The Government of Argentina has concluded the process of restructuring its debt in foreign currency (both local and external) with private creditors, significantly improving the maturity profile for the next five to eight years.

Climate change will particularly affect the Argentinian energy sector and its climate resilience, as higher temperatures and extreme weather events will impact power generation, especially clean energy sources such as hydro, solar and wind. [2] Higher demand resulting from economic growth, industrial expansion, urbanization, and population growth will also challenge existing power supply systems.

This amount covers the remaining obligations under the 2018 SBA (US$40.5 billion) and provided a small net financing support for reserves accumulation (US$4.5 billion).

Nevertheless, capital controls and deficit monetization continue to cause a large gap between the official and parallel exchange rates and limit foreign reserve accumulation.

A severe drought is expected to strongly affect agricultural production in 2023, reducing exports and fiscal revenues while limiting the capacity of the Central Bank to accumulate international reserves.

To reduce the monetary financing of the fiscal deficit and the associated persistent and high inflation, the government has adopted measures to reduce the cost of subsidies and improve their targeting, especially in the costly energy sector. In addition, it is taking steps to improve the ability of the customs administration to supervise and control the over invoicing of trade and other related distortions. In addition to addressing the urgent need for reserve accumulation, these measures should help pave the way for the eventual easing of foreign exchange controls.

Investing in flood risk reduction will have macroeconomic impacts and urban flood mitigation infrastructure will reduce asset and welfare losses. The benefit-cost ratios of the interventions (in the range from 1.4 for flood mitigation, to 4.0 for hydrometeorological infrastructure) could be increased by lowering costs through the implementation of nature-based solutions. Similarly, more effective use of planning and land-use management tools can also help reduce exposure to floods.

Climate change adds further stress to the existing infrastructure, and without proper planning and investments in risk management, floods will have a larger impact on residents and the economy.

Current flood management practices in Argentina are often insufficient, especially in relation to a holistic river basin approach which is required to optimize efficiency of interventions.

Thorough planning and design of infrastructure require an integrated river basin management approach. Innovative interventions, such as nature-based solutions to reduce flow peaks and store flood waters also need to be introduced to increase efficiency.

System's designs insufficiently consider the effects of climate change, and while authorities often have the regulations, they lack the capacity to control settlements in flood-prone areas and natural streams.

The country has a clear governance structure and institutional arrangements for water resources management.

Natural resources management (including water management) falls under provincial jurisdiction. For some river basins provinces and the national government coordinate management through basin management authorities. Municipalities and local governments are responsible for urban planning and land use management. Coordination becomes even more complex as investments in the water sector often require financial support from the national government. The Ministry of Public Works (MOP) implements most of these interventions after which they are handed over to the provincial or municipal authorities for operation and maintenance (O&M).

Interventions are often developed to minimize flood risks at a specific location disregarding upstream opportunities for more efficient water management strategies or downstream effects. This is the result of (i) a siloed approach between governmental departments and jurisdictional levels that are partly the consequence of the federal nature of the country, and (ii) a restriction in mandates, which leads to the overlook of cost-sharing opportunities for multipurpose interventions coordinated between sectoral departments.

As urban areas face a wider range of shocks and stresses, it is important to promote urban development and sustainability, as well as foster climate resilience in metropolitan areas.

Although urban flood hazard is considered high in Argentina, a few cities have truly integrated water management plans to properly prioritize investments. Some provinces have prioritized investments, and other provinces are carrying out studies, often financed by the national government, to identify the required investments to reduce flood risks in an integrated manner. For the provinces of Buenos Aires and Santa Fe, two of the most affected provinces, the investment needs to reduce flood risks amount to more than US$3.4 billion alone.

Likewise, the PNOP reinforces the international commitments assumed by Argentina in terms of environmental preservation, social integration, and sustainability, such as the Paris Agreement, the United Nations 2030 Sustainable Development Goals (SDGs), the Sendai Framework for Natural Risk Management, the latest updated NDCs (2021), the New Urban Agenda, the UN Framework Convention on Biological Diversity and the Convention Fight Against Desertification. It was developed as an action plan and a development agenda with the objective to establish a pact between the national government, the provinces, the private sector, and the society to adapt to climate change increasing levels of protection from floods, droughts, and other natural hazards, especially for the most vulnerable (women, children, the elderly, indigenous communities, and vulnerable settlements).

The MPA would support the

[20] 0 Green infrastructure (also called natural infrastructure, or engineering with nature) intentionally and strategically preserves, enhances, or restores elements of a natural system, such as streams, wetlands and can also include linear parks with flood plains, bioswales and wadis, or green roofs. Blue infrastructure refers to open water bodies of all sizes to retain water and reduce peak flows towards and in natural and constructed drainage systems.

[22] 2 The Disaster Risk Prevention and Reduction Program, an entity that aims to promote the inclusion of disaster risk reduction in development policies and land use planning at all levels of the State, through awareness raising and training of key actors.

[23] The National Water Policy Guiding Principles are federally agreed statements that allow for integration of technical, social, economic, legal, institutional, and environmental aspects of water in a modern, and efficient management.

[24] National Plan for the Reduction of Natural Disasters defines the policy guidelines for risk management to guarantee improved security

Under Pillar 3, Strengthening Resilience, the World Bank addresses crisis preparedness, and disast risk management by advocating programs that respond rapidly to future shocks. Under Pillar 4 Strengthening Policies, Institutions and Investments for Rebuilding Better, the World Bank focuses on promoting the Green, Resilient, and Inclusive Development (GRID) agenda.

The Program Development Objective for the MPA is to increase the number of people with reduced flood risk and benefiting from improved integrated flood risk management in Argentina. To achieve this objective the MPA supports the government to implement medium- and long-term plans for the water sector through a 10-year strategy. The proposed MPA for a total of US$900 million includes a three-phase overlapping approach, with each phase using the Investment Project Financing (IPF) instrument, in agreement with the government.

An MPA allows to address complex flood risk management issues with long-term engagement, flexibility, and gradually strengthening flood risk management countrywide.

Additionally, the phased approach will allow for national and subnational authorities to progressively build institutional capacity, helping to manage implementation risks.

According to lessons learned in World Bank projects this requires long term engagement of the World Bank supporting the borrower over a period that surpasses the timeframe of a regular Investment Project Financing (IPF).

During the first phase innovative and gender sensitive green-blue interventions for mitigating flood impacts and reducing citizens vulnerability, based on nature-based solutions, non-structural measures, and active engagement with communities will be developed and monitored. Because the MPA provides a scalable and modular framework, and a learning agenda is an instrumental part of the MPA, the borrower can learn from implementing interventions and optimizing efficiency of investments during subsequent phases.

The Program Development Objective (PrDO) will be achieved by (i) efficiently blending and developing green-blue, and grey infrastructure, as well as non-structural interventions, (ii) improving flood risk multi-level governance,[28] and (iii) increasing the capacity to manage flood risk through an integrated river basin planning approach. These activities are expected to lead to short-term results such as the implementation and operation of grey infrastructure with higher standards, and the improvement of flood mitigation schemes by complementary green and/or blue interventions. By putting into effect both structural and non-structural interventions, the MPA aims to increase climate resilience and build the capacity for improved flood risk management using river basin planning as a starting point for prioritization of interventions.

Without these interventions it will not be possible to reduce flood risks to an acceptable level.

This MPA considers the needs and circumstances particular to each region when building resilient infrastructure, improving operational efficiency, and strengthening water governance.

Considering the wide range of socio-economic, political, and natural environments, the level of flood risk and the readiness of interventions to reduce flood risks, this MPA pursues a gradual approach divided into three stages.

This will lead to a strong portfolio for the second and third phases while including other provinces and moving toward a country wide approach optimizing the efficiency of the projects using lessons learned and increased capacity at national, provincial, and local levels.

Number of people with enhanced flood protection through Program interventions

b. Number of cities that adopted improved integrated urban flood risk management practices as a result of the Program.

Phase I will focus on implementing no-regret grey infrastructure, preparation, piloting and implementation of green and blue in interventions, capacity building for local and national decision-makers, to (i) improve the enabling governance environment, (ii) strengthen climate resilience and reducing flood risk, and (iii) set a learning agenda to enhance the design and implementation of comparable interventions in subsequent phases. Interventions will support the development of guidelines on planning, design, implementation, O&M and M&E of structural and nonstructural measures.

Phase II of the MPA will allow for new investments and implementation of interventions prepared during the first phase.

Phase II will also seek to build on lessons learned in relation to institutional and governance arrangements and strengthen local capacities.

Phase III of the MPA will further implement interventions and strengthen the integrated management of flood risk reduction using a basin approach to prioritize and optimize interventions. Like previous phases, this last phase will regard the scaling-up of interventions in provinces where flood risk reduction is a priority.

With the completion of the MPA, flood risks will be reduced, and the governance structure will have adopted necessary instruments to improve prioritization, planning, design, implementation, O&M and M&E of efficient packages of grey, green, blue interventions and non-structural measures that increase the climate resilience of populations affected by floods.

The nature of the MPA presents similar infrastructure activities (i.e., the use of grey and green/blue infrastructure and non-structural interventions for flood adaptation and mitigation) in the three phases, which makes the MPA an excellent modality for learning lessons and implementing them in the subsequent phases.

Based on the Water Security Diagnostic for Argentina and lessons learned the learning agenda will initially focus on aspects related to (i) improving the institutional framework and strengthen water governance, (ii) how infrastructure to reduce flood risk can be made more resilient, (iii) strengthening the basic needs for improved sustainability and (iv) how to increase citizens engagement and close the gender gaps that are related to flood risk management and the added value of water in urban development.

Strengthen water governance.

Previously identified gaps in the Water Security Diagnostic for Argentina suggest the need to (i) develop and update existing flood risk management strategies and/or drainage master plans, (ii) review the challenges of governance arrangements, particularly conflicting or overlapping competencies between local, provincial, and national authorities for effective water management, and (iii) improve benchmarking data on gender aspects. Tackling both challenges will help to close the planning gap and build capacity for flood risk management. The guidelines developed during Phase I will become a framework for subsequent phases, helping to understand what actions should be conducted to improve the involved authorities' performance and how the existing strategies to manage flood risk can be improved.

Expand resilient infrastructure.

Expansion and development of the solutions will be achieved through the inclusion of training /capacity building activities for water resource/network management, plans for flood management, and enhancing response capacity as this will accrue climate adaptation benefits.

Phase I will also provide important input on how integrating water in urban development can increase the added value of water (economic, social, and environmental) in urban upgrading processes.

The percentage of developed O&M plans has been included as an indicator in the Phase I results framework.

For consecutive phases it is foreseen that an indicator will be added related to the inclusion of a budget line in financial plans prepared by responsible authorities.

The PDO is to reduce flood risk in selected cities and improve integrated urban flood risk management in Argentina, and act effectively in case of an Eligible Crisis or Emergency.

Number of people with reduced flood exposure as a result of Project interventions.

Number of people with reduced flood impacts as a result of Project interventions.

c . Number of cities that adopted improved integrated urban flood risk management practices as a result of the Project.

Synchronously, the pipeline for phase II will be built including the use of innovative concepts to increase efficiency.

All subprojects to be selected subsequently should be aligned with the MPA objectives, have technical designs that consider climate change scenarios, be economically viable and financially sustainable, with clear responsibilities for implementation, O&M and M&E, and ensure satisfactory environmental and social management following the Environmental and Social Management Framework (ESMF).

Climate resilient infrastructure for flood risk mitigation and adaptation in critical cities (US$179.5 million).

Structural interventions under this Project focus on (i) rehabilitating/constructing defense works in urban areas with high vulnerability to flooding damage; and (ii) pluvial drainage works to reduce the areas and communities affected by storms.

Interventions will be integrated in spatial planning, increasing the added value of water in urban areas Intervention details and technical assessments can be found in Annex I.

Evidence-based flood risk mitigation measures (US$138.75 million). This subcomponent will carry out demand-driven no-regret interventions consisting of rehabilitation, upgrading, reconstruction, or construction of new grey hydraulic infrastructure for urban drainage and flood risk mitigation (e.g., primary drainage channels, secondary and tertiary drainage networks, flow control infrastructure, storage areas, defenses, embankments, and pumping stations among others).

Innovative, integral, and multipurpose flood risk mitigation interventions (US$40,75 million).

Within the comprehensive matrix of green-blue infrastructure options, this Subcomponent will include the development of retention areas, linear parks, green roofs, and permeable pavements among others.

Additional benefits are the regulation of extreme temperatures (e.g., moderating heat island effects in urban areas), storage of water, reducing GHG emissions (reduction by limiting cement production), and capturing CO_2. Furthermore, these solutions could support the creation of recreational areas and urban green corridors adding to the integration, maintenance, and recovery of urban biodiversity.

This component will support capacity building of local, provincial, and national institutions to improve climate-resilient flood risk management.

This component will also focus on non-structural measures including the development of urban flood risk management plans and strategies, environmental assessments, urban development and solid waste management plans, the revision of legal frameworks, development of early warning systems, and any other tool necessary to strengthen the capacity to operate and maintain the infrastructure for improved urban flood risk management.

These will help authorities in the development and update of existing flood risk management strategies, drainage master plans, and project development using a more holistic basin approach. Preidentified sustainable flood risk management plans correspond to the cities of Formosa and Clorinda, in Formosa province.

Overall, activities executed under this component aim to support authorities by strengthening their institutional capacity, identifying roles and responsibilities, that ultimately facilitate the development and execution of investments in later phases of the MPA.

Project Management (US$5 million). This component will provide support to the Project Executing Agency (PEA) for the administration, monitoring, coordination, and supervision of project activities, including environmental and social management aspects, independent audits, and other related activities. It will also support the collaboration between MOP, provinces and cities, and finances participatory and interactive design processes with key stakeholders, all in response to the increased risk of urban flooding due to climate change). Carrying out of Project strategic evaluation activities in coordination with the Ministry of Economy, through the Undersecretariat of International Financial Relations for Development, as responsible for technical-methodological advice.

For the CERC to be activated, and financing to be provided, the Government will need (i) to submit a request letter for CERC activation, and the evidence required to determine eligibility of the emergency, as defined in the CERC Annex; and (ii) an Emergency Action Plan, including the emergency expenditures to be financed; and (iii) to meet the environmental and social requirements as agreed in the Emergency Action Plan and ESCF The mechanism to trigger the CERC will be established in the CERC Manual, which will detail the applicable fiduciary, environmental and social, monitoring, reporting, and any other implementation arrangements necessary for the execution of the proposed activities. In case of an event triggering the component, a reallocation of funds will be introduced to loan disbursement categories, to fund the activities and respond to the emergency.

Under Component 1, the flood risk in selected areas will be reduced through structural measures, directly benefiting the population in these areas, both those who live in the areas (reducing exposure of floods and damage of personal property) and those, working, commuting, studying around these areas with reduced flood related impacts on social and economic activities. With interventions improving the management of urban flood risks, for example, through better planning, prioritization, and more efficient interventions, the people living in the selected cities will benefit from the Project.

The interventions under Component 2 will increase the capacity of cities and authorities to reduce flood risks and to adopt improved integrated urban flood risk management practices.

With a long track record of supporting the sector with bold interventions, including over 20 years of engagement in mitigating flood risks, support in addressing the poor environmental conditions of the Matanza-Riachuelo river basin, and expanding water supply and sanitation services in low-income northern provinces (Norte Grande Region), the Bank is a trusted partner in the sector, helping the government overcome technical, institutional, financial, and legal challenges, among others. The Bank supports infrastructure investments and provides global technical expertise to encompass institutional development, environmental management, and citizen engagement, assisting the government toward the 2030 agenda and pursuing the SDGs.

Over the past decades, the Bank has been actively involved in flood risk management in Argentina financing projects that initially focused on recovery and rehabilitation and is now shifting to flood mitigation and flood risk management.

The Bank is well placed to provide this support given the many flood risk management projects that have been and are being supported by the Bank in this region and in other regions of the world. The Bank has also worked together with other development partners through additional funding.

The World Bank can share global knowledge and provide technical assistance for efficient flood risk management. Bank assistance to support and develop the Project would facilitate the sharing of lessons learned from previous Bank financed projects in Argentina and successful flood risk management projects globally. The Bank is bringing leading international experts and innovative concepts from within and outside the institution to inform the design and support the proposed Project's implementation.

Among the many projects that have provided important lessons learned for using an integrated approach, are the Sponge City projects in China, the Colombo Wetland Program in Sri Lanka, and the Urban Flood Risk Management projects in Wroclaw (Poland), Beira (Mozambique) and Kigali (Rwanda).

Often interventions to reduce flood risks are implemented as a reaction to an extreme event.

This also includes the integration of green and blue infrastructure to reduce peak flows and regulate the discharges to the storm water drainage systems. Furthermore, nonstructural interventions to increase capacity have been included in many of the Bank projects to further reduce vulnerability of communities and increase sustainability for example through better O&M.

The project will be implemented by the PEA composed of a technical team under the Infrastructure and Water Policy Secretariat (SIPH) and a fiduciary team under the General Programs and Sectorial and Special Projects Directorate (DiGePPSE), both within the MOP. Both the technical team and the fiduciary team have experience with the implementation of Bank-financed projects.

The team under the SIPH will be responsible for technical tasks such as developing technical specifications, reviewing technical proposals, contracting works, and supervising contracts.

The financial management, procurement, environmental and social responsibilities will be carried out by DiGePPSE that has shown good capacity to work with Bank systems.

Specifically, for environmental, social, health and safety management (ESHS) the DiGePPSE has a dedicated team composed of five environmental specialists (three senior an two junior), two social specialists, two health and safety specialists and one general ESHS coordinator.

General environmental and social management responsibilities (including supervision) will remain in DiGePPSE, which will coordinate activities with local entities as necessary. On an

Specifically, for environmental, social, health and safety

General environmental and social management respo

The tendering of ESIA and implementation will be coordinated by the PEA.

This will enable the responsible provincial and municipal authorities to carry out O&M to increase the sustainability of projects and ensure that the strategies, plans and tools to be developed will be used in an optimum manner.

This collaboration and coordination between the different levels of government will be laid out in an annex of the agreement signed between the national government and the authority that will receive the works.

The PEA will be responsible for organizing and merging the data coming from different levels of government (provincial and municipal) to track the advancement of the program against the indictors detailed in the results framework.

To ensure sustainability the national government will work with the responsible provincial and municipal authorities to improve capacity and develop the protocols needed to allocate resources for O&M and M&E. The MOP and responsible provincial and / or municipal authorities will sign agreements that lay out the tasks that need to be carried out during preparation, implementation, O&M and M&E. These agreements will be in force during the implementation to allow the provincial and municipal authorities to partake in the planning, design, and implementation ensuring that the subnational authorities will take full ownership of the interventions they receive. The agreements also will describe the responsibilities after implementation including the obligation to allocate sufficient funds for O&M.

Increasing the social, ecological, and economic value of water will also improve sustainability of the projects.

Therefore, increased collaboration with urban development will be sought to ensure that water and especially flood risk management will be properly integrated in neighborhood upgrading.

These interventions are assessed as no-regret measures meaning that, given their urgency, expected impact, and efficiency, they will be implemented in any given alternative package of interventions to reduce flood risks.

The Project will fund additional flood risk management interventions to be defined during implementation.

Under Component 2 the government will prepare urban flood risk management plans using their existing drainage plans as a starting point.

The proposed interventions were found technically adequate, with designs that address the need to upgrade the systems to adapt to climate change effects and address the challenges derived from flood risks in each urban setting. Additional interventions to be identified will also include green and grey infrastructure to improve drainage and adapt to climate change effects and non-structural interventions to improve sustainability.

It comprises several structural interventions to reduce flood risks. Additionally, non-structural interventions will be carried out to improve capacity for O&M, development of an early warning system and adequate solid waste management as this will allow the use of the full retention and discharge capacity of the system needed in the face of climate change. The intervention will also include the construction of a water park for public use, increasing awareness on issues like climate change and flood risks.

Improvement of the existing hydraulic conditions of the Canal Alvarado and the integration of the works in urban development in San Salvador de Jujuy, Jujuy (US$8.8 million). This intervention will recondition and improve the existing stormwater drainage system in the San Pedrito neighborhood. This activity will address issues resulting from uncontrolled urban sprawl, which has led to the expansion of vulnerable settlements along the canal. Non-structural interventions will include regulating land use in the riparian area allowing for more room for water (retention) to adapt to changing precipitation patterns; (ii) development of an early warning system; and (iii) improved solid waste management.

c. Rehabilitation of Canal Alvear and secondary drainage network in the city of Salta, Salta (US$23.4 million). The main part of the intervention[41] seeks to rehabilitate and upgrade the existing tunneled section of the Canal Alvear and its secondary network draining to the Canal-Alvear basin to increase the capacity in the face of climate change. This will be combined with the development of green retention areas to reduce the peak flow toward the canal and reduce the impact of increased precipitation.

The intervention includes citizens engagement programs to raise awareness on climate change, flood risk management, resilience, and waste management.

d. Improvement of the Arribalzaga street drainage network, and rehabilitation of Canal Soberania, Resistencia, Chaco (US$18.3 million).

Interventions considered to reduce impact are (i) rehabilitation of the existing Canal Soberania (10Km) including the construction of a linear park to retain water, and (ii) improvement of the drainage system located in the Avenida Arribalzaga including tunneled drainage and green interventions like rain gardens to reduce the peak flows toward the drainage system.[42] Expected

[41] The tunneled section and secondary drainage network are estimated at 80 percent of the costs and 20 percent of the costs will be related to green interventions.

Previous Bank-financed operations have shown that flood risk management interventions such as the ones to be financed under this project are economically feasible, showing positive Economic Internal Rates of Return (EIRR) and benefit-cost ratios (B/C) larger than 1. As a result of limited data, it is often the case, that only a partial economic assessment of structural flood mitigation measures can be carried out, leaving out the valuation of additional benefits and underestimating the positive impacts of these types of investments.

Other benefits, associated with the regularization of informal urban settlements, and those linked with green and blue infrastructure, like improved air quality, GHGs emissions reduction, increase of recreational areas, reduction of the heat islands effect, creation of new local socioeconomic opportunities, and tourism, have also been partially considered. To quantify these benefits, the methods of (i) avoided damage; and (ii) hedonic prices have been used.

After performing a sensitivity analysis, considering alternative cost scenarios and discount rates (between four and twelve percent) the interventions continue to be economically feasible, depicting their robustness.

In the case of San Salvado de Jujuy, benefits were estimated using a combination of avoided damage and hedonic prices methods.

Fiduciary

(i) Financial Management

73.

No other than standard conditions for FM will be applicable to the project.

The Argentinian legal framework for FM is well-developed at all levels of government, which is supported by the 1992 Financial Administration Law, revised in 2006, that regulates budgeting, public credit, treasury, government accounting, and internal controls.

The Implementing Agency will be composed by a technical team under the SIPH and a fiduciary team under the DiGePPSE, both within the Ministry of Public Works. The team at SIPH will oversee the coordination and technical implementation of the program, coordinating with the provincial and municipal governments, while the DiGePPSE will oversee the administration as well as the budgetary, environmental, and social, financial, and legal issues. At present these implementation arrangements are used in several programs financed by multilateral development banks.

Given the type of interventions included in the project, no valuable ecosystems, or habitats (legally protected and internationally recognized areas of high biodiversity value) are also expected to be affected.

In principle, there is low probability of serious adverse effects to human health, being the current COVID pandemic (and uncertainties on its evolution) and the recurrent dengue epidemic the main related risks to be managed, in addition to standard working health and safety risks, that usually are present in this kind of urban infrastructure projects.

The preliminary identified social risks and impacts are few and expected to be low to moderate and easily managed through either subproject design and construction planning (avoidance) or through appropriate mitigation measures included in the environmental and social risk management instruments. Subprojects may include minor land acquisition, and permanent physical or economic displacement.

For the management of these risks and potential impacts, the MOP has developed a set of Environmental and Social instruments. For interventions pre-identified during preparation and for which preliminary designs have been developed (in the cities of Jujuy and Salta) the MOP prepared the Terms Of Reference (TOR) for the Environmental and Social Impact Assessments, which were disclosed in-country and in the World Bank external website on November ۲۰th, 2022. The TOR of the Jujuy subproject were consulted at the local level and the corresponding report was disclosed in country on February ٦th, 2023 and in the World Bank external Website on February 2٦th, 2023; the consultation process of the Salta subproject is currently planned to be carried out during the first semester of 2023.

For interventions to be identified during project implementation, the MOP will develop an ESMF establishing the E&S management requirements to be applied to the subproject selection, design, and implementation; it will be finalized before initiating the preparation of any subproject selected during implementation.

However, given the priority given to flood risk reduction, the high need to address these aspects in pre-selected cities and locations and the flexibility to include additional projects in this or consecutive phases of the MPA, the risk is rated as moderate. Considered mitigation measures include (i) active consultation with the borrower to understand political and governance risks, (ii) constant monitoring of the dynamics of the political situation in the country, and (iii) conduct regular risk analyses with the Country Management Unit (CMU) and coordinate an appropriate risk response.

The project will be fully financed by the Bank to mitigate the risk of constrained counterpart financing during this fiscal situation. The contracts will have specific price adjustment clauses to further mitigate the risks.

These risks will be minimized through ensuring the participation of the benefiting province/municipality in the design, development of Terms of References, tendering and implementation, and the provisioning of capacity building for the involved institutions at local, provincial, and national levels to increase technical capacity.

RESULTS FRAMEWORK AND MONITORIN

Results Framework

COUNTRY: Argentina

Climate Resilient Infrastructure for Urban Flood Risk Management Project

Project Development Objective(s)

The PDO is to reduce flood risk in selected cities and improve integrated urban flood risk management in Argentina, and act effectively in case of an Eligible Crisis or Emergency.

Each project will be supported by complete technical designs considering climate change effects, proof of its economic feasibility, financial sustainability, as well as adequate environmental and social management.

Additionally, urban growth was not accompanied by the necessary urban drainage infrastructure works, causing the existing systems to become less efficient and resulting in exacerbated flooding episodes after rainfall events.

c . The current drainage system lacks development and maintenance, especially the secondary drainage network that no longer has the capacity to drain sufficient storm water.

The selected intervention will improve the hydraulic conditions of the existing Canal Alvear in the Caseros-Alvear basin.

The need for flood reduction infrastructure in this area is evident.

Works will involve the opening of the drainage tunnel or emissary to be rebuilt with reinforced concrete, improvement of the secondary drainage system and construction of rain gardens to reduce the peak discharge. The designs for the new infrastructure will take into consideration the effects of climate change.

Fast urban development with limited consideration of criteria related to storm water drainage resulted in insufficient drainage capacity and flooding exacerbated by improper solid waste management.

d . Lack of infrastructure maintenance and upgrading to adapt to climate change.

Proposed works in San Salvador de Jujuy to adapt to climate change and reduce flood risks include (i) the construction of a new Canal (2.5Km), (ii) the consolidation of the surface runoff stormwater drainage network (4867m of gutter systems and 468m 2 of channels), and (iii) the planting of Squares, Parks, and Green Corridors along the Canal as a complement to grey infrastructure and to increase water retention in the focus areas.

Also, a series of non-structural interventions are expected to be developed including an early warning system, and the planning of an adequate urban solid waste management system.

Made of cohesive material, the dike was reconditioned by the province in 2010.

Proposed works under this subproject to improve drainage capacity and adapt to climate change include interventions such as (i) reconditioning of existing defenses (crown height at 82.5 meters a.s.l.)

The Project will finance the construction of a tunnel in combination with rain gardens for retention to better regulate discharge and reduce flooding in the area.

Interventions considered are (i) rehabilitation of Canal Soberania (10Km), (ii) Av.

However, all works will complement existing schemes, including pumping stations with evacuation capacities of less than 10m 3/s and less than 5 Km long drainage pluvial systems.

Within the comprehensive matrix of green-blue infrastructure options, the Project will include retention areas, rain gardens, and permeable pavements, amongst others.

In Salta, the identified intervention focuses on developing a linear park along the Canal Oeste to increase retention capacity and stormwater infiltration (cost yet to be determined).

In Resistencia, the identified intervention focuses on developing a linear park along Canal Soberania Nacional (cost yet to be determined).

The Borrower is the Argentine Republic, and the Implementing Agency will be composed by a technical team under the SIPH and a fiduciary team under DiGePPSE, both within the MOP. The team at SIPH will oversee the coordination and technical implementation of the program, coordinating with the provincial and municipal governments, while the DiGePPSE will oversee the administration as well as the budgetary, environmental, and social, financial, and legal issues. At present these implementation arrangements are used in several programs financed by multilateral development banks. While the requests for interventions will come from provincial and municipal governments, the PEA will be responsible for (outsourcing) the design and implementation of the interventions. Municipalities and provincial authorities will be involved throughout the design, bidding and implementation providing the required information to prepare and assess projects, review every work consultancy contract, and participate in the supervision of works.

This will enable the responsible provincial and municipal authorities to carry out O&M to increase the sustainability of the projects and ensure that the strategies, plans and tools to be developed will be used in an optimum manner.

This collaboration and coordination between the different levels of governments will be laid out in an annex of the covenant signed between the national government and the authority that will receive the works.

General environmental and social management responsibilities (including supervision) will remain in DiGePPSE, which will coordinate activities with local entities as necessary.

Additionally, the procurement capacity assessment determined that the PEA has experience in implementing Bank's operations and other multilateral development organizations financed Projects (IDB, CAF, FONPLATA, etc.)

The fiduciary risk rating would be reviewed and updated during project preparation, based on new developments and the impact of any mitigation measures that may be taken (e.g., capacity building of fiduciary teams; preparation of the POM which will describe main fiduciary procedures and controls, etc.).

Participate in the fiduciary training for Bank projects, if required.

Flow of funds: Bank funds will be transferred to specific segregated account, to be opened specifically for the Project, Designated Account (DA) in US dollars at the Banco de la Nacion Argentina (BNA) under control of the DiGEPSE

Another segregated bank account will be opened (DiGePPSE local currency operating account) in the BNA in local currency, for the purpose of: i) receiving funds from the DA to pay for eligible expenditures to be paid to suppliers/vendors by DiGePPSE; and ii) receiving local funds from the National Budget. Payment processes will be registered by DiGePPSE in the UEPEX and e-SIDIF system

The IFRs (for financial reporting purposes and not disbursement purposes) and SOEs will be prepared by DiGEPSE, with information available in UEPEX

The disbursement of Project funds to DiGePPSE will be processed in accordance with Bank procedures as stipulated in the Legal Agreement and in the Disbursement and Financial Information Letter (DFIL).

The Project Application Deadline Date (final date on which the Bank will accept WAs from the DiGePPSE or documentation on the use of loan proceeds already advanced by the Bank) will be four months after the Loan Closing Date.

The PPSD is focused on the most relevant contracts included under all components and analyzes the target marke the main risks that could jeopardize the procurement objectives and the subsequent mitigation measures.

All identified interventions, not assessed at this stage, will be evaluated for their economic feasibility to ensure that these are eligible for Project funding.

The horizon of analysis and the discount rates are aligned with World Bank Guidance [5] 0

Both will reduce flood risks Given the impact, beneficiary population and data availability, the economic assessment was carried out solely for the Urban Drainage Master Plan interventions and considered only beneficiaries from reduced flood exposure (those living in the areas where flood was mitigated).

To quantify the direct benefits of flood risk reduction the Avoided Damage Method was used.

As for costs, both capital and O&M costs were considered for the 30-year time frame on the basis of market prices.

Canal Alvarado presents four objectives: (i) flood risk mitigation; (ii) Increase in sustainable mobility share; (iii) urban improvement; (i) increase access to public spaces.

Regarding the costs, O&M costs were estimated at 2 percent of the investment costs annually.

The approach for the implementation support plan was built on the experience gained from previous and ongoing water and urban projects in Argentina.

Specialized engineering, flood risk management, communications, and education inputs are required to revise bid documents to ensure fair competition through proper technical specifications and a fair assessment of the technical aspects of the bids. During preparation and construction, technical supervision will be needed to ensure that contractual obligations and quality requirements are met, as well as to review any requested change in the selected technical method or design.

The Bank team will supervise implementation of the social and environmental management instruments and provide guidance to the implementation team to address any issues.

Formal supervision will be provided through missions, including visits to works sites, and through the revision of the semiannual reports to the Bank, which will include a dedicated chapter on environmental and social risks management aspects for the period covered, as will be established in the POM. It is envisioned that environmental and social specialists will be available to support the PEA and the coordination/liaison teams at subnational levels to minimize potential social and environmental risks.

The scope, nature, and objectives of the Project indicate that there will be a continuous need for dialogue, particularly in the areas of planning, institutional arrangements, meteorological and hydrological services, and financial protection against disasters.