

## TC ABSTRACT

### I. Basic Project Data

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|--|---|
| ▪ Country/Region:  | REGIONAL/CID - Isthmus & DR   |
| ▪ TC Name:   | Supporting climate and disaster risk assessment processes to foster resilient and sustainable development   |
| ▪ TC Number:   | RG-T3328  |
| ▪ Team Leader/Members:   | ESQUIVEL GALLEGOS, MARICARMEN (CSD/CCS) TEAM LEADER; LACAMBRA AYUSO, SERGIO (CSD/RND) ALTERNATE TEAM LEADER; BARANDIARAN SALCEDO, DORIS MELISSA (VPS/ESG) ALTERNATE TEAM LEADER; GRUNWALDT, ALFRED HANS (CSD/CCS); SUAREZ VAZQUEZ, GINES (CSD/RND); ALVA, MARIA FERNANDA (CSD/CCS); JAIMES CASTELLANOS, IVONNE MARIA (CSD/RND); RAMIREZ BELLO, MARIA CECILIA (INE/INE); GOMEZ, JUAN CARLOS (CSD/CSD); HORI, TSUNEKI (CSD/RND); FRISARI, GIOVANNI LEO (CSD/CCS); ZULOAGA ROMERO, DANIELA (VPS/ESG) |
| ▪ Taxonomy:  | Research and Dissemination  |
| ▪ Number and name of operation supported by the TC:                | N/A   |
| ▪ Date of TC Abstract:   | 03 Aug 2018   |
| ▪ Beneficiary:   | the Latin-American and Caribbean Region   |
| ▪ Executing Agency:  | INTER-AMERICAN DEVELOPMENT BANK   |
| ▪ IDB funding requested:   | \$ 1,500,000.00   |
| ▪ Local counterpart funding:                                       | \$ 0.00   |
| ▪ Disbursement period:   | 26 months   |
| ▪ Types of consultants:  | Individuals; Firms  |
| ▪ Prepared by Unit:  | Climate Change  |
| ▪ Unit of Disbursement Responsibility:                             | Climate Chng & Sustainable Dev  |
| ▪ TC included in Country Strategy:                                 | No  |
| ▪ TC included in CPD:  | No  |
| ▪ Alignment to the Update to the Institutional Strategy 2010-2020: | Productivity and innovation   |

### II. Objective and Justification

- 2.1 The objective of this Technical Cooperation (TC) is to contribute with the ongoing work IDBG is leading in the region towards the improvement of existing methods and tools for climate and disaster risk analysis and the identification of resilience opportunities in the identification, preparation and implementation phases of projects. The results and lessons learned from the execution of this TC will be instrumental in helping Bank's member countries make a transition towards a more effective upstream risk assessment and resilience process. In a highly dynamic global change context, this can make a difference for vulnerable countries to successfully achieve their sustainable development goals and adaptation commitments under their National Determined Contributions (NDCs).
- 2.2 The effects of climate change and disasters triggered by natural hazards pose a significant threat to sustainable development in the Latin America and Caribbean (LAC) region. As noted by the Bank's Technical Note What is Sustainable Infrastructure, the region is one of the most vulnerable to the impacts of a changing climate. In 2017 it experienced severe losses from natural events, including floods in Peru that cost US\$3.1 billion and floods in Colombia that resulted in 329 fatalities (MunichRE NatCatService, 2017). Vergara et al. (2013) estimate that climate change will cause

damages costing US\$100 billion a year across the region by 2050. The impacts of climate change or physical climate risk are growing concerns, reducing the predictability of future infrastructure needs as well as increasing the vulnerability of assets (Reyer et al., 2017). As part of sustainable planning, development projects should take current and future risk and resilience opportunities into account in the design, construction, and operation phases.

Climate and disaster risk and resilience opportunities are not generally integrated within classic design and construction practices beyond standard building codes and design parameters, and most of these do not include climate change considerations. Proper studies and considerations are not usually undertaken as part of operations themselves, both in preparation and implementation. To address this challenge, countries have identified the need for clear methodologies and resources to undertake risk and resiliency studies. To address this gap, and with the support of resources from technical cooperation, the Bank has designed a methodology to conduct assessments to identify climate and disaster risks and resilience opportunities in relevant projects. This approach has been piloted in more than ten (10) Bank-financed projects in preparation and execution and is ready for broader application. This methodology will also be part of the Massive Open Online Course (MOOC) currently being developed by KNL and RND for online training on disaster and climate risk assessment in public investment systems, which will further strengthen capacities in the LAC region. Lessons learned so far from these pilots include: (i) the importance of completing hazard and climate change information in combination with project criticality and project structural characteristics, and (ii) having qualitative approaches such as mode of failures analysis, in addition and prior to proceeding with quantitative methods for risk analysis.

In the last recent years financial regulators and supervisors have acknowledged the threat posed by climate-related risks for the stability of financial markets. In 2015 the Financial Stability Board has created a Task-Force for Climate-related Financial Disclosures (TCFD) to help financial markets identify, assess, manage and disclose climate risks; and more recently 12 central banks (including Central Bank of Mexico) have established a new Network for the Greening of the Financial System (NGFS) and the management of climate related risks. As the recommendations from the work of the TCFD take hold and the new Network produces its first results, central banks and financial regulators in the region are assessing their role, tools and challenges (especially on data and instruments availability) to identify and understand climate risks for their countries and assess their potential impacts for financial markets.

### **III. Description of Activities and Outputs**

#### **3.1 Component 1: Implementation of climate and disaster risk and resilience opportunities in IDB projects and capacity building.**

Component 2: Robust analysis under deep uncertainty.

Component 3: Production and implementation of climate risk management tools in financial markets for Central Banks and Financial Supervisors.\*  
(\*The IDB personnel will support and supervise the execution of this TC through their knowledge and will specifically provide technical and strategic support to high level training and meetings. By financing these costs, the Bank's administrative Budget is not being complemented nor supported. The amount allocated for supervision include the costs associated with the participation of Bank sector specialists in the program for purposes of monitoring and supervising of the TC products and collaborating with the consultants and stakeholders from academia and projects involved during the elaboration of the products and the capacity building activities. This is required to be able to monitor the products of the TC and to disseminate them to all the beneficiaries. Participation in the TC of sector specialist is essential for achieving the objectives of the

TC and the specific tasks are necessary for the implementation of this operation and do not constitute functions or tasks that may be considered routinely by the Divisions or part of the general tasks covered by administrative budget resources.)

- 3.2 **Component I: Implementation of climate and disaster risk and resilience opportunities in IDB projects and capacity building.** Implement the tools and methodologies that the Bank has produced to assess climate and disaster risk and resilience opportunities in projects in preparation and implementation. Also, support clients in the LAC region to improve their understanding, knowledge, and experience related to the assessment of climate and disaster risks and resilience opportunities at the project level, and to standardize minimum criteria.
- 3.3 **Component II: Robust analysis under deep uncertainty.** This component will finance the application of the XLMR framework to a group of relevant IDB-financed project. The aim is to illustrate advantages and disadvantages of this alternative and complementary approach to assess risks and its associated uncertainties in a project from the planning stage
- 3.4 **Component III: Production and implementation of climate risk management tools in financial markets for Central Banks and Financial Supervisors.** Support central banks and financial supervisors (of banking, investment and insurance markets) in the region in developing tools, protocols and analytical instruments to identify climate risks. The component will focus on the production of pragmatic and practical methods to capture climate relevant data and translate them into financial metrics that could be used by financial analysts and risk managers in financial institutions
- 3.5 **Component IV: Supervision and Monitoring of Activities.** Resources to support consulting services for the supervision and monitoring of activities under this technical cooperation

#### IV. Budget

Indicative Budget

| Activity/Component  | IDB Funding | Counterpart | Total Funding |
|---|-------------|-------------|---------------|
| Implementation of climate and disaster risk and resilience opportunities in IDB projects and capacity building                  | \$ 630,000  | \$ 0        | \$ 630,000    |
| Robust analysis under deep uncertainty  | \$ 400,000  | \$ 0        | \$ 400,000    |
| Production and implementation of climate risk management tools in financial markets for Central Banks and Financial Supervisors | \$ 400,000  | \$ 0        | \$ 400,000    |
| Supervision and Monitoring of Activities  | \$ 70,000   | \$ 0        | \$ 70,000     |

#### V. Executing Agency and Execution Structure

- 5.1 The IDB will be the executing agency of the funds, since the TC requires central coordination. The execution period is expected to be no longer than 24 months and the disbursement period 26 months.
- 5.2 The Bank is in a process of mainstreaming risk and resilience opportunities in the project pipeline. The execution by the Bank will help strengthen the sectoral coordination needed to achieve this within the Bank and with client countries. Although the operation is executed by the IDB, it has a robust component on capacity building for client countries.

The technical responsibility for supervision within the Bank will be in charge of VPS/CCS, in close coordination with VPS/RND and VPS/ESG, and the different Bank Divisions participating in the project. The disbursements will be made with support of the Bank's procurement and contract officers.

## **VI. Project Risks and Issues**

- 6.1 The main risk of this TC is that funding for the four components remains unused. This risk will be mitigated by identifying eligible projects early in the process.

## **VII. Environmental and Social Classification**

- 7.1 The ESG classification for this operation is "C".