

TC DOCUMENT

I. Basic Information for TC

▪ Country/Region:	REGIONAL
▪ TC Name:	Rolling-Out of the Methodology to Enhance Resilience to Disaster and Climate Change Risk in IDB projects
▪ TC Number:	RG-T3528
▪ Team Leader/Members:	Tanaka, Hideharu (CSD/RND) Team Leader; Lacambra Ayuso, Sergio (CSD/RND) Alternate Team Leader; Barandiaran Salcedo, Doris Melissa (VPS/ESG); Esquivel Gallegos, Maricarmen (CSD/CCS); Gomez, Juan Carlos (CSD/CCS); Jaimes Castellanos, Ivonne Maria (CSD/RND); Negret Garrido, Cesar Andres (LEG/SGO); Valle Porrua, Yolanda (CSD/RND); Zuloaga Romero, Daniela (VPS/ESG)
▪ Taxonomy: ¹	Research and Dissemination
▪ Operation Supported by the TC:	N/A
▪ Date of TC Abstract authorization:	18 Jul 2019
▪ Beneficiary:	Regional
▪ Executing Agency and contact name:	Inter-American Development Bank
▪ Donors providing funding:	Japan Special Fund(JSF)
▪ IDB Funding Requested:	US\$1,500,000.00
▪ Local counterpart funding, if any:	US\$0
▪ Disbursement period (which includes Execution period):	24 months
▪ Required start date:	December 2019
▪ Types of consultants:	Individuals; Firms
▪ Prepared by Unit:	CSD/RND-Env, Rural Dev & Disaster Risk
▪ Unit of Disbursement Responsibility:	CSD-Climate Change and Sustainable Development Sector
▪ TC included in Country Strategy (y/n):	No
▪ TC included in CPD (y/n):	No
▪ Alignment to the Update to the Institutional Strategy 2010-2020:	Social inclusion and equality; Productivity and innovation

II. Objectives and Justification of the TC

- 2.1 The main objective of the TC is to implement the rolling-out of the Disaster and Climate Change Risk Assessment Methodology for IDB Projects in 2020. The main beneficiaries of this regional TC will be the IDB borrowing member countries that have loan operations with a moderate or high-risk rating according to the Bank's disaster risk screening classification system. Some possible candidates could be Haiti, Argentina and Brazil, but the final selection will depend on the criteria described above.
- 2.2 The effects of Climate Change (CC) and disasters triggered by natural hazards pose a significant threat to sustainable development in the Latin America and the Caribbean (LAC) region. According to the Bank's document *What is Sustainable Infrastructure: A Framework to Guide Sustainability Across the Project Cycle* – the

¹ The TC has a taxonomy of Research & Dissemination because of the nature of the activities. In Component I, the objective is to support ongoing innovative efforts at the Bank to help operations in the project cycle undertake CC and DR assessments when needed (to be known at or before ERM).

Sustainable Infrastructure Framework - (IDB & IDB Invest, 2018), the region is one of the most vulnerable to the impacts of a changing climate: in 2017, for example, floods in Peru resulted in economic losses of US\$3.1 billion and floods in Colombia resulted in 329 fatalities (Munich RE, 2017). During 2000-2019, hydrometeorological events affected more than 124,000 citizens, caused more than 251,600 deaths and damages of US\$144.5 billion for the 26 countries members of the IDB (EM-DAT, 2019). When adding CC, damages may cost the region US\$100 billion a year by 2050. Similarly, geophysical disasters have also taken a heavy toll in the region, for example, the earthquakes of Chile and Haiti in 2010 caused US\$30.8 billion in direct and indirect losses and approximately 521 fatalities, and US\$7.8 billion in direct and indirect losses and 150,000-230,000 fatalities (estimated), respectively (GEM, n.d.).

- 2.3 As part of sustainable planning, development projects should take current and future disaster risk and resilience opportunities into account in their design, construction, and operation phases. Although the region has undoubtedly learned a lot from the different disasters it has experienced in the past and has been increasingly giving more relevance to this topic of disaster and CC risk, efforts and results continue to vary largely across the different countries. Moreover, classic design and construction practices generally do not include these topics beyond standard building codes and design parameters, and most do not include CC considerations. Hence, proper studies are not usually carried out and adequate resiliency considerations are not taken into account in the projects themselves. One of the reasons this occurs is because of a lack of consistency of, at least, a framework and the definition of minimum requirements that could be applied to assess and manage these risks while accounting for uncertain variables as part of project decision-making processes.
- 2.4 Most Multilateral Development Banks (MDB) are now recently increasing the focus on disaster and CC risks under the umbrella of sustainability and resilience in all levels ranging from country programming to individual projects. As MDBs progress to update existing policies and/or strategic documents and guidelines², the theme of sustainability and resilience moves to the spotlight as the core of Bank principles, goals and activities. Hence, disaster and CC risk play a key role that has also been increasingly recognized, for example through a consensus that the application of resilience screening to all operations is needed. According to [WRI's report Towards Paris Alignment](#), across the MDBs, a relatively standard process is emerging, consisting of six main steps: (i) initial screening; (ii) additional assessments; (iii) project design modification; (iv) project approval; (v) implementation; and (vi) monitoring of results. Additionally, following the G20 [Task Force on Climate related Risk Financial Disclosure](#) (TCFD) the MDBs – like all financial organizations – are coming under increasing pressure to disclose the climate risk management strategy and governance including policies relating to climate risk and resiliency ([TCFD Final Report 2017](#)). The recommendations given for disclosure include aspects of governance, strategy, risk management and metrics and targets, inquiring

² The most recent international organization policies that consider disaster and CC risk and resiliency as key include: (i) the EBRD [Environmental and Social Policy \(2019\)](#); (ii) UNDP [Draft Social and Environmental Standards \(2019\)](#); and (iii) EIB [Environmental and Social Standards \(2018\)](#). Other less recent MDB policies that highlight this theme include: (i) AfDB [Integrated Safeguard System \(2013\)](#); and (ii) ADB [Disaster and Emergency Assistance Policy \(2004\)](#).

about whether institutions consider climate-related risks in their strategy, major plans of action and risk management policies, among others.

- 2.5 Consequently, the development of the Disaster and Climate Change Risk Assessment Methodology beginning in 2016-2017 aimed to improve the technical capacity of clients to face these risks in the region. By setting a framework for the evaluation of disaster risk throughout the project cycle that is gradual and scalable, and by providing guidance on the methods and minimum requirements of a risk assessment, the IDB has provided its client countries, both through its application to individual projects and through its ability to be used as an example for adaptation in country or local levels, a tool of high additionality. The full implementation (via a complete roll-out for IDB projects)
- 2.6 In line with what has been discussed above, the Bank, through its Community of Practice on Resilience (CPR)³ developed the Disaster and Climate Change Risk Assessment Methodology (the Methodology) to facilitate the identification and assessment of disaster and CC risks and resilience opportunities in all relevant projects during their identification, preparation and implementation phases. The Methodology serves a dual purpose of safeguarding projects, responding to the requirements established by safeguard requirements, and mainstreaming resilience, responding to the adaptation priorities set forth in the Paris Agreement and the needs of countries in the region in terms of upstreaming CC and disaster risk assessments into their investments. It provided a valuable opportunity to align existing policies, procedures and methodologies to generate tangible benefit for the Banks' client countries, beneficiaries and end users, as well as potential private sector investors. The Methodology is based on international best practices but also includes cutting-edge original elements that have been developed by the IDB based on its own expertise and experience.
- 2.7 Rooted in the existing Disaster Risk Management Policy (IDB, 2007) and Guidelines⁴ (IDB, 2008), the Methodology builds upon and strengthens the current screening process and provides guidance for project teams to conduct disaster and CC risk assessments in relevant operations, ensuring added value to projects. The approach included in the Methodology is intended to have broader applicability but is particularly relevant for projects with infrastructure components and is also aligned with the Bahamas Resolution of 2016 (IDB, 2016) and the Bank's Sustainable Infrastructure for Competitiveness and Inclusive Growth Strategy – the Sustainable Infrastructure Strategy - (IDB, 2013). In the Bahamas Resolution, the Bank's Board of Governors welcomed Management's objective to improve the assessment of climate risks and to identify opportunities for resilience and adaptation measures at the project concept stage. The Sustainable Infrastructure Strategy states that providing access to transport, electricity, water, and sanitation services improves quality of life through its direct impact on health, education, and economic opportunities. In addition, the Bank's Sustainable Infrastructure Framework (IDB &

³ The Community of Practice in Resilience is an interdivisional multidisciplinary team of IDB specialists and consultants that aims at mainstreaming resilience in IDB sectors and projects. Experts from CCS, ESG, RND, HUD, TSP, ENE and WSA have been involved in this community of practice, and in 2019 this includes SPH and EDU, as well as INE/INE and INE/UIS.

⁴ The Policy and Guidelines were approved in the context of an increase in the number and seriousness of disasters in Latin America and the Caribbean (LAC) and the awareness that disasters have significant bearing on the economic and social development of most countries in the region, affecting disproportionately the poorest countries and people.

IDB Invest, 2018) includes resilience in its definition of Sustainable Infrastructure, noting that sustainable infrastructure projects are (or should be) sited and designed to ensure resilience to climate and disaster risks.⁵ Furthermore, the Bank will launch an online course (led by CSD/RND) by the end of 2019 on disaster risk assessment which is aligned with the Methodology. Hence, by promoting resilience in projects, the Bank is furthering its commitment to improving lives in the region.

- 2.8 The Methodology involves a number of phases and steps where efforts and resources are commensurate with the levels of risk. This means that, in an effort to recognize that not all projects require and/or would benefit from conducting the complete process (due to the variety of types and levels of complexity of projects), the Methodology allows certain projects to exit the process at different times according to its risk classification and if it meets certain requirements at each step. The Methodology is comprised of three phases: Screening & Classification, Qualitative Assessment and Quantitative Assessment. The **first phase** aims to give a first overview of what hazards could affect a project and to what extent a project may be vulnerable to those hazards. It includes two steps, where Step 1 (Preliminary classification based on location and hazards) looks at hazard exposure and Step 2 (Revision of classification based on criticality and vulnerability) looks at project criticality and vulnerability. Step 1 uses a GIS platform of hazard maps for the region – including 10 hazard maps which correspond to hazards under climate change to evaluate the project’s exposure to natural hazards. Step 2 analyzes the project’s characteristics to determine its criticality and vulnerability. Phase 1 is conducted by ESG as per the policy OP-704, and it results in assigning the project a disaster risk classification of either low, moderate or high-risk. This classification serves as a first alert and determines the requirements for continuing with the following steps and developing a Disaster and Climate Change Risk Assessment (DRA). **Phase two** aims to analyze the disaster and climate change risks qualitatively and it includes two steps, Steps 3 (Simplified qualitative risk assessment and risk management plan) and 4 (Complete qualitative risk assessment and risk management plan). In Step 3 all implicit and explicit project design and management considerations are gathered and compiled into a risk narrative to identify what aspects are already covered and what gaps exist. If gaps are indeed found, then Step 4 must be conducted. In Step 4 a formal qualitative DRA and Disaster Risk Management Plan (DRMP) must be conducted to evaluate with experts and local stakeholders’ possible risks and solutions. **Phase three** consists of performing a quantitative DRA and DRMP. It includes a single step, Step 5 (Quantitative risk assessment and risk management plan), and it entails scientifically and mathematically modeling the vulnerability, hazard and risk for those selected aspects of both the project itself and the surrounding environment and communities. The DRMP should both non-structural and structural measures to reduce risk. This detailed quantitative assessment has an added value in that it provides tangible numbers of risk in terms

⁵ IDB Group defines sustainable infrastructure as follows: “Sustainable infrastructure refers to infrastructure projects that are planned, designed, constructed, operated, and decommissioned in a manner to ensure economic and financial, social, environmental (including climate resilience), and institutional sustainability over the entire life cycle of the project.” Disaster and climate change risk is embedded in the environmental sustainability (including climate resilience) principle for project preparation and design, which includes the following sustainability criteria: (i) assessment of climate risks and project-resilient design; and (ii) project design and systems optimization for disaster risk management.

of expected economic losses due to natural disasters, and most importantly, in terms of the avoided losses (or benefits) of incorporating risk reducing measures. This quantification of risk and benefits is used in benefit-cost type analyses to evaluate alternatives and their effectiveness.

- 2.9 A DRA in the context of the Methodology refers to the evaluation of the disaster and CC risks for a particular project (see Guidelines – paragraph 3.17 for the complete DRA definition). Following the definition given by the United Nations Office for Disaster Risk Reduction, a DRA is thus a “qualitative or quantitative approach to determine the nature and extent of the disaster risk by analyzing potential hazards and evaluating existing conditions of exposure and vulnerability that together could harm people, property, services, livelihood and the environment” (UNDDDR, 2017). For the purposes of the IDB Methodology, the DRA includes a Disaster and Climate Change Risk Management Plan (DRMP) that includes specific measures to be implemented to reduce the risk identified in the assessment. These measures are binding when these address non-compliance with the current safeguard policy of disaster risk⁶ and/or these determine the project’s viability, and beyond this, these are binding as far as these are directly integrated into the project design to provide resiliency.
- 2.10 Various steps of the Methodology have been applied in pilots across different IDB projects ranging in project cycle stages as well as in sectors (transport, energy, tourism and urban development). It began being applied in pilots in early 2017, and since then it has been gradually expanding, achieving a full roll-out of the screening and classification phase of the Methodology by 2018 and increasing the number of projects applying the qualitative and quantitative phases in 2019, and is now expected to be rolled out in full by 2020. The past and current applications have conducted DRAs, as well as integrated the effects of CC directly in the classic hydrological and hydraulic analyses that are part of an infrastructure’s design process. Some examples of analyses and studies that are currently underway include: road projects in Haiti (4618/GR-HA from TSP), Ecuador (RG-L1132 from TSP) and Panama (4561/OC-PN from TSP), urban projects in Asunción (4700/OC-PR from HUD) and Manaus (BR-L1431 from HUD-WSA), energy project in the Dominican Republic (4711/OC-DR from ENE) and a drainage project in Cuzco (PE-L1238 from WSA). More details on the pilots are included in the [Summary of Pilots Applying the Disaster & Climate Change Risk Assessment Methodology](#).
- 2.11 The implementation of the Methodology for the Bank considers a distribution of responsibilities between the core technical group (the CPR), ESG by itself, other divisions of the Bank and external consultancies. The overall coordination, management, monitoring and design and approval of technical content of the methodology is done by the CPR. Steps 1 through 3 are internally conducted by the Bank with its technical and operational capacities, where Steps 1 and 2 are currently and have been conducted systematically and for the complete Bank portfolio since

⁶ As per policy OP-704: “Bank-financed public and private sector projects will include the necessary measures to reduce disaster risk to acceptable levels as determined by the Bank on the basis of generally accepted standards and practices. The Bank will not finance projects that, according to its analysis, would increase the threat of loss of human life, significant human injuries, severe economic disruption or significant property damage related to natural hazards. (...) When significant risks due to natural hazards are identified at any time throughout the project preparation process, appropriate measures should be taken to establish the viability of the project, including the protection of population and investments affected by Bank-financed activities.”

2018 by ESG, and Step 3 by the CPR, in coordination with the other divisions of the Bank that are leading the respective project preparation. Steps 4 and 5 are conducted via consultancies, and supervised by the CPR, in close coordination with the division responsible for the project preparation. The roll-out of the Methodology for 2020 aims to implement Step 3 for 25 projects, out of which 8 will conduct Step 4, and 7 will conduct Step 5 (in addition to the already existing complete implementation of Steps 1 and 2), as well as to conduct 2 post-event risk assessments for cases where the risk has materialized in an actual disaster. Estimates of the resources needed to roll-out the Methodology were obtained from the past experience and the pilots conducted, and these were used to structure this TC. The cost of the in-house consultant for technical support is US\$120,000; the average cost of a qualitative assessment of Step 4 is US\$20,000; the average cost of a quantitative assessment of Step 5 is US\$125,000; and the average cost of a post-event analysis is US\$40,000.

- 2.12 **Strategic Alignment.** The TC is consistent with the Second Update to the Institutional Strategy – UIS (AB-3190-2) through the development challenges of: (i) Social Inclusion and Equality, specifically with the objective of providing inclusive infrastructure and infrastructure services including adaptation to CC; and (ii) Productivity and Innovation, as well as with the cross-cutting theme of Climate Change and Environmental Sustainability. This TC is also aligned with the new Corporate Results Framework 2020-2023 (GN-2727-8) through its contribution to the IDB Group Performance Indicator #11 “Operations with considerable disaster and climate change risk that applied risk analysis to identify resilience actions (%)”, which tracks the application of the Disaster and Climate Change Risk Assessment Methodology. The TC is aligned with the IDB’s Disaster Risk Management Policy (OP-704 - document GN-2354-5) and its Guidelines. This TC is aligned with the objectives of the Japan Special Fund of mitigating the vulnerability and enhancing the resilience to disasters. Finally, the TC is also aligned with the Bahamas Resolution of 2016 (Resolution AG-6/16 AND CII/AG-2/16), with the IDBG Climate Change Action Plan 2016-2020 (GN-2848-4), the Bank’s Sustainable Infrastructure for Competitiveness and Inclusive Growth Strategy (GN-2710-5) and the Climate Change Sector Framework Document. According to the joint MDB approach on climate finance tracking, an estimated 100% of total IDB funding for this program is invested in climate change adaptation activities.
- 2.13 This TC integrates lessons learned from the following previous TCs which have served to begin and pilot the Methodology: ATN/OC-15237-RG, ATN/OC-15148-RG and ATN/MC-17180-RG, ATN/OC-17181-RG. These TCs have all been related to the research and development of methods, as well as support to operations in pilot projects, for the evaluation of disaster and CC risk. The main lesson learned in general from these TC is the fact that a learning-by-doing approach has been and is critical to arrive to and implement the current methodology, which has been improved by a continuation of this process. Lesson learned from the research on methods include the need to have and offer a variety of methods and techniques ranging from simple to complex in order to cover time, resource and project-requirement needs, as well as the need to provide special support and guidance in the subject of how to incorporate the effects of climate change in a disaster risk assessment. Lessons learned from the pilots conducted under those TC (see the [Summary of Pilots Applying the Disaster & Climate Change Risk Assessment Methodology for details](#)) include the need to strengthen the project criticality and vulnerability aspect of risk to complement the hazard and climate change aspect which in the past has been

the main focus, and the importance of having a qualitative analysis phase before embarking on more complex quantitative analysis to help avoid generating studies that might be too costly (in terms of time and funds) and general to influence designs. This TC represents the next step in this process through the rolling-out of the Methodology.

III. Description of activities/components and budget

3.1 The TC consists of one component:

3.2 **Component I. Roll-out of the Methodology.** This component corresponds to the implementation of the Methodology for 2020 following and improving the methods applied for the pilots described in the [Summary of Pilots Applying the Disaster & Climate Change Risk Assessment Methodology](#). This includes the following specific activities:

- a. **Conducting Complete Qualitative Risk Assessments corresponding to Step 4 of the Methodology.** Consists of conducting 8 qualitative risk assessments through consultancies for all the high-risk projects and for those moderate-risk projects that require it according to the results from the application of Step 3 (Steps 1 - 3 are conducted internally by the Bank). The projects will be selected solely based on the results from the application of the previous steps of the Methodology (Steps 1-3) to the Bank's pipeline, that is, based on their risk classification and a technical diagnosis that determines if further studies such as this one are required. It involves performing a complete qualitative DRA and an accompanying DRMP following any of the methods offered by the Methodology. A qualitative assessment can be done through a workshop where disaster and CC risk experts work with technical personnel from the design/construction firms and the operation's executing agency to discuss and gauge all possible risks, contributing factors, potential consequences and intervention measures. Other qualitative techniques include using methods for consulting panels of experts or using risk matrices that rate risks based on qualitative estimations of frequency and magnitude of impacts.
- b. **Conducting Quantitative Risk Assessments corresponding to Step 5 of the Methodology.** Consists of conducting 7 quantitative DRA and accompanying DRMP through consultancies for the high- or moderate-risk operations that were determined to need it after applying Step 4. The projects will be selected solely based on the results from the application of the previous steps of the Methodology (Steps 1-4) to the Bank's pipeline, that is, based on their risk classification, a technical diagnosis and results from a qualitative risk assessment that determines if further studies such as this one are required. This involves quantitatively modeling the aspects (that can be tied to specific physical attributes, structures, modes of failure or hazards) that were found to require further investigation, and it entails scientifically and mathematically evaluating the vulnerability, hazard and risk for those selected aspects for both the structure itself and the surrounding environment and communities, including an estimation of the impacts that would not occur if the project did not exist. Any method or technique within the wide spectrum of methods offered by the Methodology (ranging from simple to highly complex) may be used to conduct the quantitative DRA.

- c. **Providing support to projects post-event.** Consists of conducting 2 post-event assessments for projects where the risk has materialized into a disaster event. The projects will be selected solely based on a technical appraisal of the urgency or criticality of the project's need for a post-event assessment. It involves conducting a site-visit to inspect the project post-event, conducting a qualitative assessment and diagnosis of the current risk and state of the project and proposing a set of short-, medium- and long-term recommendations to manage pressing issues and residual risks. It may also include the creation of Terms of Reference for further detailed quantitative studies, if needed.
 - d. **Improving the quality of the entire risk assessment process** (Steps 1 through 5) by financing in-house technical support and coordination of the roll-out of the complete Methodology, Steps 1 to 5. Three in-house consultants are needed to implement and manage the internal responsibilities of the Bank (overall technical support of Steps 1 through 5 and conducting Step 3) as well as provide training to internal and external stakeholders on risk and resilience at the project level to ensure sustainability of the process.
- 3.3 See table below for specific outputs and outcomes of these activities.
- 3.4 The total cost of this TC is US\$1,500,000 to be financed by a non-refundable grant from the Japan Special Fund (JSF) in a non-refundable form.
- 3.5 In case that activities and/or missions will take place in any borrowing member country, no-objection letter from that country will be collected.

Table. Indicative Budget in US\$

Component	Description	IDB Funding
Roll-out of the Methodology	3 technical support consultants selected	360,000
	8 ⁷ qualitative risk assessments (Step 4) analyses elaborated	160,000
	7 quantitative risk assessments ⁸ (Step 5) analyses elaborated	900,000
	2 post-event analyses elaborated	80,000
TOTAL		1,500,000

IV. Executing agency and execution structure

- 4.1 The executing agency for this operation will be the Bank through CSD/RND, in coordination with CSD/CCS and VPS/ESG. As this TC aims at rolling out a methodology that the Bank itself, specifically its CPR, has been piloting in the last

⁷ The estimation of the type and quantity of activities required to implement the Methodology in one year has been done using past experience and historical data gathered through the piloting that has been carried out during part of 2017 and during 2018 and 2019.

⁸ The estimation of the type and quantity of activities required to implement the Methodology in one year has been done using past experience and historical data gathered through the piloting that has been carried out during part of 2017 and during 2018 and 2019.

two years, it is well placed to lead its implementation in terms of both experience and expertise. The core group that will lead the implementation of this operation from a technical perspective includes CSD/RND, CSD/CCS and VPS/ESG, through the Community of Practice in Resilience based at headquarters. This implementation will also involve other Bank divisions (mostly from INE, CSD and SCL), namely those leading the preparation of loan operations that have been rated as moderate or high-risk according to the Bank's disaster risk classification system. Focal points from these divisions will be designated per project on an ad hoc basis, either at HQ or COF, as the project-related circumstances require. Per Appendix 10 of the Operational Guidelines for Technical Cooperation Products (GN-2629-1), this TC is an initiative of the Bank and due to the proposed taxonomy, the Bank will generate knowledge and dissemination products such as qualitative and quantitative disaster risk analysis, that will be disseminated in the relevant technical meetings. The activities to be executed as part of this operation are included in the Procurement Plan and will be contracted in accordance with Bank policies as follows: (a) AM-650 for Individual consultants; (b) GN-2765-1 and Guidelines OP-1155-4 for Consulting Firms for services of an intellectual nature; and (c) GN-2303-20 for logistics and other related services. The execution period is expected to be no longer than 24 months and the disbursement period 26 months.

V. Major issues

- 5.1 The main risks of this TC are: (i) a mismatch between the project pipeline and the TC – meaning that the estimation of the number of projects that require Qualitative Risk Analyses (Steps 4) and Quantitative Risk Analyses (step 5) might not be accurate since this changes from year to year depending on the pipeline (typically infrastructure projects might need more risk analysis), causing delays or acceleration in the use of funds earlier. To mitigate these risks a plan will be defined for the rolling-out identifying eligible projects early in the process and also the time frame of the TC has been set to 24 months to account for these changes in time; and (ii) relevant interventions proposed in the disaster risk assessments are not undertaken, or, if undertaken, they are not maintained. To mitigate this risk and ensure sustainability of the proposed measures, the team will work closely with relevant project teams to ensure that the measures proposed are implementable, and that project maintenance plans are also implemented. The team will also ensure that these issues are evaluated as part of the supervision of the projects being supported through this TC, thereby ensuring sustainability beyond its execution period.

VI. Exceptions to Bank policy

- 6.1 There are no exceptions to Bank policy.

VII. Environmental and Social Strategy

Because of its nature, this operation is inside the "research and dissemination" category and it is not anticipated that the activities to be financed by this TC will have negative direct or indirect social or environmental effects. Therefore, the TC does not require any special measures for safeguard compliance and environmental conservation. According to the Environment and Safeguards Compliance Policy (OP-703), this operation is classified as category "[C](#)".

Required Annexes:

[Request from the Client_84064.pdf](#)

[Results Matrix_41324.pdf](#)

[Terms of Reference_97699.pdf](#)

[Procurement Plan_38052.pdf](#)