency with region rther information on the consultations that already took place, d	the countries to elatively clearly, the strong. The tional linkages. Such as naintain such aborate on the M&E to be taken as part uded as part of the al strategies; letailing the the National e project.

	 In the development of the concept further describe or include information regarding the already existing/or to be signed agreement to host and maintain the regional data sharing mechanism in the long-term;
	 In the concept stage information on consultations at community level should be also be provided, taking into account and incorporating considerations from the most vulnerable groups, including women and youth (if possible).
Date:	February 21, 2018





Letter of Endorsement by Government

December 27th, 2017

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

Subject: Endorsement for "Enhancing Adaptive Capacity of Andean Communities through Climate Services (ENACACS)".

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

Accordingly, I am pleased to endorse the above project/programme proposal with support from the Adaptation Fund. If approved, the project/programme will be implemented by the World Meteorological Organization (WMO) and executed by the National Meteorological and Hydrological Services of: Colombia (IDEAM), Chile (DMC) and Peru (SENAMHI), and the WMO regional Climate Centre for Western South America (CIIFEN).

Sincerely,

Gladys Santis Adaptation Officer Ministry of Environment Government of Chile







Al contestar por favor cite estos datos:

Fecha: 11 de enero de 2018 19:08 Folios: 1 Nº Reg. Salida: OAI-8150-E2-2018-000739 Anexos: 1

OAI-8150

Bogotá, D. C

Doctor JOSE FRANKLYN RUIZ Subdirector (E) de Meteorología IDEAM Calle 25 D No. 96 B - 70 Bogotá D.C.

Estimado Jose Franklyn,

Por medio del siguiente oficio envío adjunto la carta de apoyo en calidad de Punto Focal del País ante el Fondo de Adaptación.

Cordialmente,

Firmado por: ANGELICA MARIA MAYOLO OBREGON JEFE DE OFICINA CODIGO 0137 GRADO Fecha firma: 11/01/2018 19:06:54 COT 21

ANGELICA MARÍA MAYOLO OBREGÓN

Jefe de la Oficina de Asuntos Internacionales

Anexo: Endorsement letter "Enhancing Adaptive Capacity of Andean Communities through Climate Services"

Proyectó: Angélica María Mayolo Obregón Revisó: Angélica María Mayolo Obregón

F-E-SIG-26-V1. Vigencia 09/02/2016



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Viceministerio de Desarrollo Estratégico de los Recursos Naturales

Dirección General de Cambio Climático y Desertificación

"Decenio de la Igualdad de Oportunidades para Mujeres y Hombres" "El año del Diálogo y la Reconciliación Nacional"

- 8 ENE. 2018

Letter N° 01 -2018-MINAM/VMDERN/DGCCD

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

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Subject

Endorsement the Pre-Concept for a Regional Project: "Enhancing Adaptive Capacity of Andean Communities through Climate Services (ENACACS)"

Dear Sirs:

In my capacity of Designated Authority for the Adaptation Fund in Peru, I confirm that the above regional project proposal is in accordance whit the government's national and subnational priorities; specifically with the National Designated Contributions (NDC) in thematic areas of water and agriculture in adaptation; reducing adverse impacts risks by climate change in our country.

Accordingly, I am pleased to endorse this project proposal with support from the Adaptation Fund, as it has been being. If approved, the project will be implemented by the World Meteorological Organization (WMO) and executed by The National Service of Meteorology and Hydrology of Peru.

Sincerely yours,

Rosa Morales Saravia Head of the General Directorate of Climate Change and Desertification Ministry of the Environment Designated Authority

Central Telefónica: 611-6000 www.minam.gob.pe



PRE-CONCEPT FOR A REGIONAL PROJECT/PROGRAMME

PART I: PROJECT/PROGRAMME INFORMATION

Title of Project/Programme:

Countries: Thematic Focal Area¹: Type of Implementing Entity: Implementing Entity: Executing Entities: ENhancing Adaptive Capacity of Andean Communities through Climate Services (ENACACS) Chile, Colombia, Peru Disaster risk reduction and early warning systems MIE World Meteorological Organization (WMO) National Meteorological and Hydrological Services of Colombia (IDEAM), Chile (DMC) and Peru (SENAMHI), and the WMO regional Climate Centre for Western South America (CIIFEN) 7,398,000 (in U.S. Dollars Equivalent)

Amount of Financing Requested:

Project / Programme Background and Context:

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 InterTropical Convergence Zone (ITCZ), which is strongly modulated by the sea surface temperatures in the tropical Pacific. The status of El Niño or La Niña exerts strong control over the spatial-temporal distribution of precipitation, cloud cover, availability of solar and wind resources, as well as food production and agricultural waste (biomass), with significant socio-economic consequences. The Colombian electric system, for example, depends heavily on the availability of water. The 2015-2016 El Niño reduced the Colombian hydroelectric resource to 43% of its historic values for the period of September 2015 to March 2016. The deficit led to higher operational costs and larger CO₂ emissions than in typical years. In Peru, seventy-two percent (72%) of national emergencies are related to drought, heavy rain, floods, frost, and hail. According to the National Convention of Peruvian Agriculture (Conveagro) the floods in April 2017 caused losses of near US\$ 645 million in the agriculture and livestock sectors. These natural disasters are becoming more frequent in the context of climate change. Central regions in Chile are regularly affected by severe drought -on occasions the water shortage has exceeded 50%- but, since 2010, this area has experienced an uninterrupted sequence of dry years (30 to 70% rainfall deficit) that have coincided with the warmest decade on record. The precipitation deficit diminished the Andean snowpack and resulted in amplified declines (up to 90%) of river flow, reservoir volumes and groundwater levels. Climate change is accelerating the progressive retreat of the tropical glaciers in the Andes that host more than 95% of the world's tropical glaciers and that provide water for drinking, small farms, hydroelectric power generation and transnational mining operations. In the past 30 years the glaciers have lost more than 30% of their ice and snow which will lead to severe water shortages in the future.

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 economicaleconomic 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.

Regional similarities and shared climate impacts and vulnerabilities make regional cooperation essential for addressing the dynamics of climate variability and change at both national and local scales. The proposed actions to strengthen climate services information for in the regionnational adaptation involve a coordinated regional climate information-producing and -sharing architecture able to deliver operational climate monitoring and prediction products in support ofing climate services for local communities adaptation at community and local level, decision making using national standards, focusing onto mitigate the climate influence over the interconnections related to water use and availability. The proposed approach contributes addresses to risk reduction through the provision of tailored climate products that will support decision to improved -water, food

¹ Thematic areas are: Food security; Disaster risk reduction and early warning systems; Transboundary water management; Innovation in adaptation finance.

and energy resources management as part of overall ongoing climate adaptation, mitigation and sustainable development efforts.

Project / Programme Objectives:

The overall objective of the project is to reduce vulnerability and strengthen resilience of Andean communities in Peru, Colombia and Chile to climate variability and change by increasing the ability of the countries to better manage water for more efficient cropping, irrigation and power generation, including improved adaptation to weather and climate extremes.

The identified action areas are:

- Colombia: Upper Magdalena River Basin (Departments of Tolima, Huila and Cundinamarca)
- Peru: catchments affected by El Niño events including the Tumbes and Piura rivers in the north, and Rimac and Huallaga rivers,
- Chile: central region of the country (Valparaiso to Maule regions) where important catchments like Aconcagua, Tinquirica and Maule are located.

The sub-objectives of the project, which are in line with the project components below and the Adaptation Fund outcomes, are:

- Increased resilience of the Andean communities through better <u>climate</u> risk management and improved access to and use of weather and climate information. <u>Efor defining and enhanceding</u> adaptation strategies and planning to ensure food and energy security during periods of water scarcity as result of climate variability and change
- Increased_<u>Strengthened</u> technical capacity of the National Meteorological and Hydrological Services (NMHSs) of Colombia, Peru and Chile to generate and disseminate tailored hydroclimate information and services to anticipate and respond to weather and climate hazards
- Sustained provision and use of <u>regional</u> climate information, and end-to-end climate services through a demand-driven approach to-and stakeholder capacity development
- Improved participation and communication of local communities and diverse stakeholder populations.

Project / Programme Components and Financing:

Project/Program me Components	Expected Outcomes<u>Outputs</u>	Expected OutputsActivities	Amount	Formatted Table
1. Identification of	- Detailed mapMapping of water, energy	-1.1 Community climate and impact assessments	1.200.000	
stakeholders,	and disaster risk demand climate	1.2 NeedsA-assessments of climate impacts, climate		
climate informatior	impacts, and societal stakeholder's	information needs and water demand for sectors and		
requirements n	needs	communities (national)		
needs , and	L	- 1.3 Climate Information System including Decision		
communication	Sustained delivery of weather and	Support products Improving capacity for production		
channels for	cClimate- related advisories to -and	of and access to high precision, timely, relevant		
service delivery	weather Information System based	climate advisory services as required by users		
	linking existing systems and providing	(national)		
	decisionsupport decision making and	-		
	early warnings for water authorities,	1.4 Integrated EWS for drought/floods, extreme		
	agriculture and energy support products	events, and sectorial impacts		
	to sectorial usersproducers	1.5 Improved access to climate information and		
	 Established or strengthened multi- 	alerts for least developed communities		
	stakeholder platforms to support co-	1.6 Identification of schemes for integrated water and		
	design and co-production of tailored	drought management and monitoring		
	climate services	1.7 Institutional agreements to share information and		
		tools		
	Warning at local level and decision	Establishment of 1.8 National Frameworks for		
	making support on water and disaster	Climate Services and hold regular		
	risk management for drought and	1.9 National Climate Forums (national)		
	exceptional rainy periods			
2. Improved	-Climate and hydrological databases	- Data rescue, homogenization of dataset in digital	1.750.000	
egional-national	interoperable and accessible Updated	form (national)		
operational climate	national data management systems and	- Gridded regional datasets and data exchange		
monitoring and	archives, and integrated regional	(regional) 2.1 Improved weather, climate and		
orecast system	hydrological and meteorological	hydrology		
supporting co-	database.	- Generation of regional Long-Range Forecast (LRF)		
peneration of	-	from Global LRF products and verification (regional)		
product and	Improved cGlimate predictions and	- Information and validation of climate change		
servicesfor	projections by establishing an optimized	projections (regional)		
improved	cascading system involving the	- Consensus statements through the Regional		
adaptation and	regionalization of the global forecast	Climate Outlook Forum (RCOF) (regional)		

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nslated into decision-making 2 Improved weather and eme event alerts. cesses through a co-genera 3 Tailored seasonal forecast for specific sites an nproved sector decision making ctorial applications Use of regionally downscaled climate rocess cenarios 2.4 Coordinated climate 1.450.000 End-to-end Suit of climate information products coseline of existing communication channels ent users-<u>Co-design and co-development of</u> aservice lesigned and co-developed through <u>Communication Enhanced access and</u> limate advisory products (national) use of climate advisory and information sustomization of products strategy shared by all project 2 Educational Training activities for NMHSs, climate ectoral ministries, schools, rural communities, takeholders, tailored according nformation country/community needs vomen and youth (regional and national) communication ctivities in rural schools Traditional knowledge and co and user feedback es access climate ough their own specialized of agement are integrated into-water svstem considering gender and traditions) lomen and youth have access to clmate ormationocal media and broadcasting 3.5-stablishing mechanisms for broad full involvement Partnerships ssemination involving pPrivate ITC institutions, vith telecommunication companies for 6-ILocal radios and television (national) MS-based two-way communication ide tailored information for rural con ood practices on tailored climate Collection of best practices and lesson-learned vices to sectors are advertised and haring (national and regional)3.7 Climate smart oted at local and community levels ners are champions of efficient practices and ted by their communities 8 Mobile phone companies are engaged to tribute in the communication process .9 Feedback on the use of Information System and uality of products 1.200.000 Capacity Regional Information Syster Develop the regional CST (regional) building sed beyond the core project Establish the National (CISH) (national) (development and keholdersClimate Services Toolkit Training workshops for climate services information improvement) CST) systems (regional and national) Help E National Climate Information System .2 Mapping of stakeholders/key users stitutions from sectors. aricultural associations with high come and energy operators participate .3 RegularT-training workshops on the use of , <u>Helpdesk (CISH)</u> climate information products to the main agricultural and energy associations including consolidated and olf-fund or disaster risk management, water, .4-t∓raining of trainers for smallholder farmers and ergy and food security, and are run micro-hydropower operators (national) takeholders and key actors.Improved Mobilization of -performed and self-funde apacity of NMHSs to generating high .5-rResources mobilized communities and quality and high relevant climate stries benefitting from the project to sustain capacity building efforts (regional and national) oroducts Improved capacity of RCC to access and regionally optimized climate data 6 Insertion of climate vulnerability/risks and forecasts from the WMO Global onsideration in local land use, development and ritory management plans Producing Centers 7-Regional and National Climate Forums (regional mproved capacity of Local-cities and ind national) communities <u>to take into</u> ountmainstream climate information n risk management the risks associated with drought and extraordinary rain periods for planning and response, and risks are reduced

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600.000

Development of guidelines on the production and

lescription of products and best climate services (regional and national) 5.1 Publication of results Collection and evaluation of -2-project So onomic impact<u>s</u> assessment on the use of weather and climate information for disaster risk Specific indicators for feedback analysis

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and improvement of service delivery Savings on water on energy are obtained on community management and on individual users	management, agriculture, <u>een</u> ergy and water management <u>through regular surveys (national), including water and carbon footprint -</u>	
Adaptation Plans based on socio- economic benefits measured by impacts on the use of climate and weather information-are adopte	Socio-economic benefits assessment based on impacts of the use of climate and weather information by at sectors (national)	
 6. Project Management (9.5%) 7. Total Project/Programme Cost 		650.000
 8. Project Cycle Management Fee (Implementing Entity-WM) 	1O) 8%	6.850.000 548.000
Amount of Financing Requested		7.398.000

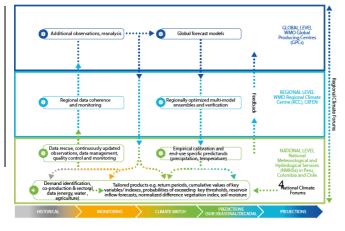
Project Duration: Three years and six months (2019 to mid_-2022)

PART II: PROJECT / PROGRAMME JUSTIFICATION

Project Components: the regional scale of the project

Colombia, Chile and Peru, and other Andean countries, share regional climate characteristics. As described in the Project Background and Context and Moreover, according to latest IPCC assessment report, changes in stream flow and water availability have been observed due to the retreat of the Andean glaciers. A regional approach allows for common needs and measures to be identified, supported by an operational system for climate services involving regional and global climate centers as well as National Meteorological and Hydrological Services (NMHSs). The forecast system worldwide is based on operational global and regional numerical weather prediction models fed by data and observations exchanged internationally by NMHSs and regional and global centers. Outputs from these models are analyzed and further downscaled to national scales by NMHSs, and tailored for supporting specific decisions in climate sensitive sectors (see figure). Examples include information on variability of inflow for reservoir operations, soil moisture for selection of crops and water availability for irrigation. Countries in Western South America are supported in this regard by a WMO Regional Climate Center (RCC), the International Research Center on El Niño (CIIFEN), based in Ecuador. CIIFEN, has the goal to strengthen NMHSs capacities to provide better climate services to users in various sectors of the region, especially in food security, water resources, energy, and climate risks. Its mandate is based on GFCS. The activities of CIIFEN and RCC-WSA are regional and scalable at national level through the NMHSs. Some regional activities are aimed to strengthening mechanisms for the operational exchange of meteorological data, the consolidation of regional databases, and analysis of vulnerability to climate change in transboundary basins that optimize resources and creates synergies of national efforts. The RCC plays a pivotal role in Examples include information on variability of inflow for recervoir operations, soil moisture for selection of crops and water availability for irrigation. Countries in Western South America are supported in this regard by a WMO Regional Climate Center (RCC), the International Research Center on El Niñe (CIIFEN), based in Ecuador.

supporting NMHSs to This project aims at strengthening the capacities of the regional center, NMHSs and partners to better meet the needs of their countries and to achieve the relevant operational connections required to for an optimal climate information system, including the deployment of a Climate Services Toolkit (CST), which facilitates access by NMHSs to relevant climate data and products from CIIFEN and WMO global centers and to tools with which NMHSs can create value-added data and products. The CST deployment will be accompanied by hands-on support from CIIFEN and third-party NMHSs with advanced climate services capabilities. The resulting strengthened operational system will support climate services delivery in selected local communities affected by climate variability and change. The resulting service provision value chain will set an example for the larger region that could be later scaled up to cover the other countries in the region



supported by CIIFEN: Bolivia, Ecuador, and Venezuela...

The regional climate outlook forum is a regional integration mechanism involving six NMHSs of western South America on a monthly and uninterrupted basis since 2003 to provide regionally integrated climate forecasts. This integration mechanism will be used to strengthen south-south cooperation where countries contribute with experts to enhance the capacities of their peers in other NMHSs. The RCC-WSA members are the directors

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of the NMHSs who signed the following regional strategic actions;

1. Strengthening capacities for climate data management.

- 2. Capacity building for seasonal prediction.
- 3. Strengthening of climate services to priority sectors.
- 4. Positioning and visibility of NMHSs as permanent and official entities in the respective countries
- 5. Resource mobilization and technical cooperation for the operation of the RCC
- This project aligns with this regional strategy

The project will facilitate the development of national frameworks to establish a systematic dialogue between users and providers for addressing the demand for tailored climate services addressing these areas. The countries' NMHSs are already engaged in user consultations for climate services to identify needs and priorities, and IDEAM (Colombia) has recently launched a National Framework for Climate Services (NFCS). This project will facilitate the establishment of a NFCS in Peru and Chile and will ensure that these mechanisms are serving as platform for promoting effective collaboration and cooperation at national level as well as rigorous monitoring and evaluation.

Promotion of new and innovative solutions

Expected innovative deliverables through this project include (further information wwill be included at the concept note stage):

- Improved use and access to weather and water data, remote sensing and model outputs, for use by both intensive and extensive agriculture sectors, from those highly organized to small-scale agroassociations.
- A wide portfolio of services to the energy sector, namely databases, forecasts and scenarios for medium and long term climatic variables, assessment, compliance with international standards of the hydro-meteorological networks, instrumentation calibration, training, research;
- Optimization of decision-making on water use based on resource monitoring, expected climate scenarios and impact-oriented forecasts. This will be particularly important to solve potential conflicts in water use between agriculture, energy and environment using multipurpose infrastructures, taking into account flood protection.

NMHSs are increasingly coordinating with other national and local authorities, private institutions and NGOs to deliver weather/climate advisories and warnings for extreme events. Climate information co-production will constitute core activities among them. CIIFEN, as the Regional Climate Center for the Western South America (RCC-WSAS), will lead the implementation of the regional aspects of the project and provide support to the NMHSs.. CIIFEN will share products, methods, technologies and knowledge as necessary to put the regional component of the operational system in place, and support the countries to develop the necessary capacities for their continued operation and delivery of associated services.

Cost Effectiveness

The project will build on the existing global and national climate services information system coordinated by the WMO and national authorities involved in the project. That system will produce and deliver authoritative climate information products through existing operational mechanisms, technical standards, communication and authentication.

Duplication of effort and maximum efficiency of intervention will be avoided by strengthening CIIFEN. The impact and cost-effectiveness will be reflected in enhanced on-going collection, updating and processing of data at the regional level, in delivering of reanalysis and forecast model outputs to countries, in providing technical assistance in model downscaling outputs and developing tailored products for country-level decision support systems.

Consistency with national or subnational strategies

The Project will be consistent with national sustainable development strategies, among them:

- Colombia: National Development Plan 2010-2014 (Prosperidad para todos), National Climate Change Adaptation Plan, Green Growth envelope strategy and Law 1715 of 2014, which encourages the diversification of energy supply with other non-coventional renewable sources (wind, biomass, among others), and Nationally Determined Contribution (NDC) to the Paris Agreement
- Peru: National Strategy to Fight Desertification, National Plan on Disaster management (PLANAGERD), National Strategy on Water Resources, National Adaptation Plan for Agricultural Sector 2012-2021, and NDC (developed by a Multisectoral Working Group formed by thirteen Ministries and the National Center of Strategic Planning)
- Chile: Climate Change National Action Plan 2017-2022, Climate Change Adaptation Plan Agriculture Sectoral Plan, Energy Agenda, and NDC

Learning and Knowledge management

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A learning and knowledge management component to capture and disseminate lessons learned will be provided by CIIFEN and the Regional Climate Outlook Forums which is a platform for regular interactions between climate specialists and user agencies in a regional/national context. The climate services information system will comprise a set of tools, including an online web interface and sharing platform to facilitate access and networking. Lessons learnt from knowledge management in other projects in the region like CLIMANDES (https://public.wmo.int/en/projects/climandes) phase I and II, and PRASDES (http://www.prasdes-ciifen.org/), will facilitate the dissimination of best practices.

Consultative Process

This proposal was developed by national institutions, CIIFEN and WMO_-in Colombia, Chilo and Peru following a series of national consultations in Colombia, Chile and Peru. CIIFEN has wide experience to engage different audiences which include authorities, local stakeholders, and small communities. The following regional activities emerged after consultations: Regional Climate Information to strengthen risk management in the agriculture sector (2007-2009). https://www.researchgate.net/publication/255754566 Technical Guide IADB Final; Regional information to support public policies on climate change and biodiversity in the Andean countries (2011-2013). http://geoportal.ciifen.org/es/, Regional Andean Programme to enhance weather, climate water services and development-PRASDES (2013-2016). http://prasdes-ciifen.org/ Colombia, Peru and Chile have organized conducted national consultations processes on Climate Services requirements and other with target stakeholders as documented here below: Colombia: The Climate Services for Resilient Development (CSRD) Partnership already conducted a stakeholders meeting in Bogota in 2015, the output white paper on "Options for Climate Services Investments in Colombia " was published in early 2016. The official launch of the National Framework of Climate Services held in 1-3 November 2017 provided the basis for the development of a National Plan for implementing Climate Services. Prior to that event, meetings with sectors representatives of agriculture, energy, disaster risk reduction and water took place in September-October 2017 (see report: http://www.wmo.int/pages/prog/wcp/meetings/presentations/Bogota3010-0311-2017/Report_SeasonalForecast_Bogota_2017_final.pdf) Peru: Regional Forums on Climate Perspectives in Peru (2014-2016): http://www.senamhi.gob.pe/?p=prensa&n=492 http://www.senamhi.gob.pe/?p=prensa&n=16 http://www.senamhi.gob.pe/?p=prensa&n=59 http://www.senamhi.gob.pe/?p=prensa&n=194, Workshops to identify needs and demands for climate services (2016): http://www.senamhi.gob.pe/climandes/index.php/noticias/detalle/senamhi-desarrolla-taller-de-necesidades-ydemandas-de-servicios-climaticos-para-autoridades http://www.senamhi.gob.pe/climandes/index.php/noticias/detalle/conociendo-las-necesidades-de-losagricultores-en-cusco Workshop: Mapping of actors of the agricultural sector for climate services (2017) http://www.senamhi.gob.pe/climandes/index.php/noticias/detalle/cusco-senamhi-present-mapeo-de-actores-delsector-agropecuario-para-los-servicios-climticos Dialogue roundtables on potential socio-economic benefits of climate services (2017): http://www.senamhi.gob.pe/climandes/index.php/noticias/detalle/senamhi-instala-mesa-de-dilogo-sobrebeneficios-socioeconmicos-potenciales-de-los-servicios-climt Chile: Several workshops were organized by DMC during July 2017 with the aim to meet users and learn about F their climate information demand. The participant entities were: Dirección Meteorológica de Chile (DMC), Subdepartamento de Información, Monitoreo y Prevención (IMP), Ministerio de Agricultura (MINAGRI), Sort) Dirección General de Aguas (DGA), Ministerio de Energía (MEN), de la Unidad de Gestión de Riesgos y Emergencias Energéticas and Ministerio de Medio Ambiente (MMA). The reports of the meetings can be found here http://164.77.222.61/climatologia/ on climate information delivery meetings Local stakeholders consultations will be undertaken in two ways: indirectly, by involving relevant sectorial Sort)

stakeholders as agiculture associations or extension agents, training them to make the consultations, or directly by consultations at community level using well tested techniques such as Roving Seminars, and Community Participatory Approaches of Climate Field Schools (for agriculture).

Sustainability of the project

The participating NMHSs are standing entities within their national governments. The project sustainability will be garanteed by DMC, IDEAM and SENAMHI in their roles of government agencies supported by public funding with officially mandated duties. In Peru, policies for adaptation to climate change in agriculture are spearheaded by the Ministry of Agriculture and Irrigation (MINAGRI) in coordination with the Ministry of Environment (MINAM) and with the support of the Regional Governments (GOREs). The National Service of Meteorology and Hydrology of Peru (SENAMHI) provides climate and environmental data. Similar arrangements are in place in Colombia and Chile.

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Economic, social and environmental benefits

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Investments in risk reduction and preventive adaptation measures based on authoritative climate information spanning the historical recurrence and the future new trends should result in economic benefits for local communities and the whole nation given the potential avoided costs associated with lack of preparedness. The experience of Project CLIMANDES I and II in Peru on the estimation of the socioeconomic benefits (SEB) of climate services adapted to users in pilot areas of the Andes, will be shared with the Project.

The effective end-user climate services through capacity building, communication and awareness will guide resource allocation at community, municipality and national level thus increasing resilience and improve the wellbeing of vulnerable populations over longer term. By engaging local government authorities and community members in identifying climate information needs linked to monitoring, forecasts and alerts, the project will lay the foundation for environment-related behavioral patterns and attitudes of future generations.

The exhaustive description of <u>social and</u> environmental benefits will be provided in the final proposal, after due assessments and consultations are carried out with the respective authorities.

Compliance with Adaptation Fund Environmental and Societal Policy

The project will be compliant with the Environmental and Social Policy (ESP) of the Adaptation Fund and will avoid negative impacts relating to the environmental and societal principles identified by the Fund. The proposed project seeks to fully align with Adaptation Fund's Environmental and Social Policy (ESP). For the concept note, the entire project, project components and activities will be screened to identify potential environmental and social risks and impacts using the 15 Adaptation Fund Principles.

With the information available at this stage the project is expected to fall into low risk category C. Information required to further assess this classification will be provided at the concept stage.

Overlap with other funding sources and engagement with NIEs

The project will not duplicate efforts of other initiatives or funding sources. Instead the project will seek synergysies with on-going and planned initiatives, and will seek engagement with the NIEs in Chile (AGCI) and Peru (PROFONAPE), regional/national institutions, and MIE (like FAO) in the region, and tap on the experiences and knowledge of completed projects and programs, which will lead to greater efficiency of resources use and maximize the final benefits and impacts. There are no regional projects that bring these countries together to address common climate related phenomenon, and apply similar approaches. Specifically, lessons will be drawn form the sample initiatives in each country.

PART III: IMPLEMENTATION ARRANGEMENTS

CIIFEN will support WMO and National Institutions for the project implementation. NMHSs will play a major rolein developing partnerships for the project implementation by taking the lead on national consultations and climate information co-production. CIIFEN is expected to lead the project implementation at the regional "common" level as well as to provide support to IDEAM, SENAMHI and DMC given their long experience in project implementation with regional institutions like the Inter-American Development Bank, World Bank, Latin America Development Bank, European Commission etc...

The identified country level project partners are:

- Colombia: National Hydrometeorological Institute IDEAM, Ministry of Agriculture and Rural Development (MADR), Agriculture and Livestock Institute (ICA), Agriculture and Livestock Research Institute (CORPOICA), , Rural Agricultural Planning Unit (UPRA), Tropical Agriculture Research Centre (CIAT), Energy National Operation Centre (CNO), Energy Market Experts (XM), Mine and Energy Planning Unit (UPME), Irrigation Management National Unit (UNGRD) and several private agricultural associations FEDEARROZ, FENALCE
- Chile: National Meteorological Service (DMC), Water General Directorate (DGA), Ministry of Agriculture (MINAGRI), Ministry of Environment (MMA) and Information, Monitoring and Prevention Unit at Ministry of Energy (MEN),
- Peru: National Hydrometeorological Service (SENAMHI), Ministry of Environment (MINAM), National Centre for Estimation, Prevention and Risk Disaster Reduction (CENEPRED), Regional Directorate for Agriculture (DRA) of Piura Regional Government, Ministry of Agriculture and Irrigation (MINAGRI), Ministry of Energy and Mining (MINEM) with Electricity General Directorate.

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

A. Record of endorsement on behalf of the government² Provide the name and position of the government official and indicate date of endorsement for each country participating in the proposed project/programme. Add more lines as necessary. The endorsement letters should be attached as annexes to the project/programme proposal.

Gladys Santis. Adaptation Officer, Ministry of Environment, Government of Chile	Date: 27 th December, 2017
Mabel Morales Saravia, General Director of Climate Change, Desertification and Water Resources, Ministry of Environment, Government of Peru	Date: 8 th ,January, 2018
Angélica Maria Mayolo Obregon Head of the Office of International Affairs Ministry of Environment and Sustainable Development, Government of Colombia	Date: 11 th January, 2018

B. Implementing Entity certification Provide the name and signature of the

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

I certify that this proposal has been prepared in accordance with guidelines provided by the Adaptation Fund Board, and prevailing National Development and Adaptation Plans (Colombia: National Development Plan 2010-2014 (Prosperidad para todos), National Climate Change Adaptation Plan, Green Growth envelope strategy and Law 1715 of 2014 encourages the diversification of energy supply with other non-conventional renewable sources (wind, biomass, among others) and Nationally Determined Contribution (NDC), Peru: National Strategy to Fight Desertification, National Plan on Disaster management (PLANAGERD), National Strategy on Water Resources, National Adaptation Plan for Agricultural Sector 2012-2021 and Nationally Determined Contribution (NDC) and Chile: Climate Change National Action Plan 2017-2022, Climate Change Adaptation Plan Agriculture Sectoral Plan, Energy Agenda and Nationally Determined Contribution (NDC)) and subject to the approval by the Adaptation Fund Board, commit to implementing the project/programme in compliance with the Environmental and Social Policy of the Adaptation Fund and on the understanding that the Implementing Entity will be fully (legally and financially) responsible for the implementation of this project/programme. Mary Power,

Director Development and Regional Activities Department World Meteorological Organization Signature

Implementing Entity Coordinator

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

Date: 15 th January, 2018	Tel. and email:
	+41 22 730 8003
	mpower@wmo.int
Project Contact Person: Jean-Paul Gaudechoux and Jose Camacho	
Tel. And Email: +41 79 514 4261; +41 730 22 8357, jpgaudechoux@wmo.int;	
jcamacho@wmo.int	