

## TC ABSTRACT

### I. Basic Project Data

▪ Country/Region:	PARAGUAY/CSC - Southern Cone
▪ TC Name:	Developing an Investment Plan to support water resources management in the Pilcomayo River Basin in Paraguay
▪ TC Number:	PR-T1369
▪ Team Leader/Members:	GONNELLI, GUSTAVO VICTOR (INE/WSA) Team Leader; NALESSO, MAURO (INE/WSA); PALACIOS ARGUELLO MARIA JOSE (INE/WSA); YOUNGMIN OH (INE/WSA); CRESPIN VILLATORO, ALEXANDRA (INE/WSA); SOSA, VICTOR (CSC/CPR); SANMARTIN BAEZ, ALVARO LUIS (LEG/SGO); SCHUTZ THERESA (INE/WSA); CUPPENS ARNOUD (INE/WSA)
▪ Taxonomy:	Client Support
▪ Number and name of operation supported by the TC:	N/A
▪ Date of TC Abstract:	02 May 2024
▪ Beneficiary:	Ministry of Public Works and Communications of Paraguay
▪ Executing Agency:	INTER-AMERICAN DEVELOPMENT BANK
▪ IDB funding requested:	US\$500,000.00
▪ Local counterpart funding:	US\$0.00
▪ Disbursement period:	36 months
▪ Types of consultants:	Firms
▪ Prepared by Unit:	INE/WSA - Water & Sanitation
▪ Unit of Disbursement Responsibility:	CSC/CPR - Country Office Paraguay
▪ 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 ; Environmental sustainability

### II. Objective and Justification

- 2.1 The objective is to prepare actions and investments identified in the updated Pilcomayo River Basin Management Plan to facilitate their implementation in future investment programs and promoting a program to improve institutional capacities focused on the management of water resources.
- 2.2 The Pilcomayo River Basin covers an extensive area of 238,653 km<sup>2</sup> of northern Argentina (27%), southern Bolivia (36%) and western Paraguay (37%). The river basin faces chronic challenges such as sedimentation, erosion, changes in the direction of the river, contamination, droughts and floods. In addition, illegal fishery jeopardizes the biodiversity of the area. The basin is home to 1.8 million people, a large proportion of whom live in extreme poverty and are affected by recurrent droughts and floods. Around 850,000 people that live in the basin identify themselves as indigenous, 80% of whom live in Bolivia, 9% in Argentina y 3% in Paraguay. The Pilcomayo River is considered as one of the rivers with the greatest amount of sediment transport in the world with an estimated load of 125 million tons per year, which causes morphological changes in the riverbeds, water bodies and flood plains on an annual scale, which in turn generates flooding with consequent damage to the population and deterioration of infrastructure, affecting economic activity. Due to the high production of sediments in the upper basin, the river does not have enough energy to transport its solid load to the Paraguay river, so it deposits the sediments in the marshes of the Chaco plain,

near the border between Argentina and Paraguay. In 2023 within the framework of the technical cooperation RG-T3294 “Management of Water Resources in the Pilcomayo River Watershed” the river basin management plan was updated by carrying out a comprehensive hydrological analysis and identifying actions and investments necessary to be implemented in the short, medium and long term. The most urgent actions and investments identified in the basin management plan, and which are to be considered for this TC include: i) sedimentation control, (ii) improvement of the early warning system to mitigate extreme hydroclimatic events, (iii) water quality monitoring, (iv) groundwater monitoring and (v) sustainable fishery management with emphasis on indigenous populations and local community to promote food security. This TC will support the Commission for the Regulation and Multi-Purpose Use of the Pilcomayo River of Paraguay (Ministry of Public Works and Communications of Paraguay) in preparing actions and investments identified in the updated Pilcomayo River Basin Management Plan to facilitate their implementation in future investment programs and promoting a program to improve institutional capacities focused on the management of water resources.

### III. Description of Activities and Outputs

- 3.1 **Component I: Component I: Feasibility studies of investments identified in the Pilcomayo River Basin Management Plan.** Evaluation and prioritization of structural and non-structural measures and the associated investment plan which were identified within the framework of the updated Pilcomayo River Basin Plan on the Paraguayan side for future financing and development of feasibility studies for future financing.
- 3.2 **Component II: Component II: Design of two pilot projects to support the improvement of water resources management in the Pilcomayo River Basin.** Based on the feasibility studies developed in Component 1, identify and develop at least two pilots on the Paraguayan side of the Pilcomayo River Basin that showcases actions that can be implemented for future financing, including elaboration of the Terms of References and development of indicators to quantify economic and environmental benefits of the foreseen pilot, which consequently need to be measured during and after implementation of the pilot
- 3.3 **Component III: Component III: Capacity Development on Water Basin Governance.** Development of a case study on water basin governance and its applicability to Paraguay; Implementation of a capacity development program tailored to the specific needs of the local technicians and knowledge exchange with the Korean Ministry of Environment and other relevant agencies on water resources management and governance.
- 3.4 **Component IV: Component IV: Coordination and Dissemination.** Organization of kick-off and closing workshop to establish better communication and facilitate interaction and exchange of information and experience between different stakeholders. Publication and dissemination of a technical note.

### IV. Budget

#### Indicative Budget

Activity/Component	IDB/Fund Funding	Counterpart Funding	Total Funding
Component I: Feasibility studies of investments identified in the Pilcomayo River Basin Management Plan	US\$200,000.00	US\$0.00	US\$200,000.00
Component II: Design of two pilot projects to support the improvement	US\$200,000.00	US\$0.00	US\$200,000.00

of water resources management in the Pilcomayo River Basin			
Component III: Capacity Development on Water Basin Governance	US\$80,000.00	US\$0.00	US\$80,000.00
Component IV: Coordination and Dissemination	US\$20,000.00	US\$0.00	US\$20,000.00
<b>Total</b>	<b>US\$500,000.00</b>	<b>US\$0.00</b>	<b>US\$500,000.00</b>

## **V. Executing Agency and Execution Structure**

- 5.1 The execution of the TC will be carried out by the IDB's Water and Sanitation Division through the TC team leader and the sector specialist in the country. Technical supervision will be carried out by the INE/WSA project team. While the studies are being carried out, workshops will be held with local technical staff to transfer knowledge, aimed primarily at officials from the institutions involved.
- 5.2 At the request of the Government of the Republic of Paraguay, the Bank, through the Water and Sanitation Division (INE/WSA), will be the Executing Agency (EA) for the TC. This execution arrangement is justified under OP-619-4 Annex 2 as: (i) the processes of contracting consultancy studies with local regulations may take time that would delay the achievement of the TC results and outputs; (ii) the Bank's experience in implementing technical support in the areas of water security and integrated water resources management will contribute more effectively to the achievement of the TC objectives in a timely manner. The Bank and the beneficiary agree that the Bank's engagement would enhance national coordination and independence according to the criteria of impartiality, as various stakeholders may have different interests in the interventions; and (iii) the Bank's implementation contributes to ensure that lessons learned from the activities carried out are adequately disseminated in the region.

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

- 6.1 The lack of availability of data and information necessary to carry out the studies in the prioritized areas is one of the main risks of the operation. Another risk is the lack of coordination and low participation of relevant institutions. In order to mitigate these risks, work will be done in coordination with the Ministry of Public Works and Communications, the Ministry of Environment, the TCN and other relevant institutions from the start of the project to ensure access to necessary information and coordination between institutions.

## **VII. Environmental and Social Aspects**

- 7.1 This Technical Cooperation is intended to finance pre-feasibility or feasibility studies of specific investment projects and the environmental and social studies associated with them; therefore, the terms of reference and products of this TC will be consistent with the applicable requirements of the Bank's Environmental and Social Policy Framework (ESPF).