

Selection process #

## TERMS OF REFERENCE

### Feasibility studies of actions and investments for the Paraguayan region of the Pilcomayo River Basin

PARAGUAY

PR-T1369

Developing an Investment Plan to support water resources management in the Pilcomayo River Basin in Paraguay

#### 1. **Background and Justification**

- 1.1.** The Pilcomayo River Basin covers an extensive area of approximately 238,653 km<sup>2</sup> of northern Argentina (27%), southern Bolivia (36%) and western Paraguay (37%). 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. 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.
- 1.2.** In 2023, as part of the technical cooperation RG-T3294 'Water Resources Management in the Pilcomayo River Basin', the management plan for the Pilcomayo River basin was updated through a comprehensive hydrological analysis, identifying the actions and investments needed for implementation in the short, medium, and long term. A key outcome was the evaluation and prioritization of structural and non-structural measures, resulting in a list of 63 prioritized actions. Various criteria were used, considering environmental, social, institutional, and economic aspects, and stakeholders from the three countries involved participated in the identification and prioritization process. The most urgent actions and investments identified for the entire basin 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 fisheries management, with an emphasis on indigenous populations and local communities to promote food security.
- 1.3.** In the Paraguayan sector of the Pilcomayo River basin, the lack of water availability for human consumption represents a significant challenge for local communities. One of the reasons is the lack of continuity in the Pilcomayo River's flows due to the large transport of sediments, which causes permanent changes in the riverbed and an excessive concentration of sediments in the water. Additionally, the rainfall regime in the region is extremely variable, with the Pilcomayo Basin and Central Chaco being the areas in Paraguay most affected by the La Niña phenomenon, which worsens droughts and rainfall shortages. A common situation in the Paraguayan region of the Pilcomayo is that, during prolonged drought periods, drinking water must be transported by tanker trucks from Asuncion.

**1.4.** In response to this situation, the National Commission for the Regulation and Multi-Purpose Use of the Pilcomayo River of Paraguay (CNRP PY), part of the Ministry of Public Works and Communications of Paraguay, requires an investment plan to support water resource management and ensure access to water for human consumption and food production. The Republic of Korea, through its instrument, the Korean Poverty Reduction Fund (KPR), which aims to reduce poverty and promote social development, including improving living conditions and access to social services such as water and sanitation, has delegated to the IDB the execution of technical cooperation to support the CNRP PY.

**1.5.** The development of at least three feasibility studies is required for projects identified within the framework of the updated Pilcomayo River Basin Plan, which aim at sustainable solutions to water scarcity, contributing to poverty reduction and the achievement of SDG 6, as well as the integrated management of water resources in the Paraguayan region of the Pilcomayo River Basin

## **2. Objectives**

**2.1.** The elaboration of feasibility studies of projects identified within the framework of the updated Pilcomayo River Basin Plan and that aim to contribute to sustainable solutions for the water scarcity problems in the Paraguay region of the Pilcomayo River Basin.

## **3. Scope of Services**

**3.1.** Elaborate at least 3 feasibility studies should take into account technical, institutional, financial, economic, social, legal, and environmental perspectives, and include a cost-benefit analysis and environmental impact assessment. These feasibility studies must allow for public bidding for contracting, including the final design of the project or intervention, technical specifications, detailed budget, execution schedule, and estimated operation and maintenance costs. Examples of possible feasibility studies are (i) Sustainable exploitation of the Pilcomayo Aquifer, (ii) Artificial recharge of shallow aquifers for storage and exploitation, (iii) Regulation of the water use for the Pilcomayo, (iv) Strengthening of sediment monitoring and (v) Assessment of Water Availability for the Lower Basin – Subsurface Components.

**3.2.** Organize outreach events among the key stakeholders in order to communicate and disseminate the results of the feasibility studies, focusing on technical feasibility and socio-economics benefits of the actions and investments for sustainable management of the water resources.

## **4. Key Activities**

### **4.1. Detailed revision of existing information and stakeholder consultation**

- Revision of the actualized Plan for Pilcomayo River Basin Management
- Meetings with the local stakeholders and CNRP PY
- ...

### **4.2. Fieldwork and data collection**

- Identification of water users and water storage capacity, flow measurement, etc.
- Geological exploration and identification of existing aquifers,

- Geophysical profiling and determination of hydraulic characteristics
- Monitoring of sediment transport
- Evaluation of water quality aspects
- ...

**4.3. Technical studies**

- Quantification of water availability,
- Identify techniques to increase aquifer recharge
- Design of exploitation wells
- Protection against contamination
- Identify current and future uses
- Develop mechanisms to quantify and manage surface water distribution and use
- Define ecological flow requirements
- Define the water balance in the study area
- Territorial planification
- Design flood protection
- ...

**4.4. Elaboration of bidding documents for contracting including the final design of the project or intervention, technical specifications, detailed budget, execution schedule, and estimated operation and maintenance costs.**

**4.5. Organization of outreach events in the study area**

**5. Expected Outcome and Deliverables**

**5.1. *Expected outcome***

- Product 1: At least 3 feasibility studies including bidding documents, technical specifications and cost estimation.
- Product 2: Investment program established for the sustainable management of water resources in the Paraguayan region of the Pilcomayo Basin
- Product 3: Knowledge dissemination through outreach events in the study area

**5.2. *Deliverables***

- Deliverable 1: Review of previous studies and work plan
- Deliverable 2: Report of the first feasibility study
- Deliverable 3: Report of the second feasibility study
- Deliverable 4: Report of investment program including at least 3 feasibility studies

**6. Project Schedule and Milestones**

<b>Deliverables</b>	<b>Timeframe</b>
Deliverable 1	45 days
Deliverable 2	180 days
Deliverable 3	360 days
Deliverable 4	600 days

## **7. Reporting Requirements**

- 7.1.** The consulting firm should follow the above-mentioned project scope, activities, schedule and milestones in a timely manner. Every deliverable including plans, reports, and proposals should be written in Spanish
- 7.2.** Format: Document in WORD and Pdf for preliminary approval by the technical team and the counterpart. Once the draft is approved, submit the final document in PDF.
- 7.3.** All recollected field data and products of technical studies should be submitted in digital version for review and traceability

## **8. Acceptance Criteria**

- 8.1.** The team leader will decide whether the deliverables are acceptable or not. Internal meetings will be held within the TC team to decide and to figure out if the deliverables meet the requirements of this consultancy. If the deliverables do not comply with the requirements, the consulting firm will be obliged to revise and supplement the deliverables.

## **9. Other Requirements**

- 9.1. Experience:** The consulting firm must have proven experience in conducting feasibility studies and pre-investment studies in this field.
- 9.2. Work Team:** The team must consist of specialists in project evaluation, civil engineering, hydrology, hydraulics, geology, water and sanitation, irrigation, geomorphology, and environmental studies.
- 9.3. Methodology:** An agile methodology should be employed to allow for early delivery of value and continuous validation by the institutions involved.
- 9.4. Infrastructure:** The firm must have the necessary technical infrastructure to support the development and implementation of the proposed tools.

## **10. Supervision and Reporting**

- 10.1.** The consulting firm will report to the WSA/CPR Specialist regarding any matters related to this consultancy. Every TC team member can give comments on the deliverables to secure the quality of deliverables
- 10.2.** After the consulting firm submits the work plan, the Bank and the consulting firm together with the National Commission for the Regulation and Multi-Purpose Use of the Pilcomayo River of Paraguay will have meetings on a regular basis.

## **11. Schedule of Payments**

- 11.1.** Payment terms will be based on project milestones or deliverables. The Bank does not expect to make advance payments under consulting contracts unless a significant amount of travel is required. The Bank wishes to receive the most competitive cost proposal for the services described herein.
- 11.2.** The IDB Official Exchange Rate indicated in the RFP will be applied for necessary conversions of local currency payments.

<b>Payment Schedule</b>	
<b><i>Deliverable</i></b>	<b>%</b>
Deliverable 1	20
Deliverable 2	25
Deliverable 3	25
Deliverable 4	30
<b>TOTAL</b>	<b>100%</b>

DRAFT

## TERMS OF REFERENCE

### Development and monitoring of pilot demonstration projects for the management of water resources in the Pilcomayo River Basin

#### PARAGUAY

#### PR-T1369

#### Developing an Investment Plan to support water resources management in the Pilcomayo River Basin in Paraguay

### 1. Background and Justification

- 1.1.** The Pilcomayo River Basin covers an extensive area of approximately 238,653 km<sup>2</sup> of northern Argentina (27%), southern Bolivia (36%) and western Paraguay (37%). 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. 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.
- 1.2.** In 2023, as part of the technical cooperation RG-T3294 'Water Resources Management in the Pilcomayo River Basin', the management plan for the Pilcomayo River basin was updated through a comprehensive hydrological analysis, identifying the actions and investments needed for implementation in the short, medium, and long term. A key outcome was the evaluation and prioritization of structural and non-structural measures, resulting in a list of 63 prioritized actions. Various criteria were used, considering environmental, social, institutional, and economic aspects, and stakeholders from the three countries involved participated in the identification and prioritization process. The most urgent actions and investments identified for the entire basin 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 fisheries management, with an emphasis on indigenous populations and local communities to promote food security.
- 1.3.** In the Paraguayan sector of the Pilcomayo River basin, the lack of water availability for human consumption represents a significant challenge for local communities. One of the reasons is the lack of continuity in the Pilcomayo River's flows due to the large transport of sediments, which causes permanent changes in the riverbed and an excessive concentration of sediments in the water. Additionally, the rainfall regime in the region is extremely variable, with the Pilcomayo Basin and Central Chaco being the areas in Paraguay most affected by the La Niña phenomenon, which worsens droughts and rainfall shortages. A common situation in the Paraguayan region of

the Pilcomayo is that, during prolonged drought periods, drinking water must be transported by tanker trucks from Asuncion.

- 1.4.** In response to this situation, the National Commission for the Regulation and Multi-Purpose Use of the Pilcomayo River of Paraguay (CNRP PY), part of the Ministry of Public Works and Communications of Paraguay, requires an investment plan to support water resource management and ensure access to water for human consumption and food production. The Republic of Korea, through its instrument, the Korean Poverty Reduction Fund (KPR), which aims to reduce poverty and promote social development, including improving living conditions and access to social services such as water and sanitation, has delegated to the IDB the execution of technical cooperation to support the CNRP PY.
- 1.5.** In the framework of the technical cooperation PR-T1369 several feasibility studies will be elaborated for actions and measures identified within the framework of the updated Pilcomayo River Basin Plan, which aim at sustainable solutions to water scarcity, contributing to poverty reduction and the achievement of SDG 6, as well as the integrated management of water resources in the Paraguayan region of the Pilcomayo River Basin. At least 2 pilot projects are required to showcase the technical feasibility and socio-economic benefits of these actions and measures.

## **2. Objectives**

- 2.1.** The objective is to develop and monitor at least two pilot projects in the Paraguayan region of the Pilcomayo River Basin that demonstrate the technical feasibility along with the economic and social benefits of the actions and measures defined in the feasibility studies available.

## **3. Scope of Services**

- 3.1.** Develop and monitor at least 2 pilot projects that showcase the technical feasibility and the economic and social benefits of the measures studied in Component I. Examples of possible pilot projects are (i) Sustainable exploitation of the Pilcomayo aquifer for human consumption and agricultural production and (ii) stormwater harvesting and artificial recharge of shallow aquifers in the Pilcomayo River Basin as an alternative water source for human consumption and agricultural production, considering gender approach.
- 3.2.** Development and monitoring of indicators to quantify economic, social and environmental benefits.
- 3.3.** Organize in-situ demonstration events to showcase the technical feasibility and socio-economic benefits of the actions and measures to the involved stakeholders, public institutions and decision-makers.

## **4. Key Activities**

- 4.1. Review of the existing feasibility studies to identify 2 pilot projects**
- 4.2. Consultation with the local stakeholders**
- 4.3. Develop and monitor pilot projects that showcase the economic and social benefits of the selected pilot.**

*Key activities depend on the pilot project that will be selected (based on the availability of feasibility studies and the local conditions in study-area). Therefore, as a reference, examples of activities are given for 2 possible pilot projects:*

**Pilot project 1: Sustainable exploitation of the Pilcomayo aquifer**

- **General objective:** demonstrating the technical feasibility and the economic and social benefits of utilizing groundwater from the Pilcomayo Aquifer for domestic use and drip irrigation in agricultural production, particularly within vulnerable communities.
- **Main activities:** developing of a small-scale irrigation project utilizing groundwater from shallow aquifers, identifying water quality requirements, monitoring water quantity and quality, capacitation of local community, promoting efficient water use, etc.

**Pilot project 2: Stormwater harvesting and artificial recharge of shallow aquifers**

- **General objective:** demonstrating the technical feasibility and the economic and social benefits of capturing stormwater for recharge of shallow aquifers in order to exploit this alternative water source during future drought periods.
- **Main activities:** developing a small-scale experiment to capture stormwater for recharge in shallow aquifers, identifying water uses and water quality requirements, water quantity and quality monitoring, capacitation of local community, promoting efficient water use, etc.

**5. Expected Outcome and Deliverables**

**5.1. Expected outcome**

- **Product 1:** At least 2 pilot projects developed and monitored
- **Product 2:** Knowledge dissemination through demonstration events in the study area

**5.2. Deliverables**

- Deliverable 1: Review of existing feasibility studies, consultation with stakeholders and work plan for the development of the pilot studies
- Deliverable 2: Report on first pilot project
- Deliverable 3: Report on second pilot project
- Deliverable 4: Final Report on the pilot projects including monitoring results and summary of demonstration events

**12. Project Schedule and Milestones**

<b>Deliverables</b>	<b>Timeframe</b>
Deliverable 1	45 days
Deliverable 2	180 days
Deliverable 3	360 days
Deliverable 4	540 days

**6. Reporting Requirements**

**6.1.** The consulting firm should follow the above-mentioned project scope, activities, schedule and milestones in a timely manner. Every deliverable including plans, reports, and proposals should be written in Spanish

**6.2.** Format: Document in WORD and Pdf for preliminary approval by the technical team and the counterpart. Once the draft is approved, submit the final document in PDF.



**6.3.** All recollected field data and products of technical studies should be submitted in digital version for review and traceability

**7. Acceptance Criteria**

**7.1.** The team leader will decide whether the deliverables are acceptable or not. Internal meetings will be held within the TC team to decide and to figure out if the deliverables meet requirements of this consultancy. If the deliverables do not comply with the requirements, the consulting firm will be obliged to revise and supplement the deliverables.

**8. Other Requirements**

**8.1. Experience:** The consulting firm must have proven experience in developing and monitoring pilot projects and case-studies in this field..

**8.2. Work Team:** The team must consist of specialists in project management, civil engineering, hydrology, hydraulics, geology, water and sanitation, irrigation, geomorphology, and environmental studies.

**8.3. Methodology:** An agile methodology should be employed to allow for early delivery of value and continuous validation by the involved institutions.

**8.4. Infrastructure:** The firm must have the necessary technical infrastructure to support the development and implementation of the proposed tools.

**9. Supervision and Reporting**

**9.1.** The consulting firm will report to the WSA/CPR Specialist regarding any matters related to this consultancy. Every TC team member can give comments on the deliverables to secure the quality of deliverables

**9.2.** After the consulting firm submits the work plan, the Bank and the consulting firm together with the National Commission for the Regulation and Multi-Purpose Use of the Pilcomayo River of Paraguay will have meetings on a regular basis.

**10. Schedule of Payments**

**10.1.** Payment terms will be based on project milestones or deliverables. The Bank does not expect to make advance payments under consulting contracts unless a significant amount of travel is required. The Bank wishes to receive the most competitive cost proposal for the services described herein.

**10.2.** The IDB Official Exchange Rate indicated in the RFP will be applied for necessary conversions of local currency payments.

<b>Payment Schedule</b>	
<b><i>Deliverable</i></b>	<b>%</b>
Deliverable 1	20
Deliverable 2	30
Deliverable 3	30
Deliverable 4	20
<b>TOTAL</b>	<b>100%</b>

## TERMS OF REFERENCE

### Capacity building program and case study on water basin governance with South Korean Government

PARAGUAY

PR-T1369

Developing an Investment Plan to support water resources management in the Pilcomayo River Basin in Paraguay

#### 1. Background and Justification

- 1.1.** The Pilcomayo River Basin covers an extensive area of approximately 238,653 km<sup>2</sup> of northern Argentina (27%), southern Bolivia (36%) and western Paraguay (37%). 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. 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 and 3% in Paraguay.
- 1.2.** In 2023, as part of the technical cooperation RG-T3294 'Water Resources Management in the Pilcomayo River Basin', the management plan for the Pilcomayo River basin was updated through a comprehensive hydrological analysis, identifying the actions and investments needed for implementation in the short, medium, and long term. A key outcome was the evaluation and prioritization of structural and non-structural measures, resulting in a list of 63 prioritized actions. Various criteria were used, considering environmental, social, institutional, and economic aspects, and stakeholders from the three countries involved participated in the identification and prioritization process. The most urgent actions and investments identified for the entire basin 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 fisheries management, with an emphasis on indigenous populations and local communities to promote food security.
- 1.3.** In the Paraguayan sector of the Pilcomayo River basin, the lack of water availability for human consumption represents a significant challenge for local communities. One of the reasons is the lack of continuity in the Pilcomayo River's flows due to the large transport of sediments, which causes permanent changes in the riverbed and an excessive concentration of sediments in the water. Additionally, the rainfall regime in the region is extremely variable, with the Pilcomayo Basin and Central Chaco being the areas in Paraguay most affected by the La Niña phenomenon, which worsens droughts and rainfall shortages. A common situation in the Paraguayan region of the Pilcomayo is that, during prolonged drought periods, drinking water must be transported by tanker trucks from Asuncion.

- 1.4.** In response to this situation, the National Commission for the Regulation and Multi-Purpose Use of the Pilcomayo River of Paraguay (CNRP PY), part of the Ministry of Public Works and Communications of Paraguay, requires an investment plan to support water resource management and ensure access to water for human consumption and food production. The Republic of Korea, through its instrument, the Korean Poverty Reduction Fund (KPR), which aims to reduce poverty and promote social development, including improving living conditions and access to social services such as water and sanitation, has delegated to the IDB the execution of technical cooperation to support the CNRP PY.
- 1.5.** In the framework of the technical cooperation PR-T1369, several feasibility studies will be elaborated for actions and measures identified within the framework of the updated Pilcomayo River Basin Plan, which aim at sustainable solutions to water scarcity, contributing to poverty reduction and the achievement of SDG 6, as well as the integrated management of water resources in the Paraguayan region of the Pilcomayo River Basin. As a complementary activity, the institutional capacity of the CNRP PY for water basin governance will be strengthened in order to enhance stakeholder engagement, develop policies, manage conflicts and promote collaborative approaches to water resources management, ensuring that all stakeholders are integrated into decision-making processes. This will ultimately support the sustainable development of the region, fostering resilience and adaptive management strategies to face current challenges of water scarcity and extreme events like droughts and flooding.

## **2. Objectives**

- 2.1.** Implement a capacity-building and training program for the technical staff of CNRP PY to enhance the integrated management of water resources in the Paraguayan region of the Pilcomayo River Basin, including knowledge sharing with the South Korean Government.
- 2.2.** Development of a case study on water basin governance, utilizing support and expertise from the South Korean Government, by developing policies and promoting collaborative approaches to water resources management, ensuring that all stakeholders are integrated into decision-making processes.

## **3. Scope of Services**

- 3.1.** Identify successfully implemented water basin governance frameworks in Korea and organize knowledge exchange between the CNRP PY and the South Korean Government
- 3.2.** Organize workshops and training sessions tailored to the needs of the technical staff of CNRP PY on transboundary basin governance, ensuring alignment with best practices and sustainability objectives for integrated water resources management.
- 3.3.** Develop a case study on water basin governance in the Paraguayan region of the Pilcomayo River Basin with support of the South Korean Government

#### 4. **Key Activities**

- 4.1. Identify and analyze successful water basin governance examples from South Korea, reviewing the laws, regulations, and policies implemented by the Korean government to foster integrated water resources management and river basin governance
- 4.2. Benchmark the successful water governance practices of South Korea against the current challenges and limitations faced in Paraguay, identifying key areas for improvement and potential lessons that can be applied to the Pilcomayo River Basin. This activity includes terrain visits and stakeholder consultations in the study area.
- 4.3. Organize training sessions tailored to the specific needs of CNRP PY, aimed at enhancing integrated water resources management in the Paraguayan region of the Pilcomayo River Basin and promoting an integrated transboundary approach.
- 4.4. Develop a comprehensive case-study on basin water governance together with CNRP PY and with support of the Korean government, focusing on sustainable water resource management practices and effective strategies for internationally shared water basins.

#### 5. **Expected Outcome and Deliverables**

##### 5.1. **Expected outcome**

- Product 1: Capacity building program implemented including knowledge exchange with the South Korean government
- Product 2: Case-study of Water Basin Governance developed with support of the South Korean Government

##### 5.2. **Deliverables**

- Deliverable 1: Work plan that will describe detailed activities to accomplish the objectives and schedule of the project. Proper allocation of human, financial, and material resources will be presented through the work plan
- Deliverable 2: Report summarizing the results of the review of water basin governance examples from South Korea, along with an analysis of the challenges and limitations for their applicability to the Pilcomayo River Basin.
- Deliverable 3: Report detailing the capacity-building activities conducted in collaboration with the South Korean government.
- Deliverable 4: Final report presenting a case study of water basin governance in the Pilcomayo River Basin, including a workshop presentation to CNRP PY and key stake holders of the basin.

#### 6. **Project Schedule and Milestones**

<b>Deliverables</b>	<b>Timeframe</b>
Deliverable 1	30 days
Deliverable 2	150 days
Deliverable 3	360 days
Deliverable 4	480 days

#### 7. **Reporting Requirements**

- 7.1. The consulting firm should follow the above-mentioned project scope, activities, schedule and milestones in a timely manner. Every deliverable including plans, reports, and proposals should

be written in English or Spanish

**7.2.** Format: Document in WORD and Pdf for preliminary approval by the technical team and the counterpart. Once the draft is approved, submit the final document in PDF.

**7.3.** All recollected field data and reports on field mission and stakeholder consultation should be submitted in digital version for review and traceability

## **8. Acceptance Criteria**

**8.1.** The team leader will decide whether the deliverables are acceptable or not. Internal meetings will be held within the TC team to decide and to figure out if the deliverables meet the requirements of this consultancy. If the deliverables do not comply with the requirements, the consulting firm will be obliged to revise and supplement the deliverables.

## **9. Other Requirements**

**9.1.** The consulting firm should demonstrate the capacity to form a team with the following characteristics:

- Expertise in development of capacity building programs and case-studies in the field of river basin governance and water resources management
- Work or research experiences in Latin America and the Caribbean region and with the Korean Governmental Institutions
- Work experiences with multilateral development organizations
- Ability to hire personnel with fluency in English, Spanish and Korean

## **10. Supervision and Reporting**

**10.1.** The consulting firm will report to the WSA/CPR Specialist regarding any matters related to this consultancy. Every TC team member can give comments on the deliverables to secure the quality of deliverables

**10.2.** After the consulting firm submits the work plan, the Bank and the consulting firm together with the National Commission for the Regulation and Multi-Purpose Use of the Pilcomayo River of Paraguay will have meetings on a regular basis.

## **11. Schedule of Payments**

**11.1.** Payment terms will be based on project milestones or deliverables. The Bank does not expect to make advance payments under consulting contracts unless a significant amount of travel is required. The Bank wishes to receive the most competitive cost proposal for the services described herein.

**11.2.** The IDB Official Exchange Rate indicated in the RFP will be applied for necessary conversions of local currency payments.

<b>Payment Schedule</b>	
<b><i>Deliverable</i></b>	<b>%</b>
Deliverable 1	20
Deliverable 2	30
Deliverable 3	30
Deliverable 4	20
<b>TOTAL</b>	<b>100%</b>

DRAFT

## TERMS OF REFERENCE

### Coordination and supervision of feasibility studies and pilot projects and organization workshops

Support Consultant for Water Resources Management

#### Post of duty: Paraguay

The IDB Group is a community of diverse, versatile, and passionate people who come together on a journey to improve lives in Latin America and the Caribbean. Our people find purpose and do what they love in an inclusive, collaborative, agile, and rewarding environment.

#### About this position

In the context of the technical cooperation Developing an Investment Plan to support water resources management in the Pilcomayo River Basin in Paraguay (PR-T1369) by the Inter-American Development Bank (IDB), the Water and Sanitation Division in Argentina (WSA/CPR) is seeking a consultant to provide technical advice, monitoring, and oversight of the feasibility studies and pilot projects related to the execution of the Technical Cooperation Developing an Investment Plan to support water resources management in the Pilcomayo River Basin in Paraguay. The consultant will ensure compliance with the commitments outlined in the consulting firm's methodological proposal, oversee the quality of its management, and facilitate interaction and information exchange among various stakeholders. Additionally, the consultant will review the reports and results of the main components in coordination with the technical team of the Trilateral Commission of the Pilcomayo. The consultant will also organize 2 workshops and elaborate a technical note with the main outcome of the TC. The consultant will also hold necessary meetings with the consulting firm's specialists, CNRP PY and the Bank to assess compliance with the work schedule and study objectives.

#### What you'll do:

- Facilitate the planning and execution of the initial and final workshop.
- Prepare and publish a technical note summarizing key findings and insights of the TC.
- Assist in the coordination and supervision of feasibility studies and pilot projects.
- Analyze the reports (deliverables) produced by the consulting companies in accordance with the terms of reference requirements
- Engage in technical discussions with the consulting companies during their progress report presentations.
- Interact and discuss technical matters with representatives CNRP PY and the Bank
- Serve as a liaison between the consulting company and CNRP PY

#### Deliverables

- Deliverable 1: Report on the organization of the kick-off workshop
- Deliverable 2: Report on the organization of the kick-off workshop
- Deliverable 3: Technical note
- Deliverable 4: Report on Assistance Provided to the CNRP PY and the Bank in Coordinating and Supervising Feasibility Studies and Pilot Projects

## Payment Schedule

*The deliverables schedule and Schedule of Payments will depend on which of the following two options is selected: 1) a single PEC contract based on time dedication (retainer) or 2) individual PEC contracts for each of the four activities. In both cases, there are four clearly identified products:*

Payment Schedule	
<i>Deliverable</i>	<i>%</i>
Deliverable 1	25
Deliverable 2	25
Deliverable 3	20
Deliverable 4	30
<b>TOTAL</b>	<b>100%</b>

## What you'll need

- **Education:** Master's degree in civil, hydraulic, or environmental engineering, preferably equivalent to a field related to water resources.
- **Experience:** Minimum of 15 years of relevant professional experience
- **Languages:** Spanish and basic understanding of Guarani

## Key skills:

- Learn continuously.
- Collaborate and share knowledge.
- Focus on clients.
- Communicate and influence.
- Innovate and try new things.

## Requirements:

- **Citizenship:** choose one of the following:  
IDB: You are either a citizen of Paraguay or a citizen of one of our 48-member countries eligible to obtain a valid residency or legal permit to work in Paraguay without the need for sponsorship by the IDB.
- **Consanguinity:** You have no family members (up to the fourth degree of consanguinity and second degree of affinity, including spouse) working at the IDB, IDB Invest, or IDB Lab.

## Type of contract and duration:

- **Type of contract:** External Products and Services Consultant (PEC), Retainer.
- **Length of contract:** *The length of the contract depends on which of the following two options is selected: 1) a single PEC contract based on time dedication (retainer) or 2) individual PEC contracts for each of the four activities.*
- **Work Location:** Paraguay



### **What we offer**

- A **competitive compensation** packages.
- A flexible way of working. You will be evaluated by deliverable.

### **Our culture**

At the IDB Group we work so everyone brings their best and authentic selves to work, willing to try new approaches without fear, and where they are accountable and rewarded for their actions.

Diversity, Equity, Inclusion and Belonging (DEIB) are at the center of our organization. We celebrate all dimensions of diversity and encourage women, LGBTQ+ people, persons with disabilities, Afro-descendants, and Indigenous people to apply.

We will ensure that individuals with disabilities are provided reasonable accommodation to participate in the job interview process. If you are a qualified candidate with a disability, please e-mail us at [diversity@iadb.org](mailto:diversity@iadb.org) to request reasonable accommodation to complete this application.

**Our Human Resources Team reviews carefully every application.**

### **About the IDB Group**

The IDB Group, composed of the Inter-American Development Bank (IDB), IDB Invest, and the IDB Lab offers flexible financing solutions to its member countries to finance economic and social development through lending and grants to public and private entities in Latin America and the Caribbean.

### **About IDB**

We work to improve lives in Latin America and the Caribbean. Through financial and technical support for countries working to reduce poverty and inequality, we help improve health and education and advance infrastructure. Our aim is to achieve development in a sustainable, climate-friendly way. With a history dating back to 1959, today we are the leading source of development financing for Latin America and the Caribbean. We provide loans, grants, and technical assistance; and we conduct extensive research. We maintain a strong commitment to achieving measurable results and the highest standards of integrity, transparency, and accountability.

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