TC Abstract

I. Basic project data

• Country/Region :	ECUADOR/CAN - Andean Group
• TC Name :	Support to ensure the resilience of public infrastructure and service systems after the earthquake in Ecuador
• TC Number :	EC-T1354
• Team Leader/Members :	INURRITEGUI MAURTUA,MARISOL - Team Leader HORI,TSUNEKI - Specialist LACAMBRA AYUSO,SERGIO - Specialist RESTREPO,LISA SOFIA - Project Assistant CHRETIEN, LOUIS-FRANCOIS - Attorney
• Indicate if : Operational Support, Client Support, or Research & Dissemination.	Client Support
• If Operational Support TC, give number and name of Operation Supported by the TC:	
• Reference to Request :(IDB docs #)	
• Date of TC Abstract :	09 Aug 2016
• Beneficiary (countries or entities which are the recipient of the technical assistance):	Gobierno de Ecuador
• Executing Agency and contact name (Organization or entity responsible for executing the TC Program) {if Bank: Contracting entity} { if the same as Beneficiary, please indicate}	EC-MECBID - N/A
• IDB Funding Requested :	$ 1,500,000.00
• Local counterpart funding, if any :	$ 0.00
• Disbursement period (which includes execution period):	24 months
• Required start date :	
• Types of consultants (firm or individual consultants):	Individuals Firms
• Prepared by Unit :	Rural Dev & Natural Disasters
• Unit of Disbursement Responsibility :	COUNTRY OFFICE ECUADOR
• Included in Country Strategy (y/n): TC included in CPD (y/n):	No No
• GCI-9 Sector Priority	Addressing the needs of small and vulnerable countries , Infrastructure for competitiveness and social welfare

II. Objective and Justification

The main objective of this Technical Cooperation (TC) is to support the Government of Ecuador to ensure the resilience of public infrastructure and service systems after the Earthquake occurred in April. The specific outputs include: (i) capacity building of the national authority responsible for the reconstruction (component 1); (ii) design of resilient public infrastructure and service systems in the sectors prioritized by the government (component 2); and (iii) design a program to improve the resilience of public infrastructure and service systems (component 3). This TC will focus on institutional strengthening, technical knowledge enhancement and the design of reconstruction and mitigation works; however, the implementation of such works is out of the scope of this TC. The geographical area targeted by this TC will be the provinces that were most affected by the Earthquake last April and subsequent aftershocks. Given Japan´s vast experience in designing and implementing earthquake-resilient public infrastructure and service systems, this TC hopes to take advantage of and transfer Japanese experience and expertise to Ecuador.

On April 16th, 2016, a 7.8 magnitude earthquake struck the coastal region of Ecuador, directly affecting nearly 8 million inhabitants in 6 provinces. In a preliminary statement, the United Nations reported that approximately 720,000 people are currently in need of immediate assistance. National and International resources have been mobilized to cover main humanitarian needs in the region. Furthermore, International Organizations have started mobilizing immediate assistant efforts for rehabilitation and reconstruction. The challenges Ecuador will face in the coming months, beyond immediate emergency assistance, will be related to i) reconstruction of critical infrastructure in the most affected areas, and ii) developing mechanisms for enhancing resilience of public infrastructure in the face of future events.

III. Description of activities and outputs

Component 1. Capacity building of the National Authority responsible for the reconstruction after the earthquake (US$250,000). The aim of this component is to enhance the institutional capacity to mainstream resilience in the reconstruction planning and implementation of public infrastructure and service systems. The main beneficiary of this component will be the Technical Secretary for Reconstruction. The final product of this component will be the incorporation of resilience considerations in the reconstruction plan, specifically for public infrastructure and service systems. Individual consultants specialized in areas such as urban planning, civil engineering, building structure, geotechnical engineering, among others, may be hired for this purpose.

Component 2. Design resilient public infrastructure and service systems (US$ 750,000). The aim of this component is to support the national government in elaborating the designs of earthquake resilient works of public infrastructure and service systems affected by the April seism. It is recommended that no more than two sectors will be prioritized by the Government, such as education, water and sanitation or electricity. The beneficiaries of this component will be the line sector ministries prioritized. Several consulting firms will be hired to provide the following services according to the needs of the specific sector: i) an inventory of the facilities/infrastructures in the area affected by the earthquake; ii) a review of existing regulations and standards which apply to the design and construction of infrastructure; (iii) a detailed damage assessment of the facilities/infrastructures, including an analysis of associated causes that contributed to the damage and the vulnerability of the system, in order to identify the needs for reconstruction and further resilience strengthening of public infrastructure and service systems; iv) specific designs on how to increase the resilience of the specific infrastructure and service systems; and v) based on international best practices, a proposal of general standards and cost effective measures (including if required the actualization of national norm) required to increase the resilience of public infrastructure and service systems to be designed and built in the future.

Component 3: Design a program to improve the resilience of public infrastructure and service systems (US$ 500,000): Given the analysis of the previous components, this component will design an investment program to increase the resilience of public infrastructure and service systems of the country. The main beneficiary of this component will be the line ministries prioritized. Consultants will be hired to implement the following activities: (i) final designs for the investment projects selected; (ii) cost-benefit analysis; (iii) institutional analysis; (iv) project executing plan; (v) regulations manual, among others.

Outcomes

Name:

Components

Name: Capacity building of the National Authority responsible for the reconstruction after the earthquake

Description: The aim of this component is to enhance the institutional capacity to mainstream resilience in the reconstruction planning and implementation of public infrastructure and service systems.

Name: Design resilient public infrastructure and service systems

Description: The aim of this component is to support the national government in elaborating the designs of earthquake resilient works of public infrastructure and service systems affected by the April seism.

Name: Design a program to improve the resilience of public infrastructure and service systems

Description: Given the analysis of the previous components, this component will design a program to increase the resilience of public infrastructure and service systems of the country.

IV. Budget

Indicative Budget

Activity/Component	IDB/Fund Funding	Counterpart Funding	Total Funding
Capacity building of the National Authority responsible for the reconstruction after the earthquake	$ 250,000.00	$ 0.00	$ 250,000.00
Design resilient public infrastructure and service systems	$ 750,000.00	$ 0.00	$ 750,000.00
Design a program to improve the resilience of public infrastructure and service systems	$ 500,000.00	$ 0.00	$ 500,000.00

V. Executing agency and execution structure

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Given the emergency, it is urgent to contract the consultancies in the shortest time possible. Currently, national processes in Ecuador require different institutions to approve the commitment of resources at different stages before it is finally hired, which may delay this operation. Therefore, it is more effective if the Bank is the Executing Agency in close coordination with the beneficiaries of this TC.

VI. Project Risks and issues

The coordination among the Technical Secretary for Reconstruction, sector ministries, local institutions and other institutions necessary for resilient public service systems may present a risk to execution delay of the TC. This risk will be mitigated through the establishment of a solid coordination mechanism during the TC execution, including periodic meetings and frequent dialogues among the Bank and national institutions. Such coordination mechanism is also used for the Contingent Loan for Natural Disasters Emergency (EC-X1014) which is currently being executed.

VII. Environmental and Social Classification

The ESG classification for this operation is [c]