

TC Document

I. Basic Information for TC

▪ Country/Region:	Honduras
▪ TC Name:	Master plan for Investments to Increase Water Availability for Human Consumption and Agriculture in the Dry Corridor
▪ TC Number:	HO-T1377
▪ Team Leader/Members:	Garzonio, Omar Dario (INE/WSA) Team Leader; Sasaki, Keisuke (INE/WSA) Alternate Team Leader; Alvarez Perez, Andreina Marisol (CAN/CAN); Arauz Herrera, Alison (INE/WSA); Bedoya Del Olmo, Celia (INE/WSA); Contin Steinemann, Christian Alberto (VPC/FMP); Del Puerto Correa, Maria Cecilia (VPC/FMP); Dipasquale, Irene Etelevina (INE/WSA); Emanuel, Serena Lise (INE/WSA); Guzman, Amalia Del Carmen (CID/CHO); Munoz Castillo, Raul (INE/WSA); Nalesso, Mauro (INE/WSA); Puig, Carlos Javier (CSD/CCS); Quinonez Zepeda, Jorge Alberto (CSD/RND); Rios Galvez, Ana R. (CSD/RND); Samayoa, Jorge Omar (CSD/CCS); Sanmartin Baez, Alvaro Luis (LEG/SGO); Velasquez Rodriguez, Manuela (INE/WSA) Alvarez Perez, Andreina Marisol (CAN/CAN);
▪ Taxonomy:	Client Support
▪ Operation Supported by the TC:	N/A.
▪ Date of TC Abstract authorization:	N/A.
▪ Beneficiary:	Honduras (Ministry of Natural Resources and Environment (MiAmbiente+))
▪ Executing Agency and contact name:	Inter-American Development Bank
▪ Donors providing funding:	Strategic Climate Fund (SCX)
▪ IDB Funding Requested:	US\$953,000.00
▪ Local counterpart funding, if any:	US\$0
▪ Disbursement period (which includes Execution period):	24 months
▪ Required start date:	December 2020
▪ Types of consultants:	Firm and individual consultants
▪ Prepared by Unit:	INE/WSA-Water and Sanitation
▪ Unit of Disbursement Responsibility:	CID/CHO-Honduras Office
▪ 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:	Productivity and Innovation; Institutional Capacity and Rule of Law; Environmental Sustainability Productivity and Innovation, Climate Change and Environmental Sustainability, and Institutional Capacity and Rule of Law

II. Objectives and Justification of the TC

- 2.1 The Republic of Honduras has an estimated population of 9.16 million inhabitants, of which 55% are located in urban areas and 45% in rural areas. The Honduran territory is divided into 2 large slopes, it is made up of 19 larger hydrographic basins of which 14 flow into the Atlantic Ocean and 5 into the Pacific Ocean. According to data from the Global Water Partnership (GWP), these basins discharge in a normal year an average of 92,813 million cubic meters (m³) of precipitation, which roughly translates to an average flow of 1,524 m³/second. The GWP also indicates that, although the

hydrology of the country is supplied by a rainfall regime that ranges between 500 mm and 3,800 mm per year, only an average of 1,800 mm is harvested and that it is necessary to increase the harvest rate through storage works and better management of water resources.

- 2.2 Honduras is no stranger to extreme hydroclimatic events. Hurricane Mitch in 1988 caused damage to the water and sanitation system, with an estimated cost of 58 million dollars, affecting storage tanks, distribution network and sanitation infrastructure with resulting economic consequences that affected the country in successive years (DIA 2020, IDB). More recently in November 2020, tropical storms Eta and Iota caused serious flooding and landslides due to heavy rains, leaving thousands of victims and evacuees in the country, also causing numerous road cuts, the destruction of bridges and the loss of thousands of hectares of corn, beans, rice and other crops, as well as significant damage to livestock¹. These extreme events could increase their frequency due to the effects of climate change, Honduras is not only susceptible to extreme rainfall, but also has a high vulnerability to droughts. These events can cause cascading problems due to population demand and agricultural activities causing a decrease in the level of reservoirs, which would cause a reduction in hydroelectric generation (DIA 2020, IDB).
- 2.3 The Pilot Program for Climate Resilience (PPCR) is one of the programs within the Strategic Climate Fund (SCF) of the Climate Investment Funds (CIFs). In its Strategic Plan for Climate Resilience (SPCR) for Honduras², water security³ is the main sector priority, as it has a transversal impact on all development sectors. Water insecurity endangers the needs of water for human consumption, food security (priority number two in the same investment plan), productive uses, ecosystem services, among others, threatening the country's achievements in reducing poverty and exacerbating the risks for the most vulnerable communities, generating cascading political, social, economic and environmental consequences. Climate change is expected to intensify the drought and drastically reduce rainfall, which will seriously affect the availability of water resources throughout the country, especially in the region known as the Dry Corridor (*Corredor Seco*, in Spanish) and the nearby growth poles. The Honduras-SPCR recognizes that actions to strengthen Water Resources Management (WRM) and increase access and quality of water services are the two main priorities of the investment portfolio. Currently, for this region, numerous interventions related to WRM and climate resilience are being led by the Multilateral Development Banks (MDBs), development partners, as well as the public and private sectors, with very little/limited coordination. Therefore, there is a pressing need to ensure synergies and complementarities between initiatives, in order to avoid duplication of efforts and achieve more effective use of the limited financial resources available.
- 2.4 The TC will support the preparation of a master plan for strategic WRM investments in the Dry Corridor and nearby growth poles with the objective of increasing water availability (¶2.8). This will also contribute to the recovery of the country in the context of COVID-19, since hand washing with soap and water is one of the most effective

¹ United Nations Honduras ([link](#)) y the Central Bank of Honduras ([link](#)). According to the news, the estimated economic damages amount to about HNL 250 billion ([link](#)).

² [Link](#).

³ Water security is the capacity of a population to safeguard sustainable access to adequate quantities of acceptable quality water for sustaining livelihoods, human well-being, and socio-economic development, for ensuring protection against water-borne pollution and water-related disasters, and for preserving ecosystems in a climate of peace and political stability (UN Water, 2013)

measures to prevent the spread of COVID-19, and this requires reliable access to basic hygiene facilities at home and in health or education centers. Likewise, it is worth highlighting the fundamental role for health (e.g. in the prevention of gastrointestinal diseases, malnutrition) that access to water, sanitation and hygiene possesses⁴.

- 2.5 The activities of this TC will be based on the hydrological and climatic analysis carried out with the HydroBID model in strategic hydrographic basins. These studies, which incorporate the simulation of population, agricultural and hydroelectric water demands, will not only help to identify current and future problems (climate change scenarios) related to water availability, but will also serve to identify and evaluate technically and economically possible solutions, as well as prioritizing investments and ensuring that solutions are resilient and sustainable both technically and economically. In identifying solutions, they will also take into account parallel efforts from the public, MDBs and other development partners, and the private sector (both ongoing and in preparation). A technology transfer process will be carried out that allows the system to be updated at any time and to feed the information platform Aguas de Honduras, which will have an effect on improving the decision-making and planning process related to the water resource management.
- 2.6 The proposed master plan will help register investment opportunities (as well as sources of climate finance, financial instruments, among others) to strengthen and complement the water resources planning initiatives currently led by the Ministry of Natural Resources and Environment (MiAmbiente+), such as the National Hydrological Plan and the Water Platform, as well as the WRM activities implemented by the World Bank (WB) within the framework of its Water Security Project in the Dry Corridor of Honduras (P169901) (mainly concentrated in the Nacaome River) and the Urban Water Supply Strengthening Project (P173125) (aimed mainly at small and medium urban areas)⁵.
- 2.7 The investment opportunities identified by the master plan will also seek to improve the actions implemented by the Sustainable Forest Management Project (3878/BL-HO) and the Program for the Restoration of Climate-Resilient Forests and Silviculture for Sustainable Ecosystem Services Related to Water (4926/GN-HO, GRT/GN-17771-HO), both with the aim of increasing the availability of water resources in critical basins where several of the aforementioned strategic growth poles are located (Tegucigalpa, Valle de Comayagua, Francisco Morazán Hydroelectric Complex, among others), as well as those implemented by the Rural Productivity and Development Project (4936/BL-HO, 4940/BL-HO) that aims to improve productive development within the Dry Corridor of Honduras, mainly through the provision of climate-smart technologies, productive technical assistance and access to financing. The master plan will complement the reform process supported by the Central District Water and Sanitation Services Reform Program (4878/BL-HO, 4879/KI-HO), a policy-based programmatic loan, which had as one of the specific objectives strengthen the sectoral framework for water and sanitation at the national level, through better stewardship, regulation, management of water resources in a context of climate change, and provision to better meet the demand for services.
- 2.8 The main objective of this TC is to support the Country, at a strategic level, in the preparation of a master plan that will guide the decision-making process to direct the

⁴ WHO ([link](#)).

⁵ To complement these activities, the World Bank is mobilizing resources from the PPCR's Business Development for Resilience Program (BDRP).

funds towards key investments aimed at increasing the availability of water, and therefore it will improve water security in the Dry Corridor and nearby growth poles.

- 2.9 This TC is consistent with the Update of the Institutional Strategy 2010-2020 (AB-3008) and is aligned with the challenges of development of Productivity and Innovation, seeking to ensure the availability of water resources and contribute to the development of the country, mainly the region known as Corredor Seco and the nearby growth poles, as well as with the cross-cutting themes of: (i) Climate Change and Environmental Sustainability through the identification, prioritization and integration of climate risk management and resilience of strategic investments in WRM; and (ii) Institutional Capacity and Rule of Law, through the consolidation of coordination between the stakeholders of WRM and those of climate resilience. This TC is framed within the Bank's Country Strategy 2019-2022 (GN 2944) through: (i) the cross-cutting area of climate change in which the incorporation of adaptation and mitigation for the effects of climate change in actions aimed at supporting productive activities; and (ii) the dialogue area of the water and sanitation sector where the need for institutional interventions and operational management that contribute, among others, to the proper management of the resource is highlighted.

III. Description of activities/components and budget

- 3.1 **Component 1: Risk Management and Master Plan.** This component will finance the identification, prioritization and integration of climate risk management and climate resilience of investments and strategic planning in WRM (strengthening of governance, development of planning instruments, expansion / improvement of infrastructure for storage and distribution of drinking water and irrigation, among others) and development of the master plan based on the results obtained, at the national level, through the implementation of the HydroBID tool for the analysis of the supply-demand balance and its relationship with current and future climate variability, as well as future changes in the socio-economic conditions of the study area. The main product of this Component will be the master plan that will guide the decision-making process to direct funds towards key investments aimed at increasing water availability in the Dry Corridor and nearby growth poles. This component will be developed in 3 phases.
- 3.2 **i) Identification of Investments:** based on the detailed analysis of supply-demand that will map the spatial and temporal distribution of demands by different types of use (analyzing, among others, the use by women, indigenous people and Afro-Honduran groups) and the related rationing and based on topographic, environmental and social characteristics, the types of solutions necessary to guarantee sustainable and safe supply of water resources will be identified.
- 3.3 **ii) Prioritization of investments:** based on technical, gender, social and economic analysis, short, medium and long-term investments will be identified based on needs, investment cost and solutions' impact.
- 3.4 **iii) Integration with management:** structural and non-structural measures will be identified that support the management of water resources and guarantee resilient and sustainable solutions, the management of extreme events and adaptation to climate change will be considered. Scenarios that involve the optimization of governance (including the promotion of women's participation in the governance), the creation or strengthening of digital platforms to support planning and decision-making and the analysis of resilience for the adaptation of present and future infrastructure will be analyzed.

- 3.5 **Component 2: Coordination.** This component will support coordination between WRM and climate resilience stakeholders. A consultant will be hired to support this coordination. Workshops will be organized to inform and involve diverse stakeholders with especial attention to women by seeking participation of representatives from women’s organizations and/or gender focal points in relevant ministries). These workshops will serve as a mechanism to facilitate the coordination of entities that have activities relevant to WRM and climate resilience (learn about activities carried out by another entity, use their results in future actions). The main product of this Component will be workshops among interested parties.
- 3.6 **Component 3: Campaigns and communication.** Social and communication campaigns will be financed to increase the capacity of the beneficiaries of the proposed master plan to resist/adapt to climate variability/climate change. As the first stage of the implementation of this component, a study will be carried out to preliminary characterize the beneficiaries. Communication campaigns will use gender-inclusive language and address the specific needs of women.

Indicative Budget

Activity / Component	Description	IDB/Fund Funding	Counterpart Funding	Total Funding
Component 1	Identification, prioritization and integration of climate risk management and resilience of strategic investments in WRM and development of the Master Plan.	580,000	0	580,000
Component 2	Coordination between WRM and climate resilience stakeholders	123,000	0	123,000
Component 3	Social and communication campaigns to increase the capacity of the beneficiaries of the proposed master plan to resist/adapt to climate variability/climate change	250,000	0	250,000
Total		953,000	0	953,000

- 3.7 The Pilot Program for Climate Resilience (PPCR) of the Climate Investment Funds (CIF) plans to commit US \$ 953,000 to this project.

IV. Executing agency and execution structure

- 4.1 The Inter-American Development Bank (IDB), as requested by the Government of Honduras (GOH), will be the executing agency for this project, which is justified given the lack of capacity in the country on the Hydro-BID tool and climate analysis of strategic basins based on the same tool. The Bank will coordinate all activities with the Ministry of Natural Resources and Environment (MiAmbiente+), which is the beneficiary secretariat designated by the GOH. Coordination with other relevant secretariats, including the Ministry of Finance (SEFIN), the Technical Secretariat of the National Council for Water and Sanitation (CONASA), and the Ministry of Agriculture and Livestock (SAG), will be carried out through MiAmbiente+. The Team Leader will be designated as the focal point responsible for the execution of the TC.

- 4.2 The activities to be executed under this operation have been included in the Procurement Plan and will be carried out in accordance with the Bank's established procurement methods, namely: (a) Hiring of individual consultants, as established in the regulations AM-650; (b) Hiring of consulting firms for services of an intellectual nature according to GN-2765-4 and its associated operating guides (OP-1155-4) and (c) Hiring of logistics services and services other than consulting, according to the policy GN-2303-28.

V. Major issues

- 5.1 The main risk is identified as the lack of coordination between different government institutions and diverse stakeholders of WRM and those of climate resilience (MDBs, development partners, public and private sector). As the measure to mitigate this risk, a specific component was included to ensure such coordination. The TC team will convene the representatives of MiAmbiente+ and other relevant secretariats to periodic coordination meetings. Component 2 will include the hiring of a consultant to support this coordination and organization of workshops to inform and involve the diverse stakeholders.
- 5.2 Another risk identified is the availability of local consulting firms with sufficient experience to carry out the studies and activities required within the framework of this TC in the area of integrated water resources management planning and climate risk management, which is mitigated with the appropriate selection of the contracting method, in view of the potential involvement of international firms in the process. This could require longer time than simpler methods, so the TC execution schedule is planned consistently.
- 5.3 There is a risk that the master plan requires a review and/or update due to the need to incorporate new scenarios. The master plan will be structured based on scenarios of needs obtained from the generation of simulations of present and future situations. This same methodology will allow updating investment scenarios that may arise and assessing their technical and economic validity. In addition, together with the development of the master plan, the capacity of the counterpart's technicians in modeling based on HydroBID will be strengthened so that they can generate and evaluate these possible new scenarios.

VI. Exceptions to Bank policy

- 6.1 This technical cooperation operation does not include any exception to Bank policies.

VII. Environmental and Social Strategy

- 7.1 Following the requirements of the ESG project classification process, it has been determined that this TC is included in Category C. No environmental assessment studies or consultations are required for Category "C" operations.

Annexes available upon request (in Spanish):

- Request from the client
- Results Matrix
- Terms of Reference
- Procurement Plan