

TC ABSTRACT
RG-X1163
HYDRO-CLIMATE SERVICES FOR ADAPTATION TO CLIMATE CHANGE

I. Basic project data

- Country/Region: REGIONAL
- TC Name: HYDRO-CLIMATE SERVICES FOR ADAPTATION TO CLIMATE CHANGE
- TC Number: RG-X1163
- Team Leader: Fernando Miralles-Wilhelm (INE/WSA); Team Members: Irene Cartin (INE/WSA); Carlos DePaco (ORP/ORP); Guillermo Eschoyez (LEG/SGO); Alfred Grunwaldt (INE/ECC); and Raúl Muñoz (INE/WSA)
- Indicate if: KNOWLEDGE GENERATION AND DISSEMINATION
- If Operational Support, TC give number and name of Operation Supported by the TC: N/A
- Reference to Request¹: N/A
- Date of TC Abstract: 18 SEPTEMBER 2012
- Beneficiary (countries or entities which are the recipient of the technical assistance): REGIONAL
- Executing Agency and contact name: BANK EXECUTED
- IDB Funding Requested: 300,000 USD (PSG financed by SGTF: Skoll Global Threats Fund)
- Local counterpart funding, if any: NONE
- Disbursement period (which includes execution period): 24 Months
- Required start date: NOVEMBER 2012
- Types of consultants (firm or individual consultants): FIRM AND INDIVIDUAL CONSULTANTS
- Prepared by Unit: INE/WSA
- Unit of Disbursement Responsibility: INE/WSA
- Included in Country Strategy (y/n): N/A; TC included in CPD (y/n): N/A
- GCI-9 Sector Priority: CLIMATE CHANGE AND ENVIRONMENTAL SUSTAINABILITY

II. Objective and Justification

In the context of climate change, extreme events such as floods and droughts (the costliest natural disasters) are expected to alter in frequency and severity in the Latin America and Caribbean region. Shorter-scale climate variability patterns are also likely to shift, placing pressure on many activities such as food production and water supply systems that sustain large populations, as well as potentially damaging water and sanitation related infrastructures and sensitive ecosystems. There have been showed marked climate signals on multiple time scales, from seasonal to multi-decadal (e.g., Boulanger et al. 2005; Barreiro et al. 2010). Inter-annual climate variability has considerable impact on agriculture (crop yields and profits) and water resources (likelihood of droughts and floods, stream flow of the river and its tributaries that supply freshwater to growing populations and allow transportation of agricultural exports). Decadal climate variability could render not further viable systems that have been developed in response to increased rainfall in the last few decades if climate reverts to a drier epoch. In conclusion, basin areas are vulnerable to a range of extreme hydroclimate events, from widespread floods that displace urban and rural populations and disrupt productive activities and livelihoods, to almost unprecedented droughts that decreased crops production, all phenomena that occur at also a wide range of time scales, making climate adaptation a complex but required process.

¹ A copy of the Letter of Request, Programming/Portfolio Review Mission Aide Memoire or Report requesting the TC should be submitted with the Abstract.

To meet this challenge, translation of scientific knowledge decision-making and operations is essential to enhance the capacity of different socioeconomic sectors, governments and other decision-making entities to respond to climate variability and change impacts. Over the next few decades, climate information must support adaptation decisions, provide straightforward estimates of uncertainty, and meet the decision needs of targeted sectors. The ability to monitor and predict variations in climate has improved substantially thanks to enhancements in climate science, observations and models. However, the use of climate information in decision-making continues to lag the availability of new knowledge; and more importantly, the existing communication barrier between climate information producers and its users. Adaptation to climate variability and change, therefore, requires building institutional and human capacity and overcoming technological, economic, cultural, and institutional barriers. In order to address these problems, the concept of *climate services* has emerged, defined as the timely production and delivery of useful climate data, information and knowledge, i.e., the “services”, to stakeholders, decision makers, and other potential “users” of such services. The concept itself was proposed by the World Meteorological Organization (WMO), adopted at the 3rd World Climate Conference in 2009, and embraced by the UNFCCC through the Global Framework for Climate Services, released at the COP16 meeting in late 2010.

Based on this concept, the objective of this TC is to support development of specific hydro-climate services for a pilot basin in a collaborative approach with users, contributing to bridge the referred gaps through climate services tailored to the water resources sector (hydro) to address specific needs for mainstreaming (climate) adaptation into planning and decision-making in order to: i) increase the resilience of hydroclimate-sensitive sectors such as water resources management and agricultural production; and ii) facilitate sustainable societal adaptation to changing climate, mainly by improving the adaptation capacity to hydro-climate extreme events. Because of the recent series of severe drought events that have taken place in southeastern South America (2008 - 2011) and because socioeconomic losses due to unpreparedness (or lack of adaptation) have been well documented, we have chosen to focus on the development of climate services for adaptation to drought in the La Plata River Basin.

This project is aligned with the lending target of “climate change, sustainable energy and environmental sustainability” of the GCI9 Bank’s policy document.

III. Description of Activities

This is a Project Specific Grant (PSG) funded by the Skoll Global Threats Fund (SGTF). The project will support the development of methodologies and outputs consisting of the following three activities:

- *Gap analysis and validation of existing hydro-climate data and drought information in the La Plata River Basin:* review of current hydro-climate data, availability of information related to droughts in La Plata River Basin, and an assessment of the technical capacity (local “state of the art”) of its institutions for the development and delivery of hydro-climate services and products.
- *Development of Basin-wide hydro-climatic services for monitoring and adaptation to drought:* Based on the assessment carried out by the gap analysis and validation, this activity consists of the development and implementation of hydro-climatic services for adaptation to drought conditions, in close collaboration with key local stakeholders in the Basin.
- *Outreach for dissemination and capacity building workshops:* Translation of the findings of the previous two activities into practice-based guidance for the provision and use of hydro-climate services for adaptation for key users of climate services in the water sector of the basin, e.g., (water resources managers, basin council decision and policy makers).

These activities are further detailed in the TC Document for this operation.

IV. Budget

This subheading should state the total amount of funding needed, showing allocations for each component as per the table below.

Indicative Budget (Detailed Budget: IDBDOCS #)	
Activity	Total Funding (SGTF)
Gap analysis and validation of existing hydro-climate data and drought information	65,000
Development of Basin-wide Hydro-climatic Services for Adaptation to Drought	180,000
Outreach for Dissemination and Capacity Building Workshops	40,000
Administrative Fee	15,000(*)
TOTAL	US\$300,000

(*) Resources of this project to be received from SGTF will be provided to the Bank through a Project Specific Grant (PSG). A PSG is administered by the Bank according to the "Report on COFABS, Ad-Hocs and CLFGS and a Proposal to Unify Them as Project Specific Grants (PSGS)" (Document SC-114). As contemplated in these procedures, and in the "Cooperation Agreement between Skoll Global Threats Fund and Inter-American Development Bank for the Cofinancing of Programs and Projects", dated as of October X, 2012, the commitment from SGTF will be established through a separate administrative arrangement. Under such arrangement, the resources for this project will be administered by the Bank and the Bank will charge an administrative fee of 5% of the contribution, which is duly identified in the budget of this project.

V. Executing agency and execution structure

This is a Bank-originated TC focused on developing climate services as adaptation measures to climate change that can be used as a reference tool for similar interventions in other Bank member countries and regions. It is important that knowledge in the area of climate change adaptation and climate services development is cultivated in the Bank, and this TC offers a first clear opportunity to do so. The Bank will use the knowledge generated through this TC to the benefit of the borrowing member countries, specifically the beneficiary countries in the La Plata River Basin. The execution of this TC will provide a learning, knowledge transfer and data gathering opportunity for Bank staff involved in issues of water resources, vulnerability and adaptation to climate change, which is a new area of work that the Bank (and particularly the WSA division) has engaged in recently. Therefore, it is deemed critical that this TC is Bank-executed. The Bank will contract all consulting services (firms and individual) according to current corporate acquisitions policies and procedures.

VI. Project Risks and Issues

The primary risk for implementation of this TC project is the lack of commitment over time of the institutions and stakeholders involved in implementing the hydro-climate services developed through this TC. To mitigate this risk, previous conversations with climatological, hydrological and agricultural institutions in the La Plata River Basin have been initiated, most notably with CICPLATA, the likely beneficiary. An additional risk stems from the pioneering nature of this TC; there isn't much operational experience with the kinds of products that climate services will yield. We have therefore included peer review of all outputs of this TC by at least 2 anonymous reviewers (one within the Bank and one outside the Bank) to insure quality of the TC deliverables.

VII. Environmental and Social Classification

Following ESG's project classification process (Safeguard Policy Filter and Safeguard Screening Form) requirements, it has been determined that this project falls under Category C. No environmental assessment studies or consultations are required for Category "C" operations.