

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

ECUADOR

BUILDING COMMUNITY RESILIENCE IN THE GALAPAGOS

(EC-T1617)

PROJECT DOCUMENT

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PROJECT SUMMARY

Operation Type:	Technical Cooperation
Sector:	ENVIRONMENT AND NATURAL DISASTERS
Subsector:	INTEGRATED DISASTER RISK MANAGEMENT
TC Taxonomy:	Client Support
Project Number under the Operational Support Taxonomy:	N/A
Technical Responsible Unit:	PTI/CTI-Competitiveness, Technology, and Innovation Division
Unit with Disbursement Responsibility (UDR):	CAN/CEC-Country Office Ecuador
Executing Agency:	Inter-American Development Bank

PROJECT OBJECTIVE

To strengthen community resilience in the Galapagos Islands to climate and disaster risks. This will be achieved through the implementation of the following: (i) diagnostics and community engagement; (ii) development of resilient infrastructure assessments; (iii) sustainable financing and investment; and (iv) strengthening capacity building and knowledge for local governments and communities.

FINANCIAL INFORMATION

Financing Type	Fund	Amount in US\$
TCN - Nonreimbursable	JSF - Japan Special Fund	800,000
Total IDB Financing		800,000
Counterpart Financing		0
Total Project Budget		800,000
Donors:	N/A	
Disbursement Period:	36 months	
Execution Period:	36 months	

ADDITIONAL FINANCIAL INFORMATION

N/A

I. JUSTIFICATION AND OBJECTIVE

- 1.1 **Diagnostic.** Located 972 km off the coast, the Galapagos Islands comprises four inhabited islands with a population of approximately 31,600, along with six smaller islands and 107 islets. Declared a United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage Site in 1978, the archipelago is the world's last oceanic system that still retains 95% of its original biodiversity, representing the global "gold standard" for biological and ecosystem integrity. Situated on the geologically active Nazca Plate, which shifts eastward at approximately 7 cm per year, the region is highly exposed to geological hazards, including frequent seismic activity, volcanic eruptions, and tsunamis. The island also faces growing climate-related hazards such as flooding, droughts, and extreme El Niño/La Niña episodes, which may result in potential impacts on marine and terrestrial ecosystems, damage infrastructure, and affect local livelihoods.
- 1.2 Although IDB-supported investment projects, including the National Early Warning System Program [3913/OC-EC](#)¹ and its second phase Strengthening of the Early Warning System [5787/OC-EC](#)², have contributed to progress in hazard monitoring and early warning – particularly through the establishment of the Tsunami Early Warning System and enhanced seismic monitoring – overall climate and disaster resilience in the Galapagos remains uneven. Galapagos faces unique challenges (such as volcanic soils, coastal salt-corrosion, multi-hazard exposure, and isolated infrastructure systems), that require tailored land use planning and guidelines. The rapid growth of tourism, a key pillar of the Galapagos economy, creates additional pressures on fragile ecosystems and local infrastructure. Increasing demand for housing, transportation, water, and waste management has expanded settlement areas into zones with higher exposure to floods, landslides, and coastal hazards. Without adequate planning guidelines and risk-informed, risk-sensitive development standards, these pressures heighten vulnerability for both residents and ecosystems. Structural and institutional constraints mean that responses often remain reactive, as seen during the COVID-19 pandemic and the recent 2023–2024 El Niño event. Strengthening hazard resilience will require more systematic attention to inhabited zones outside the National Park, along with improved access to risk information.
- 1.3 To address these challenges, the project will combine Community-based Disaster Risk Management (CBDRM) and Ecosystem-based Disaster Risk Reduction (ECO-DRR) approaches, reflecting the specific institutional and environmental context of the Galapagos. Disaster risk in the islands is shaped not only by exposure to natural hazards, but also by fragmented governance arrangements, strong dependence on local livelihoods, and the critical role of fragile ecosystems in buffering risks. In this context, stand-alone, top-down DRM interventions or purely engineered solutions are insufficient to achieve sustainable resilience outcomes. CBDRM provides a systemic framework that integrates action across multiple levels of governance, recognizing that sustainable impact in the

¹ Approved on February 8, 2017, for US\$13,922,581 Project Status – Closed. Project Completion Report (PCR) available [here](#).

² Approved on September 20, 2023, for US\$11,937,472 Project Status – Implementation.

Galapagos requires coordination with national and local authorities, academic institutions, the private sector, civil society, and local communities. Complementing, ECO-DRR, which leverages the islands' unique ecosystems as natural protective buffers, directly addressing the current underutilization of nature-based strategies in hazard-risk management. By integrating ecosystem restoration and conservation into DRM, ECO-DRR enhances resilience while remaining consistent with the ecological constraints that define development pathways in the Galapagos Together. This integrated approach will guide interventions that combine community engagement, strengthened governance, ecosystem restoration, risk-informed infrastructure, and sustainable resource management to build resilience across social, ecological, and economic systems.

- 1.4 In line with the Constitution, the Organic Law of the National System for Risk Management and Emergencies, and related regulations, the National Government is responsible for disaster risk management and disaster risk financing throughout the national territory. In the Galapagos Islands, this mandate is exercised through the Consejo de Gobierno del Régimen Especial de Galápagos (CGREG), which brings together National Government, subnational authorities, and local stakeholders. On the other hand, Escuela Superior Politécnica del Litoral (ESPOL), one of Ecuador's leading academic institutions, combines scientific expertise, innovation, and territorial engagement. The presence and technical capacity of CGREG, ESPOL and other relevant government institutions such as the Galapagos National Park, the Ministry of Economy and Finance, the Secretariat for Risk Management (SGR), and the Emergency Response System (ECU911) position them as key stakeholders and strategic partners to carry out the priority activities.
- 1.5 **Request.** As part of the annual dialogue between the Bank and IDB borrowing member countries to establish the operational program, the operation has been selected to be processed and approved. On August 26, 2025, the IDB received an official communication from the Ministry of Economy and Finance of Ecuador, through Official Letter No. MEF-MEF-2025-0536-O (Annex I), for ESPOL to be designated as beneficiary of the Non-Reimbursable Technical Cooperation (TC) "Building Community Resilience in the Galapagos" EC-TC1617.
- 1.6 **Objective.** The objective of the project is to strengthen community resilience in the Galapagos Islands to climate and disaster risks. This will be achieved through the implementation of the following components: (i) diagnostics and community engagement; (ii) development of resilient infrastructure assessments; (iii) sustainable financing and investment; and (iv) strengthening capacity building and knowledge for local governments and communities.
- 1.7 **Complementarity.** The proposed TC complements and deepens previous Bank interventions in the sector by addressing gaps that earlier operations were unable to fully cover. While the National Early Warning System Program 3913/OC-EC and Strengthening of the Early Warning System 5787/OC-EC, reinforced Ecuador's national monitoring infrastructure, alert communication systems, and tsunami preparedness, these investments were largely concentrated in urban areas on the mainland and did not extend comprehensive support to the Galapagos Islands. These projects generated progress in hazard monitoring, siren installation, and community drills, highlighting some remaining key challenges, particularly in

generating systematic risk information for non-urban areas, integrating ECO-DRR, and reinforcing community-level resilience. Fragmented coordination among institutions and the lack of risk data for areas outside the National Park further constrained the use of the systems installed. By adopting a combined CBDRM and ECO-DRR approach, the proposed TC complements the Bank's past investments by shifting the emphasis from primarily monitoring-focused actions to a more integrated, community-oriented and ecosystem-sensitive model of resilience. It also strengthens institutional arrangements and territorial governance, advancing the sector's strategic vision of risk-informed development, adaptive capacity building, and inclusive climate resilience across vulnerable territories.

- 1.8 **Strategic Alignment.** The TC aligns with the IDB Group's Institutional Strategy 2024-2030: Transforming for Scale and Impact (CA-631) by supporting the objectives of strengthening sustainable growth, addressing climate change, and reducing poverty and inequality. It also aligns with the operational focus areas of: (i) Biodiversity, Natural Capital through multi-hazard exposure and vulnerability assessments that incorporate ecosystem considerations, multi-stakeholder coordination that integrates ecosystem knowledge into decision-making, risk information dissemination, and the integration of CBDRM and ECO DRR approaches into urban planning; (ii) Institutional Capacity, Rule of Law, and Citizen Security, by establishing multi-agency coordination mechanisms (government–CGREG–GNP–NGOs–communities), strengthening institutional capacities, improving data governance and decision traceability, and identifying capacity gaps to prioritize investments in compliance with established procedures; (iii) Climate Action, Sustainable, Resilient, and Inclusive Infrastructure by aligning national climate commitments with local action, generating climate- and disaster-informed planning inputs at the community level, and supporting preparedness and last-mile early warning capabilities to enhance climate resilience. It also aligns with the IDB's Country Strategy with Ecuador 2022–2025 (GN-3103-1)³, specifically Pillar II, which prioritizes environmental sustainability and the strengthening of national and subnational disaster risk management capacities. Additionally, the operation supports the IDB's Sustainable Infrastructure Strategy (GN-2710-5) by promoting resilient, inclusive, and sustainable solutions tailored to fragile ecosystems. It is consistent with the Disaster Risk Management Policy (GN-2354-5) and the Sendai Framework for Disaster Risk Reduction 2015–2030, through its focus on risk-informed development, institutional strengthening, and climate adaptation. Finally, the TC aligns with the thematic priorities of the Japan Special Fund (JSF), by fostering quality, locally grounded infrastructure and integrated planning processes to enhance resilience in the Galapagos.
- 1.9 The project adds value by integrating CBDRM and ECO-DRR approaches within the governance framework of the Galapagos, strengthening institutions such as the CGREG and enhancing ESPOL's role as a technical and academic partner. Through these actions, the TC contributes to national strategies, reinforces sector programs, and supports communities, institutions, and the tourism-dependent economy to be better prepared to manage multi-hazard risks across the archipelago.

³ The IDB's Country Strategy with Ecuador for 2026 is currently under preparation.

- 1.10 **Donor.** The operation contributes to JSF's focus on quality infrastructure and resilience against natural disasters. Japan has a long-standing global leadership in tsunami modeling, climate projections, resilient infrastructure, and community-centered preparedness, drawing on lessons from its experience with major disasters such as the 2011 Great East Japan Earthquake. The project aligns closely with JSF's priorities by enabling the transfer of Japanese knowledge and expertise tailored to the unique multi-hazard context of the Galapagos Islands. Through technical cooperation and the participation of Japanese research institutions, the project will incorporate international best practices and high-quality standards in early warning systems, governance, CBDRM, and ECO-DRR integration. This partnership will enhance the technical depth, innovation, and long-term sustainability of the project's outcomes.

II. COMPONENTS

- 2.1 **Components 1. Diagnostics and Community Engagement (US\$250,000).** The objective of the component is to strengthen early warning capabilities and risk informed decision-making at the community level by enhancing risk assessments and information sharing, and by supporting coordination among key stakeholders, thereby laying the foundations for a community-based Multi-Hazard Early Warning System (MHEWS).

- a. Key activities under this component include: (i) developing assessments and mappings to identify multi-hazard exposure, social vulnerability, and underlying risk factors across the islands, covering hazards such as tsunamis, drought, flooding, earthquakes, volcanic eruptions, climate change-related events and public health crises; (ii) establishing multi-stakeholder coordination mechanisms that bring together government agencies, NGOs, local communities and experts to promote knowledge sharing among national and international actors, and to support efficient decision-making for climate and disaster risk reduction; and (iii) designing and implementing dissemination and communication strategies to provide communities and stakeholders with access to risk information, enabling risk-informed planning, preparedness and emergency response.
- b. Expected outputs include the development of a comprehensive framework for implementing a community-based MHEWS across the populated islands, which integrates multi-hazard risk assessments and mapping (including exposure, social vulnerability, and underlying risk factors), multi-stakeholder coordination mechanisms, and dissemination and communication strategies into a coherent system for risk monitoring, information sharing and decision-making.
- c. Individual Consultants will be hired to develop assessments, promote knowledge sharing, and design and implement dissemination and communication strategies.

- 2.2 **Components 2. Development of Resilient Infrastructure Assessments (US\$150,000).** The objective of this component is to support the resilience of critical infrastructure and territorial systems in the Galapagos Islands by conducting vulnerability assessments, improving the identification and

prioritization of infrastructure sectors and their needs, and strengthening the integration of CBDRM and ECO-DRR into urban planning, thereby reducing their vulnerability to climate and disaster risks.

- a. Activities under this component include: (i) conducting vulnerability assessments of critical infrastructure and surrounding systems to climate and natural hazard risks; (ii) developing complementary institutional and sectoral assessments to identify and prioritize vulnerable and critical infrastructure sectors and their needs; and (iii) designing strategies that integrate CBDRM and ECO-DRR into urban planning, identifying and promoting potential effective nature-based solutions (such as wetland restoration, vegetative buffer zones, or green infrastructure approaches for stormwater management, among others).
- b. Expected outcomes include improved vulnerability assessments, the identification and prioritization of vulnerable and critical infrastructure sectors and needs and strengthened integration of CBDRM and ECO-DRR considerations into urban planning, including the identification of feasible nature-based solution interventions where relevant.
- c. Individual Consultants will be hired to conduct assessments, design strategies that integrate CBDRM and ECO-DRR, and promote effective nature-based solutions.

2.3 Component 3. Sustainable Financing and Investment (US\$150,000). The objective of this component is to strengthen fiscal preparedness, reduce the financial impact of natural hazards on governments, businesses, and communities, and promote long-term resilience in the Galapagos Islands.

- a. Key activities under this component include: (i) developing disaster risk financing strategies tailored to the Galapagos Islands and its stakeholders; and (ii) designing innovative mechanisms for tsunamis or other natural hazards, such as parametric insurance schemes.
- b. The design of these instruments will draw on Japanese experience and regional best practices and will be executed in coordination with CGREG, the Galapagos National Park, and other relevant government authorities.
- c. Expected outcomes include analytical inputs and recommendations to inform the potential establishment of long-term financial mechanisms to support CBDRM and ECO-DRR-related investments.
- d. Firms will be hired to develop disaster risk financing strategies, as well as to design innovative mechanisms for tsunamis and other natural hazards.

2.4 Component 4. Strengthening Capacity Building and Knowledge for Local Governments and Communities (US\$250,000). The objective of this component is to strengthen institutional and human capacities to support coordinated, adaptive, and sustainable disaster risk management.

- a. Key activities under this component include: (i) strengthening local technical and institutional capacities for disaster management through targeted support to education and applied research in disaster risk reduction, including technical exchanges, academic collaboration, and applied research initiatives, to generate policy-relevant knowledge that informs the implementation of CBDRM and ECO-DRR approaches in the Galapagos Islands; (ii) implementing targeted training programs for staff from local governments, emergency response institutions, and relevant sectoral agencies, focusing on disaster preparedness, response coordination, and the practical application of risk and vulnerability information to strengthen disaster risk management capabilities; and (iii) implementing monitoring, reporting, and resilience studies to support continuous learning on disaster risk management and resilience.
- b. Expected outcomes include strengthened institutional and human capacities through training and academic collaboration, enhanced applied research and knowledge generation in disaster risk reduction, and monitoring and analytical products to support learning, coordination, and improved disaster risk management practices.
- c. Individual Consultants and a Firm will be hired to support education and applied research in disaster risk reduction, implement training programs, and to monitor, report and perform resilience studies to support learning on disaster risk management.

2.5 **Expected Results** include (i) the development of a comprehensive framework for implementing a community-based MHEWS across the populated islands, which integrates multi-hazard risk assessments and mapping (including exposure, social vulnerability, and underlying risk factors), multi-stakeholder coordination mechanisms, and dissemination and communication strategies into a coherent system for risk monitoring, information sharing and decision-making; (ii) improved vulnerability assessments, prioritization of infrastructure sectors and needs, and strengthened integration of CBDRM and ECO-DRR considerations into urban planning, including the identification of feasible nature-based solution interventions where relevant; (iii) improved financial resilience in the Galapagos Islands through strengthened disaster risk financing and innovative insurance mechanisms that reduce the impacts of natural hazards; and (iv) strengthened institutional and human capacities through training and academic collaboration, enhanced applied research and knowledge generation in disaster risk reduction, and monitoring and analytical products to support learning, coordination, and improved disaster risk management practices.

2.6 **Beneficiaries.** The project will directly benefit the local communities in the Galápagos Islands, while also contributing to the protection of the large tourist population that visits the archipelago each year. It will strengthen the capacities of local institutions, civil society, and the private sector, while enhancing ESPOLE's role as a key technical partner. Together, these actions will reinforce local resilience and help ensure that both people and institutions are better prepared to manage multi-hazard risks.

III. BUDGET

- 3.1 The TC will be funded by the Japan Enhanced Initiative for Quality Infrastructure, Resilience against Disaster and Health (JEI). The Japan Special Fund (JEF) expects to commit US\$800,000 to this project. No local counterpart is required, and the implementation period is 36 months.
- 3.2 The distribution of project resources is shown in the indicative budget below:

Components	JSF/IDB Funding	Total
Component 1: Diagnostics and Community Engagement	US\$250,000	US\$250,000
Component 2: Development of Resilient Infrastructure Assessments	US\$150,000	US\$150,000
Component 3: Sustainable Financing and Investment	US\$150,000	US\$150,000
Component 4: Strengthening Capacity Building and Knowledge for Local Governments and Communities	US\$250,000	US\$250,000
Total	US\$800,000	US\$800,000

IV. EXECUTION STRUCTURE

- 4.1 **The IDB as Executing Agency.** The IDB as Executing Agency. The TC will be executed by the IDB, at the request of the beneficiary, in accordance with the Bank's Technical Cooperation Policy (GN-2470-2) and the Procedures for the Processing of Technical Cooperation Operations and Related Matters (OP-619-4). It will be executed through the Unit of PTI/CTI, given its experience in the preparation and implementation of the operational and technical instruments proposed for this type of operation, as well as its technical expertise in this field, in coordination with CSD/DRM, IFD/CMF and CSD/BNC.
- 4.2 ESPOL has requested the IDB to act as Executing Agency given the specific operational, fiduciary, and procurement requirements associated with the project, for which the Bank is best positioned to provide the necessary compliance and timely implementation. The activities financed by this TC will be implemented in close partnership with ESPOL, which maintains strong collaboration networks with key public and private stakeholders in the Galapagos Islands. ESPOL will support the IDB by providing essential information, facilitating effective coordination with local actors, engaging local communities and organizations, and supporting the IDB in the oversight of consultants' work. The activities will also involve the active participation of CGREG the Galapagos National Park, and other relevant public authorities, including the Ministry of Economy and Finance, the SGR, and the ECU911.
- 4.3 **Procurement.** All procurement to be executed under this Technical Cooperation have been included in the Procurement Plan (Annex IV) and will be hired in compliance with the applicable Bank policies and regulations as follows: (a) Hiring

of individual consultants, as established in the regulation on Complementary Workforce (AM-650) and (b) Contracting of services provided by consulting firms in accordance with the Corporate procurement Policy (GN-2303-33) and its Guidelines.

- 4.4 **Monitoring, Reporting, and Supervision.** The monitoring of the progress and quality of the activities financed by this TC will be carried out directly by the IDB, through the PTI/CTI Division. The TC team leader will be responsible for reviewing, monitoring and overseeing the proper execution of the project, according to the results framework proposed for the operation, with the support of the project team, the Division Operation Analyst and the County Office Operation Analyst
- 4.5 **Origination and Reporting to Donors.** The project team will be responsible for the preparation and submission, to the donor of the project reporting, in compliance with the stipulations of the Administration Agreement.

V. POTENTIAL RISKS

- 5.1 Some potential risks were identified. First, there is the limited adoption of planned outputs into formal policies or long-term plans, which could undermine the sustainability of the expected results. To mitigate this risk, the project will incorporate a multi-stakeholder coordination mechanism and targeted training programs to facilitate policy dialogue and institutional uptake, along with a Sustainable Financing and Investment component that will link DRR strategies to long-term budget planning and promote local ownership. Second, the geographic dispersion of the islands, potential political shifts, and limited coordination across subnational and national entities due to differing mandates, priorities, and regulatory frameworks, which could create implementation delays and affect the scope and quality of the results. These risks will be mitigated through the adoption of a unified governance framework, the clear definition of roles and responsibilities, strong communication mechanisms, the strategic use of past successful experiences in multi-actor coordination, and institutional collaboration with key stakeholders, such as ESPOL, CGREG, the Galapagos National Park, the Ministry of Economy and Finance, the SGR, and the ECU911, among others. Finally, a third risk relates to the generation of technical studies that do not adequately reflect local needs and therefore fail to translate into concrete operational results, a situation observed in previous interventions in the archipelago. To address this risk, and in line with the risks identified above, the project will include continuous institutional review and feedback throughout the project cycle, from design through implementation and final validation, particularly in close coordination with CGREG the Galapagos National Park, and other relevant government institutions.
- 5.2 **Intellectual Property.** The knowledge products generated under this TC will be owned by the Bank and may be made publicly available under a Creative Commons license. However, intellectual property rights may also be licensed and/or transferred through specific contractual agreements to be developed with the advice of the Legal Department.

VI. EXCEPTIONS TO BANK POLICIES

6.1 None.

VII. ENVIRONMENTAL AND SOCIAL ASPECTS

7.1 This Technical Cooperation is not intended to finance pre-feasibility or feasibility studies of specific investment projects or environmental and social studies associated with them; therefore, this TC does not have applicable requirements of the Bank's Environmental and Social Policy Framework (ESPF).

REQUIRED ANNEXES:

- [Annex I: Request from Client](#)
- [Annex II: Results Matrix](#)
- [Annex III: Terms of Reference](#)
- [Annex IV: Procurement Plan](#)