

# **Public**

# **Environmental and Social Data Sheet**

# **Overview**

Project Name: RIO SALADO FLOOD PROTECTION PROGRAMME

Project Number: 2017-0354
Country: Argentina

Project Description: The project will finance the measures included in the

Integrated Salado River Basin Management Plan (PMI), thus (i) enhance flood protection and (ii) strengthen the capacity of the responsible institutions for integrated water resources monitoring and management in the Salado River Basin.

EIA required: yes

Project included in Carbon Footprint Exercise<sup>1</sup>: no

# **Environmental and Social Assessment**

The Rio Salado is the largest river basin in the Province of Buenos Aires (PBA). The river is 640 Km long, it drains a total area of 170,000 sg.km. and has 1.4 m inhabitants.

Climate change and extreme climate events increasingly threaten economic development in the PBA and the Salado River Basin. The Integrated Salado River Basin Management Plan (Plan de Manejo Integral de la Cuenca del Río Salado-PMI) was prepared by the Province of Buenos Aires (PBA) with World Bank support, in response to the higher flood and drought risks. The PMI has three main objectives: (i) reduce negative impacts of floods and droughts on the basin's economy and consequently on the provincial and national economy; (ii) improve the economic conditions of the basin through sustainable development and (iii) develop and preserve the environmental value of the basin and, in particular, the wetlands.

The Programme will finance the following components included in the PMI: (i) Enhancement of the hydraulic capacity of the Río Salado sections IV-lb (length 34 km) and IV-II (length 33 km) and (ii) Integrated Water Resources Management measures. These measures neither imply changes to the river course nor construction of any type of concrete structures.

The extracted material will be placed in discontinuous parcels, or *recintos*, which will be slightly elevated. Previously completed sections on the Salado River have successfully used *recintos* to repurpose dredged material. This environmentally friendly method avoids the traditional construction of continuous large dikes along the riverbanks, which confine the river flow.

<sup>&</sup>lt;sup>1</sup> Only projects that meet the scope of the Carbon Footprint Exercise, as defined in the EIB draft Carbon Footprint Methodologies, are included, provided estimated emissions exceed the methodology thresholds: 20,000 tonnes CO2e/year absolute (gross) or 20,000 tonnes CO2e/year relative (net) – both increases and savings.



#### **Environmental Assessment**

The "Organismo Provincial para el Desarrollo Sostenible" (OPDS) is the competent environmental authority for this project, since according to the Constitution of Argentina (art. 121 and 124) the competencies related to environmental protection are delegated to the Provincial Governments.

The PMI evaluated diverse strategic alternatives with respect to addressing the problem of flooding in the basin. The alternatives were studied from an environmental perspective through a preliminary Environmental Impact Assessment (EIA) and the final solution to be implemented in this project was adopted in 2009.

The operation would require within the European context a full EIA according to the EIA Directive 2014/52/EU (Annex I). A strategic environmental assessment (SEA) as defined in the SEA Directive 2001/42/EC is not required by local legislation. The operation would be in line with the EU Water Framework Directive as a benchmark.

In compliance with the Provincial Law 11.723 "Ley Integral del Medio Ambiente y los Recursos Naturales" (Integral Law of Environment and Natural Resources), two full Environmental and Social Impact Assesments (ESIAs) were completed for the two sections of the Project (IV-Ib and IV-II) in 2017. The Declarations of Environmental Impact (DIAs or environmental permits) were received in May and in December 2018, respectively. The ESIA of the component financed by the EIB has been published in the Bank's Website.

The project area is a rural landscape with significant anthropogenic influence; no wild or pristine areas remain. The works will be located in areas with agricultural or cattle use, and will not have any impact on natural Habitats, which are not located in the Project's area.

As part of the ESIAs completed in 2017, comprehensive Environmental and Social Management Plans (ESMP) were drafted, including a set of institutional, monitoring and mitigation measures targeting to: (i) prevent and mitigate adverse environmental and social impact during construction and (ii) improve and strengthen environmental monitoring, water quality control and wetlands management.

The Integrated Water Resources Management components aim to complement the enhancement of the hydraulic capacity and mainly concern institutional strengthening and planning. They will produce environmental benefits in the entire Salado River Basin.

# **Environmental impacts**

The ESIAs identified the following potential negative environmental impacts:

## a) Impacts during Construction:

Even though the course of the river is not modified and no structures are built, potential negative environmental impacts identified for the construction phase relate to: (i) temporary alterations in the pattern of water flow that will take place as a result of the excavation in the riverbed and surrounding riverbanks; (ii) reversible impact on fauna, particularly birds and fish and (iii) temporary increase of the turbidity in the water due to the sediments. These impacts are considered localized, temporary and reversible once the works are completed, due to the environmental considerations embedded in the design and the overall capacity of the fluvial corridor to restore similar conditions. Nevertheless and in order to minimize these impacts, adequate Environmental and Social Management Plants have been included in the ESIAs.



These ESMPs will be updated with the finalisation of the design studies and will be strictly implemented by the contractors.

The recintos or discontinuous parcels where the extracted material will be placed, will have to be located between 200 to 800 meters from the riverbank, leaving a parallel strip of at least 200 meters to establish a biological corridor. The recintos will not be located in any natural habitat or areas with natural pasture. An analysis and a field study will be conducted on potential "recintos" sites that have been already identified, before they are finally selected to ensure that all the environmental criteria established in the ESIA are met.

# b) Impacts during Operation

Impacts once the works are finalized are: (i) modification of the water quality and increase of eutrophication; (ii) impact on fish population and (iii) loss of diversity in the vegetation and landscape. However, the monitoring programs implemented in the sections I, II and III (223 Km executed so far), proved that the modification in the water quality (turbidity, suspended solids, conductivity and eutrophication) was only linked to the construction activities.

The Promoter will be required to implement as an undertaking, all the mitigation measures included in the ESIAs such as update and follow the ESMPs, and draft and implement a full Water Quality Monitoring Plan. In addition, the operation includes components to strengthen the Environmental Management in the entire Salado River Basin, including the Institutional Strengthening of the Water Quality Control and Environmental Services (ADA-Agencia del Agua) and the Environmental and Wetlands Management Plan.

The components financed by the Bank will be implemented in line with the Bank's Environmental and Social Standards and in order to assist the Promoter, technical assistance will monitor the works construction and report accordingly.

#### **Climate Change**

The intensity of climate variations in many parts of Argentina and in particular in the River Salado Basin, with prolonged extreme weather events, has significantly increased during the last decades due to stronger El Nino Southern Oscillation (ENSO) events and climate change. The vulnerability of the area to climate change was assessed through different studies<sup>2</sup>. The project aims through the measures of flood protection at improving the flood resilience toward climate change of the entire River Salado Basin. Thus it has a significant contribution to Climate Change Adaptation.

# **Social Assessment**

The Programme will have predominantly positive social impacts according to the ESIAs, by (i) reducing the risk and impact of floods for around 106,000 inhabitants, (ii) employment generation and (iii) generation of induced economic activities. The area of the works is a rural area, not densely populated. Hence, the usual nuisance (noise, dust, traffic disturbance) in relation to these types of works will not be significant, and will be tackled by temporary mitigation measures foreseen in the ESMP.

Since the course of the river is not modified, all the interventions will take place in public property. There will be no resettlement, no loss of income or means of livelihood. It is known that some farmers plant crops in the public domain adjacent to their property. In these cases, the Promoter will announce the works in a timely manner to provide written notice so that the

<sup>&</sup>lt;sup>2</sup> Cambio Climático. Afectación a las Obras Hidráulicas de la Cuenca del Río Salado. Ing, Guillermo Ariel Cabral. Sept 2017.



farmer will have the necessary time to harvest crops prior the start of the works. The Promoter will reach agreements with all the farmers who own property adjacent to the area of the works. In addition, previously to the commencement of the works, the Promoter will reach agreements with the land owners of the plots previously selected for locating the recintos. This environmental friendly solution was successfully used in the previously accomplished sections.

According to the ESIAs there are no Indigenous Peoples (IP) in the areas of intervention of the project. However, there are indigenous people present in other areas of the Salado River Basin as documented in the National Registry of Indigenous Communities. Since the Integrated Water Resources Management measures are aimed to improve the management of the whole Basin, the Promoter has prepared an Indigenous Peoples Planning Framework (IPPF), approved by the World Bank. This IPPF will be used in the cases that IPs are identified as stakeholders in the water management or affected by water related issues in the Basin.

#### Labour Standards

Argentina has ratified all eight ILO Fundamental Conventions (and three out of four Governance Conventions). The promoter will verify the implementation of the requirements relative to the applicable national labour code, ILO standards and EIB social standards during the implementation of the works, as well as in tender documents and in the subsequent agreements with selected contractors.

# **Public Consultation and Stakeholder Engagement**

During the development of the Integrated Salado River Basin Management Plan (PMI) there have been different participation instances that allowed the inclusion of community concerns to the overall project. The solution of the enhancement of the hydraulic capacity of the river was the result of the interaction with the academic sector and nongovernmental organizations (NGOs). The ESIAs were subject to public consultation during the year 2017 and no public contestation was recorded. In addition, the ESMPs include a Communication Program (socializing the project, announcing the start-end of works etc) and a Grievance Mechanism. These tools will be reviewed and monitored by the technical assistance responsible for assisting the Promoter in the implementation of the Programme.

# **Conclusions and Recommendations**

The Promoter will be required to fulfil the following conditions/undertakings related to the components financed by the Bank:

## Prior to the first disbursement:

 The Technical Assistance to the Project Implementation Unit (PIU) for the technical supervision, Environmental and Social Monitoring of the works has been contracted with Terms of Reference Satisfactory to the Bank.

# **Undertakings**

 The promoter shall comply with the applicable laws, ILO labour standards and international best practices and shall ensure that relevant contracts financed under the Project include specific clauses on these undertakings.



- The Promoter shall ensure that the Project (including all works performed by the contractors) is carried out in accordance with the provisions contained in the ESIA, the ESMP and the Indigenous Peoples Planning Framework (IPPF).
- The Promoter shall, or shall cause the contractor of the works (as the case may be) to, prior to the initiation of any physical works within any given area of the Salado River, enter into an agreement (the Voluntary Agreement) with the relevant landowner of the property adjacent to said area, on terms and conditions acceptable to the Bank, and as detailed in the ESMP.
- The Promoter shall notify the Bank, within 2 days after its occurrence, of any significant environmental, occupational health and safety relevant event; and within 30 days provide the Bank with a summary report that includes a description of such significant event, and the measures that the promoter is taking or plans to take to address the event and prevent any future similar events.
- The Promoter shall implement and maintain the Grievance Redress Mechanism (GRM) for addressing complaints as detailed in the ESMP.
- The Promoter shall report regularly on the River Water Quality Monitoring during the implementation of the works, at completion of the works and at least 3 years after the completion of the entire project.

Taking into consideration the above undertakings, the project is considered to be acceptable for Bank financing from an environmental and social perspective.

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