Ministerio de Ambiente y Desarrollo Sustentable
Presidencia de la Nación

BANCO DE DESARROLLO DE AMÉRICA LATINA

MVOTMA
Ministerio de Vivienda Ordenamiento Territorial y Medio Ambiente

REGIONAL PROGRAM PROPOSAL
"Climate Change adaptation in vulnerable coastal cities and ecosystems of the Uruguay River"

ANNEX 1. Acronyms and abbreviations

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ACRONYM	COUNTRY	DEFINITION
AbC	Uruguay/Argentina	Community-Based Adaptation
ANEP	Uruguay	National Administration of Public Education (Administración Nacional de Educación Pública)
ANII	Uruguay	National Agency for Research and Innovation (Agencia Nacional de Investigación e Innovación)
ANTEL	Uruguay	National Telecommunications Administration (Administración Nacional de Telecomunicaciones)
APLA	Argentina	Planning Agency (Agencia de Planificación)
APN	Argentina	National Parks Administration
APS	Uruguay	Primary Health Care (Atención Primaria en Salud)
AUCI	Uruguay	Uruguayan Agency for International Cooperation (Agencia Uruguaya de Cooperación Internacional)
AYSA	Argentina	Argentinean Drinking water and sanitation agency
CAF	General	Development Bank of Latin America
CARU	General	Uruguay River Administrative Commission (Comisión Administradora del Río Uruguay)
CC	General	Climate Change
CCA	General	Climate Change Adaptation
CEADU	Uruguay	Studies, Analysis and Documentation Centre
CECOED	Uruguay	Departmental Emergency Coordinating Center (Centro Coordinador de Emergencias Departamentales)
CEER	Argentina	Entre Rios Entrepreneurial Council (Consejo Empresario Entre Ríos)
CEMA	Argentina	Chamber of Commerce and the Environment (Cámara Empresaria de Medio Ambiente)
CETP	Uruguay	Professional Technical Education Council (Consejo de Educación Técnico Profesional)
CIMA	Argentina	Argentinean Sea and Atmosphere Investigation Centre
CIU	Uruguay	Chamber of Industries of Uruguay
CND	Uruguay	National Development Corporation (Corporación Nacional para el Desarrollo).
COFEMA	Argentina	Federal Council for the Environment (Consejo Federal de Medio Ambiente)
COHIFE	Argentina	Federal Water Council (Consejo Hídrico Federal)
COIRCO	Argentina	Interjurisdictional Committee of the Colorado River (Comité Interjurisdiccional del Río Colorado)
COREBE	Argentina	Regional Commission of the Bermejo River (Comisión Regional del Río Bermejo)
CTM	Uruguay/Argentina	Joint Technical Commission of Salto Grande (Comisión Técnica Mixta de Salto Grande)
DCC	Uruguay	Climate Change Division (División de Cambio Climático)
DINAGUA	Uruguay	National Water Directorate (Dirección Nacional de Aguas)

DINAMA	Uruguay	National Environmental Directorate (Dirección Nacional de Medio Ambiente)
DINAVI	Uruguay	National Housing DIrectorate (Dirección Nacional de Vivienda)
DINOT	Uruguay	National Land Management Directorate (Dirección Nacional de Ordenamiento Territorial)
EE	General	Executing Entities
EI	General	Implementing Entity
ENOHSA	Argentina	National Entity of Sanitary Water Works (Ente Nacional de Obras Hídricas de Saneamiento)
ENOS	General	El Niño – South Oscillation
ERAS	Argentina	Water and Sanitation Regulator Entity (Ente Regulador de Agua y Saneamiento)
ESMP	General	Environmental and Social Management Plan
ESP	General	Environmental and Social Policy
EWS	General	Early Warning System
FE	General	Erosion Process
FEA	General	Intervention Effects and Anthropogenic Impacts
FEEI	General	Presence and Proliferation of Invasive Exotic Species
GADE	Argentina	Emergency Cabinet (Gabinete de Emergencias)
GGIR	Uruguay	Integrated Risk Management Group (Grupo de Gestión Integral de Riesgo)
GNCC	Argentina	National Cabinet of Climate Change (Gabinete Nacional de Cambio Climático)
GTANGRD	Argentina	High Level Working Group for the Comprehensive Management of Disaster Risk (Grupo de Trabajo de Alto Nivel para la Gestión Integral del Riesgo de Desastre)
IMPROTUR	Argentina	National Institute for Tourism Promotion (Instituto Nacional de Promoción Turística)
INA	Argentina	National Water Institute (Instituto Nacional del Agua)
INAU	Uruguay	Uruguayan Institute for Youths and Teenagers (Instituto del Niño y el Adolescente del Uruguay)
INDEC	Argentina	National Institute of Statistics and Census of the Argentine Republic (Instituto Nacional de Estadística y Censos de la República Argentina)
INE	Uruguay	National Population Census
INTA	Argentina	National Institute of Agricultural Technology (Instituto Nacional de Tecnología Agropecuaria)
INUMET	Uruguay	Uruguayan Meteorological Institute (Instituto Uruguayo de Meteorología)
MDN	Uruguay	Ministry of National Defense (Ministerio de Defensa Nacional)
MGAP	Uruguay	Ministry of Livestock, Agriculture and Fisheries (Ministerio de Ganadería, Agricultura y Pesca)
MEC	Uruguay	Ministry of Education and Culture (Ministerio de Educación y Cultura)

MINTUR	Argentina	Ministry of Tourism
MIDES	Uruguay	Ministry of Social Development (Ministerio de Desarrollo Social)
MINTUR	Uruguay	Ministry of Tourism
MJGM	Argentina	Ministry of Finance and Ministry Gabinet Chief
MREyC	Argentina	Ministry of Foreign Affairs and Worship
MAyDS	Argentina	Ministry of the Environment and Sustainable Development
MSP	Uruguay	Ministry of Public Health (Ministerio de Salud Pública)
MTOP	Uruguay	Ministry of Transportation and Public Works (Ministerio de Transporte y Obras Públicas)
MVOTMA	Uruguay	Ministry of Housing, Land Planning and the Environment (Ministerio de Vivienda, Ordenamiento Territorial y Medio Ambiente)
NDC	General	National Determined Contributions
NMS	Argentina	National Meteorological Service (NMS) of the Ministry of National Defense
NTU	Argentina	National Technological University
ONG	Uruguay/Argentina	Non Gubernamental Organisation (Organización No Gubernamental)
OPP	Uruguay	Planning and Budgeting Office
ORSEP	Argentina	Regulatory Body of Dams Safety (Organismo Regulador de Seguridad de Presas)
CSO	Uruguay/Argentina	Civil Society Organisation (Organización de la Sociedad Civil)
OSE	Uruguay	State Sewage Water Works (Obras Sanitarias del Estado)
NPA	General	Natural Protected Areas
PADE	Uruguay/Argentina	Plan of Action During Emergencies
PET	Argentina	Territorial Strategic Plan
PNN	Uruguay	National Coast Guard Authority (Prefectura Nacional Naval)
PNCC	Uruguay	National Climate Change Policy Politica Nacional de Cambio Climático
PNRCC	Uruguay	National Climate Change Response Plan (Plan Nacional de Respuesta al Cambio Climático)
PPR	General	Project Performance Report
RAMCC	Argentina	Argentine Network of Municipalities against Climate Change
SiFAP	Argentina	Federal System of Protected Areas (Sistema Federal de Áreas Protegidas)
SIMARCC	Argentina	Argentina´s National Climate Change Risk Maps System
SINAE	Uruguay	National Emergencies System
SINAGIR	Argentina	National System for Comprehensive Risk Management (Sistema Nacional para la Gestión Integral del Riesgo)
SIyAH	Argentina	Directorate of Information Systems and Hydrologic Warning (Dirección de Sistemas de Información y Alerta Hidrológico)

SMN	Argentina	Argentina's National Weather Service (Servicio Meteorológico Nacional)
SNAACC	Uruguay	National Environment, Water and Climate Change Secretariat (Secretaría Nacional de Ambiente, Agua y Cambio Climático)
SNAP	Uruguay	National Protected Areas System (Sistema Nacional del Áreas Protegidas)
SNIS	Uruguay	National Integrated Health System (Sistema Nacional Integrado de Salud)
SNRCC	Uruguay	National Climate Change and Variability Response System (Sistema Nacional de Respuesta al Cambio Climático y Variabilidad)
SOCAT	Uruguay	Service of Orientation, Consultation and Territorial Articulation (Servicio de Orientación, Consulta y Articulación Territorial)
TCNCC	General	Third National Communication on Climate Change
UCAR	Argentina	Unit for Rural Change (Unidad para el Cambio Rural)
UDELAR	Uruguay	Universidad de la República
UNCCFC	General	United Nations Climate Change Framework Convention
UNISDR	Uruguay/Argentina	United Nations Office for Disaster Risk Reduction
UTE	Uruguay	National Administration of Electrictricity Generation and Transmission of Uruguay (Administración Nacional de Usina y Transmisiones Eléctrica Del Uruguay)
UTU	Uruguay	Labour University of Uruguay (Universidad del Trabajo del Uruguay)

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ANNEX 5. Evidence-based identification of environmental and social risks

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1. Introduction

The Environmental and Social Policy (ESP) of the Adaptation Fund requires that all projects be screened against the 15 principles and in all the components and activities planned. This policy ensures that projects supported by the Fund promote positive environmental and social benefits and mitigate or avoid adverse environmental and social risks and impacts.

This document presents a detailed risk identification, categorization and Environmental. ESP has been prepared in support of the project titled: *"Climate change adaptation in vulnerable coastal cities and ecosystems of the Uruguay River"* prepared together with the Governments of Argentina and Uruguay and the technical assistance of the Development Bank of Latin America (CAF).

The project consists of 4 components, 16 outputs and 40 activities, all clearly identified.

Along with it, implementation arrangements have been planned for the whole project activities and processes. The roles and responsibilities between the implementing entity (EI) and the executing entities (EE) have been accurately developed including the roles of each government and the technical staff of the project. All these aspects are materialized in the Environmental and Social Management Plan.

The ESMP was developed in a collaborative manner by the implementing entity (IE) and the executing entities (EE), including systematic monitoring and evaluation arrangements during the implementation phase.

The screening and preliminary analysis found that, although the project brings significant benefits to communities and ecosystems, certain project activities could generate some limited adverse social and environmental impacts. The screening resulted in an overall social and environmental risk categorization of "Type B". The ESMP is designed to avoid, and where avoidance is not possible, mitigate and manage these limited potential impacts.

The document is composed of the following sections: 1. Overview of the project including the project activities and 2. Risk identification and categorization.

2. Overview of the Project

The main objective of the project is to build resilience in the vulnerable coastal cities and ecosystems of the Uruguay river, both in Argentinean and Uruguayan territories, by developing instruments, tools and experiences for adaptation planning and

implementation as well as managing climate change and variability impacts and risks.

The specific objectives of the project are:

- To reduce vulnerability conditions and contribute to build CC and variability resilience in vulnerable coastal communities and ecosystems of the Uruguay river, including adaptation measures based on communities and ecosystems, while focusing on human rights, gender and generations.
- To promote institutional strengthening by considering CC mid and long-term scenarios in land management public policies, plans and programs for the vulnerable cities and ecosystems identified in each country.
- To promote an integrated climate risk management in the identified cities and ecosystems for each country, fostering the implementation of early warning systems (EWS).
- To reduce the coastal cities‘ vulnerability by implementing sustainable infrastructure adapted to the adverse effects of CC.
- To promote climate change adaptation (CCA) in both river´s margins by exchanging urban, environmental, social and cultural best practices and knowledge management.

The project has four components:

1. Territorial adaptation and flood risk management policies, plans and instruments
2. Priority measures to increase resilience in flood prone cities.
3. Priority measures for adaptative conservation of vulnerable coastal ecosystems
4. Priority measures for increasing resilience and reduce social vulnerability.

Outputs and activities are shown in Table 1 below:

Table 1. Expected Outputs and Activities

OUTPUT	ACTIVITY
COMPONENT 1	
1. Land management plans, protected areas management plans, and housing and water programs, under review or in progress, include the climate change perspective.	Activity 1.1. Analysis, revision and updating of the current state of different public policy instruments in place at territorial level (land use plans, protected areas plans, housing, water, health, infrastructure programmes and public investment, etc.) incorporating the climate change perspective.
	Activity 1.2. Workshops-work meetings are being held to look into, review, update and validate the sundry

	instruments for territorial management, and use of riparian ecosystems in order to incorporate resilient strategies taking into account climate scenarios, with i) institutional technical teams, ii) local, departmental and provincial governments, with a focus on the analysis, review and update of the sundry instruments involved in territorial management and management of riparian ecosystems, iii) and local citizens.
2. Methodological guidelines to assess impact, damages and losses have been designed and implemented.	Activity 2.1. Design of a methodology to collect, analyze and systematize data and information concerning impacts, damages and losses resulting from severe climate impacts, for further reporting and evaluation, including review of pre-existing methodologies, data bases, experiences and papers previously used by SINAE (Ur) and Civil Defence (Arg), and some other institutions.
	Activity 2.2. Drafting up of a methodological guide and a record of events based on the tool designed in Activity 2.1. to reporting and evaluation of severe climate impacts and attaching priority to adaptation actions on both riverbanks of the lower Uruguay River.
	Activity 2.3. Regional and subnational workshop addressing validation of the methodological guideline designed, and related capacity building/recording of events and definition of indicators required for the effective implementation of this guideline in communities involved in the Project. These workshops are focused on local authorities and technicians and are based on the Guideline / Events Log prepared for further implementation.
3. The project adaptation outcomes have been incorporated into monitoring mechanisms of National Adaptation Plans, Adaptation Communications and National Determined Contributions (NDCs) for Argentina and Uruguay.	Activity 3.1. Drafting up of adaptation indicators concerning Project activities linked to NDC.
	Activity 3.2. Monitoring of indicators and reporting of Project activities in each country.
4. Strategies and best practices involving adaptation, climate risk management, territorial planning, territorial policy, housing infrastructure adaptation, recovery of vacant lands, have been shared by Argentina and Uruguay.	Activity 4.1. Bi-national participatory process to share good practice experiences and lessons learned addressing planning instruments and protocols related to health, housing, risk management, housing infrastructure, territorial policy, among others.
	Activity 4.2. Design of a web platform to disseminate good practices, and lessons learned in countries involved. The update of the platform over the execution of projects is included.
5. Flood Early Warning	Activity 5.1. Establishment of governance instruments

System has been consolidated.	and support for inter-institutional coordination for exchanges of information, actions (such as simulations) and stakeholders to strengthening up the lower Uruguay River´s Early Warning System (EWS).
	Activity 5.2. Development and implementation of modelling, prediction, communication and training tools for floods EWS building from the CTM – CARU projections.
6. Updating and implementation of Regional Plans for Disaster Risk Management, including the Climate Change (CC) perspective, have been supported.	Activity 6.1. Revision and drafting of plans and some other local, regional, departmental, or water basin-based risk management tools for climate-related disasters incorporating key ACC actions focused on urban floods, based on a review of plans currently under way.
	Activity 6.2. Capacity-building based on national and binational workshops, focused on managers and other local and subnational stakeholders, including organizations, communicators, media, professionals, addressing their involvement in the implementation of regional flood risk management plans
COMPONENT 2	
7. High risk area vacant lands from resettlements have been recovered and re signified to avoid new informal occupations	Activity 7.1. Resignification of the Union Portuaria, Ledesma and urban border areas in Paysandú, Uruguay.
	Activity 7.2. Resignification and renovation of vacant, flood-prone lots after resettlements. Atahualpa area in Salto, Uruguay.
	Activity 7.3. Resignification and renovation of flooding-prone vacant lots at the Sauzal Stream mouth, in Salto, Uruguay.
	Activity 7.4. Environmentally sustainable hydrological management at the Esmeralda Stream – Resignification of the Esmeralda´s neighborhood housing complex - Fray Bentos, Uruguay.
	Activity 7.5. Risk prevention and evacuees care Centre. Bella Unión, Uruguay.
	Activity 7.6. Resignification of flood prone high-risk public spaces recovered from irregular residential occupation. Bella Unión, Uruguay
	Activity 7.7. Protection and resignification of the Artaláz Stream Wetland. Colón, Argentina.
	Activity 7.8. Remediation and resignification of vacant lots located within Defensa Norte and Cantera 25 de mayo Neighborhood. Concepción del Uruguay, Argentina.
8. Sustainable urban and public infrastructure has been implemented promoting climate change adaptation.	Activity 8.1. Environmentally sustainable hydrological management at the La Esmeralda Stream - hydrological lamination. Fray Bentos, Uruguay.
	Activity 8.2. Protection against coastal erosion, and sundry repairs at the water treatment plant in the city

	of Concordia, Argentina.
	Activity 8.3. Refurbishing of the Access bridge to the Pier and the Coastal areas of the San Javier town.
9. Solutions have been defined and financial mechanisms have been implemented to promote CCA housing and commercial buildings in medium risk areas.	Activity 9.1. Revolving fund for housing adaptations in flood medium-risk zones, according to the Risk Map. Pilot case in Paysandú.
	Activity 9.2. Design of flood insurance for commercial and tourist premises in coastal areas. Entre Ríos, Argentina
COMPONENT 3	
10. Ecosystemic services and benefits have been identified and assessed, including for CCA and Uruguay River ecosystems connectivity.	Activity 10.1. Identification, mapping and evaluation of ecosystem benefits on account of their contribution to climate change adaptation and connectivity in Argentina and Uruguay.
11. New ecosystem-based adaptation measures have been designed and implemented.	Activity 11.1. Adequacy of infrastructure required to upgrade resilience to CC in vulnerable human activities in protected areas, including tourism, livestock and beekeeping in the Estero de Farrapos Protected Area in Uruguay.
	Activity 11.2. Implementation of climate change ecosystem-based adaptation measures in the Rincón de Franquía Protected National Area in Uruguay
	Activity 11.3. Restoration of vulnerable coastal ecosystems through monitoring of exotic species and planting of native species.
	Activity 11.4. Structural consolidation of historical buildings, protection of the coastal canyon and valorization of the historic site Calera del Palmar or de Barquín, in El Palmar National Park (PNEP).
COMPONENT 4	
12. Social vulnerability monitoring and evaluation tools have been devised with a particular focus on Human Rights, gender, and generations.	Activity 12.1. Development of a tool for analysis, monitoring and assessment of social vulnerability in each country, incorporating a human rights, gender and generations approach, based on the review of methodologies, background analysis and pre-existing experiences in terms of social Vulnerability.
	Activity 12.2. Review of social vulnerability in towns involved in the project; this review should be based on the tool designed in Activity 12.1. Drafting of a report of the review and the publication of results in each country.
13. Assessments of perception of social risks have been carried through towards the construction of resilience.	Activity 13.1. Drafting up of a methodology allowing for identification, estimation, and review of a risk social perception, and drafting up of a methodology-based document.
	Activity 13.2. Implementation of the methodology developed in Activity 13.1 allowing for social

	perception of risk identification, estimation, and review in local communities in each country, and further publication of outcomes in each country.
14 Strategies for assistance and capacity-building of the workforce made up by vulnerable populations have been promoted.	Activity 14.1. Capacity building strategy for the reconversion of the labor force of families who have been resettled in Paysandú, Uruguay.
	Activity 14.2. Social and labor capacity-building, and drafting up of workforce capacity-building in Entre Ríos, Argentine
15. Social networks have been strengthened up through an exchange in Climate Change Adaptation (CCA) good practices and local risk management strategies.	Activity 15.1: Local, national and regional social networks strengthened up on subjects such as awareness and sensitivity vis-a-vis the role coastal systems and vulnerable ecosystems play in CC adaptation.
16 Communication, education and dissemination strategies have been implemented towards reducing vulnerability.	Activity 16.1. Identification of adaptation background and local risk management to address climate change involving the community and education and implementation of activities in the area of project intervention.
	Activity 16.2. Implementation of communication campaigns aimed at local communities in order to raise awareness about the effects of CC, the importance of adaptation and the SATs at the community level, including field missions and exchange the dissemination of good practices of the activity 16.1.
	Activity 16.3. Drafting up of methodological guidelines focused on communication and management of projects being executed as part of the CCA strategies.

3. Risk identification and categorization

Using the Guidance document for Implementing Entities on compliance with the Adaptation Fund Environmental and Social Policy; the Social and Environmental Risks Screening Checklist, the Identification and preliminary Management of Social and Environmental Risks were developed.

The process of risk screening for the current project activities developed followed the 15 principles of the ESP. Including Principles 1 (Compliance with the law), 4 (Human rights) and 6 (Core labor rights) which always apply, the other 12 principles were screened in relation to the project outcomes, outputs and activities. Establishing relevance between these principles and project elements was one of the outcomes of the risk identification process.

3.1. ESP Risks Identification

Based on the checklist of the AF ESMS procedures, environmental and social risks were identified using the following checklist (Table 2).

The risk identification is developed considering the AF's ESP Guidance document for Implementing Entities on compliance with the Adaptation Fund Environmental and Social Policy and the steps presented in the Manual of Basic Environmental and Social Management System procedures and functions at National Implementing Entities for the compliance of each principle.

¡Error! No se encuentra el origen de la referencia.. Evidence Base Identification will assess all the components of the project. Table 2 has three columns, column 1 refers to the **Checklist of E&S Principles,** and column 2 refers to the **Questions**, which will be of guidance to assess if the principle has a risk of no compliance with different type of actions or documentations. Column 3 refers to the answer presented by each country differentiated. The answers YES or NO mean if the action, activity, analysis, documentation, etc. was done for the identification of the risk. Column 4 describes which evidence in the Full Proposal document supports the answers of YES or NO of column 3.

After having the Base Identification, Table 3 shows the risk Identification per AF E&SP allowing to determine which principle is vulnerable of not being complied.

Table 2. Evidence Base Risk Identification

Checklist of E&S Principles	Questions	Yes / No	Evidence Base Identification
1.Compliance with the law	1.1. Has the project identified all the specific, applicable domestic and international laws, regulations, standards, procedures and permits that apply to any of its activities?	YES	The full proposal specifies (Section F) relevant national and international law, regulations and standards that are enforceable project-wise.
	1.2. Does the Project demonstrate any incompliance with any applicable national law?	NO	The project does not exhibit any breach of the applicable national law.
	1.3. Has the project identified activities that may require	YES	In overall, activities as singled out, should be authorized beforehand: construction permits, and environmental permits. These permits have been made manifest in the project files. See ANNEX 3.

Checklist of E&S Principles	Questions	Yes / No	Evidence Base Identification
	prior permission (such as planning permission, environmental permits, construction permits, permits for water extraction, emissions, and use or production or storage of harmful substances)		The project technician responsible for environmental and social safeguards shall be responsible for ensuring the proper enforcement of regulations applicable in each jurisdiction.
	1.4. Has the project identified environmental and social safeguarding requirements, other than those of the AF (e.g. national or of co-financing entities).	NO	On the basis of the project technician own criteria, no other additional safeguards requirements have been identified by CAF

Checklist of E&S Principles	Questions	Yes / No	Evidence Base Identification
2. Access and equity	2.1. Has the project identified benefits and its geographical area of influence?	YES	Beneficiaries have been identified over the Project Stakeholders Mapping, and through the sundry workshops being held with local government authorities in Concepción del Uruguay, Colón, Concordia, Paysandú, Artigas, Río Negro and Salto. Please refer to ANNEX 4 in Consultation with Stakeholders.
	2.2. Has the project identified any marginalized or vulnerable groups among potential project beneficiaries?	YES	Vulnerable and marginalized groups were identified over the Project Actor Mapping and sundry workshops being held with local governments of Concepción del Uruguay, Colón, Concordia, Paysandú, Artigas, Río Negro and Salto. Please refer to ANNEX 4 in Consultation with Stakeholders. Vulnerable and marginalized groups have been identified. These groups have been described in the Full Proposal, in the Vulnerability Analysis (ANNEX 9), and in each one of the Project files (see ANNEX 3). Further, maps have been included in these documents in order to facilitate the site of the project and of neighborhoods.
	2.3. Has the project identified the existing risk to access to the essential services and rights indicated in the principle?	YES	**Component 1:** Outputs 1, 2, 3, 4 and 6 entailing review of plans and policy and, in particular, output 5: **Flood Early Warning System,** shall bear in mind in their review the access to public services and essential rights over an emergency. **Components 2, 3 and 4** The activity referred to **Commercial and Tourist Establishments Insurance (Activity 9.2)** to be undertaken in the Entre Ríos Province entails a feasibility survey, while the design of the tool does not include implementation, thus, this principle is not applicable. Notwithstanding, a precautionary principle shall be attached to consideration of all ESP in all surveys. On account of their link with capacity-building, communication, capacity-building, and strengthening up of capacity-building activities

Checklist of E&S Principles	Questions	Yes / No	Evidence Base Identification
			(**Component 4**) do not contain elements likely to interfere with access to essential services and rights. • **Concepción del Uruguay**: The project will be implemented in an area close to two neighborhoods showing a high socioeconomic vulnerability, and which have sustained flooding events. These neighborhoods are Cantera 25 de Mayo and San Isidro. • There is no risk for the project to interfering with access to essential services. At present, no basic services are in place in the project intervention area. Land tenure is already public: The Province of Entre Ríos is the owner of a fraction of the project area; and the owner of the remaining area is the Municipality of Concepción del Uruguay. The project will be open to public access, benefiting the community in terms of use of a currently degraded land area. • **Colón:** The Project shall be executed on the last trench of the **Arroyo Artalaz (activity 7.7)** adjoining flood-prone neighborhoods. There is no risk for the project to interfering with access to basic sanitation services, since none of these services are being supplied to this date. This has been confirmed by local authorities and by citizens consulted. Rather, the project includes a new sanitation service through a new sewage effluent pipeline and a pumping station to collect sewage. These effluents are currently discharged into the Arroyo, along the section involved in the project intervention. Therefore, the project not only shall not constrain access to essential services, but, rather, shall provide a new sanitation service to ensure environmental quality in the intervention area. • **Concordia:** The Project to be executed in Concordia (**8.2 protection against**

Checklist of E&S Principles	Questions	Yes / No	Evidence Base Identification
			coastal erosion, and repairs to the treatment plant) does not entail any risk to interfering with access to basic services. Rather, this activity is focused on protecting a basic service entailing access to drinking water throughout the city. • **Protected Areas: Parque Nacional El Palmar/ Estero de Farrapos e Islas del Uruguay Parque Nacional /Rincón de Franquía:** Activities are basically focused on Adaptation in the coastal area, and protection of the archaeological Heritage. Activities have a low environmental and social impact. Regarding the Parque Nacional El Palmar (Argentina) and the protected area Rincón de Franquía (Uruguay), the area to be intervened is not inhabited and, therefore, evaluation of this risk does not apply. In the case of the Parque Nacional Estero de Farrapos there is an activity (11.1) fostering adaptation in existing agricultural production systems. Confirmation has been received that the Project activity will not prevent access of producers to any right, or essential service, but will on the contrary provide support for adaptation to floods in equal opportunities. • **Paysandú:** The **urban edge** redefinition project **(activity 7.1)** will be implemented in a severely degraded area. This is an area showing a high-risk of flooding, and informal housing. A relocation process is currently being carried out by the government and will be finished before the beginning of implementation of the project. Basic services in place to this date are: water, health, education and transportation; no sanitation services exist in the area. Families are being relocated in no-risk areas where basic services are fully provided for. The project is complementing this policy, attaching new value to vacant lots in flood-prone areas. It is expected that the project will provide access to new recreation services.

Checklist of E&S Principles	Questions	Yes / No	Evidence Base Identification
			The **Revolving Funds** project **(activity 9.1)** the aim of which is to increase resilience of homes not included in the relocation programme, would not limit access to services. Rather, this Fund will help make these services stronger and more resilient vis-à-vis flood events. • **Salto:** None of the two projects being suggested in Salto: Resignification of the **Atahualpa neighborhood (activity 7.2)** and refurbishing of the **Arroyo Parque El Sauzal (activity 7.3)** incorporates any risks to interfering with access to basic services. The project in the Atahualpa neighborhood consists of the rehabilitation of an area previously vacated due to a flood risk, and provides for an area for free public use, with a design incorporating the community suggestions, including vulnerable and marginalized groups. In El Sauzal, essential services are not being provided to this date. In both cases, people´s quality of life is enhanced. • **Fray Bentos:** Neither of the two interventions in Fray Bentos, “Retarding Basin Rivera” y “Parque Complejo Habitacional Esmeralda” entails a risk to interfering in essential services. Rather, these works ensure improvements in the living conditions of people settled in the neighborhood adjoining the Esmeralda Arroyo. • **Artigas (Bella Unión):** Construction of the capacity-building center and assistance to evacuees **(activity 7.5)** will allow for a dignified attention to be provided to up to 100 people living in high-risk flooding areas. Assurance could be given that the project does not prevent people from having access to services, rather, it provides a new service vis-à-vis the impact of floods. In the case of the resignification of vacant spaces (activity 7.6), the point could be stressed that the use of a new public space, not only does not interfere in the access to services, but increases

Checklist of E&S Principles	Questions	Yes / No	Evidence Base Identification
			the quality of life of the population. • **San Javier:** Rehabilitation of the Access bridge to the pier does not interfere with access to essential services and rights. In any case, quite the contrary, since access to the dock is warranted for tourism, fishing activities, and contact with the protected area.
	2.4. Has the project described the mechanism of allocating and distributing project benefits, and how this process ensures fair and impartial access to benefits?	NO	• **Concepción del Uruguay:** The project shall not entail a different access to the benefits it is expected to provide, since it will be a park open to public access. The park´s design also incorporates inclusion considerations (i.e., inclusive games, ramps) and security (i.e., lighting), to ensure that different groups, including vulnerable and marginalized groups, have an easier access to the use of the place. Thus, confirmation is in place that the project has considered different accesses to reach the park through sundry transport means: public, bicycle. Therefore, the project does not require a mechanism to allocate and spread its benefits. • **Colón:** No differences in access to its benefits shall be generated by the project since the park shall be freely accessible to the public. The park´s design also incorporates inclusion considerations (i.e., inclusive games, ramps) and security (i.e., lighting), to ensure that different groups, including vulnerable and marginalized groups, have an easier access to the use and enjoyment of the place. • Therefore, the project does not require a mechanism to allocate and spread its benefits.

Checklist of E&S Principles	Questions	Yes / No	Evidence Base Identification
			• **Concordia:** The city´s drinking water supply structure is a public service already in operation and reaching the entire population. The project´s benefit (Activity 8.2) is a reduction of the risk that this basic service is impaired. The project does not require a mechanism for this benefit to be allocated and distributed. • **Protected Areas: Parque Nacional El Palmar/Estero de Farrapos e Islas del Río Uruguay Parque Nacional/Rincón de Franquía:** Benefits being provided by the project activities are mainly based on the rehabilitation of the ecosystem. Further, the protection of historical heritage vis-à-vis the protection of the Jesuit ruins (activity 11.4) provides a benefit to visitors and the entire population. Two situations are present to which a review of this principle applies: Access rights charged (tickets to visit parks) are pre-existing to the project, and warrant operation of the same protected areas. These rights will continue to be charged as before. Activity 11.1 supporting productive activities in place in the Estero de Farrapos protected area (livestock, beekeeping and tourism), envisages working with most affected growers and producers. A clear mechanism of access to the project benefits should be detailed and approved by the Executing Entity to ensure an equitable access to those benefits. • **Paysandú:** The resignification of the urban edge project (activity 7.1) will become into a public access park. Inclusion considerations will also be incorporated into the park design (i.e., inclusive games, ramps) and security (i.e., lighting), to ensure that different groups, such as vulnerable and marginalized groups, have an easier

Checklist of E&S Principles	Questions	Yes / No	Evidence Base Identification
			access to the use and enjoyment of the area. Therefore, the design of a mechanism to access the benefits of the project, does not apply. The Revolving Funds project (activity 9.1) will have a clear access mechanism. A regulation should be in place setting forth conditions to access the credit, requirements that should be met and investment and repayment obligations. In addition, considerations should be in place for vulnerable and marginalized groups (i.e., eligible investments will include infrastructure adapted to people with disabilities), and facilities for women's access to the mechanism. The job capacity-building project (activity 14.1) is aimed at vulnerable and marginalized group, and will include a clear access mechanism, requirements and conditions for assistance, as well as monitoring for compliance with the objectives. • **Salto:** The two interventions (7.2 y 7.3) involve two new parks for public access. Inclusion and security considerations are duly borne in mind in the design of these parks, with a view to ensuring that all kinds of groups, such as vulnerable and marginalized groups, have easy access to the use and enjoyment of the area. Both parks have been designed having accessibility criteria in mind. The point is to generating spaces where users feel safe, have freedom of movement without physical hindrances, where floor level differences are also dealt with through ramps that comply with accessibility regulations. These criteria are also incorporated into public toilets, equipped with accessible bathrooms with all the necessary technical requirements, in terms of dimensions, distribution, fixed and mobile bars, baby changing rooms. These key aspects were considered in the spatial design from a gender mainstreaming stance: Accessibility, Security, Lighting, Visibility, Mobility, Integration, among other aspects.

Checklist of E&S Principles	Questions	Yes / No	Evidence Base Identification
			Multifunctional spaces where different kinds of activities coexist in close and pleasant settings to favor social encounter and integration. This mix of uses ensures people visiting the park at any time slot, thus favoring a sense of security and integration. ➢ Atahualpa Project (7.2): see descriptive sheet for further details on the infrastructure that will be promoted through a participatory process with the community. ➢ El Sauzal Project (7.3): Several highly important cultural uses are in place at the AFE (Administration of State Railways Administration) warehouses: theatrical, dance companies, comparsas, festivities related to immigrant communities. The Intendancy guarantees that these activities, as well as the access of associations to the premises, will continue to be promoted. Moreover, work is expected to get under way with these groups in the final definition of infrastructure supports necessary for the community to get adapted to flooding conditions. ➢ In addition, the project envisages the dissemination of a floods-related history (for example, through photography exhibitions) as a new cultural activity. Confirmation is in place that any cultural activity will be public and free of charge. For further information on gender approach, please refer to Section 5, or to the Gender Action Plan. Confirmation is in place that due to the type of interventions suggested (landscaping, sports infrastructure and recreation, afforestation, etc., with an inclusive outlook) there is no risk of discrimination or favouritism in access to the benefits the project entails.

Checklist of E&S Principles	Questions	Yes / No	Evidence Base Identification
			• **Fray Bentos:** Both activities will be beneficial to the community, since, on the one hand, they will add new significance to areas for public use, and on the other, they will contribute to reducing flooding risks of neighborhoods adjoining the Arroyo. As in all other activities for redefinition of vacant areas, the final design will contain all elements involved in accessibility, security and gender focus that have been promoted within the guidelines in the Gender Action Plan. Confirmation is in place that the sports infrastructure in the "Lamination Rivera" grounds will be multipurpose, that it is not necessary to design a mechanism for access to benefits, and that due to the type of interventions being suggested (landscaping, sports infrastructure and recreation, afforestation, etc. with an inclusive perspective), there is no risk of discrimination or favoritisms in access to the project benefits: • **San Javier:** The rehabilitation of the access bridge to the peer does not require an equitable access mechanism, since this is a public road. The project also envisages enlargement of the access way, considering that the rehabilitation work will include widening the bridge to add a pedestrian path and a bicycle path. A road in better conditions will allow for a better circulation and access to people with disabilities or elderly people. It is thus confirmed that, due to the type of intervention suggested, there is no risk of discrimination or favoritisms in access to the project benefits. • **Artigas (Bella Unión):** Regarding the evacuee capacity-building and assistance center (**activity 7.5**), the municipality should establish a clear mechanism for access to care for evacuees. In the case of the resignification of vacant spaces (**activity 7.6**), the point should be stressed that the use of a new

Checklist of E&S Principles	Questions	Yes / No	Evidence Base Identification
			public space not only does not interfere in access to services, but also enhances quality of life of the population. A project has been suggested by the municipality with an inclusive perspective with an aim to mitigate the risk that the new public access areas may generate discrimination or favoring in access to them. In any case, this should be verified during implementation. A precautionary principle is added to this prevention in the Environmental and Social Management Plan**.**
	2.5. Has the project developed stakeholder and local authorities' consultations?	YES	Yes, please refer to ANNEX 4, in Consultation with Stakeholders.
	2.6. Has the project presented a mechanism to ensure participation of communities, marginalized, vulnerable groups, stakeholder and local authorities'?	YES	The project has ensured several participation and consultation instances, as spelled out in ANNEX 4: Consultation with Stakeholders. It will continue to do so during the final stages of the project design and implementation. Most projects have used mechanisms for community participation, in particular in the case of interventions in urban areas where consultation processes have been carried out in all activities. Consultation with Stakeholders does not apply so directly to ecosystem-based adaptation interventions, which are mainly dealt with in Component 3. Further, the project is including a complaint and grievance mechanism to ensure that the opinion of vulnerable, marginalized groups, other actors and local authorities is consulted. Specific remarks: • **El Sauzal (7.3):** The Intendancy has been in touch with the different neighbourhood centres and schools to jointly decide how they would like to

Checklist of E&S Principles	Questions	Yes / No	Evidence Base Identification
			accommodate the project in the El Sauzal area, fostering a widely participatory decision-making process and ensuring equal participation of all vulnerable groups, as well as of men and women. However, since there is such a large diversity of users and direct beneficiaries, an effort should be made to keep the communication channels active over the final stages of the project design and implementation. The Intendancy is committed to promoting new participation instances during the last stages of the design and implementation of the project. • In the case of the **Atahualpa project (7.2)** being implemented in the same Intendancy, the vast trajectory of community work and neighborhood organization should be highlighted. The participation of many local actors will be the kick-off for the design of the project: neighborhood commissions, educational institutions, sports clubs and local authorities. • **Paysandú, activity 9.1 Revolving Funds**, A need has been identified for women and vulnerable groups to participate in the design of the mechanism. Vulnerable groups, as well as both men and women, as highlighted in the Gender Action Plan (ANNEX 7), must be able to define, together with the Intendancy, the accessibility criteria. Likewise, it is necessary to know better and at first hand the capacity of the beneficiary population to take a bank loan, even if it is a soft loan. • In the same way, as part of the Feasibility Study, the **Insurance project for commercial and tourist establishments (Activity 9.2)**, should consider the participation of potential beneficiaries in its design, with attention to the participation of women in charge of establishments in this sector. • The **EWS Activity (Component 1, Output 5)**, should also bear in mind

Checklist of E&S Principles	Questions	Yes / No	Evidence Base Identification
			community participation instances, and vulnerable and marginalized groups, in order to ensure their access to the system and a prompt response to their needs to be tackled with in case of climate-originating events. Regarding gender issues, some considerations have been included in the project´s Gender Evaluation and Action Plan. • **Artigas (Bella Unión):** Bearing in mind the multiplicity of stakeholders involved both in the evacuee capacity-building and assistance center, a recommendation is made for participatory instances to be accessible throughout the final design and completion stages and over implementation, fulfilling all the requirements for the inclusion of vulnerable groups and with a gender mainstreaming approach. • **Parque Nacional Estero de Farrapos (Uruguay) Activity 11.1.** Backing up productive activities in the Park. Participatory processes implemented by communities have been described. Notwithstanding, throughout its implementation, the project should include participatory instances, incorporating women in particular, over the time that needs are being identified and an evaluation is being made of best alternatives for adaptation of productive systems. For details on the gender aspects, please refer to the Gender Mainstreaming Action Plan.
3. Marginalized and Vulnerable Groups	3.1. In the influence area of the project has there been identified the presence of	YES	The presence of vulnerable and marginalised groups has been identified by the project. Please refer to ANNEX 9 in Vulnerability Analysis and the descriptive sheets for each project (ANNEX 3), which show a local-level review of those cases in which information was readily available. Vulnerable groups are present in all projects, with low-income populations being the most impaired by flood events in general. This does not apply in the case of

Checklist of E&S Principles	Questions	Yes / No	Evidence Base Identification
	marginalized or vulnerable groups, including but not limited to children, women and girls, the elderly, indigenous people, tribal groups, displaced people, refugees, people living with disabilities and people living with HIV/AIDS?		ecosystem-based adaptation activities. Throughout the Project area, there is no evidence of a presence of people who considered themselves as Indigenous Populations. In the case of cities in Uruguay, the presence of Afro-descendant population is considered, it is included in the social vulnerability characterization.
	3.2. Has the project described the characteristics of any marginalized or vulnerable groups, identifying their particular vulnerabilities that would or could make them disproportionately	YES	As pointed out in question above, vulnerable and marginalized groups have been identified by the project. The integration of vulnerable and marginalized groups in all the Project components shall be fostered: In Component 1, through the incorporation of the vulnerability analysis in the project´s approach; in Component 2, by the application of the vulnerability analysis to each one of the Works, so as to assure groups that they are included; in Component 3, by considering their ways of life in the event that they are settled in a natural area; and Component 4 is wholly dedicated to increasing social resilience activities, particularly aimed at these vulnerable and marginalized groups. In the case of adaptation measures such as those focused on productive activities framed in the Revolving Fund, o improvements in productive activities, **there is a risk**

Checklist of E&S Principles	Questions	Yes / No	Evidence Base Identification
	vulnerable to negative environmental or social impacts caused by the implementation of the activities of the project?		that adaptation technologies are not adapted by or are not accessible to everyone. This issue should be looked at, at the time a definition is made of the eligibility of adaptation measures and their characteristics.
4. Human Rights	4.1. Has the host countries been cited in any Human Rights Council Special Procedures, being on the list of thematic or country mandates?	YES	Thematic mandates and country mandates have been revised. Findings are shown below: • **Human Rights Council Special Procedures thematic mandates:** **Argentina** is quoted in several reports, including in the last report of the Working Group on Enforced or Involuntary Disappearances, of September 2017; the latest report of the Working Group on Enforced or Involuntary Disappearances on Enforced Disappearances within the Framework of migration, September 2017; or the Working Group on Arbitrary Detention (GTDA, for its acronym in Spanish): Preliminary findings of the visit to Argentina (May 8 to 18, 2017). The country has hosted missions to assess the situation of human trafficking, women and children in particular, as well as missions to assess external debt impacts on Human Rights. Confirmation is in place that none of these problems are related to the activities of this project**.** • **Uruguay:** Several reports have been published that are related to human trafficking, torture, and elderly people. Confirmation is available that none is related to the project activities. In 2017, Uruguay hosted the Special Rapporteur on Environment and Human Rights. The recommendations have been focused on health and environment,

Checklist of E&S Principles	Questions	Yes / No	Evidence Base Identification
			access to environmental information and community participation in drafting of environmental plans and policy. The project´s executing and implementing entities have committed themselves to a clear and proper communication regarding their activities and have fostered communities´ participation in the early project formulation stages. A complaints and grievances mechanism is also being implemented over project execution. In 2012, Uruguay hosted the Special Rapporteur on Human Right to safe drinking water and sanitation. She stated that, despite the positive situation, in general terms regarding the provision of water and sanitation, there are still challenges ahead in Uruguay. Confirmation is in place that the project will not carry out activities implying sanitation. However, the point should be stressed that the MVOTMA provides access to sanitation in construction works involving housing for relocation of people at risk from floods. On the other hand, DINAGUA is involved in the design and implementation of the project, thus warranting good practices and monitoring of sundry activities. The Special Rapporteur has made recommendations to Uruguay on the issue of human rights obligations related to the use of a safe, clean, healthy and sustainable environment. These recommendations recall the role ecosystems and biological diversity play and the importance of conservation through the National System of Protected Areas and other measures. This project is clearly in line with this vision, bearing in mind that the measures suggested are all focused on rehabilitation of coasts, and the consideration of an Ecosystem-based Adaptation approach. Uruguay has also been urged to ratify the International Labor Organization (ILO) Convention on Indigenous and Tribal Peoples, 1989 (numb 169). Confirmation is in place that no Indigenous Peoples are settled in the Project area. • **Human Rights Council Special Procedures country mandates:** No mandates

Checklist of E&S Principles	Questions	Yes / No	Evidence Base Identification
			are in place for Argentina or Uruguay.
	4.2. Is there a risk that rights holders do not have the capacity to claim their rights?	Ar - NO Uru - NO	Confirmation has been given over the consultations process that open communicational channels are in place among intendancies, municipalities and communities. Notwithstanding, this programme incorporates a grievances and complaints mechanism.
	4.3. Has the project covered Human Rights issues during stakeholder consultations during project formulation?	Ar – YES Uru - YES	Human Rights issues have been addressed at consultation meetings being held with local populations over the design process. Information was forthcoming on marginalized and vulnerable groups, while issues pertaining women, elders, children and disabled persons were also tackled with. According to people´s opinion, not only projects shall improve quality of life in terms of flood prevention issues, but also from a cultural, economic and social stance. Mention was also made that these public spaces shall in no way exacerbate conflicts, neither a risk of violence within communities.
	4.4. Has the project included the findings of the consultations on human rights issues in the project document?	Ar – YES Uru - YES	Human Rights issues-related findings over consultations processes helped design a Human Rights-based Project. Consultation-related information is shown in Annex 4. Main principles inherent to Articles in the Declaration of Human Rights with respect to impartiality without distinction of race, color, sex, language, national or social origin, property, social status and the universal right of the human being to life, liberty and security of the person, are contemplated.
5.	5.1. Has the project identified activities that are	Ar –	Neither in Argentina nor in Uruguay none of the project's activities could harm any group on account of gender issues in a discriminatory manner based on legal,

Checklist of E&S Principles	Questions	Yes / No	Evidence Base Identification
	known to exclude or hamper a gender group based on legal, regulatory or customary grounds?	NO Uru – NO	regulatory or customary reasons. Legislation related to gender issues is shown in ANNEX 7, which includes the Gender Diagnosis and the Gender Action Plan for the program.
	5.2. Has the project conduct or consult a gender analysis of the supported area, describing the current situation of the allocation of roles and responsibilities in the area?	Ar – NO Uru – NO	A gender analysis has been conducted making a description of the current situation. In addition to a diagnosis with secondary sources, gender issues have been addressed during the consultations with stakeholders, both authorities and beneficiaries. During the project design stage, an open channel has also been in place with the people who are referents on gender in the intendancies. Please see the analysis included in the Diagnostic and Gender Action Plan document (ANNEX 7).
	5.3. Has the project identified elements that maintain or exacerbate gender inequality or the consequences of gender inequality?	Ar - YES Uru - YES	Gender-based vulnerability considerations have been included in the analysis spelled out in the Gender Analysis and Action Plan. See ANNEX 7. Projects have included the identification of elements that would promote an equal access of men and women to the project benefits. In general, all actions to reduce flood risk and enhance social resilience will improve the conditions of women, bearing in mind that, during the events, women carry the heaviest workload related to care. **Component 1:** Confirmation can be given that the review of plans and policy related to Outputs 1, 2, 3, 4 and 6, shall include Gender mainstreaming. Thus, Guidelines are

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			spelled out in the Gender Action Plan warrantying their inclusion. Concerning the EWS, particular attention should be given to women as a vulnerable group and as active subjects in the handling of information and the identification of needs over a flood response. Additional information on gender considerations in the Early Warning System consolidation has been included in the Gender Diagnosis and Action Plan. . **Components 2, 3 and 4:** **Argentina** • **Provincia de Entre Ríos:** Surveys regarding insurance for commercial and tourist establishments (activity 9.2) will include gender considerations in their characterization of potential beneficiaries and in the tool design, particularly considering, for example, business establishments run by women or employing women mostly. On the other hand, the labor reconversion project (activity 14.1) will pay special attention to women participation, from the moment the project gets under way, to the definition of access requirements, timetables and subjects to be dealt with. These issues have been included in the Gender Action Plan. • **Concepción del Uruguay, Colón:** The project will entail benefits to women and girls, who will have an opportunity to enjoy healthier activities and more social activities thanks to the presence of the park. A park with the right equipment i.e., proper lighting) will make women and girls feel safe to enjoy it. People living in the neighborhoods shared this opinion during the consultation processes carried out during the project formulation stage. The municipality has undertaken a review of good practices identified in the Gender Assessment and in the Gender Action Plan (see ANNEX 7) for the design and management of the park, has included

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			considerations in the design, and is committed to implementing them. These aspects will be verified and monitored. • **Concordia:** Projects have no elements likely to maintain or exacerbate gender inequality or its consequences: the project benefits apply to the entire city of Concordia, ensuring water supply. In any case, the project brings benefits in relation to a resource in the absence of which women would probably sustain a higher impact because they are usually more burdened by domestic and care task. • **Protected Areas: Parque Nacional El Palmar /Estero de Farrapos and Islas del Río Uruguay Parque Nacional Estero de Farrapos and Islas del Río Uruguay / Rincón de Franquía** This principle does not apply to most activities in protected areas, activities which are focused on planning and adaptation based on uninhabited coastal areas. Work with the local population shall be undertaken only at the Estero de Farrapos (activity 11.1), where production activities shall be undertaken such as cattle raising, tourism and beekeeping. Beneficiary selection shall be based on an equitable access mechanism for both, male and female producers. One risk has been identified that some elements may maintain or exacerbate gender inequality, or its aftermath. Therefore, affirmative actions should be singled out for women participation in this activity. Guidelines have also been spelled out to be enforced towards the Call, implementation and monitoring. Please refer to the Gender Mainstreaming Plan in ANNEX 7. • **Paysandú:** The urban edge resignification project (activity 7.1) is expected to become into a public-access park. The park design considers those solutions that promote the use of space by women. Among others, during the consultations, the

Checklist of E&S Principles	Questions	Yes / No	Evidence Base Identification
			presence of a women's soccer team that is waiting to have a space to train was highlighted. In addition, there are spaces for children and a maintenance and surveillance that gives security to women, girls and children to appropriate the place. The Revolving Funds (activity 9.1) Project could exacerbate gender inequality if it does not have facilities for women's access to the mechanism. In its design, the constraints that women have in accessing credit will be taken into account and appropriate measures will be applied to address them. The project design shall take into account the constraints women have in access to credit; thus, the right measures should be taken to deal with those hindrances. • **Salto:** The outcome of both, the resignification project in the Atahualpa neighbourhood (activity 7.2) and the Arroyo El Sauzal project (activity 7.3), will be the creation of new parks for public access. Design of both projects includes solutions fostering women´s access to public spaces. The point should be highlighted that **Sport activities** are included in both projects. With this particular goal in mind, and over the Project design stage, the Salto Intendancy has been working on the identified initial risk related to the promotion of men-biased sporting infrastructure. (ej. Soccer (foot-ball) in both projects. On the basis of this analysis, other options that may equally benefit men, women, boys and girls have been included:

Checklist of E&S Principles	Questions	Yes / No	Evidence Base Identification
			➢ Atahualpa Project (7.2): Two foot-ball fields could be installed in the central area: one court equipped with two arches, which can also be a sundry-uses green, and another more defined, paved, and multifunctional court, with soccer ark and basketball hoops, safety nets, etc. This type of multifunctional court can be used for different sports, such as volley-ball, hand-ball, basketball, football, among other games. A children equipment strip is being envisaged with sundry possibilities for unstructured games, with a wavy tape located at ground level which can be travelled on foot, by bicycle, or stake, and an elevated metal structure with sundry equipment for games and sports for children. ➢ El Sauzal Project (7.3): A skate track and a recreational skating ring are envisaged, together with pedestrian pavements that promote running, bicycle acrobatics tracks, conditioning of free areas. Some other gender-based considerations in these two projects include: ✓ Accessible public bathrooms equipped with all the necessary technical requirements, in terms of dimensions, distribution, fixed and mobile bars, diaper changer for babies´ accessories. ✓ Evaluation of adequate lighting. ✓ Ensuring visibility of children´s playgrounds from places intended for grown-ups and the elder. ✓ Multifunctional spaces, sundry uses to provide for a feeling of security and integration. Confirmation was received over consultations at the Atahualpa neighbourhood that community projects are envisaged around the Park. Because of their very nature,

Checklist of E&S Principles	Questions	Yes / No	Evidence Base Identification
			these projects allow for the enhanced involvement of women. To this date, natural resources have not been identified as being used or protected by the Project and, which, on account of the Project, could constrain women vis-à-vis their own livelihood Notwithstanding, this activity includes mapping of ecosystem services, including gender mainstreaming. • **Fray Bentos:** The end result of both projects shall be new parks for public access, together with a reduction of the flood risk due to overflow of the Arroyo. These designs consider those solutions fostering use of space by women: lighting, accessibility, mixed uses. The spaces for sport will be multipurpose. The Intendancy is committed to abiding by the guidelines set forth in the Gender Mainstreaming Plan. • **San Javier:** With the rehabilitation of the access bridge to the wharf, no elements are identified that can maintain or exacerbate gender inequality or its aftermath. On the contrary, the project will be beneficial insofar it will facilitate transit of both, vehicles and pedestrians and cyclists, with additional safety and accessibility consideration. • **Artigas (Bella Unión):** The capacity-building, care and assistance to evacuees'centre (7.5) will help improve the conditions of women and girls in their stay over the emergency, a time when major events of gender violence crop up. Specific needs of women in terms of space, privacy and hygiene, are taken into

Checklist of E&S Principles	Questions	Yes / No	Evidence Base Identification
			account in the design of the rehabilitation of the building. International standards will be abode by, such as the "Humanitarian Charter and Minimum Standards for Humanitarian Response" of the Sphere (UNHCR) Project, as well as good practices of organizations such as UNFPA on sexual and reproductive health and gender violence in emergency situations. In the case of the resignification recovered areas, their design solutions address considerations fostering the use of space by women. The Intendancy is committed to abiding by guidelines as set forth in the Gender Action Plan. These risks have been forestalled in the Environmental and Social Management Plan
	5.4. Has the project identified particular vulnerabilities of men and women that would or could make them disproportionately vulnerable to negative environmental or social impacts caused by the outputs / activities of the project?	Ar – NO Uru - NO	**Component 1:** not applicable. **Concepción del Uruguay, Colón, Concordia, Paysandú, Salto, Fray Bentos, San Javier:** no Project-related environmental and social impacts have been singled out which could add up to the vulnerability of men and women. Rather, the project itself entails improvements in quality of life, both from an environmental and a social outlook. **Protected Areas: Parque Nacional El Palmar/ Parque Nacional Estero de Farrapos, and Islas del Río Uruguay/Rincón de Franquía:** Not applicable to most activities revolving around planning and adaptation based on uninhabited ecosystems, and the protection of the Historical Heritage. Regarding the only activity involving the population (Activity 11.1) for adaptation in Productive activities at the Parque Nacional Estero de Farrapos (Uruguay), assurance should be given that adaptation measures are suitable and adaptable to both, men and women. In any case, no disproportionate environmental or social impacts on men and women are envisaged, bearing in mind the low impact of potential activities. **Artigas (Bella Unión):** The design of the shelter to be built will apply international standards vis-à-vis emergency evacuation centers, including gender. Territorial or

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			technical personnel that are in contact with those affected will receive training on gender-related issues (see Gender Mainstreaming Action Plan in ANNEX 7).
6. Core Labour Rights	6.1. Has the project determined if the host country has ratified the eight ILO core conventions	Ar – YES Uru - YES	International Labor Organization (ILO) conventions have been ratified by both countries.
	6.2. Has the project reviewed the latest ILO assessments of application of the standards in the country?	Ar – YES Uru - YES	**Argentine:** **Country profile / ratifications:** http://www.ilo.org/gateway/faces/home/ctryHome?locale=ES&countryCode=ARG&_adf.ctrl-state=bjh1qxce3_67 **Labor Standards:** https://www.ilo.org/dyn/normlex/en/f?p=1000:11110:0::NO:11110:P11110_COUNTRY_ID:102536 **Uruguay:** **Country profile / ratifications:** https://www.ilo.org/gateway/faces/home/ctryHome?locale=EN&countryCode=URY&_adf.ctrl-state=bjh1qxce3_182 **Labor Standards:** https://www.ilo.org/dyn/normlex/en/f?p=1000:14000:0::NO:14000:P14000_CO

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			UNTRY_ID:102876
	6.3. Has the project identified how the ILO´s core labour standards are incorporated into the design and the implementation of the outputs / activities' project?	Ar – YES Uru - YES	The project incorporated basic labor rights into all actions and at different levels. Labor rights-related mechanisms and laws are in place in Argentina and Uruguay. Both countries have ratified the eight (8) key labor conventions and, in overall, they are facing similar challenges, such as child labor, discrimination over employment and occupation, high levels of informality in employment, and the protection of the right to association. These issues are expected to be revised and monitored by Project Executing Entities over the hiring processes that are carried out for the execution of the project by the Executing Entities, who abide by procedures in line with international and local standards and being supervised by the Implementation Entity.
	6.4. Has the project described the common labour arrangements in the sector(s) in which the project will operate, with particular attention to all forms of child labour and forced labour.	Ar – YES Uru - YES	As a management measure to ensuring that all Project activities are in line with compliance of basic labor rights, the project executing entities abide by the ILO labor standards, and national labor legislation. These issues are expected to be revised and monitored by Project Executing Entities over the hiring processes that are carried out for the execution of the project by the Executing Entities, who abide by procedures in line with international and local standards and are also supervised by the Implementation Entity.
7. Indigenou	7.1. Has the project identified	Ar	The presence in the project area of a population belonging to Indigenous Peoples has

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s Peoples	if indigenous peoples are present in the area of influence?	– NO Uru - NO	not been identified
	7.2. Has the project quantified the groups identified of indigenous peoples?	Ar – NO Uru - NO	N/A
	7.3. Has the project determined if there are provisions for a realistic and effective Free, Prior, Informed Consent process, giving a community the right to give or withhold its consent to proposed projects that may	Ar – NO Uru - NO	N/A

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	affect the lands they customarily own, occupy or otherwise use?		
	7.4. Has the project provided a summary of any reports, specific cases, or complaints that have been made with respect to the rights of indigenous peoples by the Special Rapporteur on the rights of indigenous peoples and that are relevant to the project?	Ar – NO Uru - NO	**Argentina:** Mr. James Amay, the Special Rapporteur´s report on Indigenous Peoples rights, describes the situation of indigenous peoples in Argentina and makes recommendations based on the visit made in December 2011. The Special Rapporteur report focuses in particular on issues related to the recognition and protection of land and natural resources, including: the cadastral survey programme and the extractive and agricultural industries; access to justice, evictions and social protest; and the social and economic situation of indigenous Peoples, including their education, health and development. The issues highlighted by the Rapporteur are not deemed to be relevant to the project area. https://documents-dds-ny.un.org/doc/UNDOC/GEN/G12/149/47/PDF/G1214947.pdf?OpenElement **Uruguay:** No related reports submitted by the Special Rapporteur in Uruguay have been traced.
8. *Involuntary Resettlement*	8.1. Has the project determined if it is voluntary or involuntary resettlement?	Ar – NO Uru -	**The project does not contemplate any displacement or resettlement**. Displacement has already occurred or will have occurred within the framework of local plans for relocation of inhabitants in a high flood risk area in many of the activities with which the project intervenes. In any case, the point should be highlighted that a survey has been conducted of the progress of these processes and of land tenure in the project intervention areas in each of the localities. This information has been

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		NO	included in each of the project files (see ANNEX 3).
	8.2. Has the project identified stakeholders whose livelihoods may be affected, directly or indirectly?	Ar – NO Uru - NO	This principle does not apply to Components 1 and 4. Neither does it apply to the design of the insurance for commercial and tourist establishments. As regards Components 2 and 3, confirmation is in place that there are no stakeholders whose livelihoods are negatively affected, either directly or indirectly. In general, all activities provide improvements to promote an increase the resilience of communities and ecosystems. Particular specifications: **Argentina** • **Concepción:** Currently no uses are identified in the area. The project will only positively affect adjacent neighborhoods, since it will improve the environmental quality of the area, and provide a new alternative for recreation and sports**.** • **Colón:** At present, fishing and recreation uses are currently present near the intervention area. Users are members of vulnerable populations, and an estimation has been made that fishing may be a part of their livelihood. However, confirmation is in place that both activities are being harmed by a current degradation of the area, mainly effluent discharge and a precarious occupation of the floodplain. The project will facilitate access and use of the area to fishermen, walkers and the community in general. The area will have a maintenance service of green areas in the municipality, allowing for access to a safer space and good environmental conditions. • **Concordia:** There is no risk that the project to protect the water intake system may negatively impair the livelihood of people living in the area. Fishing activity is in place in the San Carlos Reserve area, upstream of the intake. Notwithstanding, the highest impact on the area is coastal erosion, since fishing activity is being

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			impaired and fishing boats cannot get close to coastal areas. Therefore, the coastal protection to be provided by the project would benefit local inhabitants. • **Protected Areas: Parque Nacional El Palmar / Estero de and Islas del Río Uruguay Parque Nacional Rincón de Franquía:** Does not apply to ecosystem-focused activities. Regarding Activity 11.1 Adaptation measured for cattle breeders, beekeepers, and tourism apply. The fact is that current flooding events are having a serious impact on their livelihoods and, therefore, adaptation measures will be beneficial to them. • **Paysandú:** No negative impacts have been identified on livelihoods related to the Revolving Fund activities (activity 9.1) because the Revolving Fund is related to investments to improve the homes in which affected people currently live. As regards the urban edge redefinition activity (7.1), no negative impacts of the project activity are identified. A distinction should be made between the project impacts and the previous activities that the local government has been carrying out for relocation of families living in the Ledesma area. Currently, people living there carry out a large number of informal activities (waste classification, brick-making, breeding of small livestock). Some people are dependent employees, and others receive income from social benefits. Authorities are aware that when these people are relocated they will need support to pay for their livelihoods, which is why they are offered support through training and assignment to other areas where they can carry out their activities. The project will contribute to capacity building of people through Output 14 activities: Labor Reconversion. The point should be borne in mind that the project is not responsible for relocation but, rather, it is a Uruguayan government policy that is already being implemented. The project only collaborates with training and retraining activities at a later relocation

Checklist of E&S Principles	Questions	Yes / No	Evidence Base Identification
			stage. • **Salto:** No negative impacts have been identified vi-a-vis livelihoods related to the activities to be implemented. In the case of the Atahualpa Project (7.1), the Intendancy is relocating families, and no activities shall be taking place in the area at the time the project is being implemented. In the case of El Sauzal (7.2), cultural activities currently in place shall be further promoted. Moreover, the project envisages to jointly work with organizations currently undertaking cultural activities in the warehouse, to define which are the best measures to safeguarding materials (sets, costumes, etc.) over flooding events. On the other hand, and since the project is planning to set up food stands (that can be easily transported to remove them in case of flood events), new possibilities will be in place to create new economic alternatives through the sale of food. The fact should be pointed out that these projects are attached legitimacy in a departmental public policy consolidated for more than three decades, specifically stated in local planning instruments such as the SALTO PLAN and its basis, as well as in concrete actions. Policy is framed within the objectives and purposes stated in National Law 14,040 and some other policy instruments, such as the 18.308 Law ruling territorial arrangement and sustainable development. Among the Salto Intendancy priorities mention could be made of the recovery of the public space in general and, in particular, those places that are highly significant for people in Salta, either because of their outstanding urban or landscape conditions, or because of their contribution to the construction of a local identity. • **Artigas:** The flood shelter project will benefit people most vulnerable to weather phenomena. Therefore, livelihoods are not adversely impaired, but, rather, their conditions are improved by providing them with proper shelter conditions. Nowadays, no uses have been identified in the premises where the center will be

Checklist of E&S Principles	Questions	Yes / No	Evidence Base Identification
			built. As regards areas to be added a new significance, these had a residential use prior to the relocation of the families. No uses have been identified**.** • **San Javier y Nuevo Berlín:** - Current uses of the bridge are: access to artisan, recreational and tourist fishing activity; and communication with the Parque Nacional Estero de Farrapos. Livelihoods would be impaired if the bridge were to collapse due to the water erosive phenomena. Therefore, the project is providing a benefit as a guarantee for livelihoods. • **Fray Bentos:** The project will have a positive impact on the adjacent neighborhoods, since it will improve the environmental quality in the area, as well as provide a new alternative for recreation and sporting activities. Today, the spaces to be intervened are not used by people.
	8.3. Has the project identified stakeholders whose assets or access to assets may be affected, directly or indirectly, and if this may lead to resettlement and its consequences including indemnification, compensation, etc.	Ar – NO Uru - NO	Does not apply in any case. Refer to answers above.
9. Protection	9.1. Has the project identified	Ar	Over the formulation of the Full Proposal, an Ecosystem Vulnerability Survey has

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of Natural Habitats	all the critical natural habitats in the region that may be affected? The area considered should be large enough to be credible and be chosen in function of the impact generating agent (e.g. noise) and an appreciation of its propagating ability. The habitats to be considered include all those recognized as critical in any way, be it legally (through protection), scientifically or socially.	– YES Uru - YES	been undertaken that, through information compiled from the different priority areas nearby, from Argentina and Uruguay, has looked into the Uruguay River coastal ecosystem. Thus, a preliminary qualitative analysis was carried out based mainly on the information provided by both countries, in addition to the expert know-how of technicians attached to official agencies, and consultants working in the different areas. This also involved the collection of bibliographic information (MVOTMA Reports, Habitat and Development Foundation Reports, Important Areas for the Conservation of Birds of Argentina and Uruguay bibliography (BirdLife International), Private Protected Areas information provided by the owners, among others), in order to subsequently establish a prioritization of areas showing higher vulnerability. Regarding Components 1 and 4, addressing planning and capacity-building activities, a proposal is to incorporate into planning policy the ecosystem approach and consideration of ecosystem services natural areas supply. As regards Components 2 and 3, clarification as follows is supplied: **Argentina** • **Concepción del Uruguay:** The project will be implemented in an intervened coastal habitat, with a large number of local species needing protection. The project seeks to protect and enhance this habitat by introducing native species which are suitable for this habitat. The area does not have any legal, scientific or social protection, but thanks to the project, it is expected that this protection shall be forthcoming in the near future (as stated by the Municipality). Confirmation has been secured that the project has considered avoiding an intervention in the natural area, using as much as possible natural materials such as stone and wood for the intervention (roads, signage, etc.). On the other hand, the project includes the repair of a sewage pipeline running across the intervention area, which will improve the environmental quality in this natural area. • **Colón:** The project will be implemented in an intervened coastal habitat, but with

Checklist of E&S Principles	Questions	Yes / No	Evidence Base Identification
			local species requiring protection. The project seeks to protect and improve this habitat by introducing native species suitable to i: native species able to bear up against waterlogging periods, such as Ceibo (*Erythrina crista-galli*), Cow hoof (*Bauhinia forticata*), Willow (*Salix humboldtiana*) and Aguaribay (*Schinus molle*) will be used. Most of the area does not have legal, scientific or social protection; the multiple-use "Río de los Pájaros" (The Birds River) reserve, located close to the area to be intervened, has been granted municipal protection (set up by the deliberative Council's ordinance) and social value (various recreational and sports activities). • **Concordia:** The water intake project (8.2) is not found in any critical habitat, although the point should be stressed that the San Carlos Municipal Reserve is located close to the intake area (Municipal Ordinance N ° 26.320 / 93 and Municipal Decree N ° 26.560). The area was declared a Wild Bird Reserve area in June 1993. Then, in 1995, Municipal Ordinance No. 28,312 declared the San Carlos Park area a Protected Natural Area, and the gallery forest close to it was declared a Reserve Area. Necessary precautions should be taken to minimize the works impact on the protected area. • **Parque Nacional El Palmar :** The park´s 8.213 hectares belong to the Espinal ecological region. The area was created by Law 16.802 on 28 January 1966. All activities are focused on planning, rehabilitation of the ecosystem and protection of cultural heritage. It is expected that, after the implementation of this project, the number of hectares that are part of the RAMSAR Site can be increased. • **Estero de Farrapos e Islas del Río Uruguay National Park:** The Park territory covers a total of 20,205 hectares in Uruguayan territory along the Uruguay River Coastal region, which includes the estuaries, the *albardón* (a hill or elevation located in low and waterlogged land that, when the waters rise, becomes an islet), the paleo shore, the channels and twenty-four islands and sedimentary islets. The landscape includes marshes, *pajonales* (a place populated by high herbaceous

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			vegetation typical of the low and flood lands), riparian forests, natural fields, swamps, as well as freshwater stagnation (peat bogs). All activities involve planning and rehabilitation of the ecosystem except the productive activities that will be looked into in activity 11.1. Activities are basically; livestock, tourism and beekeeping, all of them with a conservation focus. Bearing in mind the possibility that an increase in the adaptive capacity of livestock would call for an increase in the number of livestock, which would be against the protected area regulations based on the carrying capacity of the ecosystem, the project foresees working alongside farmers in business alternatives based on nature tourism, as well as in an activity to monitor the impact of livestock and tourism activities. • **Rincón de Franquía Protected Area:** On April 17, 2013, pursuant to Decree No.121 / 013, this area was included in the National Protected Areas System (SNAP), under the "Habitat and / or species management area" category. Rincón de Franquía hosts riparian forests: one of the main relicts of a unique flora and fauna with a subtropical influence in Uruguay, as well as *espinillos and pajonales* forests, floodplains and some rich lagoons harbouring fish, aquatic birds and other biodiversity. Main ecosystem services being provided by the Uruguay River´s riparian ecosystem are: hydrological regulation, sedimentation dynamics processes, nutrient release and retention cycles, a biodiversity habitat, trophic chains, among others. In this sense, the intervention to revert erosive processes, to promote native revegetation and to monitor the expansion of exotic species is quite important. • **Paysandú:** This does not apply to the Revolving Fund activity (Activity 9.1) because it is linked to investments for refurbishing of urban housing where affected people are currently living. Regarding the urban edge redefinition activities (7.1), the project will be implemented in a coastal habitat sustaining a high environmental degradation on account of the way it has been used so far, such as breeding of small livestock and garbage collection. At the project design

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			date, large areas were still covered with waste. The project is aimed at protecting and refurbishing the area by introducing native species which are suitable to this habitat. No legal, scientific or social protection is in place in the area. • **Salto:** None of the areas for implementation of the two activities is located in a critical habitat. Regarding the activity in Atahualpa (7.2), there is a protected area close by, known as the "Vaymaka Pirú" Indigenous Park, which is outside the project area, albeit rather close to it, which is being impaired by deforestation by a high socio-economic vulnerability of the population who, while settled outside the project area, work with civil society organizations is being planned towards recognition of the natural value the area has. Soil use in the Indigenous Park is being attached a natural rural soil category. The use of the Indigenous Park land is categorized as natural rural land. The riparian forest growing there is under national protection. Another well-preserved natural area showing the same characteristics as the Indigenous Park is located in a Southern direction. A survey of the ecosystem services of the Indigenous Park (both environmental and cultural) is being scheduled; on the other hand, the Salto Intendency has updated to October 2018 the mapping of invasive alien species in the park. This will make it possible for a diagnosis to be made to what extent the dialogue between the Indigenous Park and the Project can be strengthened up within the framework of investments (e.g., reforestation with native species), and awareness-raising activities (e.g., environmental education), with an ecosystem services approach that the Indigenous Park can provide to the Atahualpa Park and vice versa. The gender approach will be included in this mapping as much as possible. • **Fray Bentos:** None of the activities at Fray Bentos is located in a critical habitat. Rather, they are being carried out in the middle Stream basin, right within the urban area. Flora species present in the area are both native and exotic species. The project will promote the planting of native species.

Checklist of E&S Principles	Questions	Yes / No	Evidence Base Identification
			• **San Javier:** San Javier is located within the Estero de Farrapos protected area. See reference above. • **Artigas (Bella Unión):** Neither the city center nor areas to be added a new significance are located in a critical habitat. The closer protected area is Rincón de Franquía (see reference above).
	9.2. Has the project identified for each critical natural habitat, the mechanism by which it is particularly vulnerable?	Ar – YES Uru - YES	As described in Section above, during the formulation of the Full Proposal, an Ecosystem Vulnerability Survey was undertaken that considers the protected areas and environmental interest areas in a 50km buffer area on each side of the river. This vulnerability survey is based on three main criteria or problems recorded in the coastal ecosystem at regional scale: 1. A first Factor linked to the **Erosive Process** recorded in the coastal ecosystem of the Uruguay River. 2. A second Factor linked to **Intervention Effects and Anthropic Impacts** (which includes problems such as intentional burning, poaching, pollution of water resources and changes in the coastal habitat through deforestation) and, 3. A third factor associated to the **Presence and Advancement of Invasive Alien Species.** Through a summation of these three factors, without first establishing some weighting, vulnerable areas were established within the areas identified in Argentina and Uruguay. Confirmation is available that natural areas in the project area are highly vulnerable vis-à-vis these stakeholders. Further, an identification is made in each project file of vulnerability factors in natural areas located in or adjacent to the interventions.
	9.3. Has the	Ar	Confirmation is in place that these issues shall be tackled with over revision of

Checklist of E&S Principles	Questions	Yes / No	Evidence Base Identification
	project considered all the activities to identify actual risks for each of the natural habitats identified taking into account the specific characteristics of the activity (location, dimension, duration etc.) and the vulnerability mechanism(s) of each habitat identified.	– YES Uru - YES	Component 1 plans and policy. This principle is not applicable to Component 4 activities, because they are capacity-building and communication activities; notwithstanding, the point should be stressed that ecosystems vulnerability and ecosystem services shall be incorporated into awareness-raising a activities. Concerning Components 2 y 3, involving in-depth physical interventions, assurances can be given that all project activities are contributing to the valuation and conservation of natural habitats. • **Concepción del Uruguay:** Works intended to the construction of the flood-prone park include low impact activities on the habitat: roads and bike paths, installation of inclusive games, eradication of exotic species to plant native species, installation of a community nursery of native species. The municipality will pay particular attention to: ➢ Clearing of the area, to allow for opening of paths and installation of some minor infrastructure in the park. ➢ Afforestation with native species adapted to the coastal and flood-prone environment. The necessary precautions will be taken so that the project has the lowest possible impact. Actions shall be reflected in the ESMP. • **Colón:** No risk has been identified for natural habitats, except during the construction period over which precautions as required should be taken. The "Río de los Pájaros" reserve will be maintained and conserved, and the area surrounding the reserve will be added new value with native species able to withstand flooding periods, such as Ceibo (*Erythrina crista-galli*), Cow hoof (*Bauhinia forticata*), Willow (*Salix) humboldtiana*) and Aguaribay (*Schinus molle*). • **Concordia:** No risks have been identified vis-a-vis natural habitats, since the work

Checklist of E&S Principles	Questions	Yes / No	Evidence Base Identification
			is focused in the water intake area only. In any case, and due to the works size, the project should pay particular attention to avoid damage to flora and fauna over the time works are under way. • **Parque Nacional El Palmar:** Activities are focused on coastal planning and rehabilitation through ecosystem restoration, or rehabilitation of the archaeological site, and their impact on the ecosystem. However, confirmation is in place that eradication of exotic species is expected to be carried out using agrochemicals, burning and other methods; accordingly, measures as required to protect the ecosystem will be stipulated in the WFP. • The point should be stressed that Parque Nacional El Palmar nursery supplies more than 1000 native plants per year, and two nurserymen and landscapers work at the Park who will be in charge of the landscape proposal. A proposal has been made to eradicate approximately 500 to 1000 privets in the trails area, and implant some 200 native species individuals along coasts and beaches, such as: *Nectandra angustifolia, Myrcianthes cisplatensis, Ocotea acutifolia, Enterolobium contortisiliquum, Albizia floodla, Pouteria salicifolia* and *Inga uruguensis.* • **Estero de Farrapos e Islas del Río Uruguay Parque Nacional Islas del Río Uruguay:** Coast-focused planning and rehabilitation activities by means of ecosystem rehabilitation activities have a positive impact on the project-related habitat. Confirmation is in place that the Estero de Farrapos is planning to use as a reference the exotic species monitoring methodologies that have been developed by Parque Nacional El Palmar; therefore, environmental protection, and health and safety measures will be taken into account for their enforcement. ➢ In the exotic species monitoring activity, there is a risk for the vegetation to be impaired if methodologies for the elimination of woody exotic species (heavy machinery, burning, application of agrochemicals such as herbicides and shrubbery eradication) are applied improperly. The safety and

Checklist of E&S Principles	Questions	Yes / No	Evidence Base Identification
			prevention procedures required have been stated in the corresponding project file. ➢ Regarding activity 11.1 focused on current livestock, tourism and beekeeping activities, a conservation approach is suggested, in line with policies historically promoted by the park institution. The project plans to work together with farmers and beekeepers in business alternatives that are based on nature tourism, as well as in an activity to monitor the impact that livestock and tourism activities have. • **Rincón de Franquía protected area:** Planning and rehabilitation activities in the coastal area on the basis of ecosystem rehabilitation activities have a positive impact on the habitat close to the project site. • **Paysandú:** The project fosters rehabilitation of the ecosystem within a currently degraded area. Thus, project activities shall have a positive impact on the ecosystem. • **Salto:** The project fosters resignification of a degraded area (Atahualpa project), and refurbishing of a public space, attaching resignification to the city-flooding link. • **Fray Bentos:** None of the two activities in Fray Bentos is found in a critical habitat. Rather, they are in locations in the middle Arroyo basin, in an urban area. Native and exotic flora species are present in the area. The project will promote planting of native species.

Checklist of E&S Principles	Questions	Yes / No	Evidence Base Identification
			• **San Javier:** San Javier is located within the Estero de Farrapos protected area. The bridge-focused protection project shall not have any high impact on the natural area, because of the small size of works. As regards the coastal rehabilitation activity, this will have a positive impact through afforestation works with native species to help prevent coastal erosion. • **Artigas (Bella Unión):** Project interventions are not located close to any sensible habitat.
10. Conservation of Biological Diversity.	10.1. Has the project identified all the elements of biodiversity interest in the region that may be affected? The area considered should be large enough to be credible and be chosen in function of the impact generating agent and an appreciation of its	Ar – YES Uru - YES	No risk is implied in the project implementation vis-a-vis the reduction or loss of biological diversity, or the introduction of known invasive species. Rightly, the goal of most activities is biological rehabilitation, and replacing exotic species for native species that supply ecosystem services enhancing resilience to flooding events. Most sensible biodiversity elements have been identified by the project, and their vulnerability has been described. Please refer to project's description sheets in ANNEX 3, and to ecosystems vulnerability survey in ANNEX 11. The point could be stressed that the project prevents any significant or non-justified reduction or loss of biological diversity, or the introduction of known invasive species.

Checklist of E&S Principles	Questions	Yes / No	Evidence Base Identification
	propagating ability. It is important in the identification of the elements of biodiversity interests not to limit this to the species level but to include all elements of biodiversity interest, including landscapes, ecosystem processes, habitats, and hydrological cycles, processes of erosion and sedimentation and interactions between taxa. Include all elements enjoying local or international protection		
	10.2. For each	Ar	Project implementation does not bear any risk for biological diversity reduction or loss,

Checklist of E&S Principles	Questions	Yes / No	Evidence Base Identification
	identified biodiversity element, has the project identified the mechanism by which it is particularly vulnerable? (Changes in flow regime or water quality for a seasonal wetland or disruption of migration routes).	– YES Uru - YES	or the introduction of known invasive species. Rightly, the goal that practically all activities seek to achieve is to rehabilitate that diversity, and, among other things, to eradicate exotic or invasive species and establish native species able to provide ecosystem services enhancing resilience to flooding events. The project has identified the most sensible biodiversity components and has made a description of their vulnerability. Please refer to records in ANNEX 3, and in Ecosystems vulnerability survey in ANNEX 11. Confirmation could be given that the project prevents the occurrence of any reduction, or significant, or unjustified loss of biological diversity, or the introduction of known invasive species.
	10.3. Has the project identified the potential of introducing – intentionally or accidentally – known invasive species?	Ar – NO Uru - NO	As explained in answers above, what the project seeks to achieve is an opposite goal, i.e. the project does not entail, either intentionally or by accident, to introduce invasive species. Rather, all project activities, either in the urban or in the rural natural setting, envisage constraining forestation endeavors to native species, abiding by an ecosystems-based adaptation focus whenever it may be applicable. The high status the Project has assigned to native species in Concepción del Uruguay (Argentine) should be highlighted: A community nursery will be installed to encourage community participation in the maintenance and conservation of these species, including environmental education activities. It is important to remember that the activity 11.5 to be undertaken both in the Parque Nacional El Palmar (Argentina) and the Parque Nacional Farrapos (Uruguay), is basically focused on solving this problem, highlighting as main actions the generation of replicable guidelines and experiences dealing with the monitoring of exotic species, design and implementation of techniques, preparation of plans, baselines, monitoring

Checklist of E&S Principles	Questions	Yes / No	Evidence Base Identification
			systems, monitoring of exotic species, exotic mammals, dissemination and involvement of communities settled in the area, as well as training of technicians and operators. The survey that will be conducted on the relationship between grazing and the dispersion and monitoring of the invasive exotic species *Gleditsia triacanthos* (one of the most serious threats in the area) is relevant. In the Rincón de Franquía environmental protection area, protection activities will be carried out along coastal areas with adapted native species.
	10.4. Has the project identified the use of living modified organisms resulting from modern biotechnology?	Ar – NO Uru - NO	This question does not apply to the project, because the project has no intention to using living modified organisms resulting from modern biotechnology.
11. Climate Change	11.1. Has the project determined if it belongs to a sector mentioned in the Guidance document for which a greenhouse gases emission calculation is required? • Energy,	Ar – NO Uru - NO	The project does not belong to any of the sectors mentioned in the Guidance document. The only GEI emissions to be produced on account of the project shall be over works, during transportation of materials. These emissions are deemed to be non-significant. Confirmation is in place that the project does not generate any new sources of greenhouse gas emissions.

Checklist of E&S Principles	Questions	Yes / No	Evidence Base Identification
	transport, heavy industry, building materials, large-scale agriculture, large-scale forest products, and waste management.		
	11.2. Has the project carried out a qualitative risk identification for each of the following drivers of climate change: • Emission of carbon dioxide gas from the use of fossil fuel and from changes in land use • methane and nitrous oxide	Ar – NO Uru - NO	Bearing in mind the above, no GHG emissions´ calculations have been made for this project.

Checklist of E&S Principles	Questions	Yes / No	Evidence Base Identification
	emissions from agriculture • emission of hydrofluorocarbons • perfluorocarbons • sulphur hexafluoride • other halocarbons, aerosols, and ozone.		
	11.3. Has the project carried out a qualitative risk identification of any impact on carbon capture and sequestration capacity?	Ar – NO Uru - NO	No qualitative identification of a positive or negative impact on carbon capture, and sequestration capacity is shown. However, an estimation is made that the ecosystem rehabilitation actions will be positive in relation to these services.
12. Pollution Prevention and Resource Efficiency	12.1. Has the project identified activities with preventable waste or pollution production?	Ar – YES Uru -	This question does not apply to Components 1 and 4 since these components refer to planning and capacity-building activities. Neither does the question apply in the case of the insurance design activities (9.1). In the case of components 2 and 3, precisions are included below.

Checklist of E&S Principles	Questions	Yes / No	Evidence Base Identification
		YES	➢ **Concepción del Uruguay, Colón:** Potential pollution sources, or the generation of waste, will correspond to the park conditioning stage (construction wastes) and during the park operation, waste generated by visitors and sewage generated by use of toilets. A low-level impact is expected, and impacts of this kind are preventable. Collection of waste in the park will be incorporated into the municipal waste-collection circuit, while cleaning tasks shall be incorporated into the areas responsible for maintenance of green areas. **Consultation in Concepción del Uruguay:** The consultation with beneficiaries highlighted a contamination-related problem due to the rupture of a sewage system pump in the San Isidro neighborhood. Although this contamination source is beyond the scope of the project, this condition could have an impact on the project area. This is the reason why the Municipality of Concepción del Uruguay has been asked to solve this problem before the project is executed. Resolution of this problem should be checked and confirming before authorizing that work gets under way. Before the identification of this problem, the Municipality had included in the project budget the repair of the broken pipe that goes through the intervention area. It is important to highlight that the Municipality is committing its own resources to the environmental conditioning of the surrounding area, including changing the effluents pumping system, using a siphon system instead of a gravity system. The new system will be more resistant to a rise in the level of the river causing an environmental impact. **Consultation in Colón:** The municipality has incorporated into the project conducting of effluents from the opposite margin, effluents which are now being discharged directly into the Arroyo. This work will be associated to a pumping station that will convey these effluents to the municipality's sanitation network. In

Checklist of E&S Principles	Questions	Yes / No	Evidence Base Identification
			this way, assurance is in place that the project intervention is carried out in an area not affected by direct effluents. The point should be stressed that, at present, the area is degraded by landfilling. The Municipality has committed its own resources for cleaning of the area. ➢ **Concordia:** As regards the protection and repair of the intake (activity 8.2), larger work residues will be generated because of the dimension of the intervention; however, impact will be moderate. All precautions regarding materials, transportation, and other, will be safeguarded in the work´s Environmental Management Plan. ➢ **Parque Nacional El Palmar:** All activities involve planning and rehabilitation of the coast on the basis of an ecosystem restoration work, or rehabilitation of the archaeological site, so there is no risk to the project´s related habitat. Regarding the tourist use of the area, confirmation is in place that the circuit already has access to baskets for waste collection, and systems for a regular collection of waste generated by tourist use, including waste separation and disposal. All activities are focused on planning and rehabilitation of the coastal areal through an ecosystem restauration work, or rehabilitation of the archaeological site. Thus there is no risk to the Project habitat. As regards the area being used for tourism purposes, confirmation is in place that the circuit already has access to baskets for waste collection, and systems for the periodic collection of waste generated by tourist use, including waste separation and disposal. Confirmation has been received that, in the case of exotic species monitoring activities, agrochemicals shall be used on the basis of specific permeating

Checklist of E&S Principles	Questions	Yes / No	Evidence Base Identification
			methods or injection, and some other methodologies such as burning and clearing. These procedures will abide by the Parque Nacional Administration regulations. The project file includes regulatory references that must be followed for the use of these methods, and the hygiene and safety standards that must be met in their application. The management of the agrochemical containers, both in their storage (the project budget includes the acquisition of a container to store them properly) and handling of containers after use is also cautious. ➢ **Estero de Farrapos and Parque Nacional Islas del Río Uruguay:** Planning and rehabilitation activities in the coastal area on the basis of ecosystem restoration activities have a low impact on the ecosystem. As regards monitoring of exogenous species, the reference to be applied will be the methodology developed by Parque Nacional El Palmar, and similar collections will be made. As regards Activity 11.1, adaptation activities foreseen for cattle breeders and beekeepers are not expected to generate any new pollution sources. Notwithstanding, these issues should be seriously taken into account since specific adverse impacts could be generated, for example, if the solution being put forward over a long-term flooding event could imply the gathering of a large number of animals in a single place. The monitoring activity related to cattle breeding and beekeeping being foreseen to get under way within the framework of this activity should incorporate forecasting situations of this kind. ➢ **Rincón de Franquía protected area:** Planning and rehabilitation activities in the coastal area on the basis of ecosystem restoration activities have a low impact on the ecosystem. Because of the very nature of activities, pollution focuses are not envisaged. ➢ **Paysandú:** Potential pollution sources, or the generation of waste, shall be in line

Checklist of E&S Principles	Questions	Yes / No	Evidence Base Identification
			with the park conditioning stage (works waste) and, over the park operation, waste being generated by visitors and waste being generated by the use of toilet facilities. It is expected that impacts should be low, and that these impacts can be prevented. Measures shall be stipulated in the Environmental and Social Management Plan (ESMP). **Monitoring Remarks about Paysandú:** Bearing in mind current site conditions, a request has been made to municipal authorities for the intended project site to be cleaned up before the area resignification work gets under way. • **Salto:** Potential pollution sources, or the generation of waste, shall be in line with the park conditioning stage (works waste) and, over the park operation, waste being generated by visitors and waste being generated by the use of toilet facilities. It is expected that impacts should be low, and that these impacts can be prevented. Measures shall be stipulated in the Environmental and Social Management Plan (ESMP). ➢ **Monitoring Remarks on El Sauzal Project:** Notwithstanding that the project does not entail the construction, rehabilitation, operation, or closing of waste systems, or effluents, mention was made over consultations that the lower area of the Sauzal Arroyo is vulnerable to contamination and deterioration, as shown by accumulation of waste of all kinds, and illegal dumping of effluents, and garbage. On the one hand, the Intendancy will warrant that the area is free of waste before the start of the works. Regarding the prevention of future discharges, the project foresees environmental monitoring, management and environmental education

Checklist of E&S Principles	Questions	Yes / No	Evidence Base Identification
			activities in the community, the collaboration of sport clubs and cultural user organizations in the area, and the presence of the Territorial Police that will alert in case of any event. The Intendancy should facilitate protocols that will be implemented to avoid waste in the area and the risk of pollution in case of flooding. These protocols should be validated by the Executing Entity before project execution gets under way. ➢ **Atahualpa Project Monitoring remarks:** Although the area is incorporated into the formal sanitation network, the fact that informal settlements have been developed has entailed precarious conditions leading to poor water supply facilities, alternative sanitation systems (improvised shallow wells), without a chamber, "black holes", etc.), soil movements, alterations to surface runoff, etc. In Atahualpa a path has been identified that is used to trespassing the property to discharge waste inside it. Measures have been taken by the Rowing Club, with headquarters bordering on this path, to prevent this from happening; however, this practice is repeated over time. The same happens over this street, along the Indigenous Park. The Intendancy shall ensure that the area is free of waste before the execution of works. Monitoring, management, and environmental education activities shall be undertaken by the project in the community, with cooperation from sports clubs, and the accompaniment of the Territorial Police Force who will alert of any event. • **Fray Bentos:** Regarding resignification activities, potential contamination, or waste generation sources shall correspond to the park conditioning stage (Works waste) and, over the operation of the park, waste being generated by visitors (for

Checklist of E&S Principles	Questions	Yes / No	Evidence Base Identification
			example, litter bins) and those wastes being generated by toilet use. It is expected that impacts will be minor and preventable. In the case of rolling works, impacts could be higher because of the size of works. In both cases, mitigation measures shall be stipulated in the Environmental and Social Management Plan (ESMP). • **San Javier:** The bridge refurbishing works will generate works waste and some nuisance because of the size of the intervention but, still, their impact will be moderate. All precautions involved regarding materials, transportation, etc., shall be safeguarded in the works´ Environmental Management Plan. ➢ **Artigas (Bella Unión):** Confirmation is in place that waste and noise will be generated over the construction work of the evacuees´ capacity-building and attention center. Afterwards, when the building is being used, it will become a source of waste and sanitary effluents resulting therefrom. The building design will contemplate standards for the proper treatment of effluents; the waste generated will be incorporated into the municipal waste collection system. Potential generation of special waste has not been identified. In the case of the redefinition of conditioned areas, the potential sources of pollution or generation of waste will correspond to the stage park conditioning stage (construction waste) and during the park operation, the waste generated by visitors i.e., waste bins, and those generated by toilets use. Impacts are expected to be lower and preventable. These risks are protected in the Environmental and Social Management Plan (ESMP).
	12.2. Has the project determined the nature and quantity of the waste, as well as	Ar – YES Uru	The project has identified the type of waste and pollutants that may be produced, as well as their volume, whenever this has been possible. Details and mitigation measures have been included in the Environmental and Social Management Plan (ESMP).

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	those of possible pollutants that may be produced?	- YES	
	12.3. Has the project determined if the concept of minimization of waste and pollution production has been applied in the design phase and if this will be effective during implementation?	Ar – YES Uru - YES	The Project has a low impact on waste production. In any case, Environmental Management Plans (EMP) will bear in mind reducing to a minimum the production of wastes and pollution over the implementation of all Project activities. A list is included below of instances in which some problems related to the minimization of waste are highlighted. ➢ **Monitoring in Concepción del Uruguay:** The incorporation of a pipeline for sewage effluents that is installed across the intervention area and is currently in poor condition is highlighted. Additionally, a decision has been made by the municipality to allocate counterpart funds to repair another pipe close to the intervention site, change the pumping system from a gravity-based to a siphon-based system. This pipe was damaged by a sudden rise in water level. The new system is flood-resistant. ➢ **Monitoring in Colón:** The inclusion in the project of a piping and a pumping station for sewage effluents currently being dumped directly into the Arroyo in the project intervention sector is highlighted. The project itself does ensure an improvement in the environmental quality of the place it is located. ➢ **Monitoring in Salto:** A good practice in El Sauzal Project is highlighted as (7.3) that all services being suggested, both gastronomic premises and public restrooms, will be carried out through the recycling and refitting of maritime containers, which are being conditioned for this particular purpose. Further, as can be seen in attached graphics, light elements such as pergolas, etc. are incorporated. The idea behind these containers, their type of anchoring and connection to the different services, is designed in such a way that, in case of

Checklist of E&S Principles	Questions	Yes / No	Evidence Base Identification
			flooding, they can be moved to safe places, and returned to their place after the water has been removed. ➢ **Monitoring in Parque Nacional El Palmar and Parque Nacional Estero de Farrapos:** The implementation of eradication measures vis-à-vis exotic wood species, such as spraying of agrochemicals, or controlled burning, procedures that include the necessary precautions have been relieved. Further, an item has been included in the budget for the acquisition of a container for storage of discarded agrochemical bottles and cans. ➢ **Monitoring in Concordia and San Javier:** Larger work wastes will be generated on account of the intervention size, but still, these wastes have a moderate impact. All precautions regarding materials, transportation, and others will be safeguarded in the works-related Environmental Management Plan.
13. Public Health	13.1. Has the project identified using an appropriate health impact screening tool (check list) potentially significant negative impacts on public health generated?	Chi – NO Ecu - NO	Not applicable. No negative public health impacts shall be generated by the project. Rather, the project shall ensure an enhanced quality of life of people in the area. Some particular issues are spelled out below. • **Concepción del Uruguay, Colón, Paysandú, Salto:** The redefinition projects for vacant areas will mainly carry out tasks for conditioning of green areas, afforestation, installation of park infrastructure, pedestrian paths, bike paths, and conveyance of effluents to the sanitation network. These activities shall not be generating risks to public health. These projects are floodplains parks and do not involve factors likely having an adverse impact on health and public safety; rather, these activities can produce a green area open to the public. In terms of security, the projects will not have large infrastructures. Children's games and entertainment infrastructure will comply with minimum safety standards. Neither will the project increase the risk of spreading diseases, but in any case, on

Checklist of E&S Principles	Questions	Yes / No	Evidence Base Identification
			the contrary, since the project envisages converting vacant areas degraded and impacted by human activities into a healthier environment that is resilient to floods. Not only will the population be less exposed to flooding, but the likelihood that people will increase their physical activity and improve the environmental quality of their neighborhood is enhanced. • **Concordia:** The project will provide protection and undertake repairs at the intake of the city's water treatment plant, in addition to protecting a small area upstream the coast. Therefore, the project is directly aimed at safeguarding public health by ensuring the provision of drinking water. • **Parque Nacional El Palmar:** In overall, the coastal planning and rehabilitation works through ecosystem restoration activities are carried out in an uninhabited area, so this principle does not apply to this activity. The only safeguard that should be enforced vis-à-vis health is the risk involved in the application of methodologies for eradication of exotic species. Guidelines to be enforced have been included in the ESMP. • **Estero de Farrapos e Islas del Río Uruguay, Parque Nacional Islas del Río Uruguay:** In overall, coastal planning and rehabilitation activities through ecosystem restoration works are carried out in an uninhabited area, so this principle does not apply to this activity. The only safeguard that should be enforced vis-à-vis health is the risk due to the application of methodologies for eradication of exotic species. Guidelines to be enforced should be included in the Project Management Plan. In the case of activity 11.1 dealing with works on adaptation of productive activities being undertaken in the Park, no impact on public health is foreseen since this activity is limited to increasing the resilience of

Checklist of E&S Principles	Questions	Yes / No	Evidence Base Identification
			existing productive activities which are already regulated. • **Rincón de Franquía protected area:** The coast-focused planning and rehabilitation activities through ecosystem restoration activities are carried out in an uninhabited area, so this principle does not apply to this activity. • **Fray Bentos:** The project being executed by the Fray Bentos Intendancy, for which the Adaptation Fund project is complementary, will contribute to improving sanitary conditions, since the current situation is the one posing a risk to the health of the community settled on the Arroyo La Esmeralda banks. • **San Javier:** Rehabilitation work under way in the bridge has no public health-related components. • **Artigas (Bella Unión):** Shelter keepers will bear in mind all recommendations spelled out in the Humanitarian Charter, and minimum standards for humanitarian response, including guides on water supply, sanitation and promotion of hygiene, food security and nutrition, and health. It includes, among other aspects, issues focused on childhood, the elderly, people with disabilities, HIV and AIDS.
14. Physical and Cultural Heritage	14.1. Has the project determined if the host country has ratified the 1972 UNESCO Convention Concerning the Protection of the World Cultural and Natural	Ar – YES Uru - YES	**Argentina:** Convention concerning the Protection of the World Cultural and Natural Heritage. Paris, 16 November 1972. 23 August 1978 – Acceptance. https://en.unesco.org/countries/argentina/conventions **Uruguay:** Convention concerning the Protection of the World Cultural and Natural Heritage. Paris, 16 November 1972. 09 March 1989 - Acceptance.

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	Heritage?		https://en.unesco.org/countries/uruguay/conventions
	14.2. Has the project identified the national and local legal and regulatory framework for recognition and protection of physical and cultural heritage?	Ar – YES Uru - YES	The "Enforceable National and international laws " project incorporates the local legal and regulatory framework to acknowledge and protect the physical and cultural heritage. • Ministry of Culture, Argentine: https://www.cultura.gob.ar/ • Ministry of Education and Culture, Uruguay: http://mec.gub.uy/
	14.3. Has the project described in the influence areaall the elements of the cultural heritage, their location and their vulnerabilities? The area considered should be large enough to be credible and be chosen in function of the impact	Ar – YES Uru - YES	This project has not been found to cause alteration, damage or elimination of physical cultural resources, cultural sites and sites with unique natural values recognized as such at local national or international community level. Projects will not interfere with existing access and use of such physical and cultural resources. Some of the Project's activities will be implemented in areas incorporating unique natural or cultural values recognized at community, national or international level. The industrial Fray Bentos landscape is a site recognized by the UNESCO Convention of 1972 on the Protection of the World Cultural and Natural Heritage (see below). **Argentine** • **Concepción del Uruguay**: No sites of cultural value or unique natural values are in place in the project area. The only element having an historical value in the area are the old railroad tracks, which will be cleared of weeds and repaired to add them value. • **Colón:**

Checklist of E&S Principles	Questions	Yes / No	Evidence Base Identification
	generating agent (e.g. vibrations, landscape elements) and an appreciation of its propagating ability. Include all elements enjoying local or international protection.		○ o *Natural value*: The project is located in the vicinity of the multiple-use reserve "Río de los Pájaros (Birds River)". This reserve was established through Ordinance 53/2017 with an aim to preserving the wetland and its biodiversity. The area has been split into sectors according to the intensity and type of activities that can be carried out in each sector. A Management Plan is in place in the area. Improvements in environmental quality in the intervention upstream area should be beneficial to this reserve. ○ *o Cultural value*: Local festivals are held annually in this reserve, such as the "Burning of the Dummy" on the eve of the first Spring day. • **Concordia:** ○ *Natural Value*: The San Carlos Park Reserve is a Wild Birds Reserve area (Municipal Ordinance No. 26,320 / 93 and Municipal Decree No. 26,560 of June 1993), and a Natural Protected Area and Reserve Area to the gallery forests nearby (Municipal Ordinance No. 28,312 of 1995). Visits are scheduled to enjoy the natural environment and for bird watching activities. Also, a Botanical Garden, "Ca a Porá" is located within its boundaries. ○ *Cultural value:* Several cultural-value sites are located around the areas in which the project is expected to be executed: ▪ *San Carlos Park*: Other than the natural value of the area, the San Carlos Castle that gives the park its name, and the Monument to the Eastern Exodus, are found in this park. In addition to the Park´s historical value, its archaeological value stands out since vestiges of the indigenous Peoples who inhabited the place are usually found. Nowadays, a cultural value has been attached to the park for specific celebrations concerning to the indigenous past of the region, among

Checklist of E&S Principles	Questions	Yes / No	Evidence Base Identification
			other activities. ▪ *Salto Chico Place*: An island located right in front of the San Carlos Park. No Project impacts are envisaged. ▪ *El Saladero Ruins*: Locates some 200 metres South of the water intake, the place would not be impaired by the project. • **Parque Nacional El Palmar:** ○ <u>*Natural Value:*</u> The Park´s 8.213 hectares belong to the Espinal ecological region. This area was established on 28 January 1966, pursuant to Law 16.802. The park is one of the southernmost natural palm groves on the planet and is under national protection. Since June 5, 2011, the park has been part to the Palmar Yatay Ramsar site. For additional information on the area characteristics and vulnerabilities, please refer to Ecosystem Vulnerability Analysis in ANNEX 11. ○ <u>*Cultural Value:*</u> One of the Project activities refers to the protection of the coast -on which the archaeological site La Calera is located- from the erosion caused by the river level rise. La Calera dates from year 1650, it was built by Indigenous People led by Jesuit missionaries and members of the Society of Jesus. Two ovens, a pier, three buildings, an oratory, a tunnel, and a cemetery are still in place as remnants or Indigenous Peoples civilizations. The cemetery was deemed as a sacred place by Jesuits and Indians. The project will be beneficial to the archaeological site, which can be visited as usual once the intervention is finished. The only risk likely to occur is for this archaeological site to be damaged or impaired during works intended to preserving it.

Checklist of E&S Principles	Questions	Yes / No	Evidence Base Identification
			Uruguay • **Estero de Farrapos e Islas del Río Uruguay Parque Nacional, and Islas del Río Uruguay:** ○ *Natural Value*: The park´s territory covers a total of 20.205 hectares in Uruguay territory over the Uruguay River coastal region including the Estuaries, the *albardón*, the *paleocosta*, the channels and 24 islands and sedimentary islets. The landscape incorporates marshes, pajonales, riparian forests, natural fields, swamps, as well as freshwater stagnation (peat bogs). In 2004, 17,496 hectares of this area, including the Estuary and 24 islands, were designated as a Ramsar Site (Treaty for the Protection of Wetlands). Later in 2008, through decree 579/008, enacted on November 27 of that year, 6327 hectares of this territory were added to the National System of Protected Areas (NSPA), including the continental area near San Javier, and two islands (Barco Grande and La Paloma). It is expected that the remaining of the Ramsar territory area will be included in the NSPA in the future. For further information on the characteristics and vulnerabilities of this area, please see Ecosystems Vulnerability Analysis in ANNEX 11. ○ *Cultural Value:* The Cultural Value attached to the area is based on the historical use the area has for productive activities, such as cattle raising, livestock, dairy, beekeeping, fishing, tourism, among others. In particular, this value highlights a traditional collaborative work modality that is not found in other areas of the country. • **Rincón de Franquía protected area:** ○ *Natural Value:* On 25 February 2011, the area was declared a Departmental Reserve by the municipality of Bella Unión. On 17 April 2013,

Checklist of E&S Principles	Questions	Yes / No	Evidence Base Identification
			through Decree No.121 / 013, the area entered the SNAP, under the "Habitat and / or species management area" category. Regarding plants formations of the area, there are three main ones: The Uruguay River riverside forest, the Cuare River forest, and the park forest. 54 different wood species have been registered. Some 223 bird species have been recorded, which corresponds to 50% of the total number of birds registered in Uruguay, some of them in danger of extinction, and 15 mammal species. There are also 21 species of amphibians and 14 of reptiles, 3 of which are on the IUCN red list. The unique record for Uruguay vis-à-vis the arboreal snake (*Phylodrias olfersii*) and the yellow anaconda (*Eunectes notaeus*) also stands out in the area**.** ○ *Cultural Value:* The area´s cultural value is based on the historical, recreational and tourist use attached to the site, besides productive activities (cattle breeding, dairy). Further, the reason for the area´s protection status was to organize the local population, giving rise to a Cultural Value on account of the population involvement and participation. • **Paysandú:** ○ *Natural Value:* No unique Natural Value sites are found in the area. ○ *Cultural Value*: A Cultural Value is in place at the Puerto neighborhood, where the Revolving Fund activity shall be implemented (activity 9.1), corresponding to a city consolidated in a medium-size risk area. While not officially stated, most dwellings have a historical value. Works that are carried out for adaptation of houses to flooding condition shall abide by relevant regulations regarding permits, works development, respect for facades, whenever this applies.

Checklist of E&S Principles	Questions	Yes / No	Evidence Base Identification
			• **Salto:** ○ *Natural Value*: As mentioned above, the Project to be executed in the Atahualpa neighborhood is close to a protected area known as the "Vaymaka Pirú" Indigenous Park; a small flora and fauna reserve close to the river, containing equipment for recreation, and open to public access. This place is under the impact of felling of trees by a population facing a high social and economic vulnerability. While the Park is outside the project area, work with local organizations is to get under way towards recognition of the Natural Value, awareness-raising activities and mapping of ecosystem services with a gender mainstreaming approach. Soil use in the Indigenous Park is attached the natural rural soil category. The coastal forest thriving in the area has been attached national level protection. ○ *Cultural Value*: Areas in which the Project is to be executed host several cultural uses, as follows: ▪ Atahualpa Neighborhood (7.2): Historical heritage houses are located nearby the project intervention area. ▪ Further, at the "Vaymaka Pirú" Indigenous Park, close to the Atahualpa neighborhood, traditional activities are held: Gaucho reins and skills tests, organized by the Salta Tradition Support Group. This project should not have any impact on this reserve. ▪ Some highly important cultural uses are in place at the AFE (State Railways Administration) warehouse: theatre companies, dance, comparsas, festivities related to immigrant communities. ▪ These activities, as well as the access of associations to space, will continue to be promoted. ▪ Other than fostering continuity of current uses, the project includes

Checklist of E&S Principles	Questions	Yes / No	Evidence Base Identification
			the dissemination of floods history (for example, through photography exhibitions) as a new cultural activity. Thus, this area that stands for a new cultural relationship of the city with the river, by becoming a flood park explicitly related to the flood event, which also recovers the traces of past floods as part of the history, is being added valued. • The proposed intervention in the Sauzal Arroyo is partially being carried out in a National Historical Heritage area (Resolution 476/2008 dated July 17, 2008 and Resolution 1074/2010 dated July 1, 2010), and bearing in mind the intervention that is intended to be carried out, it complies with the objectives and purposes set forth by Law 14.040 (Article 8). The point should be stressed that the project does not foresee any intervention in the Historical Heritage. • **Fray Bentos:** The Fray Bentos Industrial Landscape was declared as World Heritage in July 2015 by UNESCO. It is an industrial complex located on headland bathed by the waters of the Uruguay River west of the City of Fray Bentos (coordinates S33 7 4 W 58 19 54). The place covers 275 hectares incorporating the outstanding architecture of the Liebig's-Anglo industrial refrigeration facilities, the Uruguay River docks, the slaughterhouse, grazing areas, the workers' homes and their recreational areas. The place has an exceptional universal value on account of its being an outstanding example of the evolution of the social and economic structure of the 19th and 20th Centuries in Uruguay and in the region. It also plays a key role in the formation of a nationality process, resulting from the integration and cultural contribution of immigrants of more than fifty-five nationalities who came to work there. Confirmation is in place that the two activities that will be implemented in Fray Bentos are neither in a place close to

Checklist of E&S Principles	Questions	Yes / No	Evidence Base Identification
			this site nor can they have an impact on it. • **San Javier:** ○ *Natural Value:* San Javier is located within the Estero de Farrapos protected area (see above). ○ *Cultural Value*: On account of its Russian tradition, San Javier has an important Cultural Value. The colony was founded on 27 July 1913 by 300 Russian families who were seeking the full religious freedom that they did not find in Czarist Russia. Celebrations are very important and well-known: every year, several hundreds of the different Russian collectives in Uruguay participate. Settlers built a flour mill and sheds to store cereals and installed the first sunflower oil factory in Uruguay; introducing some advanced agricultural techniques to the country. Today the community celebrates year after year "The regional Sunflower festival" in a tribute to the founders of the town. These sheds are located near the bridge to be rehabilitated. • **Artigas (Bella Unión):** ○ *Natural Value:* Bella Unión is located close to the protected area Rincón de Franquía (see above). ○ *Cultural Value*: No sites with a Cultural Value are found close to Project

Checklist of E&S Principles	Questions	Yes / No	Evidence Base Identification
			interventions.
	14.4. Has the project determined if any of the heritage elements included in the List of World Heritage in Danger is in the influence zone?	Ar – NO Uru – NO	None of the elements in the *List of World Heritage in Danger* are located in the project´s area of influence.
	14.5. Has the project considered all the activities to identify actual risks for each of the heritage elements identified taking into account the specific characteristics of the activity (location, dimension, duration etc.) and the vulnerability	Ar – YES Uru – YES	The Project shall not generate any interventions likely to having an adverse or negative impact on sites, structures, or objects having a cultural, historical, artistic, traditional, or religious value, or intangible cultural forms. Instead, the Project seeks to protect these sites from climate change impacts.

Checklist of E&S Principles	Questions	Yes / No	Evidence Base Identification
	mechanism(s) of each heritage element identified?		
15. Lands and Soil Conservation	15.1. Has the project identified the presence of fragile soils within the influence area?	Ar – YES Uru – YES	All areas on which the Project is to be implemented are located in coastal regions. The project objective is to protect soil from coastal erosion and to rehabilitate coastal ecosystems, by strengthening them up and, therefore, increasing resilience both of the ecosystem and the communities nearby. Please refer to each project card (ANNEX 3) for an in-depth survey on soil types, as well as soil classification to delve into the soil type, as well as its classification at the urban code level, when applicable.
	15.2. Has the project identified activities that could result in the loss of otherwise non-fragile soil?	Ar – NO Uru - NO	The project has been designed and shall be implemented within an Ecosystems-based Adaptation approach, protection of the soil from coastal erosion, and rehabilitation of coastal ecosystem, strengthening them up, thus, increasing resilience both, of the ecosystem and neighboring communities.
	15.3. Has the project identified productive lands and/or lands that provide valuable ecosystem services within the influence	Ar – YES Uru - YE	The areas being intervened by the project are not productive. Only the presence of productive activities in the Parque Nacional Estero de Farrapos and Rincón de Franquía can be mentioned. In the case of the Estero de Farrapos, activities that will be implemented will be agriculture, tourism and beekeeping. Fishing activities have also been identified in several areas. Confirmation is in place that these activities will continue to be carried forward. Valuable ecosystem services have been identified in a large section of the project´s

Checklist of E&S Principles	Questions	Yes / No	Evidence Base Identification
	area?	S	intervention area, the most important being the two National Parks: El Palmar (Argentina) and the Islas del Río Uruguay Estero de Farrapos e Islas del Río Uruguay (Uruguay), as well as Rincón de Franquía Environmental Protection Area. Activities focused on these areas are the quantification, mapping and strengthening up of coastal ecosystem services. Further, there are several other areas having a high ecosystem value, such as the wetlands at the mouth of the Artaláz Arroyo and its multiple use area "Río de los Pájaros" or the Indigenous Park near the Atahualpa Park project area, where a proposal is in place to carry out the identification of ecosystem services and promote environmental education activities vis-à-vis the former. All other interventions shall be implemented in: a) An urban setting (mostly flooding-prone parks), where the conservation and strengthening of ecosystem services that nowadays cannot be developed, will be promoted; and b) A natural environment (green areas on the outskirts of cities), where the same goal to increasing resilience is sought with an Ecosystem-based Adaptation approach.
	15.4. Has the project identified activities that may lead to land degradation?	Ar – NO Uru - NO	The project has been designed and shall be implemented with an Ecosystem-based Adaptation approach, protecting the soil from coastal erosion and rehabilitating coastal ecosystems, reinforcing them and therefore increasing the resilience of both the ecosystem and the surrounding communities.

Table 3. Risks Identification per E&S Principles

Risks Identification per E&S Principles		
Checklist of E&S Principles	**Risk Associated**	**Risks Associated**
1.Compliance with the law	AR – YES URU - YES	**There is a risk** that the project does not comply with local and international legislation. Activities are low impact and local governments have identified and confirmed the permits to be obtained for each work. Upon revision of activities suggested, local entities confirm they do not see any problem to securing related permits. However, securing those permits requires a follow-up in case of an eventuality. That is why this activity is classified as a risk.
2. Access and Equity	AR – YES URU - YES	**There is a risk** that beneficiaries do not have access to the benefits the Project entails, if selection mechanisms are not defined to ensure a fair and equitable access. The case of the activities 7.5 Conditioning of refuges, 9.1 Revolving Fund, 9.2 Insurance for commercial and tourist activities, and 11.1 Adaptation of productive activities in the Parque Nacional Estero de Farrapos stand out. Further, Component 4 activities vis-à-vis social resilience should criteria of justice and equity criteria for access to them. As regards participation, **there is a risk** that it is not There is a risk that it is not warranted in some activities. Channels should be widened up in the case of the consolidation of the EWS (Outcome 5 of Component 1), and in Component 2: 7.3 Arroyo Sauzal activities, 9.1 Revolving Fund, and 9.2 insurance for commercial and tourist establishments. In any case, a channel for participation with vulnerable and marginalized communities and groups should be maintained in the aggregate of activities.

Risks Identification per E&S Principles		
Checklist of E&S Principles	**Risk Associated**	**Risks Associated**
3. Marginalized and Vulnerable Groups	AR – YES URU - YES	Marginalized vulnerable groups have been identified. **There is no risk** that the project may prevent access of vulnerable and marginalized groups to basic rights and services. **There is a risk** that these groups do not have fair and equitable access to project benefits, if access and participation mechanisms are not properly implemented, as referred to in the previous point. Concerning adaptation measures such as those framed in the Revolving Fund, or improvements focused on productive activities, **there is a risk** that adaptive technologies may not be adapted and made accessible to anyone.
4. Human Rights	AR – NO URU - NO	**There is no risk** that the Project does not foster and abide by international Human Rights. The project´s core objective is reducing disaster risks for communities and ecosystems. Projects shall improve quality of life in terms of flood prevention, and also from the cultural, economic and social point of view.
5. Gender Equity and Women's Empowerment	AR – YES URU - YES	**There is a risk** that some elements maintain or exacerbate gender inequalities or their aftermath: From policies and the SAT, access to insurance, Revolving Fund or support to implement adaptation measures. Adaptation technologies should be adapted for women and men use. Access and possibilities in terms of time and hours to attending participatory and training activities, capacity-building subjects. Linear park projects run the risk of not including women and girls if they do not adequately implement safety measures or if sporting activities are biased towards male-focused sports. In the case of floods refuge, there is a risk that gender issues will not be properly handled.

Risks Identification per E&S Principles		
Checklist of E&S Principles	**Risk Associated**	**Risks Associated**
6. Core Labour Rights	AR – NO URU - NO	The project will be executed in line with CAF's standards, which apply all core labor standards as identified by the International Labor Organization (ILO).
7. Indigenous Peoples	AR – NO URU - YES	**There are no risks** related to Indigenous Populations since these are not present in the Project area.
8. Involuntary Resettlement	AR – NO URU - NO	**There is no risk** linked to an involuntary resettlement, since the Project does not involve any displacement or resettlement. It is important to clarify that in several of the activities with which local governments intervene are carrying out relocations of people living in high-risk flooding areas. These relocations are not connected with the project. The project complements measures to prevent the occupation of evicted lands and to contribute with measures to reduce the flooding risk. **There is no risk** for livelihoods of the populations to be affected; rather, the project improves their conditions since it does not involve any displacement or resettlement. Clarification should be made that several of the activities with which local governments intervene involve relocations of people living in high-risk flooding areas. These relocations are not connected with the project. The project complements measures to prevent the occupation of evicted lands, and to contribute with measures reducing the risk of flooding. **There is no risk** that livelihoods of the populations are affected, but, on the contrary, the project improves its conditions.

Risks Identification per E&S Principles		
Checklist of E&S Principles	**Risk Associated**	**Risks Associated**
9. Protection of Natural Habitats	AR – YES URU - YES	The project intervenes in Natural habitats, including national and municipal-level protected areas, and areas with a recognized Natural Value. Activities proposed **do not foresee actions having an impact** on natural habitats, but rather, are focused on recovering areas highly affected by flood phenomena, many of which also show a high environmental degradation. However, it is necessary **to safeguard the risk** involved in the application of exotic wood removal methods, monitoring of clearing activities necessary to carry out works in linear parks and tourism infrastructure, or unexpected or undesirable impacts by adaptation measures on productive activities in the Parque Nacional Farrapos.
10. Conservation of Biological Diversity	AR – NO URU - NO	The project implementation **does not entail a risk** to the reduction or loss of biological diversity, or the introduction of known invasive species. Rightly, the goal of practically all activities is the rehabilitation of this diversity and, in particular, the replacement of exotic and invasive species by native ones that provide ecosystem services that increase resilience to floods. Assurance can be given that the Project avoids any significant or unjustified reduction or loss of biological diversity, or the introduction of known invasive species.
11. Climate Change	AR – NO URU - NO	**There is no risk** of a significant or unjustified increase in greenhouse gas emissions. The project does not belong to any of the sectors mentioned in the document´s reference book. The only GHG emissions that will occur due to the project will be during the works, over transportation of materials. These emissions are deemed to be non-significant. Confirmation is in place that the project does not generate any new sources of greenhouse gas emissions; in any case, it would generate new GHG emissions sinks on account of the incorporation of new native species.

Risks Identification per E&S Principles		
Checklist of E&S Principles	**Risk Associated**	**Risks Associated**
12. Pollution Prevention and Resource Efficiency	AR – YES URU - YES	**There is a risk** that the project is implemented in such a way that it does not abide by standards that should be enforced to minimize the use of natural resources, waste production and pollutants release. Reference is made in Components 2 and 3.
13. Public Health	AR – NO URU - NO	**There is no risk** for adverse impacts to be generated to Public Health by the project. Rather, the project shall provide for an enhanced quality of life of people.
14. Physical and Cultural Heritage	AR – NO URU - NO	**There is no risk** that the Project may generate alterations, damage or loss of cultural, physical resources, cultural sites, and sites with unique natural values recognized as such at community, national or international level. Projects shall not interfere with the current access to or the use of physical and cultural resources as mentioned. Some of the Project activities shall be implemented in areas harboring unique natural or cultural values, that are recognized at community, national or international level. The protection activity referring to the Jesuitical ruins under threat by coastal erosion in the National El Palmar Park is deemed as a direct protection action to safeguarding the historical Heritage and, accordingly, access to them and their use. There is a site recognized by the 1972 UNESCO Convention on the Protection of the World Cultural and Natural Heritage: The Fray Bentos Industrial Landscape. Confirmation is at hand that the Fray Bentos projects are not located close to this site, nor would they have an impact on them in any way.

Risks Identification per E&S Principles		
Checklist of E&S Principles	**Risk Associated**	**Risks Associated**
15. Land and Soil Conservation	AR – NO URU - NO	All areas singled out for implementation of the project are located along a coastal area. The Project seeks to protect the soil from coastal erosion and rehabilitate coastal ecosystems, reinforcing them and, therefore, increasing the resilience of both the ecosystem and the surrounding communities. The areas to be intervened by the project are not productive. Only the presence of productive activities (livestock, beekeeping, tourism) at the Parque Nacional Estero de Farrapos can be mentioned.

Considering **¡Error! No se encuentra el origen de la referencia.**, **¡Error! No se encuentra el origen de la referencia.** and Table 3. Risks Identification per E&S Principles, an assessment of E&S Impacts of the project activity is made. Please find below

Table 4. Activity Identified risks in accordance with AF’s E&SP and Potential E&S Impacts.

Table 4. Activity Identified risks in accordance with AF's E&SP and Potential E&S Impacts

Activity	Risks Identified in accordance with the Adaptation Fund environmental and social policy	Environmental and social impacts in case risks materialize
COMPONENT 1		
Activities 1.1 and 1.2 of Output 1: Land management plans, protected areas management plans, and housing and water programs, under review or in progress, include the climate change perspective.	E&SP 5. There is a risk that the gender approach is not incorporated into the revision of plans and the preparation of technical documents. There is a risk that the equal participation of men and women in capacity-building activities will not be achieved.	Plans and tools may not be adapted, or may not reach men and women in an equitable way.
Activities 2.1 to 2.3 in Output 2: Methodological guidelines to assess impact, damages and losses have been designed and implemented.	E&SP 3 and E&SP 5. There is a risk that databases will be used and that indicators will be defined without disaggregation by sex, age group, and vulnerable group. There is a risk that equitable participation of men and women in training will not be achieved.	Diagnostics may not be visualizing damages and losses with due consideration for gender, age and vulnerable groups.
Activities 3.1 and 3.2 in Output 3: The project adaptation outcomes have been incorporated into monitoring mechanisms of National Adaptation Plans, Adaptation Communications and National Determined Contributions (NDCs) for Argentina and Uruguay.	E&SP 3 and E&SP 5. There is a risk that indicators will be defined without disaggregation by sex, age group, and vulnerable group.	Monitoring may not be making visible the adaptation and risk reduction measures with a consideration of gender, age and vulnerable groups.

Activity	Risks Identified in accordance with the Adaptation Fund environmental and social policy	Environmental and social impacts in case risks materialize
Activities 4.1 and 4.2 in Output 4: Strategies and best practices involving adaptation, climate risk management, territorial planning, territorial policy, housing infrastructure adaptation, recovery of vacant lands, have been shared by Argentina and Uruguay.	E&SP 3 and E&SP 5. There is a risk that lessons learned are shared without both, a focus on vulnerable and marginalized groups, and a gender approach. There is a risk that an equitable participation by men and women at binational workshops is not achieved.	Plans and instruments may not include a vulnerable and marginalized groups approach. Plans and instruments may not be adapted and / or may not reach men and women in an equitable way.
Activities 5.1 and 5.2 in Output5: Flood Early Warning System has been consolidated.	E&SP 2 and E&S 3. There is a risk that not all the community is aware of the existence and working of the flooding EWS. There is a risk that the community does not have the capabilities to access and interpret the EWS information, and to properly respond to a warning.	If the community is not adequately informed, and local knowledge is not taken into account, there is a risk that the EWS is not taken into account. If adequate capacities are non-existent within the community to access and interpret the EWS information, there is a risk that it may not respond adequately to the warning.
	E&SP 5. There is a risk that the EWS does not incorporate gender mainstreaming in its consolidation.	If gender mainstreaming is not incorporated, key information regarding access to information, interpretation and men and women response may not be included.
Activities 6.1 and 6.2 in Output 6: Updating and implementation of Regional	E&SP 5. There is a risk that the revision and implementation of regional disaster risk	Plans and tools may not be adapted and/or may not reach

Activity	Risks Identified in accordance with the Adaptation Fund environmental and social policy	Environmental and social impacts in case risks materialize
Plans for Disaster Risk Management, including the Climate Change (CC) perspective, have been supported.	management plans do not bear in mind the gender mainstreaming issue. There is a risk that an equitable participation by men and women in workshops is not achieved.	women and men in an equitable way.
	E&SP 9 and ES&P 10. There is a risk that the revision and implementation of plans do not take into account in their strategy consideration of ecosystem services in protected areas, and biodiversity. There is a risk that strategies likely to having an impact on protected areas and biodiversity are defined.	Plans may be incomplete in their strategies to respond to risk, and increase the resilience of both, communities and ecosystems. Plans could foster measures having an impact on ecosystems.
COMPONENT 2		
7.1: Resignification of the Union Portuaria, Ledesma and urban border areas in Paysandú, Uruguay.	E&SP 2 and E&SP 3. Not withstanding inclusion considerations in the Project design, there is a risk that these considerations are not properly or fully implemented by the project.	Access by and use of vulnerable and marginalized groups could be jeopardized.
	E&SP 5. Despite the Project is incorporating gender mainstreaming into its design, there is a risk that all related good inclusion practices are not incorporated in the Project over its implementation stage.	Women and girls' access to and use of the place could be jeopardized.

Activity	Risks Identified in accordance with the Adaptation Fund environmental and social policy	Environmental and social impacts in case risks materialize
	E&SP 12. There is a risk of contamination due to the use of the area in the past and at the present time. Also, that contamination occurs at the time project works are under way, and over the park operation.	If the current pollution problem is not tackled with, the project area preliminary conditions shall not be suitable. If waste and effluents are not properly managed during the construction and operation stages, the area will not have suitable environmental conditions.
7.2. Resignification and renovation of vacant, flood-prone lots after resettlements. Atahualpa area in Salto, Uruguay.	E&SP 2 and E&SP 3. Notwithstanding inclusion considerations in the Project design, there is a risk that such considerations are not properly or fully implemented by the project.	Access to and use by vulnerable and marginalized groups could be jeopardized.
	E&SP 2 and E&SP 5. Despite the Project is incorporating gender mainstreaming into its design, there is a risk that all related good inclusion practices are not incorporated in the Project over its implementation stage.	Women and girls' access to and use of the park could be jeopardized.
	E&SP 12. There is a risk that the project may be impaired by pollution due to the park´s current uses: poor facilities, alternative sanitation systems, landfill area.	The project would not have environmental conditions that are suitable for the project execution and further use.
7.3. Resignification and renovation of flooding-prone vacant lots at the Sauzal Stream mouth, in Salto, Uruguay.	E&SP2 and E&SP3. Bearing in mind beneficiary multiplicity, a risk is apparent that not all of they are being represented along the whole implementation cycle.	Conflicts may arise along the Project implementation process. Access and use by vulnerable and marginalized groups could be

Activity	Risks Identified in accordance with the Adaptation Fund environmental and social policy	Environmental and social impacts in case risks materialize
	Despite inclusion considerations in the Project design, there is a risk that the Project does not properly or fully implement them.	jeopardized.
	E&SP 2 and E&SP 5. Although gender mainstreaming has been included in the Project´s design, there is a risk that the project does not properly or fully implement considerations therein.	Women and girls' access to and use of the park could be jeopardized
	E&SP 12. There is a risk that the Project is impaired by waste, illegal dumping of effluents and garbage, which are currently produced.	The project would not have environmental conditions that are not adequate vis-a-vis the Project execution and use.
7.4. Environmentally sustainable hydrological management at the Esmeralda Stream – Resignification of the Esmeralda´s neighborhood housing complex - Fray Bentos, Uruguay.	E&SP 2 and E&SP 3. Notwithstanding inclusion considerations in the Project design, there is a risk that the Project does not properly or fully implement considerations therein	Access and use by vulnerable and marginalized groups could be jeopardized.
	E&SP 5. Although gender mainstreaming has been included in the Project´s design, there is a risk that all inclusion best practices involved in this outlook over the project implementation stage.	Women and girls' access to and use of the park could be jeopardized
	E&SP 12. There is a risk that contamination is present due to the uses the area has been given both in the past and in the present time. Further, there is a risk that pollution is caused at the time Project-related works get under way, and over the operation of the park.	If the current waste disposal problem is not solved, the project area will show inadequate initial conditions. If waste and effluents are not properly managed during the

Activity	Risks Identified in accordance with the Adaptation Fund environmental and social policy	Environmental and social impacts in case risks materialize
		construction and operation stages, the area will show inadequate environmental conditions.
7.5. Risk prevention and evacuees care Centre. Bella Unión, Uruguay. 7.6. Resignification of flood prone high-risk public spaces recovered from irregular residential occupation. Bella Unión, Uruguay.	E&SP 2. There is a risk that a clear access mechanism to Project benefits is not implemented, and that the necessary participation instances are not warranted.	
	E&SP 5. There is a risk that the specific needs of women in terms of space, privacy, situations of violence, among others, will not be taken into account.	Women can be subjected to situations of violence or feel disadvantaged during their stay at the center.
	E&SP 12. There is a risk of contamination during the construction works, and over the time the building is being used.	The environment would be contaminated by construction waste and by the residential use of space.
7.7. Protection and resignification of the Artaláz Stream Wetland. Colón, Argentina.	E&SP 2 y E&SP 3. There is a risk that the project does not incorporate inclusion considerations in the final design. .	The access and enjoyment of vulnerable and marginalized groups could be harmed.
	E&SP 5. There is a risk that the project does not include gender mainstreaming in the project and in a comprehensive way.	The Project might not benefit women and men in an equitable way.
	E&SP 9 and E&SP 10. There is a risk that the natural habitat becomes impaired over the execution of Project works.	The natural habitat could become impaired by a higher pressure over the Project works.

Activity	Risks Identified in accordance with the Adaptation Fund environmental and social policy	Environmental and social impacts in case risks materialize
	E&SP 12. There is a risk of contamination and generation of wastes over the works stage, and during the time the park is in operation.	The project could be impaired by a poor environmental quality.
7.8. Remediation and resignification of vacant lots located within Defensa Norte and Cantera 25 de mayo Neighborhood. Concepción del Uruguay, Argentina.	E&SP 2 and E&SP 3. There is a risk that the project does not incorporate inclusion considerations in its design.	Access to and enjoyment of the new park could be jeopardized.
	E&SP 5. There is a risk that the project does not incorporate gender mainstreaming into its implementation process.	Insecurity situations and differentiated access for men and women could be generated.
	E&SP 9 and E&SP 10. There is a risk that native vegetation is affected if safeguards as required are not applied towards a proper forest cleaning and reforestation work.	Specimens having a Natural Value could be needlessly lost.
	E&SP 12. There is a risk of contamination and generation of waste during the construction stage and during the operation of the park. In addition, at the time of project design, there was a contamination problem due to the rupture of a sewage system pump in the San Isidro neighborhood, which, although it is located outside the project area, may have an impact on the project.	The project could be impaired by a poor environmental quality.
8.1 Environmentally sustainable hydrological management at the La Esmeralda Stream -hydrological	E&SP 2 and E&SP 3. There is a risk that the Project does not incorporate inclusion considerations in the design.	Access and enjoyment of the new park could be jeopardized.

Activity	Risks Identified in accordance with the Adaptation Fund environmental and social policy	Environmental and social impacts in case risks materialize
lamination. Fray Bentos, Uruguay.	E&SP 5. There is a risk that the project does not include gender mainstreaming in its implementation.	Insecurity, and differentiated access situations could become apparent for men and women.
	E&SP 12. There is a risk of pollution and generation of wastes over the works stage and over the operation of the park.	The project could be impaired by a poor environmental quality.
8.2: Protection against coastal erosion, and sundry repairs at the water treatment plant in the city of Concordia, Argentina.	E&SP 12. There is a risk that there will be an impact due to the generation of waste and noise during the works. There is a risk that resources will not be efficiently managed (materials for the works and for the protection of the coast).	The project It can degrade the surrounding environmental setting if wastes are not properly managed. The project can lead to an excessive consumption of materials if works wastes are not managed efficiently.
	E&P 9. There is a risk that the works stag may impair the adjacent protected area.	Damages to flora and fauna could be caused.
8.3. Refurbishing of the Access bridge to the Pier and the Coastal areas of the San Javier town.	E&SP 12. There is a risk of an impact due to generation of waste and noise during works. There is a risk that resources are not efficiently managed (works and coast protection materials).	The surrounding setting may be degraded by the Project if works wastes are not properly managed. If not managed efficiently, the project may involve overuse of materials.
	E&P 9. There is a risk that the works stage may have an adverse impact on the adjacent protected area.	Damages to flora and fauna could be caused.

Activity	Risks Identified in accordance with the Adaptation Fund environmental and social policy	Environmental and social impacts in case risks materialize
9.1. Revolving fund for housing adaptations in flood medium-risk zones, according to the Risk Map. Pilot case in Paysandú.	E&SP 2 and E&SP 3. There is a risk that people with multiple vulnerabilities in the medium risk areas have no access to the benefits of the project and are not involved in the design of the mechanism.	Without participation in the project design, the Revolving Fund might not reach people facing manifold vulnerability conditions (i.e., female heads of household, senior citizens, people with disabilities)..
	E&SP 5. The project could exacerbate gender inequality could exacerbate gender inequality if facilities for women's access to the mechanism are non-existent.	If no affirmative actions for women involvement are not taken, a condition of less access by them to this type of tools could be replicated.
	E&SP 14. There is a risk that (non-public) housing with historical value will be affected if the adaptation measures implemented with the Revolving Fund do not respect the characteristics that their historical value gives them.	If ex ante protection measures of historical values are not taken, these will be impaired.
9.2. Design of flood insurance for commercial and tourist premises in coastal areas. Entre Ríos, Argentina.	E&SP 2. There is a risk that both, an insurance access mechanism, and the involvement of potential beneficiaries is not looked into.	If this issue is not looked into over the deign consultancy stage, the tool to be used at a later time may not respond to the real needs.
	E&SP 5. There is a risk that gender considerations are not included in the feasibility survey and tool design stage.	If gender considerations are not attached to the survey, the tool to be used in the future may exacerbate the current situation.
COMPONENT 3		

Activity	Risks Identified in accordance with the Adaptation Fund environmental and social policy	Environmental and social impacts in case risks materialize
10.1: Identification, mapping and evaluation of ecosystem benefits on account of their contribution to climate change adaptation and connectivity in Argentina and Uruguay.	Without identified environmental and social risks.	N/A
11.1: Adequacy of infrastructure required to upgrade resilience to CC in vulnerable human activities in protected areas, including tourism, livestock and beekeeping in the Estero de Farrapos Protected Area in Uruguay.	E&SP2. There is a risk that the mechanism for accessing project benefits will not ensure impartial access to benefits. There is a risk that, without an adequate participatory process, the needs and better alternatives for adapting production systems will not be properly identified.	Affected male and female producers might not be included in the project.
	E&SP5. A risk is identified that certain elements such as the selection of beneficiaries or the identification of technologies can maintain or exacerbate gender inequality or its aftermath.	Female producers may not have an equitably access to the project's benefits. The technologies identified may not be the most appropriate for management by men and women.
	E&SP9 and E&SP10. Not withstanding the conservation approach in productive activities, there is a risk that Project interventions have unforeseen and unintended impacts.	Both, the natural setting and biodiversity could be impaired.
	E&SP12. While it is not foreseen that adaptation activities aimed at farmers and beekeepers will generate new pollution sources, depending on the adaptation measure. i.e., a new risk of generating foci at specific moments if any of the solutions imply	Some areas in the park could be contaminated by overgrazing (animal overload).

Activity	Risks Identified in accordance with the Adaptation Fund environmental and social policy	Environmental and social impacts in case risks materialize
	a large concentration of animals in the same place during a flood event.	
11.2: Implementation of climate change ecosystem-based adaptation measures in the Rincón de Franquía Protected National Area in Uruguay.	E&SP9 y E&SP10. Not withstanding the conservation approach, there is a risk that Project –related interventions have unexpected unintended impacts.	Both, the natural setting and biodiversity could be impaired.
11.3: Restoration of vulnerable coastal ecosystems through monitoring of exotic species and planting of native species.	E&SP 9, E&SP 10. There is a risk of an adverse impact on the vegetation, if woody exotic species eradication methodologies are not applied (heavy machinery, burning, application of agrochemicals such as herbicides and shrub killers) are not adequately applied.	The ecosystem could be impaired.
	E&SP 12. There is a pollution risk if agrochemical if agrochemical containers are not stored and properly disposed of. There is a risk that resources will not be used efficiently if constraints to the use of agrochemicals are not established.	The environment could be affected. There is a likelihood that resources are not being efficiently used.
	E&SP 13. There is a health risk for men and women workers at National Parks on account of the application of methods to eradicate exotic woody plants.	The health of men and women working in National Parks could be impaired.
11.4. Structural consolidation of historical buildings, protection of the coastal canyon and valorisation of the historic site Calera	E&SP 12. There is a risk of affectation due to the generation of waste and soil movement over Project-related works.	The environmental setting around the Project may be degraded if works´ wastes are not properly

Activity	Risks Identified in accordance with the Adaptation Fund environmental and social policy	Environmental and social impacts in case risks materialize
del Palmar or de Barquín, in El Palmar National Park (PNEP).		disposed of.
	E&SP 14. There is a risk that this archaeological site will be affected over Project works, the final purpose of which is to preserve the site from flooding events, if enough safeguards are not taken to protect it.	If no precautions are taken over Project-related works, the historical site could be impaired over works.
COMPONENT 4		
Activities 12.1 and 12.2 in Output12: Social vulnerability monitoring and evaluation tools have been devised with a particular focus on Human Rights, gender, and generations.	Neither environmental nor social risks have been identified.	N/A
Activities 13.1 and13.2 in Output13: Assessments of perception of social risks have been carried through towards the construction of resilience.	E&SP 3 y E&SP 5. There is a risk that activities to learn about the social perception of risk are not adapted to gathering the views of vulnerable men, women, and marginalized groups. There is a risk that results are not systematized by gender, and vulnerable and marginalized groups. There is a risk that pilot cases do not reflect the views of groups mentioned.	The social perception of risk review could be incomplete.
Activities 14.1 and 14.2 in Output 14: Strategies for assistance and capacity-	E&SP 2, E&SP 3 and E&SP 5: There is a risk that participation of women and men in	Involvement of women and men may not be balanced vis-à-vis the

Activity	Risks Identified in accordance with the Adaptation Fund environmental and social policy	Environmental and social impacts in case risks materialize
building of the workforce made up by vulnerable populations have been promoted.	training and access to assistance is not well-adjusted. There is a risk that participation of vulnerable and marginalized groups will be low. Labor reconversion issues pertaining some vulnerable or marginalized groups could be dismissed (i.e., people with disabilities, or on account of their needs vis-à-vis accessibility to capacity-building centers.	needs for labor reconversion. The participation of vulnerable and marginalized groups could be jeopardized by not getting the issues right, or by not taking into account issues related to accessibility to job training centers.
	E&SP 9, E&SP 10, E&SP 11 and E&SP12, E&SP 15: There is a risk that new labor activities having an impact on natural habitats and biodiversity are not encouraged. There is a risk that activities producing new GHG emissions, local pollution, or soil degradation are promoted. There is a risk that activities are fostered without training in hygiene and occupational safety.	The project would be having an adverse impact on natural habitats and biodiversity, generating new GHG emission, or local-level pollution.
Activities 15.1 y 15.2 in Output15: Social networks have been strengthened up through an exchange in Climate Change Adaptation (CCA) good practices and	E&SP 2, E&SP 3 and E&SP5.There is a risk that participation spaces and workshops do not equitably include men, women and vulnerable and marginalized groups.	Participation of the different groups could be jeopardized.

Activity	Risks Identified in accordance with the Adaptation Fund environmental and social policy	Environmental and social impacts in case risks materialize
local risk management strategies.	ALL E&SP. There is a risk that, during the exchange on lessons learned, the lessons related to environmental and social issues from the selected experiences will not be shared.	Lessons learned in environmental and social terms would be being ignored and errors related to these aspects could be made again.
Products 16.1 a 16.3 in Output16: Communication, education and dissemination strategies have been implemented towards reducing vulnerability.	&SP 2, E&SP 3 and E&SP5. There is a risk that participation spaces and workshops do not equitably include men, women and vulnerable and marginalized groups. There is a risk that communication campaigns and materials are not inclusive.	Participation of the different groups could be in jeopardy.
	ALL E&SP. There is a risk that, during the exchange of experiences, over the dissemination of successful experiences, and preparation of strategies and methodologies, the lessons related to environmental and social issues in experiences chosen will not be shared.	Learning in environmental and social terms could be being ignored, and errors related to these aspects could be repeated.

Considering the risks identified in

Table 4. Activity Identified risks in accordance with AF's E&SP and Potential E&S Impacts, Table 5 shows the general Project categorization:

3.2. General Categorization

Table 5. Categorization definition

Questions	Component Answer YES / NO			
	1	2	3	4
Does the Project Outputs / Activities have significant adverse environmental or social impacts that are diverse?	NO	NO	NO	NO
Does the Project Outputs / Activities have significant adverse environmental or social impacts that are widespread?	NO	NO	NO	NO
Does the Project Outputs / Activities have significant adverse environmental or social impacts that are irreversible?	NO	NO	NO	NO
Does the Project Outputs / Activities have few adverse environmental or social impacts?	NO	YES	YES	NO
Does the Project Outputs / Activities have in small scale / low widespread adverse environmental or social impacts?	NO	YES	YES	NO
Does the Project Outputs / Activities have reversible or easily mitigated adverse environmental or social impacts?	NO	YES	YES	NO
Does the Project Outputs / Activities have no adverse environmental or social impacts?	YES	YES	YES	YES
Categorization	C	B	B	C

The results of the Component Categorization showed that the Component 1 and Component 4 are categorized as low risk (Category C) because of their nature of capacity building (capacity-buildings, workshops, review of strategies and plans for the incorporation of climate change perspective, lessons and best practices dissemination) which is not expected to generate significant environmental and social impacts. Only provisions related to guaranteeing participation and inclusion in these activities are to be considered.

Components 2 and 3 are categorized as medium risk (Category B) because they involve physical interventions, but focused on improving living conditions of communities, and their environmental and social impacts can be mitigated by the actions required by the ESMP.

Ministerio de Ambiente y Desarrollo Sustentable
Presidencia de la Nación

BANCO DE DESARROLLO DE AMÉRICA LATINA

MVOTMA
Ministerio de Vivienda Ordenamiento Territorial y Medio Ambiente

REGIONAL PROGRAM PROPOSAL

"Climate Change adaptation in vulnerable coastal cities and ecosystems of the Uruguay River"

ANNEX 6. Environmental and social management plan, complaints and grievances mechanism, and monitoring, evaluation, and oversight programme

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1. Introduction

Pursuant to the Environmental and Social Policy being enforced by the Adaptation Fund, and once all projects have been reviewed pursuant to the fifteen principles, and risks and impacts have been identified for each activity, mitigation measures should be brought forward, together with the names of persons responsible for their implementation.

This document refers to the Environmental and Social Management Plan (ESMP) pertaining to the project entitled "Adaptation to Climate Change in vulnerable cities and coastal ecosystems in the Río Uruguay area". This Plan has been jointly drafted up with the Argentina and Uruguay governments, and the technical assistance of the Development Bank of Latin America (CAF).

This document incorporates sections as follows:

1. Environmental and social management plan
2. Grievances and complaints mechanism, and
3. Monitoring and evaluation arrangements.

2. Environmental and Social Management Plan

The Environmental and Social Management Plan that has been drafted up for the project incorporates specific measures to prevent and mitigate adverse environmental and social risks and impacts that have been identified in all the project activities. Mitigation measures envisaged vis-à-vis relevant risks identified are spelled out in this section. Information is included herein pertaining organizations responsible for implementing these mitigation measures and ensuring they have indeed been applied.

As detailed in Annex 5, it is relevant to stress that the project does not contemplate any displacement or resettlement. Displacement has already occurred or will have occurred within the framework of local plans for relocation of inhabitants in high flood risk areas in many of the activities with which the project intervenes.

As described in Section III of the Full “Implementation Arrangements" Proposal, an Expert shall be hired by the project to specifically monitor safeguards, complaints and grievances. This Expert will have proven working experience with international financing agencies´ safeguards, including a gender approach, and will ideally be familiar with local realities in both countries.

This Expert will be hired by the Regional Implementing Entity and will be in charge of overseeing the implementation of the Environmental and Social Management Plan and the Project's Gender Action Plan. This Expert will be responsible for drafting semi-annual reports for conveyance to project-related National and Regional Implementing Entities. Furthermore, and over quarterly meetings being held to monitoring project progress, this Expert will submit reports on any possible environmental and social risk that may have arisen and were not previously identified. This Expert will be responsible for updating the Environmental and Social

Management Plan and the Gender Action Plan whenever unforeseen impacts and risks are identified.

The Implementing Entity will appoint an officer to oversee compliance with safeguards and to further work, together with the Adaptation Expert, the Safeguards Expert, and Implementing Entities experts´ teams, to ensure compliance with all conditions.

As a part to the Environmental and Social Management Plan, and prior to their implementation, all activities should go through an environmental and social risks´ screening process and, depending upon related findings, mitigation measures should be defined that are properly discussed and disseminated with local authorities and other relevant stakeholders.

Table 1. Mitigation measures for management of environmental and social impacts and risks

Risks, potential impacts, and mitigation measures vis-à-vis each activity				
Activity	**Risks identified in line with the Adaptation Fund environmental and social policy**	**Environmental and social impacts if risks were to materialize**	**Mitigation measures**	**Responsible for verification**
COMPONENT 1				
Activities 1.1 and 1.2 in Input 1: The climate change (CC) outlook is incorporated into land management plans, protected area management plans, and housing and water programmes under revision or under way.	E&SP 5. There is a risk that the gender approach is not incorporated into revision of plans and in preparation of technical documents. There is a possibility that equitable participation of men and women in capacity-building activities will not be achieved.	Plans and instruments (tools) may not be adapted and/or may not equally reach men and women.	A gender approach shall be incorporated by means of the participation of a gender specialist with proven experience in climate change projects, flood emergencies, or related issues. Equitable participation of men and women in capacity-building workshops will be encouraged with proper considerations for timetables, places and resources. Gender considerations for this type of activities have been described in the Gender Action Plan.	Expert responsible for environmental and social safeguards Local authorities Regional Implementation Entity Implementation Entity
Activities 2.1 to 2.3 in Input 2: Methodological guidelines for assessing impact, damages and losses have been designed.	E&SP 3 and E&SP 5. There is a risk that databases are used, and indicators are defined lacking disaggregation by sex, age groups	Assessments may not be foreseeing damages and losses bearing in mind issues pertaining to gender, age and vulnerable groups.	Disaggregated data will be used whenever they are available, disaggregated indicators will be defined and methodological guides will be generated that promote a differentiated analysis. An equitable participation of men	Expert responsible for environmental and social safeguards Local authorities Regional Implementing

Risks, potential impacts, and mitigation measures vis-à-vis each activity				
Activity	**Risks identified in line with the Adaptation Fund environmental and social policy**	**Environmental and social impacts if risks were to materialize**	**Mitigation measures**	**Responsible for verification**
	and vulnerable groups. There is a possibility that an equal participation of men and women in capacity-building activities is not achieved.		and women in capacity-building workshops shall be fostered taking schedules, places, and resources in mind.	Entity Implementation Entity Articulation with SINAE and Civil Defence.
Activities 3.1 and 3.2 Project adaptation outcomes have been incorporated into monitoring mechanisms in Input 3: The project adaptation outcomes have been incorporated into monitoring mechanisms of plans, Adaptation Communications and National Determined Contributions	E&SP 3 and E&SP 5. There is a possibility that indicators are defined without disaggregation by sex, age, and vulnerable groups.	Monitoring may not be making adaptation and risk reduction measures visible with due consideration of gender, age and vulnerable groups.	Disaggregated indicators shall be defined based on the Vulnerability assessment of the project. Among related requirements, Consultancy-related Terms of Reference should incorporate a review of these proposals. An equitable participation of men and women in capacity-building workshops shall be fostered bearing in mind schedules, places, and resources.	Expert responsible for environmental and social safeguards Local authorities Regional Implementing Entity Implementation Entity

Risks, potential impacts, and mitigation measures vis-à-vis each activity				
Activity	**Risks identified in line with the Adaptation Fund environmental and social policy**	**Environmental and social impacts if risks were to materialize**	**Mitigation measures**	**Responsible for verification**
(NDCs) for Argentina and Uruguay.				
Activities 4.1 and 4.2 in Input 4: Strategies and best practices involving adaptation, risk management, territorial planning, territorial policy, housing infrastructure adaptation, recovery of vacant lands, have been shared by Argentina and Uruguay.	E&SP3 and E&SP 5. There is a possibility that lessons learned are shared without integrating marginalized groups, and a gender approach. There is a possibility that equitable participation of men and women in binational workshops is not achieved.	Plans and instruments may not incorporate a focus on vulnerable and marginalized groups. Plans and instruments may not be adapted to equitably reach women and men.	Indicators disaggregated by sex, age, and vulnerable groups shall be used. Design of binational scope´s protocols should, in particular, contemplate a gender approach as well as vulnerable and marginalized groups considerations.	Expert responsible for environmental and social safeguards Local authorities Regional Implementing Entity Implementation Entity
Activities 5.1 and 5.2 in Input 5: The flood Early Warning System (EWS) has been consolidated.	E&SP 2 and E&S 3. There is a possibility that not all people in the community are aware that a flood EWS is in place and in operation.	If the community is not properly informed, and local knowledge is not taken into account, there could be a possibility that the EWS is not taken into consideration.	The Expert responsible for the Project safeguards will prepare a "Communication and Participatory Strategy" on the way to involve the local community incorporating all project-related activities, based on the consultations made during the project design. Particular	The document is drafted up by the Expert responsible for Project-related environmental and social safeguards in consultation with local authorities. The document is approved

Risks, potential impacts, and mitigation measures vis-à-vis each activity				
Activity	**Risks identified in line with the Adaptation Fund environmental and social policy**	**Environmental and social impacts if risks were to materialize**	**Mitigation measures**	**Responsible for verification**
	There is a possibility that the community does not have the know-how to access and interpret the EWS data, and respond to the alert appropriately. There is a possibility that the skills to access to and interpret the EWS data are not present in the community, to properly react to a flooding alert.	If the community lacks the know-how necessary to access to and interpret the EWS data, there is a possibility for the community not properly reacting to a flooding warning.	attention will be paid to participation of vulnerable and marginalized groups. Assurances should be given of a proper articulation with Component 4 activities, incorporating EWS strengthening activities that are focused on communities at risk.	by the Regional Implementing Entity. The Capacity-building activities Plan should be revised in line with this document. Documents will be shared with all Project implementation experts and stakeholders.
	E&SP 5. There is a possibility that the EWS does not incorporate into its consolidation the gender mainstreaming approach.	If the gender mainstreaming approach is not incorporated, there is a possibility that the Project may be leaving aside key information regarding the access of men and women to information interpretation, and	Equitable participation of women and men in capacity-building instances will be ensured. This participation will be monitored through sex-disaggregated indicators. Special attention will be attached to provide capacity-building activities adapted to the realities and needs of men and women during flooding events.	Expert responsible for environmental and social safeguards Local authorities Regional Implementing Entity Implementation Entity The Project team shall ensure that the

Risks, potential impacts, and mitigation measures vis-à-vis each activity				
Activity	**Risks identified in line with the Adaptation Fund environmental and social policy**	**Environmental and social impacts if risks were to materialize**	**Mitigation measures**	**Responsible for verification**
		their response.	The Project´s Annual Report to the Adaptation Fund shall duly address how men and women opinions have been incorporated into the EWS design and implementation.	Adaptation Fund remarks should be duly incorporated.
Activities 6.1 and 6.2 in Input 6: Updating and implementation of Regional Plans for Disaster Risk Management, including the Climate Change (CC) perspective, have been encouraged.	E&SP 5. There is a possibility that gender mainstreaming is not borne in mind over the revision and implementation of regional management plans addressing disaster risks. There is a possibility that an equitable participation by men and women in workshops is not achieved.	Plans and instruments may not be adapted and/or do not equitably reach both, men and women.	The gender approach shall be incorporated through the participation of a gender expert in the subject. The equitable participation of men and women in workshops will be encouraged and monitored.	Expert responsible for environmental and social safeguards Local authorities Regional Implementing Entity Implementation Entity
	E&SP 9 and ES&P 10. There is a possibility that the review and	Plans may be lacking in their strategies to respond to risk and	Consideration of ecosystems and their services will be incorporated into the review of regional disaster management plans.	Expert responsible for environmental and social safeguards.

Risks, potential impacts, and mitigation measures vis-à-vis each activity				
Activity	**Risks identified in line with the Adaptation Fund environmental and social policy**	**Environmental and social impacts if risks were to materialize**	**Mitigation measures**	**Responsible for verification**
	implementation of plans do not bear in mind in their strategy the ecosystem services being supplied by protected areas and biodiversity. There is a possibility that strategies likely having an adverse impact on protected areas and biodiversity may not be defined.	increase the resilience of both, communities and ecosystems. Plans should foster ecosystem´s protection measures.		Local authorities Regional Implementing Entity Implementation Entity
COMPONENT 2				
7.1: Resignification of the Unión Portuaria, Ledesma and urban border areas in Paysandú, Uruguay	E&SP 2 and E&SP 3. In spite of inclusion considerations in the Project design, there is a possibility that these considerations are not fully	Access and use by vulnerable and marginalized groups could be impaired.	Implementing entities shall verify that inclusion considerations have been properly implemented.	Expert responsible for environmental and social safeguards Paysandú Intendency MVOTMA / CND Implementation Entity

Risks, potential impacts, and mitigation measures vis-à-vis each activity				
Activity	**Risks identified in line with the Adaptation Fund environmental and social policy**	**Environmental and social impacts if risks were to materialize**	**Mitigation measures**	**Responsible for verification**
	implemented by the project.			
	E&SP 5. Regardless of the inclusion of gender mainstreaming in the Project design, there is a possibility that not all best inclusion practices involved therein are incorporated over the implementation stage.	Access and use by women and girls could be impaired.	The implementing entity shall monitor the implementation of gender mainstreaming considerations in the Project design as committed by the Intendency, and shall ensure that guidelines as spelled out in the Gender Action Plan are duly warranted over implementation.	Expert responsible for environmental and social safeguards Paysandú Intendency MVOTMA /CND Implementation Entity
	E&SP 12. There is a contamination risk resulting from the area´s use in the past, and at the present time. Also, a risk that contamination occurs at the time works get under way, and during the operation of the park.	If the current contamination problem is not addressed, the Project area will show unsuitable initial conditions. If wastes and effluents are not properly managed during the construction and operation stages, the area will not show suitable	The intendency will clean up the whole area before works get under way. These activities have been envisaged in the project / will be guaranteed by the municipality prior to the implementation of the project. The intendency shall abide by national and local waste and effluent management regulations. A monitoring procedure for the work should be submitted. The contractor shall implement a	The Contractor´s employee responsible for environmental and social matters is accountable for the works plan and the monitoring procedure. Entities responsible for due submission of these procedures: Paysandú Intendency MVOTMA /CND DINAMA Responsible for

Risks, potential impacts, and mitigation measures vis-à-vis each activity				
Activity	**Risks identified in line with the Adaptation Fund environmental and social policy**	**Environmental and social impacts if risks were to materialize**	**Mitigation measures**	**Responsible for verification**
		environmental conditions.	monitoring plan to control: consumption of water and fuel, consumption of construction materials, energy consumption, generation of solid waste, generation of effluents, generation of construction waste. The intendency will incorporate the linear park into the municipal waste management system.	approval: Expert responsible for environmental and social safeguards Implementing Entity. Last technical and administrative responsible entity: Implementing Entity
7.2. Resignification and renovation after resettlement of vacant lots prone to flooding. Atahualpa area in Salto, Uruguay	E&SP 2 and E&SP 3. Notwithstanding inclusion considerations in the Project design, there is a possibility that they are not properly implemented by the project.	Access and use by vulnerable and marginalized groups may be impaired.	Implementing entities shall verify that committed inclusion considerations are being properly implemented.	Expert responsible for environmental and social safeguards Salto Intendency MVOTMA Implementation Entity
	E&SP 2 and E&SP 5. Notwithstanding that gender mainstreaming has been included by the project in its design, there is a possibility that not all gender mainstreaming	Access and use by women and girls could be in jeopardy.	The Expert responsible for safeguards, and the country´s Implementing Entity shall monitor implementation of committed gender considerations as committed by the Intendency in the project design and ensure that guidelines provided in the Gender Action Plan are warranted during project	Expert responsible for environmental and social safeguards Salto Intendency MVOTMA Implementation Entity

Risks, potential impacts, and mitigation measures vis-à-vis each activity				
Activity	**Risks identified in line with the Adaptation Fund environmental and social policy**	**Environmental and social impacts if risks were to materialize**	**Mitigation measures**	**Responsible for verification**
	good practices shall be incorporated over the project implementation stage.		implementation.	
	E&SP 12. There is a possibility that the project is affected by potential contamination due to the project´s area current uses: poor installations, alternative sanitation systems, informal dumpsite area.	The project would not show the right environmental conditions for its implementation and subsequent use.	Regarding the specific area used informally as a garbage dump, the Intendency is committed to implement measures such as installation of fences and prohibition of entry to vehicles. As for alternative sanitation systems, the Intendency will ensure that the area is sanitized before the implementation of the project through an environmental technical assessment including soil samples tests. These tests will comply with national protocols. A works-related monitoring procedure should be submitted. The contractor should implement a monitoring plan to control: consumption of water and fuel, consumption of construction materials, energy consumption, generation of solid waste,	The contractors´ officer in charge of environmental and social issues is responsible for the works plan and monitoring procedures. Salto Intendency is responsible for a timely submission of these procedures The Implementing Entity MVOTMA / CND are responsible for approval of these procedures. Expert responsible for environmental and social safeguards Implementation Entity

Risks, potential impacts, and mitigation measures vis-à-vis each activity				
Activity	**Risks identified in line with the Adaptation Fund environmental and social policy**	**Environmental and social impacts if risks were to materialize**	**Mitigation measures**	**Responsible for verification**
			generation of effluents, generation of construction waste.	
7.3. Resignification and renovation of flooding-prone vacant lots at the Sauzal Stream mouth, in Salto, Uruguay	E&SP2 and E&SP3. Bearing in mind the multiplicity of users, there is a possibility that not all of them are represented throughout the implementation cycle. Despite the committed inclusion considerations in the project design, there is a possibility that the project does not properly or fully implement those considerations.	Conflicts might arise over the project implementation stage. Access and use by vulnerable and marginalized groups could be impaired.	The Intendency is in contact with the different neighborhood centers and schools to consult how they would want the project to be set up in the El Sauzal area, promoting a broadly participatory decision-making and ensuring an equal participation of all vulnerable groups. The project will include best practices for calls ensuring the participation of all stakeholders including vulnerable groups, as well as guidelines for the inclusion of their opinions in decision-making. However, since there is such a multiplicity of users and direct beneficiaries, a recommendation is made that communication channels be expanded over the final stages of the project design and implementation. Implementing entities should ensure that inclusion considerations are properly implemented.	Expert responsible for environmental and social safeguards Salto Intendency MVOTMA / CND Implementation Entity

Risks, potential impacts, and mitigation measures vis-à-vis each activity				
Activity	**Risks identified in line with the Adaptation Fund environmental and social policy**	**Environmental and social impacts if risks were to materialize**	**Mitigation measures**	**Responsible for verification**
	E&SP 2 and E&SP 5. Notwithstanding that gender mainstreaming has been included in the Project design, there is a possibility that considerations therein are not properly or fully implemented by the project.	Access and use by women and girls could be jeopardised.	The Implementing Entity shall monitor implementation of gender considerations in the Project design, as committed by the Intendency, and shall ensure that guidelines as set forth in the Gender Action Plan are duly warranted over project implementation.	Expert responsible for environmental and social safeguards Salto Intendency MVOTMA / CND Implementation Entity
	E&SP 12. There is a possibility that the Project is affected by illegal dumping of wastes and garbage which are currently produced in effluents.	Environmental conditions required for implementation and further use of the Project would not be accessible by the project.	Regarding garbage dumps, other than ensuring their eradication, the Intendency will carry out awareness and environmental education activities within the community to prevent their recurrence. The Territorial Police will be in charge of monitoring these activities. It is also expected that, once the linear park is operational and the community has appropriated it and uses it, garbage dumps will no longer be in place around the area. A works-related monitoring procedure should be designed. A	The contractor´s employee responsible for environmental and social matters is also responsible for the works plan and monitoring procedure. Entity responsible for ensuring that these procedures are submitted: Salto Intendency Entity responsible for approval: Implementing Entity MVOTMA / CND

Risks, potential impacts, and mitigation measures vis-à-vis each activity				
Activity	**Risks identified in line with the Adaptation Fund environmental and social policy**	**Environmental and social impacts if risks were to materialize**	**Mitigation measures**	**Responsible for verification**
			monitoring plan should be implemented by the Contractor regarding: Consumption of water and fuel, consumption of construction materials, energy consumption, generation of solid waste, generation of effluents, generation of construction waste.	Expert responsible for environmental and social safeguards Last technical and administrative entity responsible: Implementation Entity
7.4. Environmentally sustainable hydrological management at the Arroyo La Esmeralda – resignification of neighbourhood housing complex La Esmeralda, Fray Bentos, Uruguay.	E&SP 2 and E&SP 3. Despite the fact that inclusion considerations are spelled out in the Project design, there is a possibility that these considerations are not properly or fully implemented.	Access and use by vulnerable and marginalized groups could be impaired.	Implementing entities should ensure that inclusion considerations have been properly implemented.	Safeguards monitoring Expert – Intendency of Fray Bentos MVOTMA / CND Implementation Entity
	E&SP 5. Notwithstanding that gender mainstreaming has been included in the Project design, there is a possibility that not all good inclusion practices are	Access and use by women and girls could be jeopardized.	The Implementing Entity will monitor incorporation of gender considerations committed by the Intendency in the project design, and will ensure that guidelines as set forth in the Gender Action Plan are warranted over implementation.	Expert responsible for environmental and social safeguards Intendency of Fray Bentos MVOTMA /CND Implementation Entity

Risks, potential impacts, and mitigation measures vis-à-vis each activity				
Activity	**Risks identified in line with the Adaptation Fund environmental and social policy**	**Environmental and social impacts if risks were to materialize**	**Mitigation measures**	**Responsible for verification**
	enforced over the implementation stage.			
	E&SP 12. There is a contamination risk resulting from the use of the area in the past and at the present time. Also, that contamination occurs at the time works are under way and the park is in operation.	If the current waste disposal problem is not solved, the project area will show unsuitable initial conditions. If waste and effluents are not properly managed during the construction and operation stages, the area will not show suitable environmental conditions.	The municipality will clean the entire area before works get under way. These activities have been envisaged in the project / they will be warranted by the municipality prior to the implementation of the project. The municipality will enforce national and local works-related waste and effluent management regulations. A works-focused monitoring procedure should be submitted. The contractor should implement a monitoring plan to check: consumption of water and fuel, consumption of construction materials, energy consumption, generation of solid waste, generation of effluents, generation of construction waste. The municipality will incorporate the lineal park into the municipal waste management system.	The contractor´s employee responsible for environmental and social matters is also responsible for the works plan and monitoring procedure Entity responsible for submission of these procedures: Fray Bentos Intendency MVOTMA /CND DINAMA Approval by Safeguards monitoring Expert Last technical and administrative entity responsible: Implementation Entity

Risks, potential impacts, and mitigation measures vis-à-vis each activity				
Activity	**Risks identified in line with the Adaptation Fund environmental and social policy**	**Environmental and social impacts if risks were to materialize**	**Mitigation measures**	**Responsible for verification**
7.5. Risk prevention and evacuees´ care center. Bella Unión, Uruguay	E&SP 2. There is a possibility that a clear mechanism is not implemented for access to Project-related benefit. There is a likelihood that enough participatory instances are not implemented.	Attention to evacuees could be attached priority without first taking into account vulnerability factors. Without a clear mechanism in place, discriminatory situations could arise.	The Municipality of Bella Unión will submit an evacuee´s access attention mechanism to the Expert responsible for environmental and social safeguards, who will jointly work with the Intendency to prepare a sound proposal for further submission for approval to the Implementing Entity and the Implementation Entity.	Expert responsible for environmental and social safeguards Municipality of Bella Unión Intendency of Artigas MVOTMA Implementation Entity
	E&SP 5. There is a possibility that the specific needs of women in terms of space, privacy, situations of violence, among others, are not borne in mind.	Women may experience situations of violence or feel disadvantaged during their stay at the center.	International standards will be abode by, such as the "Humanitarian Charter and minimum standards for humanitarian response" attached to the Sphere Project (UNHCR) and the good practices of organizations such as UNFPA in matters of sexual and reproductive health and gender violence in emergency situations. The final design will be submitted for review to Experts in the field and must be approved by Implementing agencies and the Implementation Entity. On the other hand, a strong	Expert responsible for environmental and social safeguards Municipality of Bella Unión Intendency of Artigas MVOTMA Implementation Entity

Risks, potential impacts, and mitigation measures vis-à-vis each activity				
Activity	**Risks identified in line with the Adaptation Fund environmental and social policy**	**Environmental and social impacts if risks were to materialize**	**Mitigation measures**	**Responsible for verification**
			emphasis shall be put on awareness-raising instances regarding the gender issue among social workers and municipal officials. The participatory instances with the community should be accompanied by a Gender Expert.	
	E&SP 12. There is a risk of contamination over the construction stage and over the time the building is used.	Environmental pollution would be released due to works´ wastes, and the residential use of the area.	The Environmental Management Plan (EMP) for construction of the building shall involve standards as required for a proper treatment of effluents. A monitoring procedure for the works should be submitted. The contractor should implement a monitoring plan to control: water and fuel consumption, consumption of construction materials, energy consumption, generation of solid waste, generation of effluents, generation of construction waste. Waste generated over residential use, shall be discarded into the municipal waste collection system.	The contractor´s employee responsible for environmental and social matters is also responsible for the works plan and monitoring procedure Safeguards Monitoring Expert Municipality Bella Unión Intendency of Artigas MVOTMA Implementation Entity
7.6. Resignification of spaces recovered from irregular	E&SP 2 and E&SP 3. There is a possibility that the Project may not	Access to and use by vulnerable and marginalized groups could be	Inclusion and security in access to use of the area considerations shall be included in the project. The municipality is committed to	Expert responsible for environmental and social safeguards

Risks, potential impacts, and mitigation measures vis-à-vis each activity				
Activity	**Risks identified in line with the Adaptation Fund environmental and social policy**	**Environmental and social impacts if risks were to materialize**	**Mitigation measures**	**Responsible for verification**
residential occupation. Bella Unión, Uruguay	incorporate the committed inclusion considerations in its final design.	jeopardized.	implementing guidelines as set forth in the Gender Action Plan. Implementation of these guidelines shall be monitored over the project implementation stage.	Municipality of Bella Unión Intendency of Artigas MVOTMA / CND Implementation Entity
	E&SP 5. There is a possibility that the project does not comprehensibly include gender mainstreaming in the project.	The Project might not equitably benefit women and men.	Recommendations as earmarked in the Gender Action Plan shall be implemented by the municipality.	Expert responsible for environmental and social safeguards Municipality of Bella Unión Intendency of Artigas MVOTMA / CND Implementation Entity
	E&SP 12. There is a risk of contamination and generation of waste over the works stage and over the use of the refurbished areas.	The project could be impaired by poor environmental quality.	The municipality shall abide by waste management-focused regulations and standards vis-à-vis works execution, and shall include the resignified area in the municipal waste and cleaning management system. A Works-related monitoring procedure should be submitted. The contractor shall implement a monitoring plan to control: consumption of water and fuel, consumption of building	The contractor´s employee responsible for environmental and social matters is also responsible for the works plan and monitoring procedure. Entities responsible for submission of these procedures: Municipality Bella Unión

Risks, potential impacts, and mitigation measures vis-à-vis each activity				
Activity	**Risks identified in line with the Adaptation Fund environmental and social policy**	**Environmental and social impacts if risks were to materialize**	**Mitigation measures**	**Responsible for verification**
			materials, energy consumption, generation of solid waste, generation of effluents, generation of construction waste.	Intendency of Artigas Approval by Expert responsible of environmental and social Safeguards MVOTMA / CND
7.7. Protection and resignification of the Artaláz Stream Wetland. Colón, Argentina	E&SP 2 and E&SP 3. There is a possibility that the Project´s final design does not apply all the committed inclusion considerations.	Access and use by vulnerable and marginalized groups could be jeopardised.	The project shall incorporate inclusion and security considerations for an easy access to the use and enjoyment of the area. The municipality is committed to implementing guidelines as set forth in the Gender Action Plan. Implementation of guidelines shall be monitored over the project implementation stage.	Expert responsible for environmental and social safeguards Municipality of Colón Province of Entre Ríos Implementation Entity
	E&SP 5. There is a possibility that gender mainstreaming is not comprehensibly included in the project.	The project might not equally benefit women and men.	The Municipality shall implement recommendations as set forth in the Gender Action Plan.	Expert responsible for environmental and social safeguards Municipality of Colón Province of Entre Ríos Implementation Entity
	E&SP 9 and E&SP 10. There is a possibility that the	The natural habitat may be impaired by increased pressure	Measures as required shall be taken to prevent impairment of the natural habitat by the project's	Safeguards Monitoring Expert

Risks, potential impacts, and mitigation measures vis-à-vis each activity				
Activity	**Risks identified in line with the Adaptation Fund environmental and social policy**	**Environmental and social impacts if risks were to materialize**	**Mitigation measures**	**Responsible for verification**
	natural habitat is impaired over the implementation of Project works.	over the Project works.	works. These measures shall be incorporated into the Works´ Environmental Management Plan.	Municipality of Colón Province of Entre Ríos Implementation Entity
	E&SP 12. There is a risk of contamination and generation of waste during the construction stage and during the operation of the park.	The project may be affected by a poor environmental quality.	The Municipality shall abide by waste-related regulations and standards in force vis-à-vis the execution of works, and shall include the linear park into the municipal waste collection management system (Direction of Parks and Walking Paths for maintenance, gardening and cleaning and Environmental Management for waste collection). A works-related monitoring procedure shall be submitted. The contractor shall implement a monitoring plan to monitor: consumption of water and fuel, consumption of construction materials, energy consumption, generation of solid waste, generation of effluents, generation of construction waste.	The contractor´s employee responsible for environmental and social matters is also responsible for the works planning and monitoring procedure. Responsible for submission of these procedures: Municipality of Colón Province of Entre Ríos Approval by Safeguards Monitoring Expert
7.8. Remediation and resignification of	E&SP 2 and E&SP 3. There is a possibility that the	Access to and use of the new park could be	The project has included in its design inclusion and security considerations for easy access to	Expert responsible for environmental and social safeguards

Risks, potential impacts, and mitigation measures vis-à-vis each activity				
Activity	**Risks identified in line with the Adaptation Fund environmental and social policy**	**Environmental and social impacts if risks were to materialize**	**Mitigation measures**	**Responsible for verification**
vacant lots located between Defensa Norte and Cantera 25 de Mayo neighbourhood. Concepción del Uruguay, Argentina.	committed inclusion considerations are not included in the Project design.	jeopardized.	the use and enjoyment of the area. Examples: inclusive children's games, ramps, lighting. These aspects should be monitored to ensure their effective inclusion.	Concepción del Uruguay Municipality Province of Entre Ríos
	E&SP 5. There is a possibility that the project does not include gender mainstreaming in its implementation.	Insecurity situations, and a differentiated access to men and women could be generated.	The project will incorporate access roads to the linear park allowing for women to feel safe walking around the park. The Municipality is committed to implementing guidelines as foreseen in the Gender Action Plan.	Concepción del Uruguay Municipality Provincia de Entre Ríos Expert responsible for monitoring of safeguards. Implementation Entity
	E&SP 9 and E&SP 10. There is a risk of an adverse impact on native vegetation if safeguards as required are not undertaken vis-à-vis proper clearance and reforestation works.	Specimens having a natural value would be unnecessarily lost.	The Project´s Environmental Management Plan (EMP) shall incorporate a detailed arrangement addressing clearing and reforestation activities, warranting that impacts on native species present in the area shall be considerably reduced, and reforestation work with native species shall be undertaken.	Concepción del Uruguay Municipality Province of Entre Ríos Safeguards monitoring Expert Implementation Entity
	E&SP 12. There is a risk of contamination and generation of waste during the	The project may be impaired by poor environmental quality.	The Municipality shall abide by waste-focused regulations and standards vis-à-vis implementation of works, and will include the linear park in the	The contractor´s employee responsible for environmental and social matters is also responsible for the

Risks, potential impacts, and mitigation measures vis-à-vis each activity				
Activity	**Risks identified in line with the Adaptation Fund environmental and social policy**	**Environmental and social impacts if risks were to materialize**	**Mitigation measures**	**Responsible for verification**
	construction stage and over the operation of the park. In addition, at the time of the project design, there was a contamination problem due to breakdown of a sewage system pump in the San Isidro neighborhood that, although located outside the project area, may have an adverse impact on it.		municipal waste management system. In addition, the Municipality should have solved the problem of the sewage system pump in the San Isidro neighborhood before the implementation of the project gets under way. This condition should be duly verified before works get started. A works-related monitoring procedure should be submitted. A monitoring plan shall be implemented by the contractor to monitor water and fuel consumption, consumption of construction materials, energy consumption, generation of solid waste, generation of effluents, generation of construction waste.	works plan and monitoring procedure. Authorities responsible for submission of these procedures: Municipality of Concepción del Uruguay Province of Entre Ríos. Approval by safeguards´ monitoring Expert.
8.1 Environmentally sustainable hydrological management at the La Esmeralda Stream – Rivera retarding basin, Fray Bentos,	E&SP 2 and E&SP 3. There is a possibility that the project does not apply the committed inclusion considerations in its final design.	Access to and use of the new park could be jeopardized.	The project design incorporates inclusion and safety aspects vis-à-vis an easier access and use of the area. These issues should be monitored to ensuring their effective incorporation.	Expert responsible for environmental and social safeguards Intendency of Fray Bentos MVOTMA / CND

Risks, potential impacts, and mitigation measures vis-à-vis each activity				
Activity	**Risks identified in line with the Adaptation Fund environmental and social policy**	**Environmental and social impacts if risks were to materialize**	**Mitigation measures**	**Responsible for verification**
Uruguay				Implementation Entity
	E&SP 5. There is a possibility that the Project does not comprehensively include gender mainstreaming in its implementation.	Insecurity conditions and a differentiated access could be generated for women and men.	The Municipality undertakes the implementing guidelines as set forth in the Gender Action Plan.	Expert responsible for environmental and social safeguards Intendency of Fray Bentos MVOTMA / CND Implementation Entity
	E&SP 12. There is a risk of contamination and generation of waste during the construction stage and during the operation of the park.	The project could be impaired by a poor environmental quality.	The Municipality shall abide by waste-focused regulations and standards vis-à-vis completion of works and will incorporate the linear park into the municipal waste management system. A works-related monitoring procedure should be submitted. The contractor shall implement a monitoring plan to verify: consumption of water and fuel, consumption of construction materials, energy consumption, generation of solid waste, generation of effluents, generation of construction waste.	The contractor´s employee responsible for environmental and social matters is also responsible for the works plan and monitoring procedure. Entity responsible for submission of these procedures: Intendency of Fray Bentos MVOTMA / CND Approval by Safeguards monitoring Expert.
8.2: Protection	E&SP 12. There is	The project can	The Municipality shall abide by	Expert responsible for

Risks, potential impacts, and mitigation measures vis-à-vis each activity				
Activity	**Risks identified in line with the Adaptation Fund environmental and social policy**	**Environmental and social impacts if risks were to materialize**	**Mitigation measures**	**Responsible for verification**
against coastal erosion, and sundry repairs at the water treatment plant in the city of Concordia, Argentina	a possibility of an impact due to generation of waste and noise over works. There is a likelihood that resources are not efficiently managed (materials for works, and for the protection of the coastal area).	degrade the surrounding environment if works waste is not properly managed. The project can lead to an excessive consumption of materials if these are not managed efficiently.	regulations and standards vis-à-vis works wastes. The Municipality should attach a breakdown of alternatives to the works´ Environmental and Social Management Plan (EMP) with a view to assessing efficiency in resource use. This breakdown shall include precisions over the origin of materials most used (i.e., gabions). A works-related monitoring procedure shall be submitted. The contractor shall implement a monitoring plan to verify: consumption of water and fuel, consumption of construction materials, energy consumption, generation of solid waste, generation of effluents, generation of construction waste.	environmental and social safeguards Municipality of Concordia Province of Entre Ríos Implementation Entity
	E&P 9. There is a possibility that activities of construction stage may impair the adjacent protected area.	Damages to flora and fauna could occur.	The works´ Environmental and Social Management Plan (EMP) shall look into potential impacts over each works´ stage, and should put forth concrete mitigation measures. This Environmental and Social Management Plan (EMP) shall be	Expert responsible for environmental and social safeguards Municipality of Concordia Province of Entre Ríos

Risks, potential impacts, and mitigation measures vis-à-vis each activity				
Activity	**Risks identified in line with the Adaptation Fund environmental and social policy**	**Environmental and social impacts if risks were to materialize**	**Mitigation measures**	**Responsible for verification**
			approved to the satisfaction of the project´s environmental safeguards Expert, as a requirement for works to get started.	Implementation Entity
8.3. Refurbishing of the access bridge to the pier and the coastal area of the San Javier town	E&SP 12. There is a possibility for an impact due to the generation of wastes and noise during works. There is a possibility that resources are not efficiently managed (materials for works and for protection of the coastal area).	There is a possibility that the project has an adverse impact on the surrounding setting if works´ wastes are not properly managed. The project may entail an overuse of materials if the latter are not efficiently managed.	The Municipality shall abide by regulations and standards vis-à-vis waste related to the implementation of works. The Municipality shall submit an Environmental Management Plan (EMP) of the works that incorporates an analysis of alternatives to evaluating efficiency in use of resources. This analysis will include details on the origin of the most commonly used materials (i.e., gabions). A works-focused monitoring procedure should be submitted by the contractor to monitor: consumption of water and fuel, consumption of construction materials, energy consumption, generation of solid waste, generation of effluents, generation of construction waste.	Expert responsible for environmental and social safeguards Intendency of Río Negro Implementation Entity

Risks, potential impacts, and mitigation measures vis-à-vis each activity				
Activity	**Risks identified in line with the Adaptation Fund environmental and social policy**	**Environmental and social impacts if risks were to materialize**	**Mitigation measures**	**Responsible for verification**
	E&P 9. There is a possibility that works may have an adverse impact on the protected area close to it.	Damages could be sustained by flora and fauna.	The works´ environmental management plan (EMP) shall look into potential impacts over each work stage, and suggest specific mitigation measures. This environmental management plan (EMP) shall be approved to the satisfaction of the project´s environmental and social safeguard Expert as a requirement for work to get under way.	Expert responsible for environmental and social safeguards Intendency of Río Negro Implementation Entity
9.1. Revolving fund for city consolidated in a medium-risk zone, according to the Risk Map. Pilot case in Paysandú, Uruguay.	E&SP 2 and E&SP 3. There is a possibility that people facing multiple vulnerabilities in medium-risk areas do not have access to Project benefits, and do not get involved in the design of the mechanism.	The revolving fund might not reach people living under multiple vulnerability conditions, i.e. female heads of households, elderly people, people with disabilities. Without their involvement in the project design, the revolving fund might not fully address beneficiaries' needs.	The project should have access to a clear access mechanism. There will be a project-related regulation setting forth the conditions to access the credit, the requirements that should be met and the investment and repayment obligations. The project shall incorporate considerations for people facing multiple vulnerabilities in this zone (i.e., eligible investments will include infrastructure adapted to disabled persons), and facilities for women's access to the mechanism. The participation of women and vulnerable groups in the design of	Expert responsible for environmental and social safeguards Local Government National Government Implementation Entity

Risks, potential impacts, and mitigation measures vis-à-vis each activity				
Activity	**Risks identified in line with the Adaptation Fund environmental and social policy**	**Environmental and social impacts if risks were to materialize**	**Mitigation measures**	**Responsible for verification**
			the mechanism will be promoted. As highlighted in the Gender Action Plan, both, men and women, and vulnerable groups should be able to define, together with the Intendency, what are the most necessary measures to be considered eligible. Likewise, it is necessary to know better and first-hand what are the capacities of the beneficiary population to take a credit, even if talking about a soft loan.	
	E&SP 5. The project could exacerbate gender inequality if it does not provide for facilities for women's access to the mechanism.	If affirmative measures are not taken for women participation, the prevailing situation of a less access by women to this type of tools could continue to be reproduced.	In the design of the mechanism, the barriers that women have in accessing credit will be taken into account, and appropriate measures will be taken to address them. Women participation in the design of the mechanism will be promoted. See considerations highlighted above.	Expert responsible for environmental and social safeguards Local Government National Government Implementation Entity
	E&SP 14. There is a risk that houses and buildings having a historical value will be impaired if adaptation measures	If *ex ante* protection measures are not foreseen vis-à-vis historical heritage, this will be impaired.	Works to be undertaken for the adaptation of historical buildings to flooding conditions will abide by corresponding regulations regarding permits, implementation of works and respect for facades, in those cases to which regulations should	Expert responsible for environmental and social safeguards Local Government National Government

Risks, potential impacts, and mitigation measures vis-à-vis each activity				
Activity	**Risks identified in line with the Adaptation Fund environmental and social policy**	**Environmental and social impacts if risks were to materialize**	**Mitigation measures**	**Responsible for verification**
	implemented with the revolving fund do not respect the characteristics that their historical value attach them.		be enforced.	Implementation Entity
9.2. Design of flood insurance for commercial and tourist premises in coastal areas. Entre Ríos, Argentina	E&SP 2. There is a possibility that the insurance access mechanism and the participation of potential beneficiaries will not be assessed.	If this matter is not assessed over the design consultancy, the future tool may not address the real needs.	The consultancy shall incorporate an analysis on the access to the tool by beneficiaries vulnerable to floods, as well as participation instances to reflect their real needs.	Expert responsible for environmental and social safeguards Province of Entre Ríos Implementation Entity
	E&SP 5. There is a possibility that gender considerations are not included in the feasibility survey, and in the tool design.	If gender considerations are not included in the survey, the future tool may exacerbate gender –related issues.	Feasibility and design surveys shall include gender considerations in their characterization of potential beneficiaries, and in the design of the tool, looking into a possibility to incorporate affirmative actions, such as a minimum fee, or conditions provided for establishments run by women, or that employ a majority of women.	Expert responsible for environmental and social safeguards Province of Entre Ríos Implementation Entity
COMPONENT 3				
10.1: Identification,	No environmental and social risks	N/A	N/A	N/A

Risks, potential impacts, and mitigation measures vis-à-vis each activity				
Activity	**Risks identified in line with the Adaptation Fund environmental and social policy**	**Environmental and social impacts if risks were to materialize**	**Mitigation measures**	**Responsible for verification**
mapping, and evaluation of ecosystem services and benefits on account of their contribution to climate change adaptation and connectivity in Argentina and Uruguay.	have been identified.			
11.1: Adequacy of infrastructure required to upgrading resilience to CC in vulnerable human activities in protected areas, including tourism, livestock and beekeeping in the Estero de Farrapos Protected Area in Uruguay.	E&SP2. There is a possibility that the mechanism to accessing project benefits does not ensure impartial access to them. There is a risk that, without a suitable participatory process, the needs and better alternatives for adapting production systems will not be properly identified.	Vulnerable producers affected might not be included in the project.	A clear mechanism of access to the project benefits should be detailed and approved by the Implementing Entity to ensure an equitable access to these benefits. The project shall incorporate participatory instances throughout its implementation, in particular along the work involving identification of needs and assessment of best alternatives vis-à-vis adaptation of ecosystems.	Expert responsible for environmental and social safeguards SNAP Implementation Entity
	E&SP5. A risk is identified that some	Women involved in production activities	An equitable access mechanism shall be ensured to both, women	Expert responsible for environmental and

Risks, potential impacts, and mitigation measures vis-à-vis each activity				
Activity	**Risks identified in line with the Adaptation Fund environmental and social policy**	**Environmental and social impacts if risks were to materialize**	**Mitigation measures**	**Responsible for verification**
	issues such as the selection of beneficiaries, or the identification of technologies, can maintain or exacerbate gender inequality, or its impacts.	may not have an equitable access to the Project benefits. Technologies identified may not be the most suitable to the Project management by both, women and men.	and men producers. Affirmative actions shall be identified vis-à-vis women participation in this activity. Guidelines have also been envisioned to be implemented vis-à-vis the Project call, accompaniment over implementation, and monitoring. Please refer to Gender Action Plan.	social safeguards SNAP Implementation Entity
	E&SP9 and E&SP10. Despite the conservation focus of productive activities, there is a possibility that Project interventions have unexpected unintended impacts.	Both, the natural area and biodiversity could be harmed.	The project envisages complementarity with alternatives such as nature tourism and an activity to monitor tourism and livestock impacts, with the involvement of men and women producers, which is considered a good monitoring measure. SNAP will design a monitoring plan.	Expert responsible for environmental and social safeguards SNAP Implementation Entity
	E&SP12. While adaptation activities for livestock farmers and beekeepers are not expected to generate new contamination sources,	Park areas could be contaminated by animal overload.	Activities addressing identification of adaptation measures and monitoring of livestock and beekeeping activities impact that are expected to be undertaken within the framework of this activity (E&SP12) should include prevision of this type of situations, evaluation of potential impacts,	Project environmental Expert. Parque Nacional Esteros de Farrapos e Islas del Río Uruguay Implementation Entity

Risks, potential impacts, and mitigation measures vis-à-vis each activity				
Activity	**Risks identified in line with the Adaptation Fund environmental and social policy**	**Environmental and social impacts if risks were to materialize**	**Mitigation measures**	**Responsible for verification**
	depending on the adaptation measures there is a risk that specific contamination foci are generated at particular times. E.g., solutions that imply a large concentration of animals in the same place during a flood event.		and submission of mitigation measures to be implemented. The Implementing Entity should monitor fulfilment of these tasks.	
11.2: Implementation of climate change ecosystem-based adaptation measures in the Rincón de Franquía Protected National Area in Uruguay.	E&SP9 and E&SP10. Despite the conservation approach, there is a likelihood for project interventions to have unexpected and unintended impacts.	The natural habitat and its biodiversity could be affected.	Coastal protection activities are foreseen by the project together with an ecosystems-based adaptation approach. The Expert responsible for environmental and social safeguards will monitor the measures implemented by SNAP to minimize impacts during the intervention.	Expert responsible for environmental and social safeguards SNAP Implementation Entity
11.3: Restoration of vulnerable coastal ecosystems through monitoring of exotic species	E&SP 9, E&SP 10. There is a risk of vegetation impairment if methodologies, (such as use of heavy machinery,	The ecosystem could be affected.	An identification has been made of technical references, protocols and procedures to properly use methodologies for eradication of woody species (see activity sheet). These guidelines shall be implemented in both sides of the	Expert responsible for environmental and social safeguards El Palmar National Park - SNAP

Risks, potential impacts, and mitigation measures vis-à-vis each activity				
Activity	**Risks identified in line with the Adaptation Fund environmental and social policy**	**Environmental and social impacts if risks were to materialize**	**Mitigation measures**	**Responsible for verification**
and planting of native species.	burning, application of agrochemicals such as herbicides and shrubs killers) for eradication of woody exotic species are not properly applied.		Argentina and Uruguay borders. In the case of the potential residual effect of agrochemicals, adverse impacts have not been reported in surveys conducted (see activity sheet). However, the Project´s Environmental Management Plan (EMP) shall incorporate monitoring of residual concentrations in the soil and monitoring of amphibians and / or fish larvae.	Implementation Entity
	E&SP 12. There is a contamination risk if agrochemical packages are not properly managed and discarded. There is a possibility that resources are not efficiently disbursed if limits on the use of agrochemicals are not established.	The ecosystem may be impaired Resources may not be efficiently used.	Storage: This project has contemplated the acquisition of containers that will be used as a warehouse. This should be adapted to applicable standards and regulations, to be verified by the Expert responsible for safeguards. Empty containers: Storage places for empty containers will be prepared in a specific area carrying a hazardous waste identification sign, with restricted access, with a roof, and with a waterproof floor, and safe transport of empty containers to	Project Environmental and Social Safeguards Expert Implementation: El Palmar National Park SNAP Verification: Implementing Entity.

Risks, potential impacts, and mitigation measures vis-à-vis each activity				
Activity	**Risks identified in line with the Adaptation Fund environmental and social policy**	**Environmental and social impacts if risks were to materialize**	**Mitigation measures**	**Responsible for verification**
			official waste treatment centers will be warranted. To be verified by the Expert responsible for safeguards. Resource efficiency: An estimated budget for purchase of agrochemicals has been submitted, considering the type of invasion of exotic species, concentrations, volumes, hectares and costs. In any case, the project´s Environmental and Social Management Plan (EMP) should include specific indications of quantities of agrochemicals required for each application.	
	E&SP 13. There is a health-related risk for staff working at the National Parks on account of the application of exotic wood plants removal methods.	The health of workers at National Parks may be affected. .	Technical guidelines for implementation of techniques described have been identified (see project card). The project´s Management Plan should include Health and Safety provisions for each method for eradication of exotic woody plants.	Implementation: El Palmar National Park SNAP Verification: Project´s Environmental and Social Safeguards Expert Implementing Entity
11.4. Structural consolidation of historical	E&SP 12. There is a possibility of an impact due to	The surrounding area may be degraded if works	El Palmar National Park will abide by waste-management regulations and standards for the	Implementation: PNEP

Risks, potential impacts, and mitigation measures vis-à-vis each activity				
Activity	**Risks identified in line with the Adaptation Fund environmental and social policy**	**Environmental and social impacts if risks were to materialize**	**Mitigation measures**	**Responsible for verification**
buildings, protection of the coastal canyon, and valorisation of the historic site Calera del Palmar or de Barquín, in El Palmar National Park (PNEP).	generation of waste and soil removal over works.	waste is not properly managed.	completion of works, and submit a plan to minimize the impact of works on the surrounding habitat. A work plan including monitoring of these aspects.	Verification: Project´s Environmental and Social Safeguards Expert, Implementing Entity
	E&SP 14. There is a possibility that this archaeological site may be affected by works, whose end-purpose is to protect the site from a flooding event. Structural consolidation of historical buildings, protection of the coastal canyon and appraisal of the historical site Calera del Palmar or Barquín, in Parque Nacional El Palmar.	The historical site may be impaired by the Project if precautions are not taken over works. .	The project´s Management Plan shall incorporate procedures warranting a proper preservation of Historical Heritage over works. A works plan will be submitted that includes monitoring of these aspects	Implementation: PNEP Verification: Project´s Environmental and Social Safeguards Expert Implementing Entity

Risks, potential impacts, and mitigation measures vis-à-vis each activity				
Activity	**Risks identified in line with the Adaptation Fund environmental and social policy**	**Environmental and social impacts if risks were to materialize**	**Mitigation measures**	**Responsible for verification**
COMPONENT 4				
Activities 12.1 and 12.2 in Input 12: Social vulnerability monitoring and evaluation tools have been devised with a particular focus on Human Rights, gender, and generations.	No identified social or environmental risks.	N/A	N/A	N/A
Activities 13.1 and 13.2 in Input 13: Assessments of social risk perception have been carried through towards the construction of resilience.	E&SP 3 and E&SP 5. There is a possibility that activities to learn about the social perception of risk are not adapted to collect opinions of men, women and vulnerable and marginalized groups. There is a possibility that outcomes are not systematized by gender and	The analysis of the social perception of risk could be incomplete.	Ensuring the participation of men, women and vulnerable and marginalized groups in activities to identifying the social perception of risk. Document incorporating methodology and results are provided that are disaggregated by sex, age group. and vulnerable group. The selection of pilot cases should include among its criteria gender and vulnerable and marginalized groups considerations.	Expert responsible for environmental and social safeguards Local authorities. National Government Implementing Entity.

Risks, potential impacts, and mitigation measures vis-à-vis each activity				
Activity	**Risks identified in line with the Adaptation Fund environmental and social policy**	**Environmental and social impacts if risks were to materialize**	**Mitigation measures**	**Responsible for verification**
	vulnerable and marginalized groups. There is a possibility that pilot cases do not reflect groups as mentioned above.			
Activities 14.1 and 14.2 in Input 14: Strategies for assistance and capacity-building of the workforce made up by vulnerable populations have been promoted.	E&SP 2, E&SP 3 and E&SP 5: There is a possibility that participation of women and men in capacity-building activities and access to assistance is not balanced. There is a possibility that participation of vulnerable and marginalized groups is low. Labor reconversion issues addressing vulnerable or marginalized	The participation of women and men may not be balanced vis-à-vis their needs for labor reconversion. Participation of vulnerable and marginalized groups could be harmed by not getting the issues right or by not taking into account aspects of accessibility to the capacity-building centers.	Ensuring participation of men, women, and young people in activities. Ensuring access to vulnerable and marginalized groups. This includes consideration of schedules, physical access to capacity-building sites, (for example, access for people with disabilities), boys, girls and youngster care services, among others. The Expert responsible for environmental and social safeguard should review access conditions to capacity-building activities, and places where they are being implemented.	Expert responsible for environmental and social safeguards Province of Entre Ríos Implementing Entity

Risks, potential impacts, and mitigation measures vis-à-vis each activity				
Activity	**Risks identified in line with the Adaptation Fund environmental and social policy**	**Environmental and social impacts if risks were to materialize**	**Mitigation measures**	**Responsible for verification**
	groups (for example, people with disabilities) might be disregarded. Or, on account of their needs in terms of accessibility to capacity-building centers.			
	E&SP 9, E&SP 10, E&SP 11 and E&SP12, E&SP 15: There is a possibility that new work activities are fostered having an impact on natural habitats and biodiversity. There is a possibility that activities that produce new GHG emissions, local contamination, and soil degradation are promoted. There is a	The project might be having an adverse impact on natural habitats and biodiversity, generating additional GHG or pollution at local level.	The capacity-building Plan will be drafted up bearing in mind that working activities that are promoted should not have an impact on natural habitats or biodiversity, nor be carbon-intensive, or produce local pollution. The safeguards expert attached to the project shall supply a black listing of non-eligible activities (i.e., high-impact extractive activities) and will subsequently review the selection of capacity-building activities that will be submitted by the Implementing Entity before the start of the activity. This Capacity-building Plan should be approved by the Implementation Entity.	Expert responsible for environmental and social safeguards Province of Entre Ríos Implementation Entity

Risks, potential impacts, and mitigation measures vis-à-vis each activity				
Activity	**Risks identified in line with the Adaptation Fund environmental and social policy**	**Environmental and social impacts if risks were to materialize**	**Mitigation measures**	**Responsible for verification**
	possibility that activities are promoted without capacity-building in hygiene and work safety.		All capacity-building activities shall include hygiene and safety at work issues.	
Activities 15.1 and 15.2 in Input 15: Social networks have been strengthened up through an exchange in Climate Change Adaptation (CCA) best practices and local risk management strategies.	E&SP 2, E&SP 3 and E&SP5. There is a possibility that participation spaces and workshops do not equitably include men, women and vulnerable and marginalized groups.	The participation of different groups could be impaired	Actions fostering participation of the different groups will be implemented, taking into account the way in which the activity, timetables, and accessible places, among others, are convened.	Expert responsible for environmental and social safeguards Local authorities Implementing Entity
	ALL E&SP. There is a risk that, at the time lessons learned are exchanged, lessons dealing with environmental and social issues that are related to specific experiences are not shared as well.	Learnings in environmental and social terms would be ignored, and errors related to these aspects could be repeated.	In lessons learned that are selected to be exchanged, assurances should be given that learning vis-à-vis environmental and social aspects is included.	Expert responsible for environmental and social safeguards Local authorities Implementing Entity

Risks, potential impacts, and mitigation measures vis-à-vis each activity				
Activity	**Risks identified in line with the Adaptation Fund environmental and social policy**	**Environmental and social impacts if risks were to materialize**	**Mitigation measures**	**Responsible for verification**
Products 16.1 to 16.3 in Input 16: Communication, education and dissemination strategies have been implemented towards reducing vulnerability.	E&SP 2, E&SP 3 and E&SP5. There is a likelihood that participation spaces and workshops do not equitably include men, women and marginalized groups. There is a possibility that communication campaigns and materials are not inclusive.	Participation by these different groups could be at risk.	Actions shall be undertaken that foster participation by the different groups, bearing in mind the way how the activity is convened, schedules, accessible places, among others. All communication materials and campaign messages will be reviewed so that they convey an inclusive message and language.	Expert responsible for environmental and social safeguards Local authorities Implementing Entity
	ALL E&SP. There is a risk that, over the exchange of experiences, dissemination of successful experiences, and over preparation of strategies and methodologies, lessons learned dealing with environmental and social subjects in	Learnings in environmental and social terms would be ignored, and errors related to these issues could be made again.	In successful experiences, in experiences to visit, in drafting up of strategies, and in the design of methodological guides, assurances should be given that learning is included in environmental and social issues. At least two of the successful experiences chosen (one per country) shall have a particular focus on gender issues.	Expert responsible for environmental and social safeguards Local authorities Implementing Entity

Risks, potential impacts, and mitigation measures vis-à-vis each activity				
Activity	**Risks identified in line with the Adaptation Fund environmental and social policy**	**Environmental and social impacts if risks were to materialize**	**Mitigation measures**	**Responsible for verification**
	experiences selected are not shared.			

3. Grievances and Complaints Mechanism

3.1. Public Announcement

Related information is available to the general public on the CAF website on how to draw up and file a complaint, or a claim concerning a project that CAF implements vis-à-vis the Adaptation Fund.

Link: https://www.caf.com/es/temas/a/ambiente-y-cambio-climatico/projects/

Within the framework of accountability and attention to grievances and complaints principles, a complaints and grievances management system shall be implemented to address those complaints and grievances that may be generated over a project cycle with Green Funds (Global Environmental Facility (GEF), the Adaptation Fund (AF), or the Green Climate Fund (GCF). An ad-hoc Grievances and Complaints Management Committee will be set up that is made up by CAF officers, and an ombudsperson will be appointed.

Communication channels have been established for reception of grievances and complaints, as follows:

- E-mail: projects_GEF_GCF_AF@caf.com
- Address: CAF Representation Office in the country in which the Project is being implemented (a sealed envelope including information as required shall be delivered to the CAF Grievances and Complaints Management Committee)

Complainant Protection: Pursuant to the grievances and complaints accountability policy guidelines, the Grievances and Complaints Management Committee Chairman ensures the confidentiality of the information provided and its source.

3.2. ¿Who can file a complaint?

Persons or entities as follows may file a complaint or a grievance concerning the breach or non-compliance of the Adaptation Fund´s Environmental and Social Principles, and its Gender Policy by any project funded with AF resources:

a) Any group of two or more people sharing a common interest, in the country or countries where the CAF-AF project is located, who has sustained or is likely to sustain direct damage due to a CAF-AF project that is likely to be approved or which is in its implementation stage.
b) A group´s representative who has been duly authorized may file complaints or grievances.

c) A person who is not a part to the affected group and who has no local base, may act as the group representative only if that person provides evidence that there is no suitable or appropriate capacity within the local community to file a

complaint. If appropriate, the person must be fluent in the native language of the group member, and be able to communicate effectively with the affected group.

d) CAF Board of Directors.

3.3. Administrative Instances for Management of a Complaint or a Grievance

Administrative instances to receive, respond, and deal with grievances and complaints, are as follows:

a) The Ombudsperson (OP) will be reporting to the CEO.
b) The Complaints Management Committee. This Committee is made up by:

- CAF Representative in Country Office;
- Management Vice-President – (Talent Management, or Staff Services and Payroll Management);
- Legal Consulting;
- Directorate for Development Cooperation Funds;
- Risk Management Office;

c) Conflict Resolution Facilitator: An external expert consultant in conflict resolution appointed by the Complaints and Grievances Management Committee;
d) An Expert in Verification of Compliance in Environmental and Social Policy – Safeguards: An external consultant expert in safeguards appointed by the Grievances and Complaints Management Committee
e) CAF – AF Technical Focal Point and Financial Focal Point
f) AF Project Executor

Annual external audits will be conducted to evaluate CAF compliance in terms of the Environmental and Social Policy and Gender Policy vis-à-vis CAF / Adaptation Fund projects.

3.4. Roles and Responsibilities

Ombudsperson

• Overall responsibility for the operation of the Grievances and Complaints Management System of CAF-AF Projects.

• Filing of the Complaint or the Claim.

• Ensuring that deadlines are met or extensions are approved by the Grievances and Complaints System.

• Convening the Complaint Management Committee.

• Contacting the Project Executor.

• Contacting the CAF Adaptation Fund Focal Points (Technical Focal Point and Financial Focal Point).

• Receiving the Complaint Management Committee´s approval of the complaint to get ahead with the Conflict Resolution Phase.

• Coordinating and delivering information and answers to all relevant parties in each phase of the Grievances and Complaints System of CAF-AF Projects process.

Conflict Resolution Facilitator:

- Checking over the Project Performance Report (PPR)
- Relying on the Verification of Compliance in Environmental and Social Policy´ Expert to review any nonconformity by the CAF-AF Project with the Adaptation Fund´s Environmental and Social Policy, and Gender Policy.
- Drawing up the Compliance Verification Report for delivery to the Grievances and Complaints Management Committee.
- Drawing up the Problems Resolution Report and incorporating a Follow-up and Monitoring Plan to be implemented by the Facilitator himself/herself.
- Drawing up a Closing Final Report.

Expert Verification of Compliance in Environmental and Social Policy:

- Reviewing the Project Performance Report (PPR)) insofar Risk Evaluation and Environmental and Social Indicators are concerned.
- Reviewing the Environmental and Social Management Plan approved by the Adaptation Fund, and its compliance.
- Undertaking the review of compliance.
- If there is any disagreement between the CAF-AF Project and the Adaptation Fund´s Environmental and Social Policy, and Gender Policy, recommendations are made by the expert for corrective actions to be taken.
- The expert prepares the Compliance Verification Report related to the Adaptation Fund´s Environmental and Social Policy and Gender Policy, for further delivery to the Conflict Resolution Facilitator.

The Complaints Management Committee:

- Reviewing the Project Performance Report (PPR) insofar Risk Evaluation and Indicators are concerned.
- Undertaking an initial evaluation of the complaint, or claim received and confirming if it corresponds to proceed with the Conflict Resolution Phase.

- Making a decision whether to accept the complaint, or claim findings and recommendations as spelled out in the Compliance Verification Report
- Reviewing and approving the Compliance Verification Report submitted by the Conflict Resolution Facilitator.
- Delivering to the Ombudsperson the Verification of Compliance Report and the decision made on findings and recommendation.
- Approving the Conflicts Resolution Report and the Follow-up and Monitoring Plan submitted by the Conflict Resolution Facilitator.
- Approving the Implementation Plan delivered by the Project Executor.
- Reviewing the Project Monitoring and Follow-up Plan Reports.
- Approving the Closing Final Report.

CAF – AF Technical Focal Point:

- In charge of all communications between CAF and the Adaptation Fund vis-à-vis projects / programmes technical matters.
- Reviews the Project Performance Report (PPR) insofar matters concerned with Risk Evaluation Indicators.
- Reviews the Compliance Verification Report insofar matters concerning the AF Environmental and Social Policy and Gender Policy are involved.
  Receives through the Ombudsperson all reports and decisions made by the Complaints Management Committee, the Conflict Resolution Facilitator, and the Compliance Verification Expert in Environmental and Social Policy.
- Advises the Complaints Management Committee in all matter pertaining the Adaptation Fund.

CAF – AF Financial Focal Point:

- In charge of all communications between CAF and the Adaptation Fund insofar projects- / programmes-related financial matters are concerned,
- Reviews the Project Performance Report (PPR) vis-à-vis Risk Assessment and Indicators.
- Reviews the Compliance Verification Report vis-a-vis the Adaptation Fund´s Environmental and Social Policy and Gender Policy.
- Receives through the Ombudsperson the reports submitted by and decisions made by the Complaints Management Committee, The Conflict Resolution Facilitator, and the Compliance Verification of Environmental and Social Policy Expert
- Advises the Complaints Management Committee in all matters pertaining the Adaptation Fund.

CAF - AF Project Executor:

- Delivers all information requested by the Complaints Management Committee, the Conflict Resolution Facilitator, and the Expert in Verification of Compliance in Environmental and Social Policy for review and verification vis-à-vis the complaint or grievance submitted.
- Participates in the Conflict Resolution Phase.
- Draws up and executes the Implementation Plan.

3.5. Grievances and complaints Mechanism Phases

Phase 1. Receipt of a Complaint or a Grievance

At any time over the implementation and execution of the project. Depending on the project, and up to final verification of the proper operation of the project.	**Step 1. Receipt of a Complaint or a Grievance** Individuals or a group that may file a Complaint or Grievance and believe they have been affected or may be affected by the adverse environmental and social impacts of a project in which CAF acts as an AF: agency, should consider: • The complaint may be linked to any stage of the Project, be it with its design or its execution. • The complaint may be received by e-mail, through a physical letter delivered at any of CAF Representation Offices, or in accordance with the system established during the formulation of the Full Proposal. • In faraway places, where access to telecommunications or electronic media is restricted, CAF, in coordination with the Project Executor, and over the formulation of the Full Proposal, shall adopt effective alternative mechanisms to allow the people involved to send their grievances and complaints. Such effective alternative mechanisms should consider suitable translation and written record in case the native language of the affected group is other than Spanish, Portuguese or English.
Within twenty (20) business days after receiving the complaint. (maximum a period of thirty-five (35) business days in justified special cases)	**Step 2. Registration and acknowledge of the Complaint** • The OP acknowledges receipt of the Complaint. • The OP verifies the information and the complainants request (problem resolution or compliance review). • The OP files the Complaint in the CAF-AF Projects web portal. • The PO can defer the Complaint until sufficient information and documentation are filed. • The OP ensures the confidentiality of complainants´ identities if the complainant so requests. • The OP activates the Complaint Management Committee.
Within three (3) business days after publication of the complaint in the CAF-AF web portal.	**Step 3. Forwarding of a Complaint** The OP activates the Complaints Management Committee by forwarding the Complaint to: • Grievances and Complaints Management Committee • Any other relevant CAF departments or area offices (if the

	nature of the Complaint abides by scope´s limitations).
Within three (3) business days after resending the Complaint	**Step 4. Complainants Update** • The PO informs complainants about the process that CAF will continue with the Complaint, and the latter´s contact information

Phase 2. Conflict Resolution

Within ten (10) business days after reception of the Complaint (a maximum of twenty (20) business days in specific and justified cases)	**Step 1. Determination of Eligibility** • The OP delivers the information to the Complaints Management Committee. • The Complaints Management Committee revises the information and makes a decision on action to be undertaken (revision of compliance, or submission to the conflicts/problems resolution stage). • The Complaints Management Committee delivers the information to the Conflicts Resolution Facilitator.
Within twenty (20) business days after reception of the Complaint (A maximum of thirty-five (35) business days in special justified instances)	**Step 2. Evaluation of the Complaint** • The Conflict Resolution Facilitator will prepare the Compliance Verification Report and the Follow-up and Monitoring Plan according to verification by the Compliance Verification Expert in Environmental and Social Policy, in line with the PPR and Environmental and Social Management Plan approved in the Full Proposal by the Adaptation Fund. • The Conflict Resolution Facilitator will deliver the Compliance Verification Report and the Follow-up and Monitoring Plan to the Complains Management Committee. • The Complaints Management Committee delivers the Compliance Verification Report to the OP, together with the decision regarding findings and recommendations.
Time required depends on specific conditions, the particular setting, the nature, and the complexity of problems.	**Step 3. Conflict Resolution** • The Conflict Resolution Facilitator coordinates with stakeholders their participation in problem resolution activities through: (a) A consultative dialogue, (b) Exchange of information, (c) Investigation,

	(d) An arbitration mechanism, (e) Other problem resolution methods. • The Conflict Resolution Facilitator and stakeholders (the Project Executor, among them) reach an agreement on corrective measures. • El The Conflict Management Facilitator submits the Problem Resolution Report to the Complaints Management Committee, with copy to the OP • . • The Project Executor submits an Implementation Plan. • The Expert in Verification of Compliance in Environmental and Social Policy shall participate in Step 3 of Conflict Resolution, • The Complaints Management Committee approves the Problems Resolution Report and the Follow-up and Monitoring Plan submitted by the Conflict Resolution Facilitator. • The Complaints Management Committee approves the Implementation Plan submitted by the Project Executor. • The Complaints Management Committee reviews the Follow-up and Monitoring Plan. • If an agreement is not reached, the problem resolution process is terminated.
Time required depends on both, the Plan and the Project specific conditions	**Step 4. Implementation and Follow-up.** • The Implementation Plan is accomplished by the Executor, while the Conflict Management Facilitator abides by the Monitoring Plan and related Reports programme.
Within ten (10) business days after the Executor´s Implementation Plan comes to an end. (a maximum of 20 business days in special and justified cases)	**Step 5. Conclusion of the Problem Resolution Process.** • Once the Implementation Plan and the Monitoring Plan have been completed, the Conflict Management Facilitator shall prepare the Closing Final Report. • The Complaints Management Committee approves the Closing Final Report. • The OP approves the Closing Final Report. • The OP delivers the Closing Final Report to stakeholders.

4. Monitoring, Evaluation and Oversight Programme

Main steps are described below.

Activities	Person Responsible
1. Implementation of mitigation measures	Implementing Entity
2. Monitoring of implementation of mitigation measures	Safeguards, grievances and complaints Expert
3. Implementation of the Environmental and Social Management Plan	Safeguards, grievances and complaints Expert - Implementing Entity
4. Environmental and Social Management Plan Progress Report	Safeguards, grievances and complaints Expert Implementing entities Implementation Entity

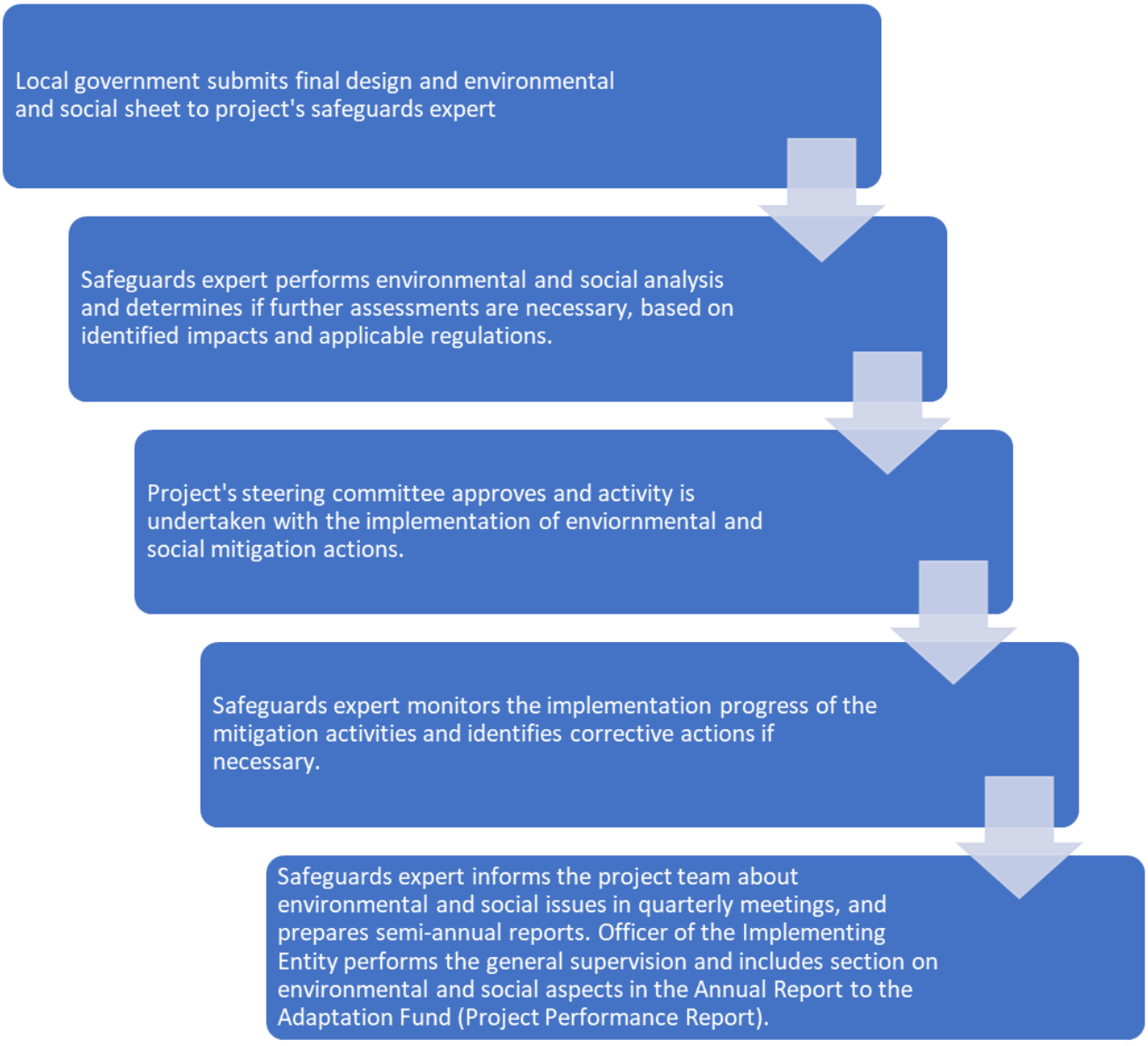
General Operating Principles:

1. All of the Executing Agencies, Technical Agencies, and the Implementation Agency shall ensure compliance with the Adaptation Fund´s Environmental and Social Policy and Gender Policy.
2. With the final works (Green – grey) designs, the safeguards, grievances and complaints Monitoring Report Expert shall conduct the Environmental and Social Impact Assessment.
3. Before undertaking the execution of (green – grey) works, the Environmental and Social Management Plan shall be submitted by Executing Agencies with the support of the Expert in charge of monitoring of safeguards, grievances and complaints reports, which shall be approved by the Project´s Executive Committee.
4. The Environmental and Social Management Plan shall define roles and responsibilities of all entities involved in the project for further implementation of the Plan.
5. The Project´s Executive Committee shall be acquainted with the Impact Evaluation Report and the Environmental and Social Management Plan.
6. The safeguards, grievances and complaints monitoring Expert shall submit to the Executive Committee a biannual Project follow-up report.
7. the Implementation Entity shall incorporate both, these reports, and the Entity´s approval by the Management Committee, in the Implementation Entity´s Yearly Report to the Adaptation Fund.

Monitoring tools (such as environmental and social cards, monitoring cards, and monitoring report) will be designed within the framework of the Project Operation Manual definition.

Monitoring of the Environmental and Social Management Plan shall be incorporated into the Project´s overall monitoring system.

A general organizational outline for implementation, monitoring and reporting of the Environmental and Social Management Plan is shown below.



Ministerio de Ambiente y Desarrollo Sustentable
Presidencia de la Nación

BANCO DE DESARROLLO DE AMÉRICA LATINA

MVOTMA
Ministerio de Vivienda Ordenamiento Territorial y Medio Ambiente

REGIONAL PROGRAM PROPOSAL

"Climate Change adaptation in vulnerable coastal cities and ecosystems of the Uruguay River"

ANNEX 8. COST – BENEFIT ANALYSIS

Supported by:

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Ideas for change

1. COST - BENEFIT ANALYSIS (CBA). GENERAL DATA

A cost-benefit breakdown of investment projects in Component 2, and of one investment project in Component 3 has been undertaken. Annual damages avoided by the implementation of adaptation measures in cities chosen have been pinpointed as a measure of benefits being brought about by projects. The economic allocation of damages was made on the basis of Global Flood Analyzer (GFA) data (WRI, 2010), which estimates both, urban-level economic costs, and the population affected by floods in different regions in the world[1].

Damage assessment criteria are unified by this decision, an issue that is not standardized for any country, and no accurate data is available on the economic impact of floods for Argentine cities. Notwithstanding that data are indeed in place for Uruguay[2] (November 2009 flood impacts in Artigas, Salto and Paysandú, GGIR-UDELAR-UNDP) and to avoid a bias, a decision was made to use a single data source.

GFA data report flood losses in urban areas for 2010 and 2030 over a 25-year protection period, similar to the period used for the Cost Benefit Analysis (CBA). Based on these data, estimated per capita annual costs for floods were calculated for 2010 and updated, with a cumulative annual rate of increase to 2018, taking the damages increase rate estimated by WRI for the 2010-2030 period. This figure was subsequently extrapolated in terms of damage per square kilometre, considering population density in each of the cities intervened (densities taken over the consolidated urban area, not over the administrative area of municipalities). Damage data per square kilometre were applied to intervened areas, assuming that the project intervention protects the area from potential flooding risks and avoids product losses (infrastructure) in those areas. Finally, the cost-benefit breakdown considered the evolution of these costs -which are increasing year by year. The same linear extrapolation resulting from the 2010 and 2030 periods was taken over to identify this increase.

For project 11.4, the incremental benefit in monetary terms derived from the income received by visitors as from the date of implementation of the project was used.

Constraints. A significant number of benefits attributable to the construction of infrastructures and to the regeneration of spaces has not been included in this analysis, such as: Aesthetic value, water uptake, recreational benefits and social integration, economic activities generated, and the higher prices of land and buildings close to interventions areas, among others. The valuation of these attributes would have entailed greater benefits, which would have meant raising the profitability of each intervention. Thus, this is a conservative cost-benefit breakdown and, bearing in mind the results obtained, projects are socially profitable notwithstanding constraints found. No alternative assessment solutions are available.

Projects. A review was undertaken of ten projects in Component, and one project in Component 3. Notice should be taken that a decision was made to carry out the joint cost-benefit breakdown of projects 7.2 and 7.3, located in Salto, and projects 7.4 and 8.1, located in

[1] Except for projects 7.5 and 9.1, for which the 2009 Uruguay flood report assessments were used on account of the particular characteristics of these actions.

[2] Values spelled out in the November 2009 report are higher than those used in this report, so activities would be being evaluated from a conservative standpoint, and if the Uruguayan report data had been used, project yields could have been higher.

Fray Bentos, bearing in mind that these projects are interventions having an impact on areas close to each other in each municipality, and share some common similar characteristics.

Currency and Discount rates. A breakdown is made in current year 2018 dollars. A 7.5% discount rate has been used for projects in Uruguay, and a 12% discount rate applied for projects in Argentina. These rates are recommended and used in public investment projects in both countries. The point should be stressed that social discount rates currently used are much lower than those used in this review: for example, in the European Union countries, rates range from 3 to 6 percent; in the United States from 2 to 3 percent; while the Environmental Protection Agency uses rate values from 0.5 to 3 percent.

Costs, Investment costs for projects to be funded by the AF are included, together with additional amounts contributed by other funding sources that are specifically applied as regards the project in question (these amounts are detailed in the description by project revised):

• 7.1. Includes the budget to be funded by AF: US$1 million; and US$4.5 million originating in the investment for relocation of the 123 families currently settled in the area to be intervened.

• 7.2 and 7.3 Include the amount to be funded by AF in both projects: US$ 1.1 million and, additionally, an equivalent amount that the municipality commits to finance to complete the intervention: US$ 1.3 million.

• 7.6 includes US$ 35,000 for purchase of land to set up shelter facilities.

• Capital replacement costs were calculated as a percentage of the initial investment, and are taken over to be allocated to major repairs, replacement of urban furniture, etc.

• Maintenance costs were calculated on an annual percentage of the initial investment of: 0.5% in all projects except for 8.2 project, in which a 15% was taken over, and 9.1, where a 30% concessional credit was calculated as a part of the expenses.

Benefits. Calculated on the basis of damages annually avoided depending on the protected / intervened area, except for: 7.7 where the population benefited by the shelter to be built was taken as a reference; 8.2 where the replacement cost of the water treatment plant was taken as a reference; and 9.1, where the damage to households was taken as a reference (estimated by the damage to homes as reflected in the November 2009 Report on Floods Impact in Artigas, Salto and Paysandú, GGIR-UDELAR-UNDP, updated to 2018). Annual benefits are the total estimated benefits´ discounted value for the useful life of projects.

Project 11.4 benefits are equivalent to the additional monetary income accrued by park visits.

Lifetime of projects. A 25-years lifespan has been calculated for all projects, except for:

• 8.2, Protection against coastal erosion and sundry repairs at the water treatment plant in the city of Concordia, Argentina, considering that the project entails the protection of a water treatment plant, thus the plant´s operation span was raised to fifty (50) years; and,

• 9.1, Revolving fund for the city consolidated in a medium risk area, according to the Risk Map. Pilot case in Paysandú. A useful 5 years´ life span period was calculated, which covers the

target to care for 100 medium-risk homes, calculating a 30% fund decapitalization per each 4-year repayment period of loans granted.

CBA General Data per project

	COSTS					BENEFITS			
	Initial investment	Capital replacement, 5 years	Annual maintenance	Total	Annualized	Total	Annualized	Lifetime of project, years	Social discount rate
7.1	$5,500,000	$100,000	$ 50,000	$ 7,200,000	$ 645,917	$ 21,375,339	$1,917,596	25	7.5%
7.2 y 7.3	$2,400,000	$240,000	$ 120,000	$ 6,480,000	$ 581,325	$ 15,901,225	$1,426,510	25	7.5%
7.4 y 8.1	$500,000	$50,000	$ 25,000	$ 1,350,000	$ 121,109	$ 7,573,636	$679,436	25	7.5%
7.5	$335,000	$30,000	$ 15,000	$ 490,000	$ 43,958	$ 2,946,926	$264,371	25	7.5%
7.6	$20,000	$10,000	$ 10,000	$ 845,000	$ 75,806	$ 3,180,639	$285,337	25	7.5%
7.7	$1,000,000	$100,000	$ 50,000	$ 2,700,000	$ 344,250	$ 31,834,055	$4,058,841	25	12.0%
7.8	$1,000,000	$100,000	$ 50,000	$ 2,700,000	$ 344,250	$ 14,794,673	$1,886,320	25	12.0%
8.2	$1,000,000	$100,000	$ 150,000	$ 9,350,000	$ 1,125,896	$ 30,000,000	$3,612,500	50	12.0%
9.1	$200,000	$0	$ 35,000	$ 340,000	$ 30,502	$ 1,123,644	$110,221	5	7.5%
11.4	675000	33,750.00	$ 33,750	$ 978,750	$ 124,791	$ 6,776,954	$864,061	25	12%

Source: Author

OUTCOMES

On the basis of assumptions taken into account in the **CBA**, Component 2 projects samples, and in 11.4 in Component 3, all of these projects are profitable. Net present values (NPV) are positive and the internal return rates (**IRR**s) are higher in all cases than the Social Discount Rate, meaning that, in addition to covering the breakeven point (IRR equals the Discount Rate), they generate benefits to society.

Further, there is a substantial number of attributes that have not been economically valued, so internal rates of return on investment would surely be higher, bolstering a positive aspect vis-à-vis profitability of interventions.

CBA PROFITABILITY INDICATORS			
	NPV	IRR	CBI
7.1	$1,246,605	9%	0.21
7.2 y 7.3	$1,336,249	11%	0.34
7.4 y 8.1	$1,686,851	26%	2.07
7.5	$666,667	26%	2.17
7.6	$528,871	17%	1.01
7.7	$4,909,289	52%	3.60
7.8	$1,551,562	26%	1.14
8.2	$2,313,737	44%	1.08
9.1	$548,525	77%	1.86
11.4	$216,431	14%	0.25

NPV: Net present value
IRR: Internal return rate
CBI: Cost benefit index

3. COST – BENEFIT OF SPECIFIC PROJECTS

7.1. Resignification of the Union Portuaria, Ledesma and urban border areas in Paysandú, Uruguay.

I. Data Base

The Project involves Intervention of an 85Ha. area located along the riverbank.

The requested investment amount is US$1 million. The project also has access to some other counterparts for a total amount of US$22 million for road works, relocations, Intervention, etc. An additional US$20 million investment has been made in a OSE sanitation plant in the area.

II. Assumptions

- The investment accounted for is that requested to the AF: US$1 million, plus an investment for relocation of the 123 families currently settled in properties to be intervened: US$4.5 million.
- Specific investments are envisaged for sundry 10% replenishments on the Intervention investment (US$100,000) every 5 years, and recurring 5% costs (US$50,000)
- The protection of family assets and infrastructure located in the project area is taken on as a benefit.
- The valuation was made on the basis of WRI information related to flood damages to urban infrastructures in 2010.
- A useful 25 years´ lifespan is foreseen.
- A 7.5% Social Discount Rate is used

Source Data and Estimates for Paysandú		
Damages in USD million, year	2010	8.60
	2030	36.90
Urban population - Department		113,000
Damages in USD per inhabitant, year	2010	76.11
	2030	326.55
CAGR year		7.6%
Urban footprint km2		28
Core Population		80,000
Density hab/km2		2,857.14
Estimated Damage Km2		217,446.27
Intervened area Km2		0.925
Avoided damage, estimated	2010	201,137.80
	2018	360,168

III. Results

	A1. Investment Costs		A2. Operational Costs	A. Total Costs. (A = A1 + A2)	B. Benefits		C. Net Cash Flow (NCF = B - A):
Years	Additional Investments	AF Investment and Capital replacement	Maintenance		Avoided Damages	Total Benefits	
1	4,500,000	1,000,000		5,500,000		0	(5,500,000.00)
2			50,000	50,000	330,965.0	330,965	280,964.99
3			50,000	50,000	355,965.9	355,966	305,965.94
4			50,000	50,000	383,642.5	383,642	333,642.48
5		100,000.00	50,000	150,000	413,470.9	413,471	263,470.87
6			50,000	50,000	445,618.4	445,618	395,618.44
7			50,000	50,000	480,265.5	480,265	430,265.49
8			50,000	50,000	517,606.4	517,606	467,606.38
9			50,000	50,000	557,850.5	557,851	507,850.53
10		100,000	50,000	150,000	601,223.7	601,224	451,223.69
11			50,000	50,000	647,969.1	647,969	597,969.13
12			50,000	50,000	698,349.1	698,349	648,349.06
13			50,000	50,000	752,646.0	752,646	702,646.05
14			50,000	50,000	811,164.7	811,165	761,164.66
15		100,000	50,000	150,000	874,233.1	874,233	724,233.12
16			50,000	50,000	942,205.2	942,205	892,205.18
17			50,000	50,000	1,015,462.1	1,015,462	965,462.10
18			50,000	50,000	1,094,414.8	1,094,415	1,044,414.79
19			50,000	50,000	1,179,506.1	1,179,506	1,129,506.09
20		100,000	50,000	150,000	1,271,213.3	1,271,213	1,121,213.28
21			50,000	50,000	1,370,050.7	1,370,051	1,320,050.75
22			50,000	50,000	1,476,572.9	1,476,573	1,426,572.88
23			50,000	50,000	1,591,377.2	1,591,377	1,541,377.16
24			50,000	50,000	1,715,107.5	1,715,108	1,665,107.54
25		100,000	50,000	150,000	1,848,458.0	1,848,458	1,698,458.01

IV: Conclusion

Investment profitability Indicators are positive. NPV is positive; IRR: 9%, is higher than the social Discount Rate used, and the **CBI** shows that a US$0.21 benefit shall be obtained for each dollar invested.

Incorporating valuation of all other aspects not considered in this CBA would suppose higher profitability ratios, stressing the positive nature of this intervention over general well-being.

INDICATORS	
NPV	$1,246,604.83
IRR	9%
CBI	0.21

7.2. Resignification and renovation of vacant, flood-prone lots after resettlements. Atahualpa area in Salto, Uruguay; and
7.3. Resignification and renovation of flooding-prone vacant lots at the Sauzal Stream mouth, in Salto, Uruguay.

I. Base Data

The project involves Intervention in two areas covering an estimated 15 Ha area.

The investment amount requested is US$1.1 million. Further, the project has access to some other counterparts for a total amount of US$1.3 million, which are included in profitability calculations.

V. Assumptions

- The investment accounted for is that requested from the AF: US$1.1 million, plus the additional investment, US$1.3 million.
- Specific investments are envisaged for several 10% replenishments on the total investment (US$240,000) every 5 years, and some recurring costs equivalent to 5% (US$120,000)
- The protection of private assets and infrastructure in the project area is taken over as a benefit.
- The valuation was made on the basis of WRI information, for flooding damages to urban infrastructures in 2010.
- A lifespan of 25 years is foreseen
- A 7.5% Social Discount Rate is used
- A summary of data taken over for CBA calculations is shown in table below:

Source Data and Estimates for Salto		
Damages in USD millions, year	2010	16.40
	2030	79.00
Urban poverty in department		105,000
Damages in USD per inhabitant, year	2010	156.19
	2030	752.38
CAGR damage		8.2%
Urban Footprint km2		21
Core population		117,000
Density hab./km2		5,571.43
Estimated damage Km2		870,204.08
Intervened area Km2		0.15
Estimated damage avoided	2010	130,530.61
	2018	244,808

II. Results

	A1. Investment Costs		A2. Operational Costs	A. Total Costs. (A = A1 + A2)	B. Benefits		C. Net Cash Flow (NCF = B - A):
Years	Additional Investments	AF Investment and Capital replacement	Maintenance		Avoided Damages	Total Benefits	
1	1,300,000	1,100,000		2,400,000		0	(2,400,000.00)
2			120,000	120,000	244,808.0	244,808	124,808.04
3			120,000	120,000	264,828.6	264,829	144,828.57
4			120,000	120,000	285,419.1	285,419	165,419.12
5		240,000.00	120,000	360,000	307,610.6	307,611	(52,389.40)
6			120,000	120,000	331,527.5	331,527	211,527.48
7			120,000	120,000	357,303.9	357,304	237,303.91
8			120,000	120,000	385,084.5	385,084	265,084.47
9			120,000	120,000	415,025.0	415,025	295,024.98
10		240,000.00	120,000	360,000	447,293.4	447,293	87,293.38
11			120,000	120,000	482,070.7	482,071	362,070.66
12			120,000	120,000	519,551.9	519,552	399,551.90
13			120,000	120,000	559,947.3	559,947	439,947.32
14			120,000	120,000	603,483.5	603,484	483,483.50
15		240,000.00	120,000	360,000	650,404.6	650,405	290,404.65
16			120,000	120,000	700,973.9	700,974	580,973.94
17			120,000	120,000	755,475.0	755,475	635,475.01
18			120,000	120,000	814,213.6	814,214	694,213.57
19			120,000	120,000	877,519.1	877,519	757,519.09
20		240,000.00	120,000	360,000	945,746.6	945,747	585,746.64
21			120,000	120,000	1,019,278.9	1,019,279	899,278.91
22			120,000	120,000	1,098,528.4	1,098,528	978,528.36
23			120,000	120,000	1,183,939.5	1,183,939	1,063,939.49
24			120,000	120,000	1,275,991.4	1,275,991	1,155,991.38
25		240,000.00	120,000	360,000	1,375,200.3	1,375,200	1,015,200.34

III. Conclusion

Investment Return Indicators are positive. The NPV is positive. The IRR, 11%, is higher than the social discount rate used, and the CBI shows that for each dollar invested, a US$0.34 benefit will be obtained.

The project profitability would significantly improve by incorporating attributes not assessed for this analysis.

INDICATORS	
NPV	$1,336,249.30
IRR	11%
CBI	0.34

7.4. Environmentally sustainable hydrological management at the Esmeralda Stream – Resignification of the Esmeralda´s neighborhood housing complex - Fray Bentos, Uruguay., and
8.1. Environmentally sustainable hydrological management at the La Esmeralda Stream - hydrological lamination. Fray Bentos, Uruguay.

I. Data Base

Two projects are surveyed at the same time, along the Arroyo Esmeraldas channel Laminación together with protection of the areas in one section, and protection and Intervention activities in another section, for a total 0.15 Km2 area, and an estimated beneficiary population of 2,080 people.

II. Assumptions

• The investment accounted for is that requested to the AF: US$0.5 million.

• Specific investments are envisaged for sundry replenishments of a10% on the total investment (US$50,000) every 5 years, and recurring costs for 5% (US$ 25,000)

• The protection of private assets and infrastructure in the project area is undertaken as a benefit.

• The valuation was made on the basis of WRI data, for damages due to flooding of urban infrastructures in 2010.

• A 25 years´ useful lifespan is foreseen
.
• A 7.5% Social Discount Rate is used

• Calculation of Benefits is in this case was made vis-à-vis the beneficiary population.

• Table below shows a summary of data taken over for the CBA calculations:

Source Data and Estimates for Rio Negro (Fray Bentos)		
Damages in USD millions, year	2010	1.70
	2030	7.60
Urban poverty in Department		55,000
Damages in USD per inhabitant, year	2010	30.91
	2030	138.18
CAGR damage		7.8%
Urban Footprint km2		6
Core Population		25,000
Density hab./km2		4,166.67
Estimated damage Km2		28,787.88
Intervened area Km2		0.15
Estimated damage avoided	2010	4,290.91
	2018	117,030

III. Results

	A1. Investment Costs		A2. Operational Costs	A. Total Costs. (A = A1 + A2)	B. Benefits		C. Net Cash Flow (NCF = B - A):
Years	Additional Investments	AF Investment and Capital replacement	Maintenance		Avoided Damages	Total Benefits	
1		500,000		500,000		0	(500,000.00)
2			25,000	25,000	117,029.5	117,030	92,029.52
3			25,000	25,000	126,128.6	126,129	101,128.63
4			25,000	25,000	135,935.2	135,935	110,935.19
5		50,000.00	25,000	75,000	146,504.2	146,504	71,504.22
6			25,000	25,000	157,895.0	157,895	132,895.00
7			25,000	25,000	170,171.4	170,171	145,171.41
8			25,000	25,000	183,402.3	183,402	158,402.32
9			25,000	25,000	197,661.9	197,662	172,661.95
10		50,000	25,000	75,000	213,030.3	213,030	138,030.26
11			25,000	25,000	229,593.5	229,593	204,593.47
12			25,000	25,000	247,444.5	247,444	222,444.48
13			25,000	25,000	266,683.4	266,683	241,683.41
14			25,000	25,000	287,418.2	287,418	262,418.18
15		50,000	25,000	75,000	309,765.1	309,765	234,765.09
16			25,000	25,000	333,849.5	333,849	308,849.48
17			25,000	25,000	359,806.4	359,806	334,806.45
18			25,000	25,000	387,781.6	387,782	362,781.58
19			25,000	25,000	417,931.8	417,932	392,931.79
20		50,000	25,000	75,000	450,426.2	450,426	375,426.19
21			25,000	25,000	485,447.1	485,447	460,447.06
22			25,000	25,000	523,190.8	523,191	498,190.81
23			25,000	25,000	563,869.2	563,869	538,869.16
24			25,000	25,000	607,710.3	607,710	582,710.27
25		50,000	25,000	75,000	654,960.0	654,960	579,960.04

IV. Conclusion

Investment Return Indicators are positive. The NPV is positive. The IRR, 26%, is higher than the social discount rate used, and the CBI shows that for each dollar invested, a US$2.07 benefit will be obtained.

INDICATORS	
NPV	$1,686,851.48
IRR	26%
CBI	2.07

7.5. Risk prevention and evacuees care Centre. Bella Unión, Uruguay.

I. Base Data

The intervention entails conditioning of a shelter with a100 people accommodation capacity for people evacuated from flooded areas. The amount requested for this investment is US$300 thousand.

II. Assumptions

• The investment accounted for is that requested to the AF: US$300 thousand, plus land acquisition costs for US$35,000.

• Specific investments are envisaged for sundry replenishments of 10% on the total investment (US$ 30,000) every five years and recurring costs for 5% (US$ 15,000)

• The evacuee cost avoided calculated on the basis of disbursements made over the 2009 floods in Artigas is taken over as a benefit.

• A 25-years lifespan is foreseen.

• A 7.5% Social Discount Rate is used.

A summary of data taken over for CBA calculations is shown in table below:

Source Data and Estimates for Artigas (Bella Unión)		
Damages in USD million, year	2010	8.80
	2030	38.90
Urban Poverty in Department		70,000
Damages in USD per inhabitant, year	2010	125.71
	2030	555.71
CAGR damages		7.7%
Urban Footprint km2		3.5
Core Population		12500
Density hab./km2		3,571.43
Estimated damage Km2		448,979.59
Estimated Damage avoided	2018	49.175.24

III. Results

	A1. Investment Costs		Operational Costs		B. Benefits		
Years	Additional Investments	AF Investment and Capital replacement	Maintenance	A. Total Costs. (A = A1 + A2)	Avoided Damages	Total Benefits	C. Net Cash Flow (NCF = B - A):
1	35,000	300,000		335,000		0	(335,000.00)
2			15,000.00	15,000	49,175.2	49,175	34,175.24
3			15,000.00	15,000	52,968.8	52,969	37,968.76
4			15,000.00	15,000	57,087.1	57,087	42,087.11
5		30,000.00	15,000.00	45,000	61,525.7	61,526	16,525.66
6			15,000.00	15,000	66,309.3	66,309	51,309.31
7			15,000.00	15,000	71,464.9	71,465	56,464.90
8			15,000.00	15,000	77,021.3	77,021	62,021.33
9			15,000.00	15,000	83,009.8	83,010	68,009.77
10		30,000.00	15,000.00	45,000	89,463.8	89,464	44,463.83
11			15,000.00	15,000	96,419.7	96,420	81,419.68
12			15,000.00	15,000	103,916.4	103,916	88,916.36
13			15,000.00	15,000	111,995.9	111,996	96,995.91
14			15,000.00	15,000	120,703.6	120,704	105,703.65
15		30,000.00	15,000.00	45,000	130,088.4	130,088	85,088.42
16			15,000.00	15,000	140,202.9	140,203	125,202.86
17			15,000.00	15,000	151,103.7	151,104	136,103.70
18			15,000.00	15,000	162,852.1	162,852	147,852.09
19			15,000.00	15,000	175,513.9	175,514	160,513.92
20		30,000.00	15,000.00	45,000	189,160.2	189,160	144,160.22
21			15,000.00	15,000	203,867.5	203,868	188,867.52
22			15,000.00	15,000	219,718.3	219,718	204,718.32
23			15,000.00	15,000	236,801.5	236,802	221,801.53
24			15,000.00	15,000	255,213.0	255,213	240,212.97
25		30,000.00	15,000.00	45,000	275,055.9	275,056	230,055.90

I. Conclusion

Investment Return Indicators are positive. The NPV is positive. The IRR, 17%, is higher than the social discount rate used, and the CBI shows that for each dollar invested, a US$1.01 benefit will be obtained.

INDICATORS	
NPV	$528,871
IRR	17%
CBI	1.01

7.6. Resignification of flood prone high risk public spaces recovered from irregular residential occupation. Bella Unión, Uruguay

IV. Base Data

The intervention entails Intervention of an urban area that was released from irregular occupation in a high risk flood area. The amount requested for investment is US$200.000.

V. Assumptions

• The investment accounted for is that requested to the AF: US$200 thousand.

• Specific investments are envisaged for sundry 5% replenishments on the total investment (US$ 10,000) every five years and recurring costs for 5% (US$10,000)

• • The protection of private assets and infrastructure in the project area is taken over as a benefit.

• The valuation was made based on WRI data for flood damage to urban infrastructures in 2010.

• A useful 25 years´ lifespan is foreseen.

• A social discount rate of 7.5% is used.

A summary of data taken over for CBA calculations is shown in table below:

Source Data and Estimates for Artigas (Bella Unión)		
Damages in USD millions year	2010	8.80
	2030	38.90
Urban poverty in Department		70,000
Damages in USD per inhabitant, year	2010	125.71
	2030	555.71
CAGR Damages		7.7%
Urban footprint km2		3.5
Core population		12500
Density hab./km2		3,571.43
Estimated damage Km2		448,979.59
Avoided / Estimated damages	2018	49.175.24

VI. Results

	A1. Investment Costs		A2. Operational Costs		B. Benefits		
Years	Additional Investments	AF Investment and Capital replacement	Maintenance	A. Total Costs. (A = A1 + A2)	Avoided Damages	Total Benefits	C. Net Cash Flow (NCF = B - A):
1		200,000		200,000		0	(200,000.00)
2			10,000.00	10,000	45,561.9	45,562	35,561.86
3			10,000.00	10,000	49,076.6	49,077	39,076.63
4			10,000.00	10,000	52,892.4	52,892	42,892.36
5		10,000.00	10,000.00	20,000	57,004.8	57,005	37,004.77
6			10,000.00	10,000	61,436.9	61,437	51,436.92
7			10,000.00	10,000	66,213.7	66,214	56,213.67
8			10,000.00	10,000	71,361.8	71,362	61,361.82
9			10,000.00	10,000	76,910.2	76,910	66,910.24
10		10,000.00	10,000.00	20,000	82,890.0	82,890	62,890.05
11			10,000.00	10,000	89,334.8	89,335	79,334.79
12			10,000.00	10,000	96,280.6	96,281	86,280.61
13			10,000.00	10,000	103,766.5	103,766	93,766.48
14			10,000.00	10,000	111,834.4	111,834	101,834.37
15		10,000.00	10,000.00	20,000	120,529.6	120,530	100,529.55
16			10,000.00	10,000	129,900.8	129,901	119,900.79
17			10,000.00	10,000	140,000.6	140,001	130,000.64
18			10,000.00	10,000	150,885.8	150,886	140,885.76
19			10,000.00	10,000	162,617.2	162,617	152,617.20
20		10,000.00	10,000.00	20,000	175,260.8	175,261	155,260.77
21			10,000.00	10,000	188,887.4	188,887	178,887.38
22			10,000.00	10,000	203,573.5	203,573	193,573.47
23			10,000.00	10,000	219,401.4	219,401	209,401.41
24			10,000.00	10,000	236,460.0	236,460	226,459.98
25		10,000.00	10,000.00	20,000	254,844.9	254,845	234,844.86

II. Conclusion

Investment profitability indicators are positive. The NPV is positive, IRR, 26%, higher than the social Discount Rate used, and the CBI shows that for each dollar invested, a US$2.17 benefit will be obtained.

INDICATORS	
NPV	$666,667.16
IRR	26%
CBI	2.17

7.7. Protection and resignification of the Artaláz Stream Wetland. Colón, Argentina.

I. Data Base

The work entails intervention of an urban area in the northern side of the city´s core sector covering an estimated 68Ha area.

II. Assumptions

• The investment accounted for is that requested to the AF: US$1 million.

• Specific investments are envisaged for sundry 10% replenishments on the total investment (US$ 100,000) every five years and recurring costs for 5% (US$50,000)

• The valuation was made on the basis of WRI data for flood damage to urban infrastructures in 2010.

• A useful 25 years´ lifespan is foreseen.

• A social discount rate of 12% is used.

A summary of data taken over for CBA calculations is shown in table below:

Source Data and Estimates for Entre Ríos and Colón			
		Entre Rios	Colón
Damages in USD millions year	2010	220.30	
	2030	554.50	
Urban poverty in Department		1,310,000	26,000
Damages in USD per inhabitant, year	2010	168.17	168.17
	2030	423.28	423.28
CAGR Damages		4.7%	5%
Urban footprint km2			8.5
Core population		135,994	26,000
Density hab./km2			3,058.82
Estimated damage Km2			514,396.05
Inrtervened Surface area Km2			0.68
Avoided / Estimated damages	2010	-	349,789.31
	2018	-	506,013

III. Results

	A1. Investment Costs		A2. Operational Costs	A. Total Costs. (A = A1 + A2)	B. Benefits		C. Net Cash Flow (NCF = B - A):
Years	Additional Investments	AF Investment and Capital replacement	Maintenance		Avoided Damages	Total Benefits	
1		1,000,000		1,000,000		0	(1,000,000.00)
2			50,000	50,000	506,012.6	506,013	456,012.63
3			50,000	50,000	529,914.4	529,914	479,914.39
4			50,000	50,000	571,115.5	571,115	521,115.50
5		100,000	50,000	150,000	615,520.0	615,520	465,520.01
6			50,000	50,000	663,377.0	663,377	613,377.00
7			50,000	50,000	714,954.9	714,955	664,954.90
8			50,000	50,000	770,543.0	770,543	720,543.00
9			50,000	50,000	830,453.1	830,453	780,453.10
10		100,000	50,000	150,000	895,021.2	895,021	745,021.25
11			50,000	50,000	964,609.6	964,610	914,609.60
12			50,000	50,000	1,039,608.5	1,039,608	989,608.48
13			50,000	50,000	1,120,438.6	1,120,439	1,070,438.56
14			50,000	50,000	1,207,553.2	1,207,553	1,157,553.22
15		100,000	50,000	150,000	1,301,441.1	1,301,441	1,151,441.09
16			50,000	50,000	1,402,628.8	1,402,629	1,352,628.78
17			50,000	50,000	1,511,683.9	1,511,684	1,461,683.87
18			50,000	50,000	1,629,218.1	1,629,218	1,579,218.05
19			50,000	50,000	1,755,890.6	1,755,891	1,705,890.57
20		100,000	50,000	150,000	1,892,411.9	1,892,412	1,742,411.95
21			50,000	50,000	2,039,547.9	2,039,548	1,989,547.92
22			50,000	50,000	2,198,123.8	2,198,124	2,148,123.80
23			50,000	50,000	2,369,029.0	2,369,029	2,319,029.02
24			50,000	50,000	2,553,222.2	2,553,222	2,503,222.22
25		100,000	50,000	150,000	2,751,736.5	2,751,737	2,601,736.52

IV. Conclusion

Investment profitability indicators are positive. The NPV is positive, IRR, 52%, higher than the social Discount Rate used, and the CBI shows that for each dollar invested, a US$3.6 benefit will be obtained.

INDICATORS	
NPV	$4,909,288.69
IRR	52%
CBI	3.60

7.8. Remediation and resignification of vacant lots located within Defensa Norte and Cantera 25 de mayo Neighborhood. Concepción del Uruguay, Argentina.

I. Data Base

Urban Intervention project in flooded areas on an estimated 24Ha. area.

II. Assumptions

• The investment accounted for is that requested to the AF, US$1 million.

• Specific investments are contemplated for various replenishments of 10% on the total investment (US$100,000) every five years and a recurring cost of 5% (US$50,000)

• The protection of private and public assets in the project area is taken over as a benefit.

• The assessment was made on the basis of WRI data, for damages due to flooding of urban infrastructures in 2010.

• A 25 years´ lifespan is foreseen

• A 12% Social Discount Rate is used.

• A summary of data taken over for CBA calculations is shown in table below:

Source Data and Estimates for Entre Ríos and Concepción			
		Entre Rios	Concepción
Damages in USD millions year	2010	220.30	
	2030	554.50	
Urban poverty in Department		1,310,000	72,500
Damages in USD per inhabitant , year	2010	168.17	2,010.00
	2030	423.28	2,030.00
CAGR Damages		4.7%	0.0%
Urban footprint km2			18
Core population		135,994	72,500
Density hab./km2			4,027.78
Estimated damage Km2			8,095,833
Intervened surface area Km2			0.24
Avoided / Estimated damages	2010		1,943,000
	2018		1,950,710

II. Results

	A1. Investment Costs		A2. Operational Costs		B. Benefits		
Years	Additional Investments	AF Investment and Capital replacement	Maintenance	A. Total Costs. (A = A1 + A2)	Avoided Damages	Total Benefits	C. Net Cash Flow (NCF = B - A):
1		1,000,000		1,000,000		0	(1,000,000.00)
2			50,000	50,000	235,166.1	235,166	185,166.13
3			50,000	50,000	246,274.3	246,274	196,274.31
4			50,000	50,000	265,422.3	265,422	215,422.27
5		100,000.00	50,000	150,000	286,059.0	286,059	136,058.98
6			50,000	50,000	308,300.2	308,300	258,300.21
7			50,000	50,000	332,270.7	332,271	282,270.70
8			50,000	50,000	358,104.9	358,105	308,104.92
9			50,000	50,000	385,947.8	385,948	335,947.76
10		100,000	50,000	150,000	415,955.4	415,955	265,955.39
11			50,000	50,000	448,296.1	448,296	398,296.13
12			50,000	50,000	483,151.4	483,151	433,151.38
13			50,000	50,000	520,716.6	520,717	470,716.64
14			50,000	50,000	561,202.6	561,203	511,202.62
15		100,000	50,000	150,000	604,836.4	604,836	454,836.40
16			50,000	50,000	651,862.7	651,863	601,862.74
17			50,000	50,000	702,545.4	702,545	652,545.39
18			50,000	50,000	757,168.6	757,169	707,168.65
19			50,000	50,000	816,038.9	816,039	766,038.89
20		100,000	50,000	150,000	879,486.3	879,486	729,486.32
21			50,000	50,000	947,866.8	947,867	897,866.82
22			50,000	50,000	1,021,563.9	1,021,564	971,563.94
23			50,000	50,000	1,100,991.1	1,100,991	1,050,991.05
24			50,000	50,000	1,186,593.7	1,186,594	1,136,593.66
25		100,000	50,000	150,000	1,278,851.9	1,278,852	1,128,851.91

III. Conclusion

Investment profitability indicators are positive. The NPV is positive, IRR, 26%, higher than the social Discount Rate used, and the CBI shows that for each dollar invested, a 1.14 benefit will be obtained.

INDICATORS	
NPV	$1,551,561.76
IRR	26%
CBI	1.14

8.2. Protection against coastal erosion, and sundry repairs at the water treatment plant in the city of Concordia, Argentina.

I. Data Base

This is a project entailing prevention of erosion and protection of a large hydraulic infrastructure in the city: a water treatment plant that supplies the whole urban area.

II. Assumptions

• The investment accounted for is that requested to the AF, US$1 million.

• Specific investments are envisaged for sundry 10% replenishments on total investment (US$100,000) every five (5) years and 15% Recurring Costs (US$150,000)

• The protection of the water treatment plant and its replacement value, estimated at US$30 million, is taken over as a benefit vis-à-vis the prices tendered for a similar work in the same location in 2018 (tender by the Ministry of Internal Affairs).

• A lifespan of 50 years is foreseen.

• A 12% Social Discount Rate is used.

II. Results

	A1. Investment Costs		A2. Operational Costs		B. Benefits		
Years	Additional Investments	AF Investment and Capital replacement	Maintenance	A. Total Costs. (A = A1 + A2)	Avoided Damages	Total Benefits	C. Net Cash Flow (NCF = B - A):
1		1,000,000		1,000,000		0	(1,000,000.00)
2			150,000	150,000	600,000.00	600,000	450,000.00
3			150,000	150,000	600,000.00	600,000	450,000.00
4			150,000	150,000	600,000.00	600,000	450,000.00
5		100,000	150,000	250,000	600,000.00	600,000	350,000.00
6			150,000	150,000	600,000.00	600,000	450,000.00
7			150,000	150,000	600,000.00	600,000	450,000.00
8			150,000	150,000	600,000.00	600,000	450,000.00
9			150,000	150,000	600,000.00	600,000	450,000.00
10		100,000	150,000	250,000	600,000.00	600,000	350,000.00
11			150,000	150,000	600,000.00	600,000	450,000.00
12			150,000	150,000	600,000.00	600,000	450,000.00
13			150,000	150,000	600,000.00	600,000	450,000.00
14			150,000	150,000	600,000.00	600,000	450,000.00
15		100,000	150,000	250,000	600,000.00	600,000	350,000.00
16			150,000	150,000	600,000.00	600,000	450,000.00
17			150,000	150,000	600,000.00	600,000	450,000.00
18			150,000	150,000	600,000.00	600,000	450,000.00
19			150,000	150,000	600,000.00	600,000	450,000.00
20		100,000	150,000	250,000	600,000.00	600,000	350,000.00
21			150,000	150,000	600,000.00	600,000	450,000.00
22			150,000	150,000	600,000.00	600,000	450,000.00
23			150,000	150,000	600,000.00	600,000	450,000.00
24			150,000	150,000	600,000.00	600,000	450,000.00
25		100,000	150,000	250,000	600,000.00	600,000	350,000.00
26			150,000	150,000	600,000.00	600,000	450,000.00
27			150,000	150,000	600,000.00	600,000	450,000.00
28			150,000	150,000	600,000.00	600,000	450,000.00
29			150,000	150,000	600,000.00	600,000	450,000.00
30		100,000	150,000	250,000	600,000.00	600,000	350,000.00
31			150,000	150,000	600,000.00	600,000	450,000.00
32			150,000	150,000	600,000.00	600,000	450,000.00
33			150,000	150,000	600,000.00	600,000	450,000.00
34			150,000	150,000	600,000.00	600,000	450,000.00
35		100,000	150,000	250,000	600,000.00	600,000	350,000.00
36			150,000	150,000	600,000.00	600,000	450,000.00
37			150,000	150,000	600,000.00	600,000	450,000.00
38			150,000	150,000	600,000.00	600,000	450,000.00
39			150,000	150,000	600,000.00	600,000	450,000.00
40		100,000	150,000	250,000	600,000.00	600,000	350,000.00
41			150,000	150,000	600,000.00	600,000	450,000.00
42			150,000	150,000	600,000.00	600,000	450,000.00
43			150,000	150,000	600,000.00	600,000	450,000.00
44			150,000	150,000	600,000.00	600,000	450,000.00
45		100,000	150,000	250,000	600,000.00	600,000	350,000.00
46			150,000	150,000	600,000.00	600,000	450,000.00
47			150,000	150,000	600,000.00	600,000	450,000.00
48			150,000	150,000	600,000.00	600,000	450,000.00
49			150,000	150,000	600,000.00	600,000	450,000.00
50		100,000	150,000	250,000	1,200,000.00	1,200,000	950,000.00

III. Conclusion

Investment profitability indicators are positive. The NPV is positive, IRR, 44%, higher than the social Discount Rate used, and the CBI shows that for each dollar invested, a 1.08 benefit will be obtained.

INDICATORS	
NPV	$2,313,736.68
IRR	44%
CBI	1.08

9.1. Revolving fund for housing adaptations in flood medium-risk zones, according to the Risk Map. Pilot case in Paysandú.

I. Base Data

A Revolving Fund with a useful 4-year life for medium-risk homes in the city of Paysandú. This Fund is expected to benefit one hundred homes.

II. Assumptions

• The investment accounted for is that requested to the AF: US$200 thousand.

• Amounts resulting from the non-reimbursable fraction of loans are considered as additional expenses.

• A disbursement of 25 credits per year was estimated.

• Benefits are incremental since an estimation is made that loss of ownership of the beneficiary´s dwellings can be avoided, entailing a higher number of beneficiaries, and the protection of the equivalent amount in 25 housing units per year.

• A useful four years´ life span is expected, plus 1 year for creation of the Revolving Fund.

• A 7.5% Social Discount Rate is used.

III. Results

	A1. Investment Costs		A2. Operational Costs		B. Benefits		
Years	Additional Investments	AF Investment and Capital replacement	Maintenance	A. Total Costs. (A = A1 + A2)	Avoided Damages	Total Benefits	C. Net Cash Flow (NCF = B - A):
1		200,000		200,000		0	(200,000.00)
2			35,000	35,000	112,364.4	112,364	77,364.38
3			35,000	35,000	224,728.8	224,729	189,728.76
4			35,000	35,000	337,093.1	337,093	302,093.14
5			35,000	35,000	449,457.5	449,458	414,457.52

I. Conclusion

Assuming that loan amounts effectively contribute to the protection of property, the project is highly profitable in social terms. The NPV is positive, the IRR is 77% and the CBI is 1.86.

INDICATORS	
NPV	$548,525.05
IRR	77%
CBI	1.86

11.4 Structural consolidation of historical buildings, protection of the coastal canyon and valorisation of the historic site Calera del Palmar or de Barquín, in El Palmar National Park (PNEP).

I. Base Data

This is a project to enhance physical accommodation conditions to visit a series of assets in El Palmar National Park. Its concretion would help strengthen the attraction capacity of the park by increasing the number of visitors and, therefore, the economic income for the park´s maintenance and management.

II. Assumptions

• The investment accounted for is that requested to the AF, US$ 665.000.

• Punctual replenishment investments are estimated every 5 years, valued at 5% of the initial investment, and a recurrent annual expenditure of 5%.

• A lifespan of 25 years is considered

• The estimated project benefits are originated from the additional income due to the increase in the number of visitors estimated, on account of infrastructural improvements made.

• Visits in recent years have remained at an average of 175,000 people per year, with no noticeable increase over time. Thus, an assumption is made that the project will be able to draw an substantial share of the annual increase of visitors that National Parks have in Argentina.

• A conservative 70% annual increase in visitors to national parks in Argentina was estimated: Over the last decade, this figure was 5.8%, the annual growth rate for El Palmar is 4.1% per year.

• Income from sale of tickets was estimated at US$ 2.25 per visitor (without real income data, we opted for a conservative average between the most expensive entry ticket of US$8, and the cheapest entry ticket of US$0, considering that more than 90% of visitors are people living in the area close by, a fact reducing income capacity due to the manifold discounts available).

• A 12% Social Discount Rate is used.

	Base	Year 25	
	2018	Without project	With project
Visitors: average 2012-2017, Number	175,000	175,000	459,045
Income US$	393,750	393,750	1,032,851.95
Additionality in year 25			
Visitors			284,045
Income			639,102
Estimated average value of entrance ticket			2.25
Estimated increase of visitors / year			4.10%

I. Results

	A1. Investment Costs		A2. Operational Costs		B. Benefits		
Years	Additional Investments	AF Investment and Capital replacement	Maintenance	A. Total Costs. (A = A1 + A2)	Avoided Damages	Total Benefits	C. Net Cash Flow (NCF = B - A):
1		675,000		675,000		0	(675,000.00)
2			33,750	33,750	16,143.75	16,144	(17,606.25)
3			33,750	33,750	32,949.39	32,949	(800.61)
4			33,750	33,750	50,444.07	50,444	16,694.07
5		33,750.00	33,750	67,500	68,656.03	68,656	1,156.03
6			33,750	33,750	87,614.67	87,615	53,864.67
7			33,750	33,750	107,350.62	107,351	73,600.62
8			33,750	33,750	127,895.75	127,896	94,145.75
9			33,750	33,750	149,283.23	149,283	115,533.23
10		33,750.00	33,750	67,500	171,547.59	171,548	104,047.59
11			33,750	33,750	194,724.79	194,725	160,974.79
12			33,750	33,750	218,852.26	218,852	185,102.26
13			33,750	33,750	243,968.95	243,969	210,218.95
14			33,750	33,750	270,115.42	270,115	236,365.42
15		33,750.00	33,750	67,500	297,333.91	297,334	229,833.91
16			33,750	33,750	325,668.35	325,668	291,918.35
17			33,750	33,750	355,164.50	355,164	321,414.50
18			33,750	33,750	385,869.99	385,870	352,119.99
19			33,750	33,750	417,834.41	417,834	384,084.41
20		33,750.00	33,750	67,500	451,109.37	451,109	383,609.37
21			33,750	33,750	485,748.61	485,749	451,998.61
22			33,750	33,750	521,808.05	521,808	488,058.05
23			33,750	33,750	559,345.93	559,346	525,595.93
24			33,750	33,750	598,422.87	598,423	564,672.87
25		33,750.00	33,750	67,500	639,101.95	639,102	571,601.95

IV. Conclusion

Considering Assumptions established for the CBA of this project as valid, the latter´s execution results are beneficial from an economic and social point of view.

The NVP is positive, the IRR is 14%, higher than the Social Discount Rate used, and the CBI shows that an additional USD 0.25 is generated for every dollar invested over the project´s lifespan.

INDICATORS	
NPV	$216,431.49
IRR	14%
CBI	0.25

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REGIONAL PROGRAM PROPOSAL

"Climate Change adaptation in vulnerable coastal cities and ecosystems of the Uruguay River"

ANNEX 9. Climate change vulnerability, adaptative capacity and risk analysis

Supported by:

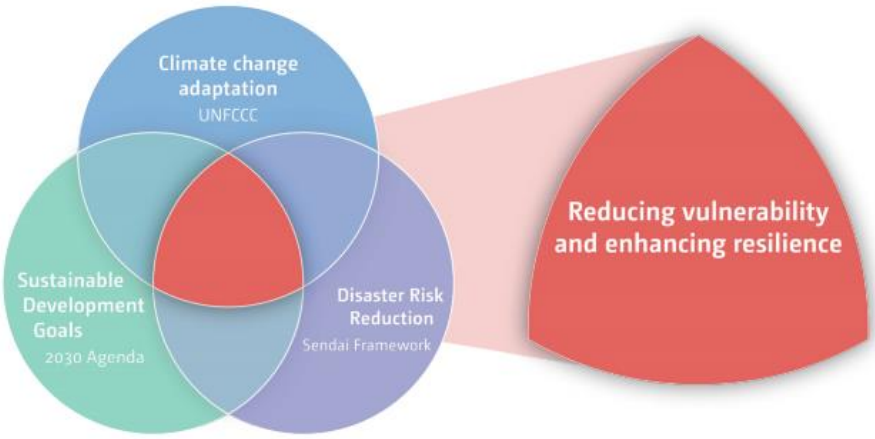
Factor
Ideas for change

1. Starting point: local governments, ecosystem-based adaptation and resilience in the Uruguay river lower basin

These days, local governments are being recognized, on the international agenda, as the main agents to be empowered to deal with issues related to climate change adaptation, disaster risk reduction and, as a whole, to achieve the goal of sustainable development (Project Al-Las, 2016). Working on a combination of these three frameworks of action has the common point of reducing vulnerability and increasing resilience, as noted in the Technical Document (May 2017) in Bonn[1], which reflects technical discussions based on experiences shared by the member countries. (**Figure No.1**).

Figure Nº1: Overlapping of three UN Action Frameworks

Source: UNFCC, 2017



As the first intermediary in the construction of public policies between the National States and their citizens, local governments play a key role. There are various initiatives in the region, with groups of cities that guide and promote actions leading to building resilience in an integrated manner. Such is the case of Mercociudades. The cities of Paysandú and Salto included in this project are also part of Mercociudades. It is also the case of initiatives such as the RAMCC (Argentine Network of Municipalities against Climate Change) in Argentina. The local and community levels in the implementation of climate change adaptive measures is central to this project, which acts in the line of Community-Based Adaptation (AbC, in Spanish). In the international context, there are special pioneer programs such as the "100 Resilient Cities" of the Rockefeller Foundation[2], which even define Urban Resilience as a new necessary trend in a changing world.

The project "*Adaptation to Climate Change in vulnerable coastal cities and ecosystems of the Uruguay River*" focuses on such that; on building resilience in riverside communities and local governments of the Uruguay river lower basin and reducing vulnerability to climate change. For reference purposes, there are the ten essential aspects defined by the Building Resilient Cities Campaign of UNISDR (2015), consisting of:

- Essential Aspect 1: Institutional and administrative framework. Establish the organization and coordination necessary to understand and reduce the risk of disaster, based on citizen participation.

[2] What is urban resilience? 100 resilient Cities, Rockefeller Foundation
https://www.100resilientcities.org/resources/

-Essential aspect 2: Financing and resources. Assign a budget for disaster risk reduction.

-Essential Aspect 3: Multi-threat risk assessment - Know your risk. Keep updated information on threats and vulnerabilities, conduct risk assessments on which to build city development plans and decisions.

-Essential Aspect 4: Infrastructure protection, enhancement and resilience. Invest in and maintain risk-reducing infrastructure to cope with climate change.

-Essential aspect 5: Protection of vital facilities. Evaluate the safety of all schools and health care facilities and improve them when necessary.

-Essential Aspect 6: Building regulations and territorial planning. Apply and enforce building regulations and principles for land use planning that contemplate risk aspects.

-Essential Aspect 7: Capacity-building, education and public awareness. Ensure educational and capacity-building programs on disaster risk reduction are instituted both in schools and in local communities.

-Essential Aspect 8: Protection of the environment and strengthening of ecosystems. Protect ecosystems and natural buffer zones to mitigate floods. Adapt to climate change by resorting to best practices.

- Essential Aspect 9: Preparedness, early warning and effective response. Install early warning systems and develop the capacities for emergency management in your city.

-Essential Aspect 10: Recovery and reconstruction of communities. After a disaster, "rebuild" the city better without reproducing the previous risk conditions, and by increasing the safety of the affected population.

Near the project area, in Argentina there is a leading case where these lines of work have been implemented. The city of Santa Fe has been selected as role-model in disaster risk reduction by the UN, having won even the Sasaskawa Award of the UNISDR[3] and being the first Argentinean city within the 100 Resilient Cities - Rockefeller. Uruguay is also part of this program with the city of Montevideo.

The local riverside governments that make up the project correspond, for the case of Argentina, according to the administrative-political division of the province of Entre Ríos, to first-tier cities[4] (more than 5,000 inhabitants): Concordia, Colón and Concepción del Uruguay.

In Uruguay, the definition of cities is recent[5] - May 2010- and the third level of government and administration is a first in Uruguay. (Scheloto and Abreu, 2011). As sub-national administrative political government entities there are the departments and their government seats or “Intendencias”. The following integrate the project (**Figure Nº2**): Paysandú and Salto, as capital cities of departments where the government seats are located; the city of Bella Union (Artigas Department); and the cities of Fray Bentos, Nueva Berlin and San Javier (the three belonging to Rio Negro Department).

Figure No.2: Map with cities and national parks location along the Uruguay river

[3] Risk Management. City of Santa Fe http://www.santafeciudad.gov.ar/blogs/gdr/

[4] Law Nº 3001 Municipalities

[5] Law Nº 18567 on Decentralization and Citizen Participation

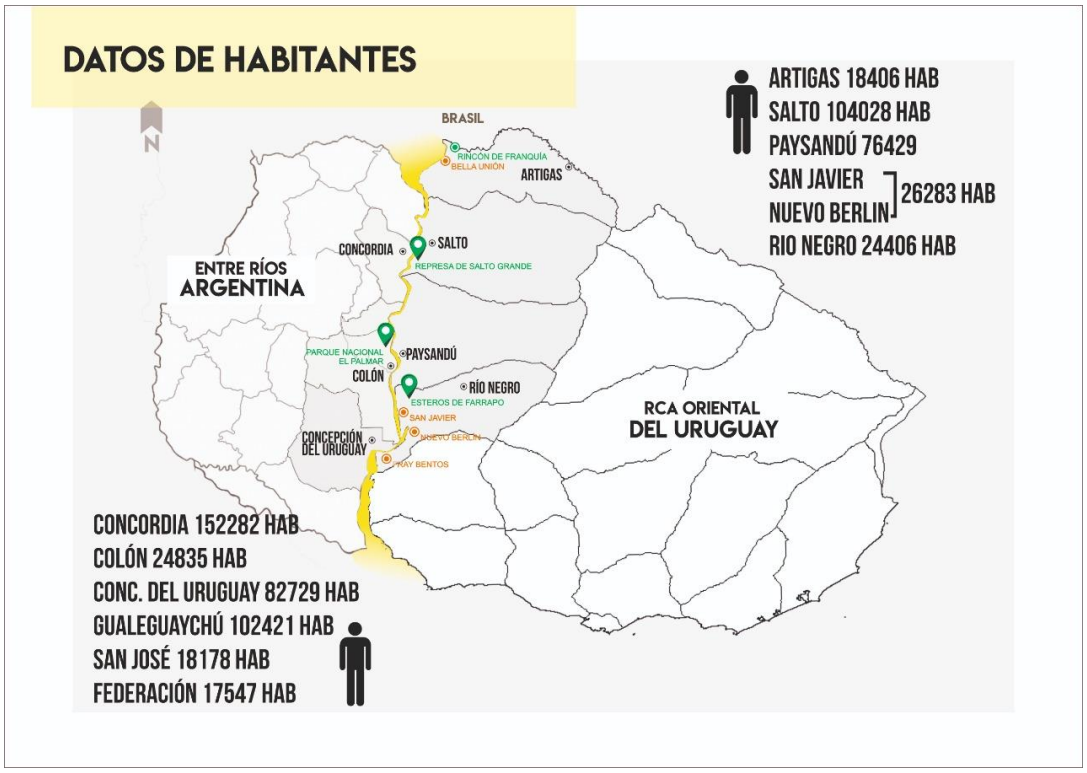
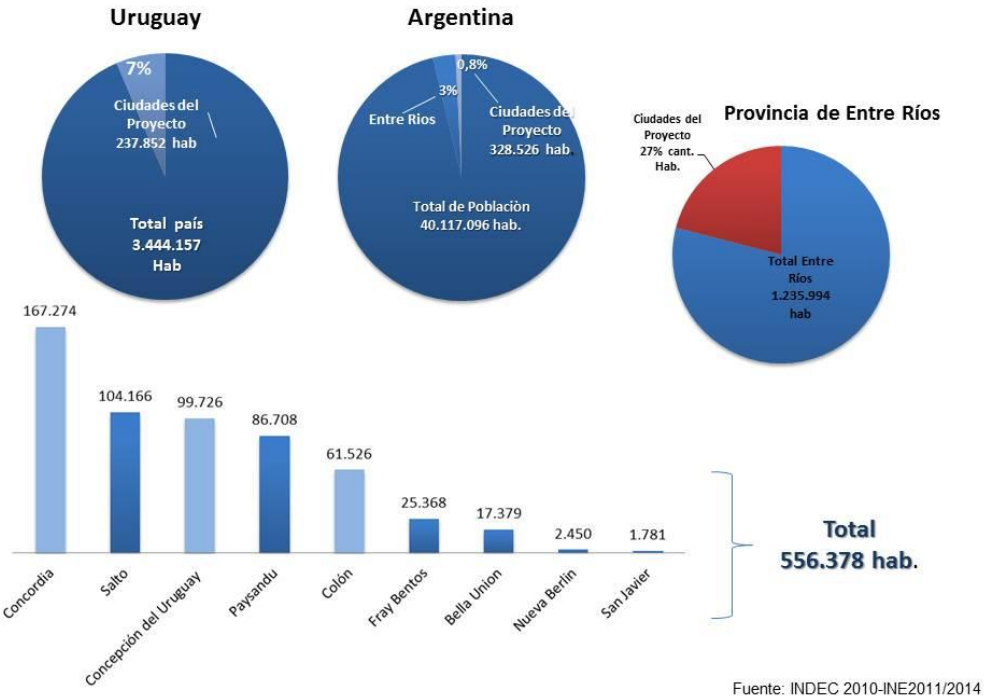


Chart No.1: Cities comprising the project, broken down per population

Source: prepared based on INDEC 201-INE2011 Censuses



The amount of population involved in the cities represents 7% of Uruguay's total population (237,852 inhabitants) and only 0.8% of Argentina's total population (328,526 inhabitants), whereas it

represents 27% of the province of Entre Ríos. The cities, in aggregate, add up to 556,378 inhabitants. These can be classified as intermediate and small cities (Martínez, et al, 2013, Manzano y Velázquez, 2015) in the city ranking of both countries (see **Chart Nº1**). This ranking is not only demographic but also functional, in the sense of concentrating administrative, technological, commercial, and educational activities for the relevant rural areas and areas of influence and for other population centers or urban areas.

These cities have a territorial reality on which their resilience is based. The challenge of recovering riparian ecosystems (wetlands) is presented as part of the development of sustainable urban habitat (UN-Habitat, 2015) in the line of Ecosystems-based Adaptation(AbE)[6]. Many of the interventions proposed in this project seek out the valorization and restoration of riparian ecosystems in urban areas as buffers for any surplus water, and in turn, as public recreational spaces that promote social inclusion.

On the other hand, the aim is to wrap up a cycle of relocation processes currently being carried out in some of the cities, avoiding new informal occupancy of these flood-prone lands and reducing the amount of population at risk in terms of floods.

A leading case of this mechanism in the project's region: Uruguay was acknowledged by the UNFCC for its National Resettlement Plan aimed at reducing vulnerability of low-income population sectors and their exposure to floods. These actions are part of a human rights mainstreaming process in climate change adaptation actions, as proposed in the Geneva commitment on human rights related to climate action.

In relation with ecosystems within the project area, given that they have a different logic, where jurisdictional limits do not apply, it is necessary to understand their behavior as ecological corridors for their conservation and sustainability. The corner stone for this are two protected areas with category of national parks: *El Palmar* and *Esteros de Farrapos e Islas del río Uruguay*. Both are representative of the ecosystem of the Uruguay River lower basin and are considered within this project for their vulnerability to climate change.

Under the project mentioned, the general objective of this document is to carry out a climate risk analysis of the cities and ecosystems of the Uruguay river lower basin. Specifically, it is proposed:

- To identify climatic threats in the Uruguay River lower basin.

- To analyze sensitivity and adaptive capacities that cities have in a comparative manner in both countries.

-To analyze the exposure of cities against floods along the Uruguay River in a comparative manner in both countries.

2. Theoretic framework and proposed methodology

The concept of Climate Change Risk contributed by the IPCC (2015, a,b,c) AR5 report adopted for reference is that Climate Change Risk is the result of the interaction of Threat, Vulnerability (comprising Sensitivity and Adaptive Capacity) and Exposure (**Figure No.3**).

Threats can be defined as potentially damaging phenomena. In this analysis we will refer to climate threats in the context of climate change for the region, with special emphasis on flooding events of the Uruguay River, which will be altered in their frequency and magnitude. On the other hand, associated or sequential threats can be generated that together increase their potential damaging characteristic[7], such is the case of Salto Grande dam for the cities of this project, downstream.

Vulnerability is the propensity or susceptibility of a community (or ecosystem) to be affected by the effects of climate change. In the case of a community, it refers to its demographic, social, economic,

[6] Biodiversity Convention http://www.un.org/es/events/biodiversityday/convention.shtml
[7] Sequential threats according to CRID: http://www.cridlac.org/VCD/files/page38.html

cultural and institutional aspects that make it susceptible to sustain damage. When measured, it is analyzed through sensitivity (negative aspects) and adaptive capacity (positive aspects):

- *Sensitivity* is defined by the intrinsic characteristics of a community (or ecosystem), that make it susceptible to effects. In a community, the population living in poverty, children, the elderly, the disabled, etc. will be more sensitive to the effects of climate change.

- *Adaptive capacity* refers to the aspects that strengthen the community (or system) to deal with climate change. Consideration is given to aspects linked to existing knowledge, planning, prevention policies, resource management, etc.

Exposure refers to the location; to the material territorial aspect of a community (or ecosystem) that can be directly impacted by the threat in question. It refers to infrastructure, location of houses, property and economic activities.

Figure No.3: Climate Change Risk

Source: IPCC (2015)

$$R = P * V(s+ca) * E$$

There is no single quantitative methodology either in the international field or regional field to assess Climate Risk in cities. However, the conceptual definition can be of use to build a Vulnerability Index to assess Sensitivity and Adaptive Capacity, and to build an Exposure Index, using qualitative, comparative valuation of indicators. Such indicators and their scoring are independent in each case, and a value from 0 to 10 is provided, as explained in the following paragraphs. The score of each indicator and its comparison to arrive at indexes will be performed through evaluation matrices. The rationale behind the matrix of **Figure No. 4** means: the greater Sensitivity is and the lower Adaptive Capacity is, the higher the level of Vulnerability will be, and the other way around.

Figure No.4: Vulnerability Scoring Matrix: Sensitivity and Adaptive Capacity

Sensitivity		
Low	**Medium**	**High**
S1	**S2**	**S3**

Adaptive capacity	**High**	**CA3**	**V1**	**V1**	**V2**
	Medium	**CA2**	**V1**	**V2**	**V3**
	Low	**CA1**	**V2**	**V3**	**V3**

As regards climate Threats, this report mentions them, their tendencies and scenarios of climate change based on the study of Argentina and Uruguay National Communications. However, for this risk analysis, only the flood lines defined by the studies of PADE – Plan of Action During Emergencies - of Salto Grande are taken into account. The 100-year flood line is adopted, as established by Uruguay's National Land Management Policy, for the towns located along the river, extrapolating the same observation for the cities on the Argentinean side with the Q90,000 m3 discharge flood line. Even though both lines measure different situations, they are the ones available in both countries.

Lastly, the Vulnerability Index and the Exposure Index are factored in to arrive at a resulting Climate Risk level. **Figure No.5**.

Figure No.5: Climate Risk Scoring Matrix: Vulnerability and Exposure

			Exposure		
			Low	**Medium**	**High**
			E1	**E2**	**E3**
Vulnerability	**Low**	**V1**	**RC1**	**RC1**	**RC2**
	Medium	**V2**	**RC1**	**RC2**	**RC3**
	High	**V3**	**RC2**	**RC3**	**RC3**

2.1. Development of Indicators and territorial definition

This section addresses the territorial scale; the selection of indicators to analyze sensitivity, adaptive capacity, exposure; and the rationale behind such selection.

2.1.1. Territorial scale: The minimum territorial and governmental scale is adopted, defined as town, Department, or Municipality for Uruguay, and for the province of Entre Rios (Argentina). Besides, the national and/or provincial context is given for each indicator.

2.1.2. Sensitivity: to analyze Sensitivity, indicators were selected with available information for both countries, and bearing in mind the definition of vulnerable groups by the Adaptation Fund (2016). That definition refers to children, women, the elderly, aboriginal population, the disabled, illegal immigrants, etc. (AF, 2016). Three quantitative indicators were used for a short demographic and socio-economic characterization and comparison between the countries, extracted from the 2010 National Population Census in Argentina (INDEC) and the 2011 National Population Census in Uruguay (INE). Each indicator is in relation with the total population of each administrative unit. The indicators are:

-Population with Unsatisfied Basic Needs (UBN): direct method measuring population deemed to be poor. Useful indicator to understand situations of socio-economic urban residential inequality and segregation, as it is possible to derive information at a scale of "barrios" or neighborhoods through census block groups, or exceptionally, at a scale of "street block". Each country adopts different

deficits to define UBNs. In Uruguay, 6 indicators are factored in: decent housing; potable water supply, sanitation facilities, electric power, basic comfort appliances, and education (INE, 2013). In Argentina, the indicators are 5: precarious housing, sanitation conditions, house crowding, school attendance and subsistence capacity (DINREP, 2014). In both countries, the presence of at least one of the above indicators is considered to define "population with UBNs". Comparatively speaking, Uruguay considers a wider array of aspects, such as energy, and the definition of each indicator has "nuances" seeking to evaluate a higher standard of living. That is why, UBN values are found to be higher in Uruguay. On such account, scoring for this analysis is conducted differently for each country.

-Children and the Elderly dependency: this is the ratio of population 0 -14 years of age and 65-years and more with young and adult population (15 to 64). It provides an insight on the substantially more vulnerable demographics in the face of disasters.

-Families in informal settlements: this is considered another indicator of Sensitivity building on information provided by informants of the local governments. The estimated total number of families in informal settlements within each municipality/department is taken. One definition that characterizes this social phenomenon similarly in both countries is that of "a group *of more than 10 houses located in public or private lands built without the owner's authorization in irregular conditions without observing city planning regulations. Besides the foregoing characteristic, there is the deficit of all or any of the basic urban infrastructure utilities in most cases, and deficit or serious difficulty of access to social services"* (MVOTMA, 2011).

Scoring: each indicator has 3 (three) breaks - low to high -, and scores from 0 to 10. The statistical break used the function "natural breaks" of the Qgis program, and scoring is performed by the qualitative valuation of the analyst. The aggregate Sensitivity analysis had the lowest level below 14 points; the medium level, from 15 to 28 points; and the high level, from 29 to 40 points. Table No. 5, in the chapter of Sensitivity, shows these breaks and scoring.

2.1.3. Adaptive Capacities: to evaluate this indicator, the reference was the existence of planning and governance instruments for the reduction of risks based on the "Ten Essentials For Making Cities Resilient UNISDR", including Adaptation to Climate Change. The analysis is based on documents furnished by the cities and on conversations held with key informants from the same local governments and national/provincial institutions (Secretariat of Environment, province of Entre Rios; Entre Ríos Civil Defense; DINAGUA or National Water Directorate of Uruguay; and Climate Change Division of the MVOTMA - Ministry of Housing, Land Planning and Environment of Uruguay.

-Risk maps: instrument for territorial analysis that helps visualize the distribution and levels of disaster risks. It combines threat and vulnerability. It is a functional instrument for territorial planning and for emergency preparedness. For the purposes of this analysis, in relation with the array of situations of the cities, the evaluation is qualitative with scoring (1 to 10) based on presence or absence of management instrument: None; Only draft version; In process of development; Official version in place; Official version in place and in process of community validation.

-DRR & CC land management plan (POT): technical instrument prepared to guide the development of local governments in the long run. It also helps with regulations governing uses, occupancy and transformation of physical space, both urban and rural. It is used to provide the foundations for Codes of Land Management and/or Land Use Zoning. When any Management Plan includes risk areas and potential impacts of climate change in the territory it becomes a powerful prevention instrument in the face of disasters and climate change adaptation. As regards the array of situations of local governments, a qualitative assessment is conducted with scoring from 1 to 10 depending on whether the Land Management Plan includes risks and climate change: No Plan in place; No Updated Plan in place and there is no discussion or partial discussion of floods; Updated Plan in place and no discussion or only partial discussion of floods; Plan in place with a Risk and Climate Change Approach and in process of implementation.

-Early Warning System: it requires four aspects to work as such. Those are: information on the risk; monitoring of such risks; communication-warning to the community in the face of an event; and a Response or Contingency Plan (UNISDR, 2006). For the evaluation of this indicator in local governments, the following is assigned a score (from 1 to 10): Only Information/Monitoring; Formal Communication and Response mechanisms pending; Only Formal Response mechanisms (Contingency Plan) pending; All components are operational and are community-centered.

-Preparedness for Risk Management: this refers to the degree of coordination and institutionalization implemented by the provincial, department and local governments, together with the community, to reduce disaster risks. To evaluate this indicator, the following is taken into account: whether local governments have only firefighters and/or have a Response division which does not coordinate with other areas (scoring 1-5); whether they have a dedicated area to Response working in coordination with the rest of the cabinet (6-7); whether they are in the process of mainstreaming or integrating risk reduction in programs and/or plans from different municipal divisions not only centered around Response, also engaging the community.

-Recovery Fund: this indicator shows the economic resources available for the local government to cope with damage redress after an emergency or disaster. The more independent from other levels, whether national, provincial or international, the higher the capacity of the local government. To such end, scoring from 1 to 10 is assigned depending on whether: they have no funds of their own, or borrowed; they depend on funds from Nation/Province; they have fund in place and also aid from Nation/Province; they have fund of their own for these kinds of situations.

Scoring: for the valuation of the above five indicators, each one has a number of different categories depending on their specific characteristics and the diversity of situations existing in the cases under study. Scoring is 0 to 10 according to the analyst's qualitative valuation. The result of the Adaptive Capacity Analysis, maximum score will be 50 and will be divided into 3 levels: less than 16 points means low adaptive capacity; 17 to 33 means medium adaptive capacity; and 34 and more means high adaptive capacity.

2.1.4. Exposure: for the analysis, territorial information is taken into account to help study two aspects about flood-prone areas: population and land uses according to municipal regulations. Such flood-prone areas derive from the 100-year RT line of Salto Grande in its Contingency Plan. Observation and valuation of indicators are based on available information, that is, without generating any other information especially for this study.

- Percentage of population over total population, in flood-prone areas: information of the maps of the DINAGUA in Uruguay and census data (2011) are used, as well as information provided by cities of Entre Rios. In other cases, information was inferred from census block groups (2010). Score was assigned from 1 to 10 in three ranges depending on the number of families exposed: 0 to 50; 51 to 100; 100 or more.

-Use Zoning in flood-prone area: municipal zoning within the flood line is studied. Scoring from 1 to 10 is assigned depending on whether the uses allowed by the regulations should entail greater or lesser exposure over time. Categories are: area of nature reserve; tourist recreation-residential area; urban-residential area acknowledged by the regulations to be exposed; and consolidated mixed industrial-commercial-residential area.

Scoring: each one of these indicators have different categories subject to their own characteristics, and scoring goes from 0 to 10. The total to measure Exposure values go from 0 to 20 divided into three: low exposure, with values below six (6); medium exposure, from seven (7) to fourteen (14); and high exposure, from fifteen (15) to twenty (20).

3. Context. Cities, floods and disasters in the shorelines of the Uruguay river.

The cities along the Uruguay river share a common history of settlement at the riverside, as most of the cities of the Rio de La Plata, marked by battles for land conquest, Jesuitical missions and trading interests. In late 19th century and on, the first settlements sprang up around the port as trading hubs for the export of raw materials. Some were born spontaneously, such as Salto and Paysandú; others were the result of State initiatives (Alvarez Lenzi, in Piperno et. al 2009) following the typical grid pattern of the Spanish crown, such as Concepción del Uruguay and Colón.

With waves of European immigration arriving in the early 20th century, cities began to grow and expand, aided by the railway (Piperno, et al 2009: 36). Subsequently, migration from rural to urban areas, drawing people in with the offer of services and sources of industrial jobs, boosted again the expansion of urban agglomerations. The prevailing hygienist view of the time, which subsequently gave rise to City Planning, justified the advance over, and occupancy of, flood-prone areas as well as the need to fill the river banks (Viand y González, 2013). Wetlands were viewed as land to be dredged, filled and reclaimed, for the growth of cities.

Overall, between 1930s and 1950s, European immigration and population growth of the Rio de La Plata cities brought about a strong process of expansion towards more economic, flood-prone lands. This allowed middle-income socio-economic sectors to acquire a place to build houses on, formally consolidating the occupancy of such areas (Viand y González, 2013). No doubt – seeing the present-day layout of cities on both sides of the river – such expansion occurred not only along the shores of the Uruguay river by means of embankments but also along the water course of affluents, which in many cases were culverted and integrated to the system of city drainage, giving rise to problems such as “chorraderas” (Piperno, et al 2009). In subsequent decades, mainly the 1990s, as a result of the region’s economic policies, expansion deepened, but now the actors were low-income population sectors in informal settlements on lands prone to floods.

It is worth mentioning that the above review of the history of how these cities and their growth came to be accounts for the generation of flood risks and their vulnerable condition in the context of climate change. Water knows no borders. Thus floods are a shared issue. The flood of 1959, the largest known, is engraved in the collective memory of the two shores. It is even the oldest reference of the Joint Technical Commission (CTM) for the construction of the Salto Grande Binational Hydroelectric power plant in 1974. From that decade on, the Rio de La Plata basin went into a humid period, and the ENOS phenomenon, in its “El Niño” phase, affects with recurring precipitation of considerable size. This was connected with the big floods of 1982-83; 1991-92; 1997-98; 2002, 2009 and 2015. As will be seen in the following paragraphs, those floods brought about the displacement of large quantities of people in the riverside cities (**Chart No.2**).

Records on damage sustained differ from one country to the other. Some databases such as Desinventar[8] allow a comparative analysis with information on both countries until 2015 and allow understanding the impacts of big and small disasters. Another worldwide base is the EM-Dat[9] from the Catholic University of Louvain, Belgium, which logs large disasters reported by national authorities when these appear in the international spotlight. In Uruguay, the SINAE (National Emergencies System) is responsible for recording and systematizing all information regarding the events and their impacts through Departmental Committees. In Argentina, information is not centralized and depends on the records taken by each municipality independently.

For the largest cities of the Project in both countries, Chart No. 2 shows the amount of people displaced (evacuation or self-evacuation) due to successive floods occurring every 3-7 years, in a period of just over three decades (from 1983 to 2015). Concordia is presented as the most affected during the entire period together with Paysandú and Salto, with about 17,000 affected in 1983. It is

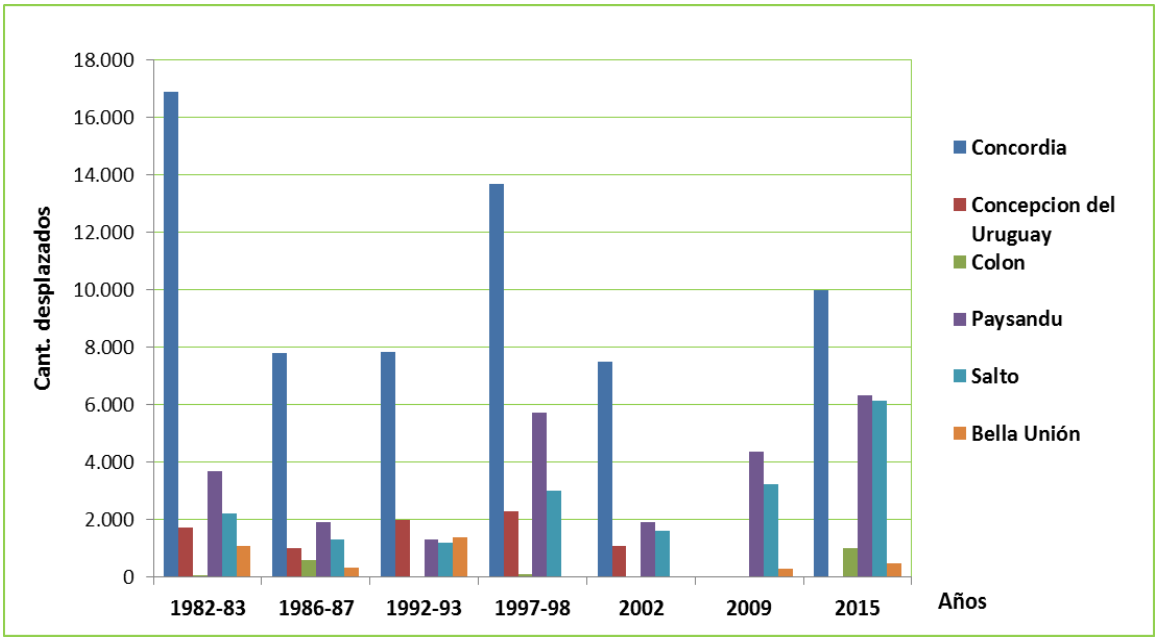
[8] Desinventar https://online.desinventar.org

[9] Em-Dat https://www.emdat.be/

not only about the amount of people that need to leave their houses behind, but also the recurrence of those floods, which hints at the size of the economic damage and social impact they bring about.

Chart No.2: Quantity of people displaced (evacuation and self-evacuation) during large floods of the Uruguay river

Source: prepared by the authors based on Desiventar and SINAE information.



Typically for both countries, hydrometeorological events are the most damaging ones. In Uruguay, such events represent 73% of the actions of the National Emergencies System (SINAE). According to EM-DAT database for Argentina, between 1970 and 2015, 93% of large disasters were hydrometeorological in nature (floods and landslides due to heavy rain) affecting 14 million people and causing losses for USD 10 billion. Argentina was on the Top10 of countries affected by large disasters during 2016 with USD 1,000 billion (EM-DAT, 2016).

This context accounts for the need to consider actions of climate change adaptation oriented to disaster risk reduction.

4. Climate Threats

4.1. Natural physical characteristics and current climate situation

The area of implementation of the Project is located in the low basin of the Uruguay river (middle section), a transboundary watercourse with a drainage basin over the territories of Argentina, Brazil and Uruguay, covering an aggregate surface area of about 339,000 Km2 and average flow rate of 4,500 m3/s. The Uruguay river has its headwaters at Sierra do Mar (Brazil), flowing along 1,800 km until its outlet in the Rio de La Plata. A 32% of its course flows through Brazilian territory, 38% forms the Brazil-Argentina boundary and a 30% forms the Argentina-Uruguay boundary.

The area's geomorphology is a homogenous relief without high altitudes, creating meandering waterways which frequently overflow, this being one of the main hydro-climatic threats enhanced by the effects of the climate change. Upstream of the Project area, the river features numerous rapids, waterfalls, and its shores have high banks.

The region's climate is of a humid temperate type, and the vast catchment basin of the Uruguay river is located in areas characterized by 2,000 mm/year rains in winter and spring, ranging from 70 mm to 132 mm in the region under study. The tropical and subtropical portion of South America typically features the South American Monsoon system, a seasonal atmospheric circulation system in South America and adjacent Oceans, controlled by seasonal solar radiation with a strong influence in the hydro-climatic regime of La Plata basin. One of its main characteristics is a defined annual life cycle of precipitation over the largest portion of the basin with records of maximum values in the summer and minimum values in the winter.

In the region under study, an increase in mean annual precipitation has been recorded from the 1970s. This, on the one hand, fostered the expansion of the agricultural frontier over the west periphery of the traditional wet region, and on the other hand, led to permanent or transient waterlogging of a large number of production fields.

Consistently, there has been a substantial increase in river discharge, and while this brought about benefits for the development of the hydro-electric sector, it also brought about more frequent floods. Likewise, a considerable increase in the frequency of extreme precipitation was recorded in the region, which worsened in the 1990s.

Added to the increase in mean annual precipitation and in extreme precipitation, a series of changes have come about in the basin's hydrology system: the decrease in the infiltration capacity and in the water storage capacity of the soil, the reduction of the volume stored in groundwater layers on account of erosion and compaction resulting from inadequate agricultural practices, planting of exotic species, and the clearing of native vegetation. This translates into an increase in floods at the time of maximum precipitation and an increase in droughts at the time of scarce precipitation.

4.2. Climate Change Scenarios

The anticipated climate change (CC) scenarios for the region can be found in the Third National Climate Change Communication of Argentina (TCNCC Argentina, 2015[1]) and in the National System of Climate Change Risk Maps of Argentina SIMARCC (http://simarcc.ambiente.gob.ar).

Projections anticipate a tendency towards more extreme precipitations, which could lead to an increase in the frequency of river overflow and floods, and thus to unplanned migrations and resettlements, impacts on basic services and environmental services, internal connectivity, access to health care centers and educational institutions, increased health risk on account of vectors and contamination, impacts on primary economic activities in urban fringe areas, and tourist activities, among others.

The Oceans and Atmosphere Research Center (CIMA) of Argentina projects likely changes for the 2020/2040 period through a high-resolution climate model and the outputs of several global climate models, and estimates that high frequency of heavy precipitation and floods in the currently affected areas will continue, with ensuing negative impacts (physical, economic, social and environmental).

The above mentioned communication (TCNCC Argentina, 2015) prioritizes, for the design and application of adaptation measures, the increase in mean annual precipitation for almost all Argentina's territory (particularly the Northeast and the periphery of the traditional wet region), as well as the increase in extreme precipitation over a large portion of the country's East and Center, as shown in T**able 1.** The results show an increase in precipitation and temperature for the Uruguay river lower basin.

Table No. 1. Results of regional climate model ETA (10 km) for future scenarios (compared with 1961 – 1990 period). Source: CIC

Macro Basin	Precipitation			Temperature		
	Periods					
	2011-2040	2041-2070	2071-2100	2011-2040	2041-2070	2071-2100
Upper Paraguay	Decreases all year	Decreases DJF	Decreases DJF	Increases all year >2°C DJF>3.5°C	Increases all year >3°C	Increases all year >3°C DJF>4°C
Lower Paraguay	Decreases SON-DJF	Increases MAM	Increases MAN-SON	Increases all year >2°C	Increases all year >2.5 °C	Increases all year >2.5 °C
Upper Paraná	Decreases all year	Decreases DJF	Increases MAM-JJA-SON	Increases all year >2°C	Increases all year >2°C	Increases all year >2.5 °C
Lower Paraná	Increases MAM-DJF	Increases MAM-DJF	Increases MAM-DJF	Increases all year >2°C	Increases all year >2°C	Increases all year >2.5 °C
Upper Uruguay	Increases MAM-SON	Increases MAM-JJA-SON	Increases all year	Increases all year >2°C	Increases all year >2.5 °C	Increases all year >2.5 °C
Lower Uruguay	Increases DJF	Increases JJA-DJF	Increases MAM-DJF	Increases all year >1°C	Increases all year >2°C	Increases all year >2.5 °C
Río de la Plata	Increases DJF	Increases DJF	Increases MAM-DJF	Increases all year >1°C	Increases all year >2°C	Increases all year >2.5°C

According to the studies conducted for Uruguay's Fourth National Communication, based on the best suitable global climate models (CMIP5, IPCC 2013) with socio-economic RCPs forcing, and the generation of AR5 climate models (IPCC 2013), for the 1979 – 2005 and 2001 – 2014 periods, the following is observed for Uruguay's territory:

a. the evolution of the change of the mean annual temperature on ground level has a similar behavior until 2030 (+0.5 °C) for both scenarios (RCP 4.5; RCP 8.5). However, increases by +1.0 °C for scenario RCP 4.5 and by +1.5 °C for scenario RCP 8.5 have been anticipated for year 2050.

b. concerning the evolution of the change of the mean annual precipitation conditions for the country, slight increases under scenario RCP 4.5, and increases by +0.10 to +0.15 mm/day for 2030 are expected; whereas under scenario RCP 8.5 values of +0.15 to +0.20 mm/day are expected to be recorded for 2050.

Projections suggest the number of days with frost will decline, the number of temperate nights will increase significantly, the duration of the heat waves will rise, and precipitation will be significantly more intense. Extreme events (intense rain and winds, storms, hail, etc.) will continue to be more frequent. According to global and regional based predictions, these events are also expected to get more frequent and intense over time.

Regardless of climate change projections presented by Argentina and Uruguay in their National Communications, and climate change projections developed for the La Plata Basin, other relevant studies corroborate that future climate change projections will increase the threat of flooding in the Uruguay river due to higher mean and extreme flows for more precipitation and more extreme events: CEPAL with the support of UKAID, AECID, Cooperation from the EU, Germany and Denmark, and the IADB (Barros, Vicente "Escenarios hidrológicos de flujos medios en los ríos Uruguay y Paraná ", CEPAL 2013.) developed climate change scenarios for the flow of the Uruguay river using temperature and rain PRECIS climate projections.

These scenarios showed increases in the mean flow by 33%, under B2 emission scenario in the 2016-2026 period, and up to a 57% increase in A2 emission scenario for the 2091-2100 period, in relation with the 1990-1999 period.

Another research, conducted by Inés A. Camilloni, Ramiro I. Saurral and Natalia B. Montroull in 2013 on "*Proyecciones hidrológicas de inundaciones fluviales en el Uruguay y cuencas del Paraná bajo diferentes escenarios de cambio climático*" [Hydrological projections of river overflows in the Uruguay river and Parana basins under various climate change scenarios], published by the International Journal of River Basin Management (11:4, 389-399) included projections on ten-year frequency of 24-hour events with water levels above the evacuation threshold at Paso de los Libres under B2 and A2 emissions scenarios according to the VIC model with the forcing results of the PRECIS model without deviations.

These hydrologic scenarios of the Uruguay river show such an increase in the frequency of flood events that by 2091-2100 floods will almost double those of the period of reference (1990-1999).

Furthermore, during some decades, floods will be more frequent in low-emission scenarios (B2) (2026-2035, 2046-2055 and 2091-2100) than in high-emission scenarios (A2).

5. Sensitivity to Climate Change

Next the indicators selected to prove Sensitivity to Climate Change are addressed for each city: Population with UBN; Dependency of Children and of the Elderly; and lastly information on Informal Settlements.

5.1. Population with Unsatisfied Basic Needs (UBN)

To measure the latest poverty conditions, some indicators available for both countries, other than UBN, are worth mentioning. For the second half of year 2017, 27.5% of the Argentinean population was deemed poor. In Concordia, one of the cities measured by the Permanent Household Survey (EPH Encuesta Permanente de Hogares) and part of this project, 36% of its population was below poverty line, and 4.8%, below indigence line (EPH INDEC, 2017), thus being one of the country's five poorest urban centers. In Uruguay, for the same period, the estimation was 5.2 %, with Montevideo (7.3%) being the region with greatest incidence of households below Poverty Line (LP), right alongside the departments of Artigas (which includes the municipality of Bella Unión, part of this project) and of Rivera, with levels in excess of 8% (EPMI, 2018).

Having stated the above, there follows the UBN in the project's cities according to 2010 and 2011 Censuses, as shown in Table No. 2.

Table No.2: Cities stated as percentages of Unsatisfied Basic Needs (UNB) over total population

Source: Prepared based on INDEC, 2010- INE, 2011

Country	Cities	Population	With UBN	%UBN	Scoring
Argentina	Concordia	167,274	32,585	19.5	9
	Concepción	99,726	8,691	8.7	7
	Colón	61,526	6,401	10.4	8
Uruguay	Salto	104,166	49,728	47.7	9
	Paysandú	86,708	34,263	39.5	8
	Fray Bentos	25,368	9,337	36.8	7
	Bella Unión	17,379	10,407	59.9	10

	Nuevo Berlín	2,450	996	40.7	7
	San Javier	1,781	550	30.9	5

SCORING Population with UBN	
Argentina	**Uruguay**
>15%: 9-10	>47%: 9-10
7-14%: 6-8	32-46%: 6-8
<7 %: 5	< 31%: 5

Country-wide, for the 2010 census, the UBN indicator for Argentina is 12.5% over total population, and for the province of Entre Rios, 11.3%. In Uruguay, UBN is higher, with 33.8% over total population, according to 2011 Census. The differences of index construction between the countries must be taken into account.

Concordia shows the highest value of the three Argentine cities, with 19.5% of its population with UBN, followed by Colón and Concepción. For the case of Uruguay, the city of Bella Unión, with 59% of its population with UBN, has the highest value, followed by Salto, Nuevo Berlín and Paysandú.

5.2. Dependency of Children and Elderly Population

Dependency ratios for passive ages above active ages[10] show high dependency in small cities of San Javier and Nueva Berlín. This would mean a substantial number of people in the more vulnerable age groups – children and the elderly – in those places. Secondly, there is a similar tendency in Paysandú, Fray Bentos and Salto. In contrast, Concordia, Fray Bentos, Colón and Concepción show a stronger dependency of children, that is those cities have a younger population structure. **Table No. 3** shows the above ratios.

Table Nº3: Cities per Children and the Elderly Dependency Ratio w/ Total Working Population

Source: Prepared based on INDEC, 2010- INE, 2011

Country	Cities	Children DR	Elderly DR	Total DR
Argentina	Concordia	46.7	13.1	59.8
	Concepción del Uruguay	39.9	18.6	58.5
	Colón	39.6	18.1	57.6
Uruguay	Salto	43.2	19.1	62.3
	Paysandú	41.0	22.3	63.4
	Fray Bentos	44.5	20.2	64.7
	Bella Unión	42.0	17.3	59.3
	Nueva Berlín	46.3	20.1	66.4
	San Javier	49.6	24.5	74.0

[10] Note: The potential dependency ratio reflects the number of people potentially not working, who would need be supported by the total of the potentially working population.
Ratio of total potential dependency: share of population under 15 years of age and older than 64 years of age in relation with population from 15 to 64 years, by one hundred.
Ratio of potential child dependency: share of population under 15 years of age in relation with population from 15 to 64 years, by one hundred.
Ratio of potential elderly dependency: share of population of 65 years and more in relation with population from 15 to 64 years, by one hundred.

SCORING	
The elderly population	**Children population**
>30:9-10	>60:9-10
30 to 21:5-8	30 to 49:5-8
<21:5-1	<30:5-1

5.3. Families in informal settlements

The presence of informal settlements in cities points at those social sectors more vulnerable and exposed to climate change. The informality refers to multiple aspects. It is not only their location outside urban regulations, but also the lack of basic services of water, sanitation, and power, to which access is possible in many cases through illegal connections. It is also about housing with low-quality material and crowding conditions for the dwellers. Furthermore, in most cities, Settlements are located in flood prone areas, with no value in the real estate market, being the first affected when a flood or strong storm hits.

According to surveys conducted by municipal authorities, Argentinean cities Concordia and Concepción are the ones with the largest number of families (according to the records) in housing informality, followed by Colón, as shown in T**able No.4.**

Presently in Argentina, there is no one direction in that regard. However, design of policies within the Ministry of Social Development has begun, with the National Register of Informal Settlements[11], together with an incipient Plan of Social Housing of the Home, Public Works and Housing Ministry[12]. Another program present, currently executing a housing plan jointly with the municipality of Colón - 70% funds from National government and 30%, municipality – is the National Program of Water Emergency (IADB loan) for the relocation of 80 families in flood-prone areas of stream Artalaz surrounding the city. In other cities, for the time being, actions are being defined in that regard with the national programs available.

Table No. 4: Cities per number of families in informal settlements

Source: Prepared based on information of local governments

Country	Cities	Families in settlements
Argentina	Concordia	1300
	Concepción del Uruguay	600
	Colón	80
Uruguay	Salto	666
	Paysandú	372
	Fray Bentos	0
	Bella Unión	0
	Nueva Berlín	0
	San Javier	34

[11] National Register of Informal Settlements
https://www.argentina.gob.ar/barriospopulares/mapa
[12] Social Housing Plans
https://www.mininterior.gov.ar/viviendayhabitat/pdf/Promocion%20de%20la%20Vivienda%20Social.pdf

SCORING Families in informal settlements
>1000 : 9-10
500 to 999: 6-8
< 499: 5

In Uruguay there has been a National Housing Plan since 2005, which has consolidated through five-year programs. The 2015-2019 Housing Five-Year Plan of the MVOTMA defined priorities to consolidate policies that help generate sustainability conditions and continue the processes to reverse housing precariousness from a right-to-the-city perspective. This way, the MVOTMA and Departmental Governments created housing plans to relocate population from flood-prone areas and contaminated sites. Those initiatives are executed with national budget and supplemented with funding from the Inter-American Development Bank through the OPP – Office of Planning and Budget – of the Presidency of the Republic.

Fray Bentos and Nueva Berlín have recently executed a relocation plan from flood-prone areas with housing plans. Similarly, in Bella Unión, in barrio Las Láminas, 290 social houses were inaugurated last year[13], resulting from relocations. Paysandú is going through a similar process, where in addition a work restructuring plan is in place, as is Salto, with a fewer number of families.

5.4. Scoring. Sensitivity

When comparing the different conditions of the cities, each indicator is assigned a score from 1 to 10 according to the values used to categorize. For example, the higher the value of UBN, the score assigned will be higher. The same applies to all other indicators. A Sensitivity level is assigned to the aggregate of those values in ranges: low-medium- high. **Table No.5** shows this analysis: none of the cities under study feature low Sensitivity. Rather, they feature high Sensitivity: Concordia, Paysandú and Salto, with the rest of the cities featuring medium level.

Table No.5: Level of Sensitivity to Climate Change per city (Sensitivity indicators and scoring)

Country	Cities	Population with UBN	The elderly dependency	Children dependency	Families in informal settlements	TOTAL	Sensitivity level
Argentina	Concordia	9	5	8	9	**31**	**High**
	Concepción	7	5	7	8	**27**	**Medium**
	Colon	8	5	7	5	**25**	**Medium**
Uruguay	Salto	9	5	7	8	**29**	**High**
	Paysandú	8	7	7	8	**30**	**High**

[13] https://www.elpais.com.uy/informacion/inauguran-viviendas-barrio-laminas.html

	Fray Bentos	7	5	7	1	**20**	**Medium**
	Bella Unión	10	5	7	1	**23**	**Medium**
	Nuevo Berlín	7	5	8	1	**21**	**Medium**
	San Javier	5	9	8	5	**27**	**Medium**

REFERENCES

Population with UBN		The elderly population	Children population	Families in informal settlements	TOTAL SENSITIVITY INDEX
Argentina	**Uruguay**				
>15%: 9-10	>47%: 9-10	>30:9-10	>60:9-10	>1000 : 9-10	**>29-40 High (S3)** **15-28 Medium (S2)** **<14 Low (S1)**
7-14%: 8-6	32-46%	30 to 21:5-8	30 to 49:5-8	500 to 999: 6-8	
<7 %: 5	< 31%	<21:5-1	<30:5-1	< 499: 5	

6. Adaptive Capacities

As mentioned in the methodology section, climate change adaptive capacities for the purposes of this analysis mean those instruments of public management related to planning, risk preparedness, and resilience-building in the cities.

6.1. Risk Maps

These are a valuable instrument in territorial planning and in emergency preparedness even more so when it builds on knowledge of the community residing in the areas with risks.

The availability of risk maps varies widely depending on the country, thus reflecting the public policies that require such maps. Whereas Argentina has not any public policy requiring and developing risk maps, in Uruguay, they are part of the National Waters Policy defined by Law No. 18610, (2009) of the National Water Directorate (DINAGUA) under the MVOTMA. Also, the Law of the National Emergency System (SINAE) (Law No. 8621, year 2009) fosters this instrument. Risk mapping and subsequent technical validation with the departments and cities is promoted together with processes of territorial planning or planning of urban waters being developed in the different towns. Such mapping seeks to conform criteria of new paradigms and move away from the definition of a flood-prone area to that of risk areas. This means replacing the definition provided in the Act of Population Centers (Law No. 10723, year 1946) whereby a flood-prone area is defined by the maximum flood level known plus 50 cm through probabilistic criteria and the use of a return period as threshold parameter. Besides, special attention is paid to zoning vulnerability and exposure components. Flood risk maps are built in Local Land Management and Sustainable Development Plans. The 100-year RT line is included in the National Directives of Land Management as a limit to authorize specific actions within the city. For the case of the shoreline of the Uruguay river, the Uruguayan Delegation of the Joint Technical Commission (CTM) of Salto Grande, was requested to calculate it based on the lines defined in its PADE.

For Argentina, water resources are subject to the provinces after the 1994 Constitutional Reform. Therefore, the definition of the shoreline and the Waters Code is defined by each province. In Entre Ríos, law Nº9008, 1996, was enacted to define and outline the shoreline as well as to obtain water risk maps (that is, the threat) for rivers Paraná, Uruguay, plus inland water courses of the Province fit for navigation. The objective was to have instruments in place capable of outlining restricted areas. Even though it was only a start, the Law was not regulated, and thus mapping and zoning have not taken place.

Bearing in mind the above, the cities of Concordia, Concepción and Colón do not have an official risk map in place. Rather, under this project, the province's Secretariat of Environment identified areas with UBN, building on maps of flow rate lines furnished by Salto Grande (PADE). With the purpose of assessing this instrument as an Adaptive Capacity, scoring was 1 (one-low). **See Table Nº6**

Today, Uruguayan cities, except for Fray Bentos, have risk maps developed by DINAGUA, and with technical validation by the Departments. Therefore, scoring is 7 (seven-high). In the case of Paysandú, in addition, workshops to validate the map with the community have been held, that is why, this is deemed an even bigger achievement, and scoring as Capacity is even higher, 9 (nine-high). Independently of these meaningful steps, it is necessary to strengthen this process sustainability in terms of updating mechanisms; technical training; communication with the community; and their use in different aspects of risk management (taxes, insurance-compensation, contingencies, etc.)

Risk maps proposed by DINAGUA build on the overlapping of information on threat, vulnerability and exposure. The result is fourfold zoning from higher to lower risk: high, medium, low and potential risk.

"The proposals typically take into account whether in the area there are already incompatible uses (existing risk). In those cases, two zones are defined: one of high risk (red zones) where the transformation of the territory is proposed based on a specific action program, which may entail relocation, housing demolition, forestation, or other measures. And zones of medium or low risks (yellow zones) where mitigation measures are proposed, including retrofitting of housing stock (internal sanitation and electricity), promotion of early warning system, among others. For areas not developed under pressure of occupancy (potential risk), preventive measures are proposed to avoid occupancy, promoting compatible uses with water, keeping it in a natural rural category. This map is built in the definition of the use and occupancy categories of the Local Plan" [AC1].

Table No. 6: Adaptive Capacities – Scoring: Availability of Risk Maps

Country	Cities	RISK MAPS
Argentina	Concordia	1
	Concepción del Uruguay	1
	Colón	1
Uruguay	Salto	9
	Paysandú	9
	Fray Bentos	6
	Bella Unión	7
	Nueva Berlín	7
	San Javier	7

Categories: None available: 0 /Only draft available: 1-3/ In process of development: 4-6/Official version available 7-8/ Available and in process of Community validation: 9-10

6.2. DRR-driven Land Management Plans

In Uruguay there are consolidated regulations connecting territorial planning with climate change. In the year 2008, the Land Management and Sustainable Development Law (LOTDS) (Law No. 18308) became effective, fostering local land management plans to include risk maps in line with the National Water Policy. This policy defined by Law No. 18.610, section 17, states that all public institutions responsible for developing and/or executing development plans, sectoral strategic plans and/or land management plans, whether at the national, department or local scales, shall include mandatory planning, analysis and zoning processes of threats and risks so that objectives, policies, plans, programs and projects arising from such process should allow for any necessary actions or resources to reduce any identified risks and see to emergencies and disasters stemming from them. The cities and instruments already effective are:

- Local Land Management and Sustainable Development Plan for the city of Paysandú, and its Micro-region,
- Land Management and Sustainable Development Plan for the city of Salto and its Micro-region
- Local Plan of Fray Bentos and its area of influence (Risk map, still being developed)
- Local Plan of Bella Unión
- Local Plan of Nueva Berlín and San Javier (undergoing validation)

Local plans define criteria with a greater detail than Department's directives. Local plans regulate land uses, the location of different socio-economic activities, services, infrastructure and housing. Go to http://sit.mvotma.gub.uy/listainstrumentos/PlanesLocales for consultation.

Score for the comparative analysis of Capacities is 8 (eight) for Uruguayan cities, because even though the risk and climate change perspective has been built in, the technical and financial mechanisms still need consolidating before they can be implemented and updated on an ongoing basis.

In Argentina, from 2004 till 2011, the Territorial Strategic Plan (PET) took place, which defined infrastructure projects across the country and factored in the disaster risk reduction issue, serving as guide for the provinces when conducting their plans. In turn, the provinces should encourage the cities to do the same. However, not being backed by a National regulation – bills have been drafted but none of them has been enacted[14]-, regulations differ from one province to the other, and also from one city to the other. In most cases, the provisions of the Urban (or Territorial) Management Codes or Land Use Zoning should be backed by a plan. This is not the case for every city. At provincial scale, in Entre Ríos, there are the Territorial Strategic Plan[15] and the Municipal Organization Law (2011) of the province of Entre Ríos, which specify that the cities are responsible for managing and planning their territory with a perspective of sustainable development, with the only obligation of Zoning Uses. The cities included in this project have the following plans and regulations in effect:

- 2008 Plan of Territorial Development, Urban Projects and Management Instruments of Concordia /2014 General Plan of Urban Management / 2004 Urban Management Code.
- 2009 Strategic Plan of Concepción del Uruguay 2009 /Code of Urban Management
- Planning for Environmental Urban Development of Colón, Argentina, 2011 / 2013 Code of Urban Management.

The three plans combined mention the environmental issue, but it is restricted to the definition of green areas, waste management and contamination. As regards issues such as floods, the problem of the flood line is mentioned for some sectors, but without further development. Taking into account this information, and given that some of them are outdated or do not address the risk and climate change issue, they simply cannot be deemed useful instruments for adaptation. Therefore, the scoring for those cities is low, between 1 and 4. See **Table No. 7.**

Table No. 7: Adaptive Capacities - Scoring: DRR&CC Land Management Plans (POT)

[14] http://www.cafedelasciudades.com.ar/planes_96_1.htm

[15] https://www.entrerios.gov.ar/ambiente/index.php?codigo=&cod=1109&codtiponoticia=1&noticia=ver_noticia&modulo=noticia

Country	Cities	RISK & CC POT
Argentina	Concordia	3
	Concepción del Uruguay	4
	Colón	1
Uruguay	Salto	8
	Paysandú	8
	Fray Bentos	6
	Bella Unión	7
	Nueva Berlín	6
	San Javier	6

Scoring categories: No Plan Available: 0 /Outdated Plan in terms of "floods": 1-3 /Updated Plan in terms of "floods": 4-6 / Risk & CC Plan: 7-10

6.3. Early Warning System (EWS)

At meetings held with national, departmental, and municipal authorities, and with beneficiaries of the intervention projects during the Mission (late July and September 2018), a consultation on the components of an EWS was conducted. From such consultation the following derived:

-As regards components of risk information and monitoring, departmental authorities have access to cartography on flood levels of the Uruguay river as modelled by the CTM for the PADE (the Action Plan during Emergencies) of Salto Grande. Recurrence times (RT) for Uruguay's shoreline and the elevation or height above ground level that could be reached by floods for both countries are included therein. With that baseline information, DINAGUA mapped the above mentioned risks.

For the monitoring of the hydrologic situation there are daily reports by the CTM-Salto Grande[16], including the anticipated operation of the dam, and the forecasting of river levels at different points downstream. The Hydrology Division of the CARU - Uruguay River Administrative Commission (*Comisión Administradora del Río Uruguay*) – runs a real-time mathematical model of floods that helps understand water rise levels and water rise time periods, with the resulting flood maps. Recently, the CTM has launched an app for phones with warnings. Information from some automatic gauging stations is provided by the CARU[17] and by Argentina's Coast Guard, with a monitoring network readily legible in the web for the general public and the authorities[18]. Besides these institutions, in Argentina, the National Water Institute (INA - Instituto nacional del Agua -) with the Hydrologic Alert of the La Plata Basin carries out a forecast and surveillance system with weekly reports[19].

As regards meteorological matters, there are the alerts issued by Argentina's National Weather Service (SMN - *Servicio Meteorológico Nacional*), and those of Uruguay's National Weather Institute (INUMET - *Instituto Nacional Uruguayo de Meteorología*), which draw information for forecasting from Brazilian and Argentinean radars. Both institutes are nation-wide and their warnings air through different mass media, in addition to preventive forecast sent out under restricted circulation to provincial Civil Defense agencies and/or Hydraulic Offices (Entre Ríos) and SINAE (Uruguay) for preparedness.

[16] Press Releases Salto Grande https://www.saltogrande.org/docs/hidrologia/CaudalesNiveles.pdf?

[17] CARU http://190.0.152.194:8080/alturas/web/app.php/user/alturas

[18] River monitoring Argentina Coast Guard http://sitiowcontingencia.prefecturanaval.gov.ar/alturas/index.php

[19] INA's Monitoring of the La Plata Basin https://www.ina.gov.ar/legacy/alerta/index.php

Even though hydrologic forecasting instruments and models may be perfected, Information and Monitoring components that make up an EWS are sufficient and available for all riverside cities from both countries.

- *Communication and Response*: according to representatives of the Departmental Emergency Committees of the SINAE-Uruguay, coordination and communication with the CTM in the face of floods works and allows to evacuate in time. The CTM contacts directly the SINAE, and in turn the SINAE contacts the Departmental Committees to alert their population. Each Departmental Emergency Committee is bound (by law of the SINAE) to develop plans and protocols of action for flood related emergencies. The warning allows to go "door-to-door" in the areas to be affected. In Paysandú, for example, this was orally corroborated by the communities in risk areas. In the rest of the project's cities, coordination among Departmental agencies of the SINAE and the cities is also enough and allows to send out a warning and response in time to evacuate. In Bella Unión (Artigas), as mentioned in an another section of the project, to fulfill the warning actions it is necessary to refurbish an evacuee reception center for the population in risk areas classified as "red" (according to DINAGUA risk map), that is, highly vulnerable areas. In Salto, however, consultation with the community in the risk areas showed the absence of warning and information on the phenomena of "enchorradas" (flash floods on account of rainfall) of streams Sauzal and Ceibal.

In the case of Argentina, the CTM contacts the Civil Defense agencies or the heads of municipal governments before discharging more water, reporting elevations the water can reach with time enough to evacuate. Entre Ríos' Civil Defense is also in touch with the CTM and is responsible for verifying the information reaches the municipality.

In the case of Concepción del Uruguay, it has been reported that even though the Head of the Municipal government and the rest of the cabinet make up the Defense Civil Board, as requested by the applicable regulation (Provincial Executive Order No. 1724/1973), coordination is not good enough. Therefore, the development of contingency plans is necessary as well as any formal actions this may entail. In Colón, for example, a specific area devoted to launching the warning and the response has not been created. However, whenever the CTM warns the Head of the municipal government of a flood, the help of the Firefighters and the Area of Social Action of the municipality is summoned as these have the families listed that need be evacuated depending on the water level of the river, to start warning. In both cases, residents consulted stated that warning came mainly through the radio, through other residents and through firefighters or municipality staff. They also rely on the Coast Guard web that provide station readings. In the case of Concordia, there is a protocol in place to respond to CTM warnings containing elevation values subject to flooding, with sufficient time to let the population know. Even though the cooperation among areas of the municipality, Firefighters, Army, among others, is deemed good enough, with time to anticipate, they need to coordinate and provide more reception centers for evacuation purposes.

Bearing in mind the above, the score for Uruguayan cities is assigned considering all EWS components are operational, with some aspects to improve, though, on a case by case basis (8-eight), particularly that of communication in Salto. For most Argentinean cities, score is assigned considering it is necessary to reinforce formal mechanisms of Communication and Response (5-five). See **Table No. 8.**

Table No. 8: Adaptive Capacities – Scoring: Early warning

Country	Cities	EARLY WARNING
Argentina	Concordia	7
	Concepción del Uruguay	5
	Colón	5

Uruguay	Salto	8
	Paysandú	8
	Fray Bentos	8
	Bella Unión	8
	Nuevo Berlín	6
	San Javier	6

Scoring categories: None of the components available: 0/ Only Monitoring / Flood map available: 2-4 /No formal mechanisms of Communication and Response available: 5-6/ No formal response mechanism available: 7 /All components available: 8-10

6.4. DRR (Disaster Risk Reduction) Preparedness

In Uruguay, the law creating the National Emergency System in 2009 (Law No.18621/09) in the sphere of Presidency, appoints SINAE as responsible for risk management throughout its stages, with an integral view. SINAE is not only a liaison in the face of disasters coordinating different spheres of the State, but also promotes strategies to reduce, prevent, mitigate, assist, prepare for, step in, restore and recover, being also responsible for evaluating the stages as a whole. That is, SINAE's objective is to mainstream risk reduction into the different sectors of the State.

SINAE's territorial strategy is embodied in the Departmental Emergency Committees with a Coordinator in each Department. Thus represented, actions are coordinated by the Departments with the cities for each type of contingency. Within each Department and city, coordination reaches inside the entire Cabinet or Staff. The Department with greatest coordination, given the progress made in various aspects (prevention, warning and response) is Paysandú. Even though it may be considered that Departments' capital cities are covered by the Departmental Committees, the challenge is to develop local Committees to integrate the third level of government in Uruguay (the municipalities).

In Argentina, the National System for Comprehensive Risk Management was created in 2016 (Law No. 27287)[20], and the Secretariat for Integral Treatment of Catastrophes and Civil Protection, under the National Ministry of Security, was appointed as application authority. Even though the SINAGIR – the National System for Comprehensive Risk Management – has been created with a cross-cutting perspective, its role has been more connected with response, being in the sphere of a ministry which traditionally housed Civil Defense. However, nowadays efforts are being devoted to developing the National Disaster Risk Reduction Plan integrating several agencies of the National State and encouraging the provinces to adhere to the System. Federal meetings of the SINAGIR invite the Civil Defense Service of each Province. However, the province of Entre Ríos has not changed yet the approach to the issue.

Cities included in the project feature response preparedness with presence of staff devoted to Civil Defense, with little coordinated actions with other areas except for Social Development or Social or Health Policies at the time of performing evacuations. This approach is far from a cross-cutting perspective related to risk reduction and disaster prevention. That is why scoring goes from 4 to 6 (four to six) in all cities depending on the level of response preparedness. See **Table No.9.**

As we mentioned in the starting point, an example of cross-cutting work internationally acclaimed is the municipality of Santa Fe (Argentina). In year 2008, a Municipal Risk Management System was

[20]Law creating the SINAGIR http://servicios.infoleg.gob.ar/infolegInternet/anexos/265000-269999/266631/norma.htm

created reporting to the Head of the Municipal Government, thus coordinating actions with all areas of the Cabinet (Ordinance No. 11512)[21].

Table Nº9: Adaptive Capacities-Scoring: DRR Preparedness

Country	Cities	DRR PREPAREDNESS
Argentina	Concordia	6
	Concepción del Uruguay	4
	Colón	4
Uruguay	Salto	9
	Paysandú	7
	Fray Bentos	7
	Bella Unión	7
	Nueva Berlín	7
	San Javier	7

Scoring categories: only Firefighters or any area devoted to Response with no coordination with other areas (1-5); area available devoted to Response coordinated with the rest of the Cabinet (6-7); in process of mainstreaming risk in programs and/or plans of different municipal areas other than Response (8-10).

6.5. Recovery Funds

Funds to redress damage sustained by families, shops, businesses, etc. come from the national and/or provincial governments, in the case of all local governments involved in the project. The possibility of redressing damage after a flood is out of the cities' reach. This means more paperwork for the governments, deferring solutions and without the chance of assisting their "flooded" population promptly. Even during response, in many cases, such assistance may exceed the capacity of the local government.

There are initiatives in Argentina – in Project stage still – of creating municipal recovery funds, such as that of San Antonio de Areco (Province of Buenos Aires) withholding a minimum percentage of the municipal rates to set aside a reserve for hydrometeorological contingencies.

On the other hand, in June 2017, the mayors of the cities of Entre Rios along the Uruguay river came together to claim for compensations from firm Salto Grande on account of the floods of that year. As a result, a letter was presented to both governments to be submitted to the company of the hydroelectric power plant.

Scoring of Adaptive Capacities in this case was the same for all cities. See **Table No. 10**

Table No.10. Adaptive Capacities-Scoring: Recovery Funds

Country	Cities	FUNDS
Argentina	Concordia	3
	Concepción del Uruguay	3

[21] Santa Fe Municipal Risk Management System http://santafeciudad.gov.ar/blogs/gdr/wp-content/uploads/2013/04/ORDE_11512.pdf

	Colón	3
Uruguay	Salto	3
	Paysandú	3
	Fray Bentos	3
	Bella Unión	3
	Nueva Berlín	3
	San Javier	3

None available: 0 / Dependent on Nation-Prov funds: 3 / Local government funds and Nation-Prov.support: 5 /Local government fund available: 10

6.6. Adaptive Capacities Scoring

To sum up, as shown in **Table No. 11**, the analysis evidences the strengths of the several regulatory, land management and risk reduction instruments implemented by the Uruguayan State, made available for the cities as climate change adaptive capacities. As a result of the scoring, all cities show a medium adaptive capacity except for Paysandú, which stands oud for having enhanced capacities. Conversely, for Argentinean cities, the instruments examined would hint at a low adaptive capacity for the three cities of the project.

Table No.11. Adaptive Capacities – Total Score per city

Cities		RISK MAP	DRR & CC POT	EARLY WARNING	DDR PREPAREDNESS	RECOVERY FUND	TOTAL	Resulting Adaptive Capacity
ARGENTINA	Concordia	1	3	7	6	3	20	Low
	Concepción	1	4	5	4	3	17	Low
	Colón	1	1	5	4	3	14	Low
URUGUAY	Salto	9	8	8	9	3	37	High
	Paysandú	9	8	8	7	3	35	High
	Fray Bentos	6	6	8	7	3	30	Medium
	Bella Unión	7	7	8	7	3	32	Medium
	San Javier	7	6	6	7	3	29	Medium
	Nuevo Berlín	7	6	6	7	3	29	Medium

REFERENCES Valuation of adaptive capacity:	
>34	High (CA3)
17-33	Medium (CA2)
<16	Low (CA1)

7. Vulnerability Index

Given the high sensitivity and the low capacities, Argentinean cities feature High Vulnerability to climate change (See **Table No.12**). For the case of Uruguay, large cities such as Paysandú and Salto are also highly vulnerable according to this analysis. Even though the former has a high adaptive capacity, it also has a high level of sensitivity. For the rest of the Uruguayan cities, the vulnerability levels are intermediate.

Table No.12. Climate Change Vulnerability Index per cities

Country	Cities	S	CA [Adaptive capacity]	Vulnerability
Argentina	Concordia	S3	CA1	**V3 (High)**
	Concepción	S2	CA1	**V3 (High)**
	Colón	S2	CA1	**V3 (High)**
Uruguay	Salto	S3	CA3	**V2 (Medium)**
	Paysandú	S3	CA3	**V2 (Medium)**
	Fray Bentos	S2	CA2	**V2 (Medium)**
	Bella Union	S2	CA2	**V2 (Medium)**
	San Javier	S2	CA2	**V2 (Medium)**
	Nuevo Berlin	S2	CA2	**V2 (Medium)**

Sensitivity: Low =S1 Medium= S2 High= S3
Adaptive Capacity: Low= CA1 Medium=CA2 High=CA3
Vulnerability V1=Low V2=Medium V3=High

8. Exposure Index

To analyze Exposure, a 100-year recurrence time flood Threat is taken into account for Uruguay, and the Q 90,000 m3 discharge line of Salto Grande, for Argentina, subject to two indicators: population below the flood water level, and land use regulation for flood areas.

8.1. Population in flood-prone area

An analysis was conducted with official information provided by DINAGUA (Uruguay) in its risk maps for each city. For the case of Entre Ríos, such information was provided by municipal authorities and/or was inferred visually connecting census block groups (INDEC, 2010) and flood lines of Salto Grande. The amount of population exposed for each city is included in **Table No. 13** below.

Table No.13: Population in flood-prone area and scoring

Country	Cities	Population	Population in flood prone areas	% flood prone area	Exposure score
Argentina	Concordia	167,274	11,843	7.08	10
	Concepción del Uruguay	104,166	5,208	5.00	5
	Colón	61,526	2,695	4.38	5
Uruguay	Salto	104,166	9,469	9.09	10
	Paysandú	86,708	6,251	7.21	10
	Fray Bentos	25,368	97	0.38	3
	Bella Unión	12,201	1801	14.76	10
	Nuevo Berlín	2,450	14	0.57	3
	San Javier	1,781	32	1.80	3

SCORING Share of population in flood-prone area
Affected population > 7 % = 10
Affected population 4-6.9 % = 5
Affected population < 3.9 % = 3

The cities with largest proportion of population exposed are: Concordia, Salto, Paysandú and Bella Unión, followed by Colón, Concepción, and lastly Fray Bentos, Nueva Berlín and San Javier.

8.2. Zoning of Land Uses below flood level

For the evaluation of this exposure indicator, the Land Use regulations prevailing in flood-prone areas in each city are studied. Scoring arises from the degree in which those land uses create more or less exposure (See **Table No. 14**). However, regulations are not always observed, as is the case of buffer areas near levees occupied by informal settlements, for example, Concordia, where according to Civil Defense, 600 families have settled there, who are frequently evacuated with each flood. Regardless of the actual land uses, the regulation specifies residential land use in most flood areas. That is why scoring is the highest, 10 (ten). Similarly, in Concepción del Uruguay there are families settled in buffer areas near levees, and the prevailing regulations specify urban-residential and industrial land uses connected with the port. Scoring for this city is also high, 9 (nine). In the case of Colón, mixed recreational-tourist and residential land uses prevail in flood-prone areas. Therefore, exposure scoring is lower, 6 (six).

In the case of Paysandú, even though the city has consolidated urban areas in flood zone, the regulations see these areas as areas prone to be flooded, for which reason interventions are necessary. These uses are referred to as “6.5 m elevation urban fringe project” and “stream

reclamation areas" in the south of the city. Besides, a portion of these areas near the stream are undergoing relocation processes of informal settlements. Scoring is eight (8).

In Salto, the areas of the streams that discharge into the Uruguay river and go through the city are described in the regulations as "consolidated urban land with high environmental sensitivity", as are some areas near the shoreline of the Uruguay river described as "non-consolidated urban land with high environmental sensitivity". These uses account for the flooding issue, for which interventions are necessary to reduce such sensitivity. That is why this area is rated with exposure scoring of 8 (eight).

In Bella Unión, the flood line coincides with that of the "right-of-way" accepted by Salto Grande and occupies an entire consolidated urban sector. Therefore, the exposure rating is 8 (eight).

In Fray Bentos, mixed industrial-residential uses are established by the regulations, scoring nine (9). Conversely, San Javier and Berlín, recreational-tourist uses give them a rating of 4 (four).

Table No.14: Zoning of Land Uses in flood-prone areas and scoring

Country	Cities	Land Uses Scoring
Argentina	Concordia	10
	Concepción del Uruguay	9
	Colón	6
Uruguay	Salto	8
	Paysandú	8
	Fray Bentos	9
	Bella Unión	8
	Nueva Berlín	4
	San Javier	4

Nature reserve area: 1-3; recreational-tourist-residential area: 4-6; urban-residential area where exposure is considered by regulations: 7-8 and consolidated mixed industrial-commercial-residential area: 9-10

8.3. Exposure Index Scoring

The result of exposure indicators of the cities can be seen in **Table No.15**. The cities of Salto, Paysandú, Concordia and y Bella Unión are the ones with the highest exposure. This means they have the largest population in flood areas, and in turn, the land use regulation validates the residential use. Only in the case of Salto and Paysandú where there are consolidated urban areas, the regulations contemplate the problem, for which intervention measures against flooding are necessary. The cities of Concepción, Fray Bentos and Colón follow with a medium level. In these cities, the number of population exposed is lesser, population being the prevailing indicator in the result. Lastly, San Javier and Berlin feature a low level of exposure, where the population and the recreational uses of flood prone areas make this rating more patent.

Table No.15 Exposure Levels in Cities

Cities	Population	Zoning of Uses	Total	Exposure level

Argentina	Concordia	10	10	**20**	**High**
	Concepción	5	9	**14**	**Medium**
	Colón	5	6	**11**	**Medium**
Uruguay	Salto	10	8	**18**	**High**
	Paysandú	10	8	**18**	**High**
	Fray Bentos	3	9	**12**	**Medium**
	Bella Unión	10	8	**18**	**High**
	Nuevo Berlín	3	4	**7**	**Low**
	San Javier	3	4	**7**	**Low**

REFERENCES Exposure Index Values:	
>15	**High (E3)**
7-14	**Medium (E2)**
<6	**Low (E1)**

9. Conclusions: Climate Risk Index

To sum up, the analysis conducted so far, when overlapping the valuation results of Vulnerability and Exposure for each city, the result is a climate change risk level, shown in **Table No. 16** below. The cities of Concordia, Paysandú, Salto, Concepción del Uruguay, Colón and Bella Unión have the highest climate change risk, given that these featured high levels in both indexes (vulnerability and exposure). Then, followed by a medium risk level there is: Fray Bentos. Lastly, the smallest cities of Nueva Berlín and San Javier feature a low risk level in the face of climate change compared with the rest of the cities.

A constraint of this analysis to be taken into account is that the risk level is a general value for the entire city, in comparison with the rest of the cities along the river included in the Project and does not account for an absolute risk level of such cities in the context of their relevant countries or which the specific risks are for each city. The challenge is to understand with greater detail the diversity of vulnerability and exposure conditions for each place. This means and stresses the importance of a local risk analysis including not only scientific-technical knowledge but also the perception of the community that co-exists with the risk.

Another element to take into account is that when comparing indicators, only information available shared by both countries was adopted, leaving aside any other information available inherent to each country, which could enhance each specific case. This choice, being a constraint though, opens up to the possibility of exploring the construction of joint indicators during project execution. Furthermore, it must be considered that the methodology stresses the Exposure variable, unlike other methodologies of, for example, Disaster Risk analysis, where the values of vulnerability, capacities and exposure are on equal footing.

Given these results, the next section includes recommendations to be addressed by the Project's activities.

Table No.16 Climate Risk Index in Cities of the Uruguay river

Country	Cities	Vulnerability	Exposure	Risk
Argentina	Concordia	V3	E3	RC3
	Concepción	V3	E2	RC3
	Colón	V3	E2	RC3
Uruguay	Salto	V2	E3	RC3
	Paysandú	V2	E3	RC3
	Fray Bentos	V2	E2	RC2
	Bella Unión	V2	E3	RC2
	Nuevo Berlín	V2	E1	RC1
	San Javier	V2	E1	RC1

Vulnerability: Low =V1 Medium= V2 High= V3
Exposure: Low= E1 Medium=E2 High=E3
Risk R1=Low R2=Medium R3=High

10. Recommendations for the Project

Sensitivity/Exposure indicators: identify vulnerable population from various information sources or develop independent records and surveys, especially in areas experiencing flooding or waterlogging due to rains. Bear in mind indicators such as: female breadwinners; disabled people; livelihoods and their connection with times of emergency; children-elderly population; illegal immigrants, etc.

Identify critical and strategic infrastructure, including: schools, hospitals, nursing homes, key transport routes, strategic communication ways for the community and evacuation routes, location of evacuee reception centers, etc. in areas experiencing flooding or waterlogging due to rains.

Damage logging: based on existing information, develop a compatible logging system for both countries of the cities involved in the project regarding shared flood events and agree on a similar and comparable way to survey damage or losses.

Risk maps: work in risk mapping for Entre Ríos following a similar methodology to that applied by DINAGUA for Uruguayan cities, so that both shorelines attain equal territorial information on risks. Both countries need to move forward with community validation processes to contribute perception aspects and build a technical-community knowledge process.

Land Management Plans: once the risk maps should have been developed for the cities on the Argentinian side, develop management plans including the variables at hand and start conforming land use regulations to risk identification (Consider plans of DINOT- Uruguay as role model). For the

Uruguayan case, review local land use regulations and consider improvements and/or intervention measures. In both cases, carry out the above processes in a participatory manner engaging the different stakeholders.

DRR Preparedness: strengthen risk management preparedness from within the local governments through regulations; sensitization and capacity-building of municipal agents; networking with the different sectors (private, neighbors, NGOs) with actions towards preventing disasters and adapting to climate change. Promote community-based risk management.

Early warning: develop a community-centered early warning program to strengthen the weak points of each component of the EWS, specifically in each local government. Actions may be oriented to preparing a protocol of communication and warning among the different stakeholders (Salto Grande, Coast Guard, Local Response Agencies, NGOs, community leaders); create a community-based communication strategy including signaling evacuation routes; volunteers and leaders of each city sector or " barrio" to support preparedness; specifically address the vulnerable population (children, the elderly, the disabled, etc.); integrate women's key roles; preselection and retrofitting of evacuees centers; formalize preparedness and response procedures through local/municipal regulations; carry out emergency drills and adjustment of communications for the municipal cabinet; capacity-building at schools, sports clubs, cultural centers; and other activities that help the community improve communication and prevention-preparedness in the face of a flood.

In the monitoring aspect, it is also possible to explore including a geographic information model for the real-time display of the actual and potential area affected and for the estimation of the probable number of people evacuated as well as key infrastructure at risk. This could help better anticipate to reduce population vulnerability in risk areas who sustain frequent dislodgments. In the city of Durazno in the Negro river and the city of Artigas along the Cuareim river, a similar EWS approach is undergoing development (See Retrospectiva, 2013) in Bibliography.

Recovery fund: identify mechanisms of self-funding of local governments in order to restore community life through municipal rates and/or other revenue.

Citizen awareness of Climate Change and Risks: it is recommended studying whether an indicator related to community awareness should be included. An informed community knowledgeable on natural and social dynamics of the environment they inhabit have greater chances of adaptation than a community that experiences the problem "as it comes", with prior, but short, notice. The social meanings will vary hugely, and so shall the practices that emerge from those meanings. One possible indicator could be "Level of citizen awareness", with categories from 1 to 10: No awareness-building on CC and DRR / Informative actions for preparedness or response upon a specific event are implemented / Awareness-building actions are carried out on a regular basis.

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Regulations:

Argentina:
Law No. 3001 Municipalities System. Province of Entre Ríos (*Régimen de Municipalidades. Provincia de Entre Ríos)*
Law No. 27287 National System for Comprehensive Risk Management and Civil Protection - SINAGIR (*Sistema Nacional para la Gestión del Riesgo y la Protección Civil- SINAGIR)*

Uruguay
Law No. 18.308 Land Management and Sustainable Development Law (*Ley de Ordenamiento Territorial y Desarrollo Sostenible*)
Law No. 18.610 National Water Policy Law (*Ley de Política Nacional de Aguas*)
Law No. 18567 on Decentralization and Citizen Participation (*Descentralización y Participación Ciudadana*)
Law No. 18621. National Emergency System (*Sistema Nacional De Emergencias*)

Third National Communication

Capítulo 2: Análisis de las tendencias del clima observado a nivel nacional, fundamentalmente de la temperatura de superficie y de la precipitación en sus valores medios y en algunos índices de sus valores extremos [Chapter 2: Analysis of climate tendencies nation-wide, mainly surface average temperature and precipitation, and some extreme values] http://ambiente.gob.ar/wp-content/uploads/Mod.Clim_.Cap2_.pdf

Capítulo 3: Proyecciones del clima para el resto del siglo XXI y descripción de la metodología utilizada. Escenarios de temperatura y precipitación para futuro cercano, 2015-2039 y de fin de siglo, 2075-2099. [Chapter 3: Climate projections for the remainder of the 21st century and description of the methodology used. Temperature and precipitation scenarios for the near future, 2015-2039, and for the turn of the century, 2075-2099] http://ambiente.gob.ar/wp-content/uploads/Mod.Clim_.Cap3_.pdf

Ministerio de Ambiente y Desarrollo Sustentable
Presidencia de la Nación

BANCO DE DESARROLLO DE AMÉRICA LATINA

MVOTMA
Ministerio de Vivienda Ordenamiento Territorial y Medio Ambiente

REGIONAL PROGRAM PROPOSAL

"Climate Change adaptation in vulnerable coastal cities and ecosystems of the Uruguay River"

ANNEX 10. Overview cities climate risk profiles

Supported by:

Factor
Ideas for change

1.1. Concordia

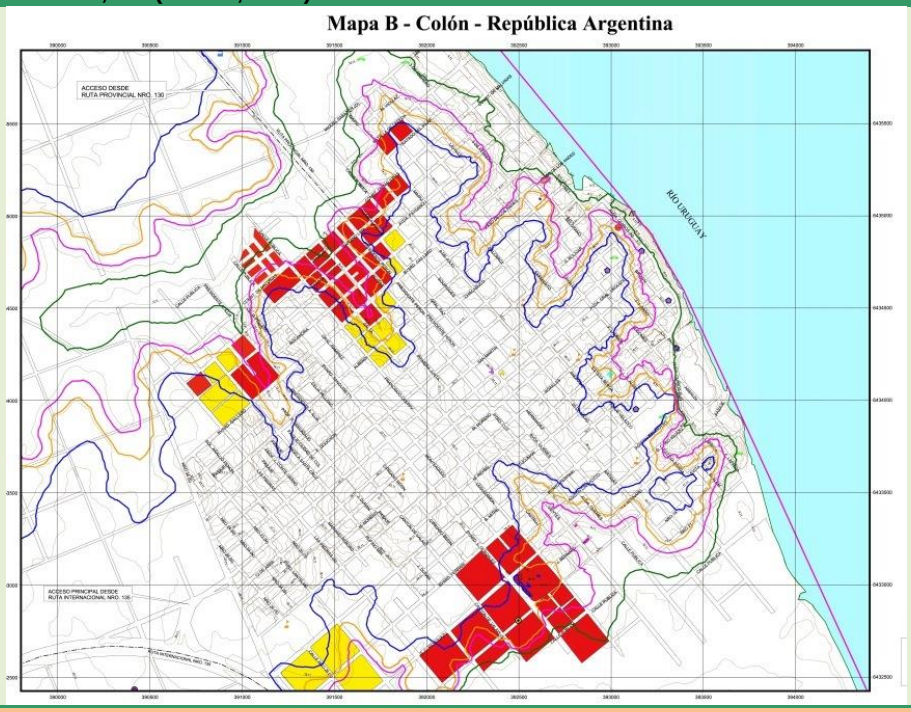
Concordia (Argentina) **Total Population: 167,274 (INDEC, 2010)**				
Sensitivity Index: HIGH				
Population with UBN 32,585 (18.5%)	**Elderly Population** Rate 13.1	**Children Population** Rate 46.7	**Families in Informal Settlements** 1,300	
Capacities Index: LOW				
Risk and Climate Change (CC) Land Management Plan (POT) None	**Risk Map** Draft version	**Early Warning** Only formal Response mechanism is pending	**DRR preparedness** Response entity coordinated with cabinet	**Recovery Funds** Depend on Provincial/National Governments
VULNERABILITY INDEX: HIGH				
Exposure Index: HIGH				
Population in Flood Prone Areas: 11,843 (7%)	**Use Zoning:** Mixed urban residential-commercial industrial / Settlements in buffer zones			
CLIMATE RISK: HIGH				
Additional information: It is one of the Permanent Household Survey (EPH)'s cities. According to the last 2017 survey, the poverty rate is 36%				

1.2. Concepción del Uruguay

Concepción del Uruguay (Argentina) **Total Population: 99,726 (INDEC, 2010)**				
Sensitivity Index: MEDIUM				
Population with UBN 8,691 (%8.7)	**Elderly Population** Rate 18.6	**Children Population** Rate 39.9	**Families in Informal Settlements** 600	
Capacities Index: LOW				
Risk and CC Land Management Plan (POT) Outdated and does not include risk (2009)	**Risk Map** None	**Early Warning** Formal response and communication mechanisms are pending	**DRR Preparedness** Only Response agencies	**Recovery Funds** Depend on Provincial/National Governments
VULNERABILITY INDEX: HIGH				
Exposure Index: MEDIUM				
Population in Flood Prone Areas: 5,208 (5%)	**Use Zoning in Flood Prone Areas:** Urban residential and port uses / Settlement in buffer areas nearby levees			
CLIMATE RISK: HIGH				
Additional information:				

1.3. Colón

Colón (Argentina)
Total Population: 61,526 (INDEC, 2010)



Sensitivity Index: MEDIUM

Population with UBN	Elderly Population	Children Population	Families in Informal Settlements
6,401 (10.4%)	Rate 18.1	Rate 39.6	80

Capacities Index: LOW

Risk and CC Land Management Plan (POT)	Risk Map	Early Warning	DRR Preparedness	Recovery Funds
Updated but does not provide for the risk/CC dimension	Draft version	Formal response and communication mechanisms are pending	Firefighters only	Depend on Provincial/National Governments

VULNERABILITY INDEX : HIGH

Exposure Index: MEDIUM

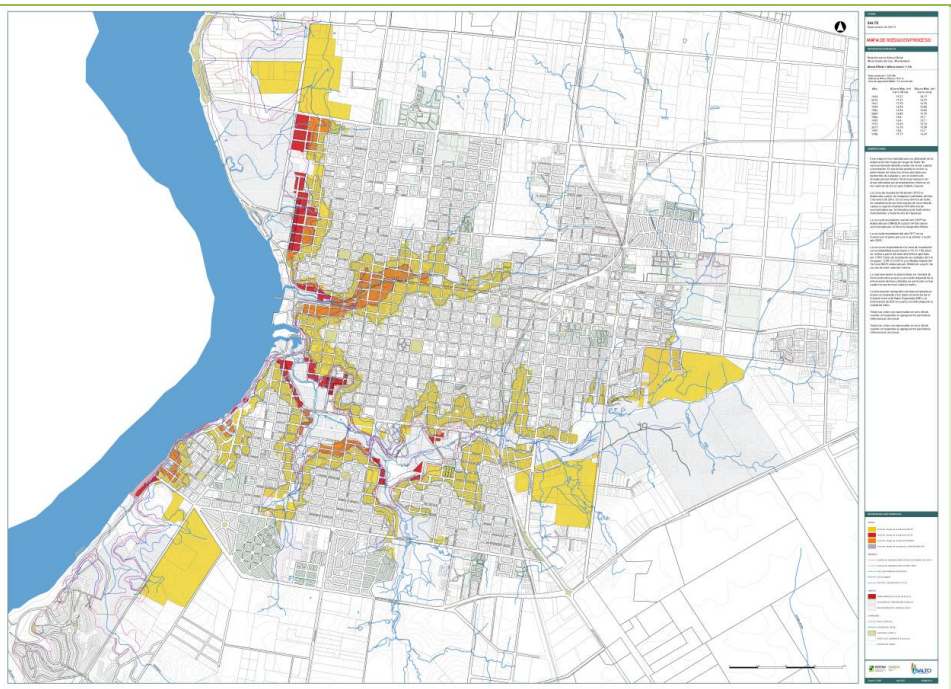
Population in Flood Prone Areas:	Use Zoning:
2,695 (4.8%)	Mixed recreational touristic residential uses

CLIMATE RISK: HIGH

Additional information:
Artalaz stream buffer area resettlement plan. National Water Emergency Program (*Programa de Emergencia Hídrica Nación*) (with 30% financing by the Municipality)

1.4. Salto

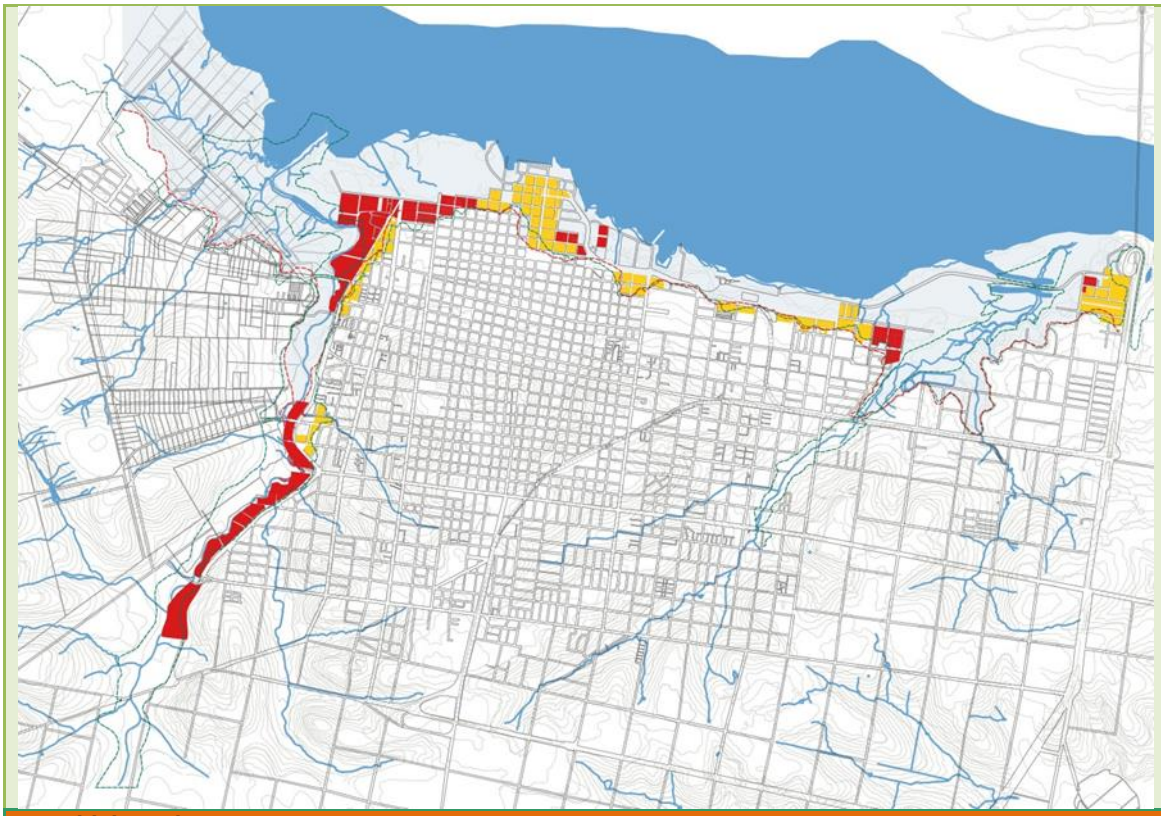
Salto (Uruguay)
Population 104,166 (INE, 2011)



Sensitivity Index: HIGH				
Population with UBN 49,728 (47.7%)	**Elderly Population** Index 19	**Children Population** Rate 43	**Families in Informal Settlements** 666	
Capacities Index: HIGH				
Risk and CC Land Management Plan (POT) YES	**Risk Map** YES	**Early Warning** Communication and response mechanisms are pending	**DRR Preparedness** Response coordinated with cabinet	**Recovery Funds** Depend on National Government
VULNERABILITY INDEX: MEDIUM				
Exposure Index: HIGH				
Population in Flood Prone Areas: 9,469 (9%)	**Use Zoning:** Environmentally fragile urban consolidated/not consolidated			
CLIMATE RISK: HIGH				
Additional information:				

1.5. Paysandú

Paysandú (Uruguay)
Total Population: 86,708 (INE, 2011)



Sensitivity Index: HIGH			
Population with UBN **34,263 (39.5%)**	**Elderly Population** Rate 22	**Children Population** Rate 41	**Families in Informal Settlements** 372

Capacities Index: HIGH				
Risk and CC Land Management Plan (POT) YES	**Risk Map** YES	**Early Warning** All components are operational	**DRR Preparedness** Risk management in progress	**Recovery Funds** Depend on National Government

VULNERABILITY INDEX: MEDIUM

Exposure Index: HIGH	
Population in Flood Prone Areas: 6,251 (7.21%)	**Use Zoning:** urban areas below 6.5 m elevation/ Stream reclamation area

CLIMATE RISK: HIGH

Additional information:

-Progress has been made in the validation process with the community in relation to risk maps

-They have a relocation plan for the informal settlements in flood prone areas

1.6. Fray Bentos

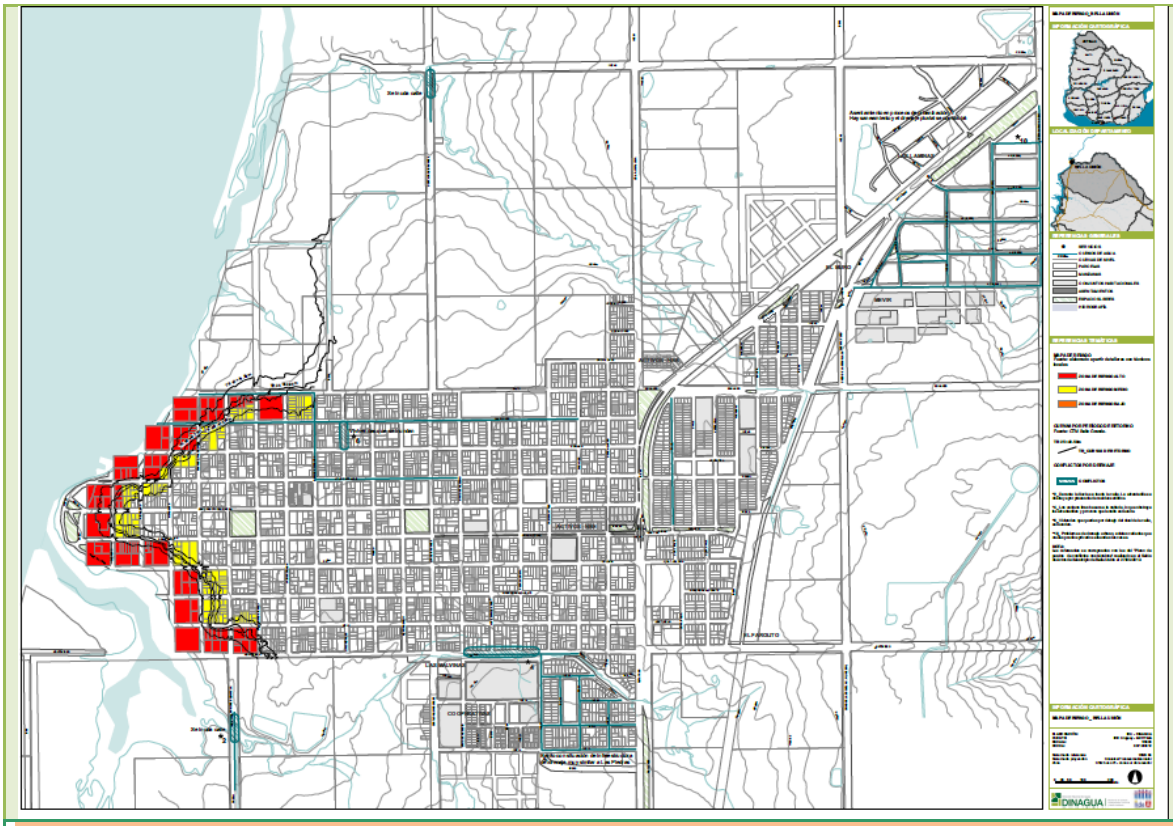
Fray Bentos (Uruguay)
Total Population: 25,368 (INE, 2011)

Sensitivity Index: MEDIUM			
Population with UBN 9,337 (%36.8)	**Elderly Population** 20.2	**Children Population** 44.5	**Families in Informal Settlements** 0

<table>
<tr><td colspan="5">Capacities Index: MEDIUM</td></tr>
<tr><td>Risk and CC Land Management Plan (POT)
YES (risk areas missing)</td><td>Risk Map
NO</td><td>Early Warning
All components are operational</td><td>DRR Preparedness
Depend on the departmental SINAE - National Emergencies System</td><td>Recovery Funds
Depend on the National/Departmental Government</td></tr>
<tr><td colspan="5">VULNERABILITY INDEX: MEDIUM</td></tr>
<tr><td colspan="5">Exposure Index: MEDIUM</td></tr>
<tr><td colspan="2">Population in Flood Prone Areas:
97 (0.38%)</td><td colspan="3">Use Zoning:
Consolidated urban</td></tr>
<tr><td colspan="5">CLIMATE RISK: MEDIUM</td></tr>
<tr><td colspan="5">Additional information:</td></tr>
</table>

1.7. Bella Unión

Bella Unión (Uruguay) (Department of Artigas)
Total Population: 17,379 (INE, 2011)



Sensitivity Index: MEDIUM

Population with UBN 10407 (%59.9)	**Elderly Population** Rate 17.3	**Children Population** Rate 42	**Families in Informal Settlements** 0

Capacities Index: MEDIUM

Risk and CC Land Management Plan (POT) YES	**Risk Map** YES	**Early Warning** All components are operational (Evacuee reception centers to be reinforced)	**DRR Preparedness** SINAE Departmental response	**Recovery Funds** Depend on National/Departmental Governments

VULNERABILITY INDEX: MEDIUM

Exposure Index: HIGH

Population in Flood Prone Areas: 1,801 (14.76%)	**Use Zoning:** Urban with right-of-way through Salto Grande

CLIMATE RISK: HIGH

Additional information:

1.8. Nuevo Berlín

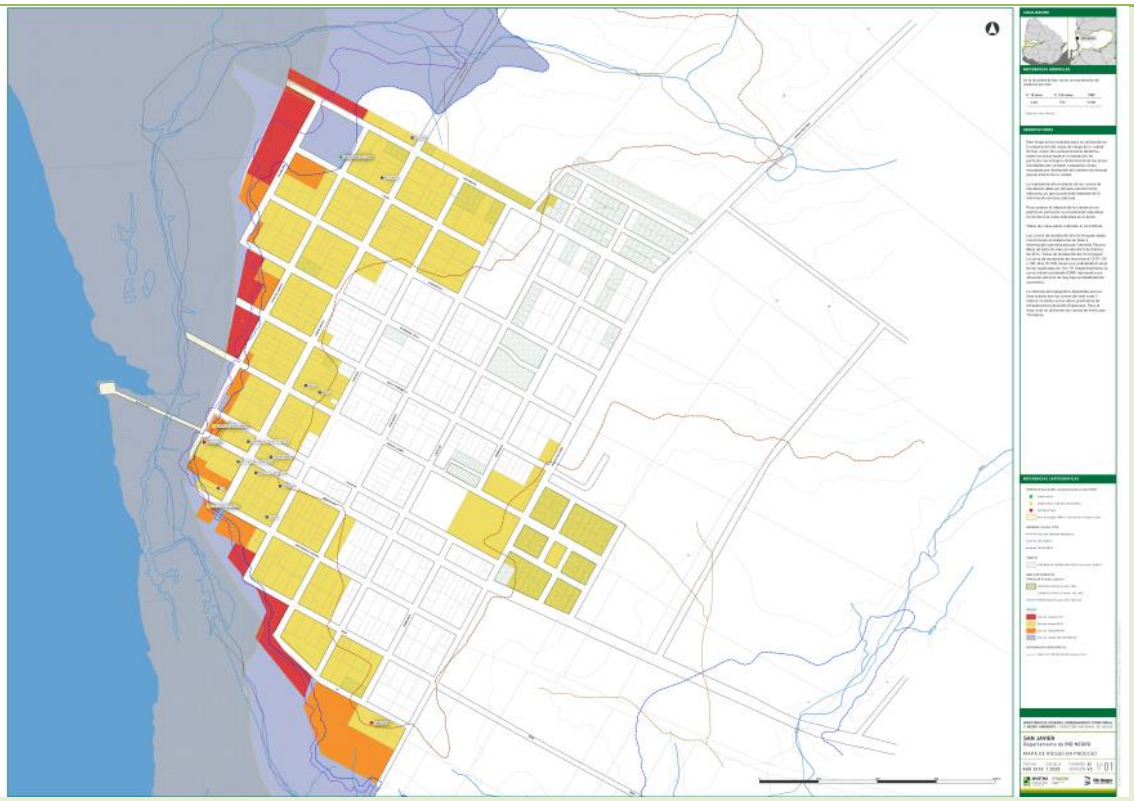
Nuevo Berlín (Uruguay)
Total Population: 2,450 (INE, 2011)

Sensitivity Index: MEDIUM

Population with UBN 996 (% 40.7)	**Elderly Population** 20.1	**Children Population** 46.3	**Families in Informal Settlements** 0
Capacities Index: MEDIUM			
Risk and CC Land Management Plan (POT) YES	**Risk Map** YES	**Early Warning** All components are operational	**DRR Preparedness** Depend on departmental SINAE	**Recovery Funds** Depend on National/Departmental Governments
VULNERABILITY INDEX: MEDIUM			
Exposure Index: LOW			
Population in Flood Prone Areas: **14 (% 0.57)**	**Use Zoning:** Recreational		
CLIMATE RISK: LOW			
Additional information:			

1.9. San Javier

San Javier (Uruguay) **Total Population: 1,781 (INE, 2011)**



Sensitivity Index: MEDIUM				
Population with UBN 550 (30.09%)	**Elderly Population** Rate 49.6	**Children Population** Rate 24.5	**Families in Informal Settlements** 34	
Capacities Index: MEDIUM				
Risk and CC Land Management Plan (POT) YES	**Risk Map** YES	**Early Warning** All components are operational	**DRR Preparedness** Depend on departmental SINAE	**Recovery Funds** Depend on National/Departmental Governments
VULNERABILITY INDEX: MEDIUM				
Exposure Index: LOW				
Population in Flood Prone Areas: 32 (% 1.8)	**Use Zoning:** Recreational			
CLIMATE RISK: LOW				
Additional information:				

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ANNEX 11. Vulnerability Analysis of Coastal Ecosystems

Supported by:

Factor
Ideas for change

Ecosystemic Vulnerability Analysis

Vulnerability is the propensity or susceptibility of an ecosystem to be affected by the effects of climate change. In order to perform a survey, the coastal ecosystem of the Uruguay river is analyzed through information gathered from the several nearby priority Argentinean and Uruguayan areas. For such purpose, a preliminary qualitative analysis mainly based on the information provided by both countries was carried out, in addition to the knowledge obtained from technical experts from official entities and local consultants. This also implied gathering bibliographical information (reports from the Ministry of Housing, Land Management and Environment - *Ministerio de Vivienda, Ordenamiento Territorial y Medio Ambiente*-, reports from Foundation Hábitat y Desarrollo, bibliography on Important Bird Areas from Argentina and Uruguay (BirdLife International), information on Private Protected Areas provided by their owners, among other sources) to subsequently establish a priority of highly vulnerable areas. The order of priority below is based on the following three criteria or main problems recorded for the coastal ecosystems of the Uruguay river at a regional level:

1. A first factor related to the **Erosion Process** recorded in the coastal ecosystem of the Uruguay river (FE).
2. A second factor associated to the **Intervention Effects and Anthropogenic Impacts** (which includes problems such as intentional fires, poaching, pollution of the water resource and the modification of the coastal habitat through deforestation) (FEA) and,
3. A third factor related to the **Presence and Advance of Invasive Exotic Species (EEI**) – (FEEI).

By adding the above three factors, without establishing beforehand any priority among them, the most vulnerable areas within the areas identified in Argentina and Uruguay have been determined.

VULNERABILITY OF PRIORITY AREA n = Σ (FE+FEA+FEEI)

The values assigned to each factor are measured within a range of 0=no impact, 1=low impact, 2=medium impact, 3=high impact.

In maps, visualization follows a traffic-light color code, where green is for additions with values between 0 and 1, under the NO IMPACT category, yellow is for additions with values between 2 and 3, under the LOW category, orange is for additions with values between 4 and 5, under the MEDIUM category and red is for additions with values between 6 and 9, under the HIGH category.

PRELIMINARY ECOSYSTEM VULNERABILITY MATRIX IN THE IDENTIFIED PRIORITY AREAS

CATEGORY	ECOREGION	AREA HA (MEASURED)	Erosion Factor (FE)	Anthropogenic effects (fires, deforestation, habitat modification, pollution) Factor (FEA)	EEI Factor	Ecosystem Vulnerability (FE+FEA+FEEI) Index	CODING
MUNICIPAL	Delta e Islas del Paraná	1809	**0**	**1**	**2**	**3**	**LOW VULNERABILITY**
PRIVATE	Espinal	2087	**1**	**2**	**3**	**6**	**HIGH VULNERABILITY**
NATIONAL GOVERNMENT	Espinal	22879 RAMSAR; 39752 IBAS	**2**	**2**	**3**	**7**	**HIGH VULNERABILITY**
PRIVATE	Espinal	267	**1**	**2**	**1**	**4**	**MEDIUM VULNERABILITY**
PRIVATE	Espinal	198	**0**	**2**	**2**	**4**	**MEDIUM VULNERABILITY**
PRIVATE	Espinal	416	**3**	**2**	**1**	**6**	**HIGH VULNERABILITY**

PRIVATE	Espinal	3004	**1**	**3**	**2**	**6**	**HIGH VULNERABILITY**
PRIVATE	Espinal	383	**1**	**3**	**2**	**6**	**HIGH VULNERABILITY**
PRIVATE	Espinal	1968	**1**	**3**	**2**	**6**	**HIGH VULNERABILITY**
PRIVATE	Espinal	798	**1**	**3**	**2**	**6**	**HIGH VULNERABILITY**
PRIVATE	Espinal	3754	**0**	**2**	**2**	**4**	**MEDIUM VULNERABILITY**
PRIVATE	Espinal	963	**0**	**2**	**2**	**4**	**MEDIUM VULNERABILITY**
MUNICIPAL	Espinal	105	**3**	**1**	**1**	**5**	**MEDIUM VULNERABILITY**
MUNICIPAL	Espinal	215	**0**	**2**	**2**	**4**	**MEDIUM VULNERABILITY**
PRIVATE		6169	**0**	**2**	**1**	**3**	**LOW VULNERABILITY**
PRIVATE		23	**0**	**1**	**0**	**1**	**NO IMPACT**

PRIVATE		7	**0**	**1**	**0**	**1**	**NO IMPACT**
PRIVATE		23	**0**	**1**	**0**	**1**	**NO IMPACT**
PRIVATE		139	**0**	**1**	**0**	**1**	**NO IMPACT**
MUNICIPAL	Espinal	330	**0**	**2**	**0**	**2**	**LOW VULNERABILITY**
PRIVATE		76266	**0**	**3**	**0**	**3**	**LOW VULNERABILITY**
PRIVATE		70520	**0**	**3**	**0**	**3**	**LOW VULNERABILITY**
PRIVATE		36182	**0**	**3**	**0**	**3**	**LOW VULNERABILITY**
PRIVATE		14389	**0**	**3**	**0**	**3**	**LOW VULNERABILITY**
MUNICIPAL		66	**3**	**1**	**1**	**5**	**MEDIUM VULNERABILITY**
PRIVATE		2722	**1**	**3**	**2**	**6**	**HIGH VULNERABILITY**

Managed resources protected area		19969	**0**	**1**	**1**	**2**	**LOW VULNERABILITY**
Managed resources protected area		23441	**1**	**2**	**2**	**5**	**MEDIUM VULNERABILITY**
Habitat and/or species management area		1550	**0**	**0**	**1**	**1**	**NO IMPACT**
Habitat and/or species management area		3879	**1**	**3**	**2**	**6**	**HIGH VULNERABILITY**
National Park		16810	**1**	**2**	**3**	**6**	**HIGH VULNERABILITY**
Habitat and/or species management area		1229	**3**	**2**	**1**	**6**	**HIGH VULNERABILITY**

Values are analyzed on a qualitative basis and rated 0=no impact, 1=low impact, 2=medium impact, 3=high impact

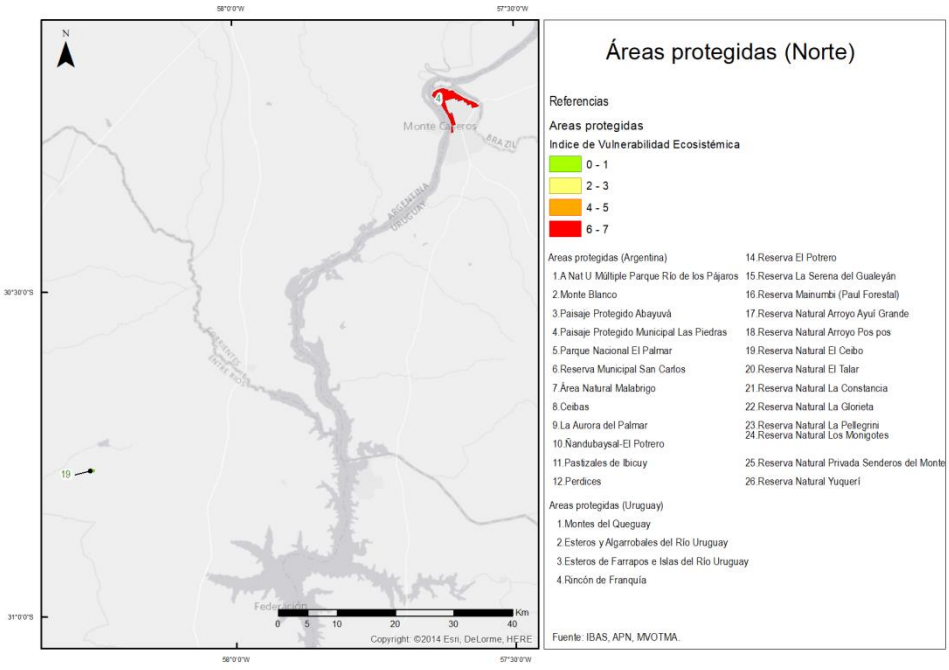

Figure 1 North. Ecosystemic Vulnerability Index (IVE) for protected Areas and identified priority areas considering as influence area the Uruguay river with boundaries between the province of Entre Ríos and counterpart margins on the Uruguayan departments.

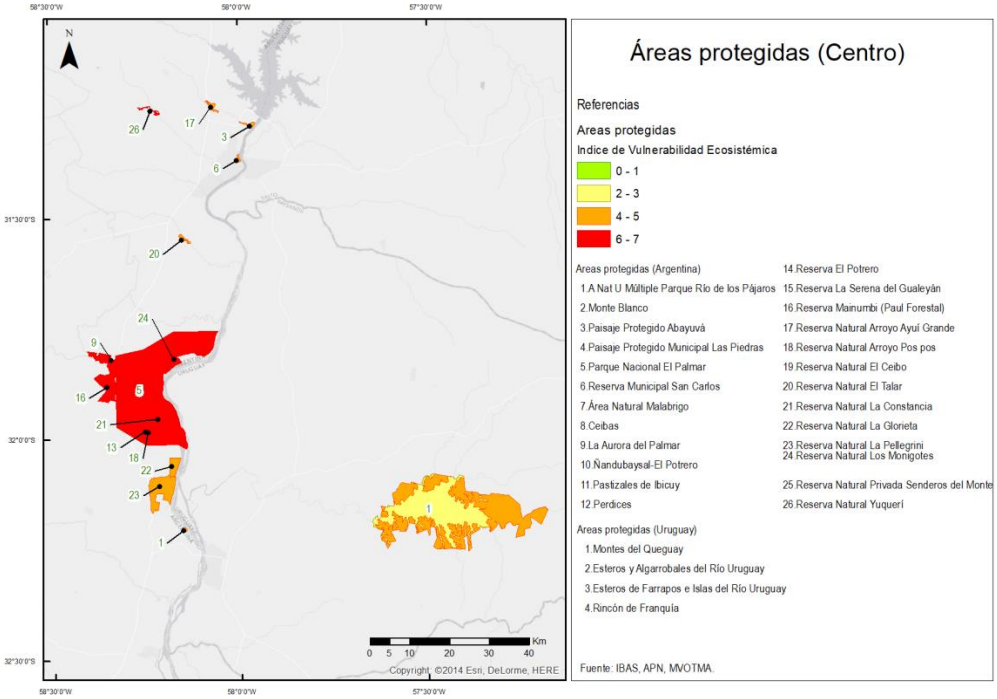

Figure 2 Center. Ecosystemic Vulnerability Index (IVE) for protected Areas and identified priority areas considering as influence area the Uruguay river with boundaries between the province of Entre Ríos and counterpart margins on the Uruguayan departments.(For further information, see Figures 1-4 North, Center and South).

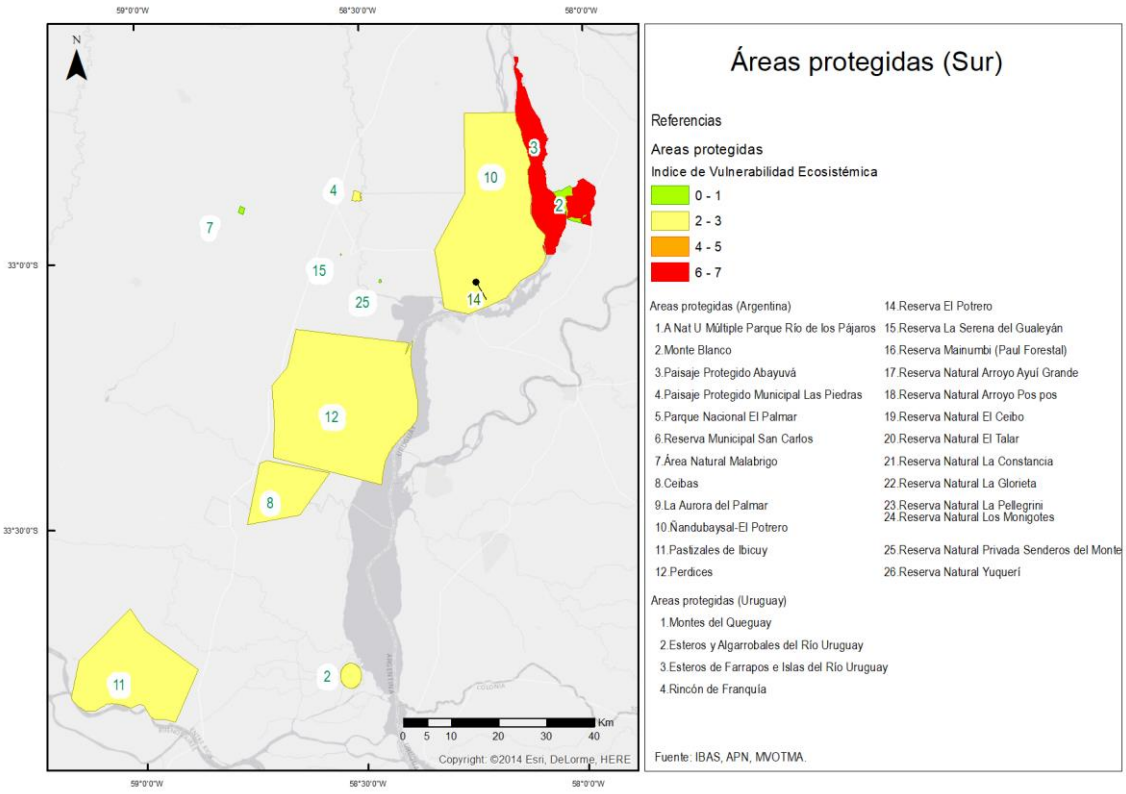

Figure 3 South. Ecosystemic Vulnerability Index (IVE) for protected Areas and identified priority areas considering as influence area the Uruguay river with boundaries between the province of Entre Ríos and counterpart margins on the Uruguayan departments.

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ANNEX 12. Terms of Reference for Executing Entities
Components 1 and 4

Supported by:

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Responsibilities of the Executing Entity (AE – C1y4)
Components 1 and 4

1. **AE – C1y4** will provide the following services to support project implementation:

    a. Staff identification and recruiting
        i. Argentina's Project Coordinator to do follow-up of the general project for Argentina
        ii. Uruguay's Project Coordinator to do follow-up of the general project for Uruguay
        iii. Climate change adaptation technician to be in charge of the ToR, technical product development for Argentina
        iv. Climate change adaptation technician to be in charge of the ToR, technical product development for Uruguay
        v. Technician in charge of monitoring safeguards, grievances and complaints. Part time reports for each country (1 for Argentina and Uruguay)
    b. Identification and recruiting of specific staff for components 1 and 4 activities
    c. Acquisition of goods and services (software, hardware, cloud space, among others, for components 1 and 4)
    d. Identification and enabling of capacity-building activities
    e. Ensuring implementation of the Environmental and Social Management Plans in line with the Project approved
    f. Checking compliance with the Environmental & Social and Gender Policy of the AF during project execution
    g. Articulating climate change under a regional vision and understanding in territorial planning instruments
    h. Articulating climate change with the civil society under a regional vision and understanding in the learning, sensitization and capacity-building processes and monitoring tools
    i. Components 1 and 4 must be fully managed by **AE – C1y4**
    j. Designing the annual work plan and delivering execution reports of Components 1 and 4 during the meetings of the Steering Committee for its approval

2. **AE – C1y4** will attend the meetings of the Steering Committee and National Subcommittees through the point of contact delegated for such purpose.

3. **AE – C1y4** will send to CAF the progress reports related to the provision of its services to support project implementation, as well as the costs involved.

Economic and Financial Management

4. The global budget delivered by the Adaptation Fund to CAF for the execution of the project will be delivered to **AE – C1y4**, who will be in charge of all hirings and acquisitions according to the budget approved by the Adaptation Fund in the project document. **AE – C1y4** will manage and execute such funds as planned in the project document.

Hirings and Acquisitions

5. The terms of reference for hiring staff and consultancy services for project execution as well as the subscription of agreements with other entities, for example, universities and research centers, will be prepared by the project coordinators and approved by the project's National Subcommittees.

6. Both the acquisition of goods and services as well as staff recruiting by **AE – C1y4** will be performed according to its policies, rules, procedures and regulations, which must comply with:
    a. A transparency policy
    b. A policy for the prevention and control of the risk of asset laundering
    c. The Steering Committee must agree with the hiring process to be included in the annual work plan for its approval.

7. Payment and hiring requests must be submitted to **AE – C1y4** by each Project Coordinator once the products delivered have been approved.

Social and Environmental Protection

8. All Executing Agencies, Technical Agencies and the Implementing Agency must see that the Adaptation Fund's Environmental & Social and Gender Policy are followed.

9. With the final designs of the works (green – grey), the technician in charge of monitoring safeguards, grievances and complaints will conduct the environmental and social impact assessment.

10. Before starting works execution (green or grey), the pertinent Social and Environmental Management Plan will be submitted by the Executing Agencies of Components 3 and 4 supported by the technician in charge of monitoring safeguards, grievances and complaints, which will be approved by the Project's Steering Committee.

11. The environmental and social management plan must define the roles and responsibilities of all entities involved in the project for the implementation of the plan.

12. The project's Steering Committee will learn of the environmental impact assessment report and the environmental and social management plan.

Monitoring and Evaluation

13. The program will be permanently subject to monitoring and evaluation by the Project's national Subcommittees and the National Steering Committee and its members.

Reporting

14. Project Coordinators supported by Project Managers will prepare quarterly progress reports of the project, reflecting compliance with the planned activities and actions, milestones achieved, any difficulties encountered and the work proposal for the following period.

15. Project Coordinators will prepare semi-annual reports to be submitted for the consideration of the Project´s Steering Committee and, once approved, CAF will compile and store them as evidence of the project's progress.

Resources of the Adaptation Fund cannot finance:

- Current and/or capital expenses of the beneficiary - executing entity. Current expenses include those incurred by a financial entity not intended to create assets but rather for consumption; that is, expenses intended for hiring human resources and acquiring the necessary goods and services for developing administrative functions;
- Personal services of the beneficiary - executing entity (wages, salaries, benefits, air tickets, traveling expenses, hotel cancellation, vehicle gas oil or rental);
- General utilities (water, Internet, power and telephone bills, among others);
- VAT as well as any other taxes and fees;
- Capital expenses related to the creation of an asset such as the purchase and/or lease of lands, buildings, vehicles;
- Capital expenses (reimbursements) made before submitting the Application for technical cooperation with CAF;
- Expenses not related to the project's activities;
- Financial expenses incurred as a result of any actions taken in the course of the project;

- Representation expenses and alcohol beverages of the beneficiary - executing entity;
- No speculation activities or transactions, gambling or transactions related to the war industry.

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ANNEX 12. Terms of Reference for Executing Entities Components 2 and 3 and a specific activity of Component 4

Supported by:

Responsibilities of the Executing Entity
Components 2 and 3 and a specific activity of Component 4
(hereinafter, AE – C2y3)

1. **AE – C1y4** will provide the following services to support project implementation:

    a. Staff identification and recruiting
        i. Project Manager for the Uruguay river (relevant country)

    b. Identification and recruiting of specific staff for the activities of component 2 for the relevant country

Uruguay

- Resignification of the areas Unión Portuaria, Ledesma and the urban border of Paysandú, Uruguay
- Resignification and renovation of flood-prone, vacant lots after resettlements. Atahualpa Area in Salto, Uruguay
- Resignification and renovation of flood-prone, vacant lots in Sauzal stream mouth in Salto, Uruguay
- Environmentally sustainable hydrologic management at the Esmeraldas Stream - Resignification of the esmeraldas neighbourhood housing complex, Fray Bentos, Uruguay
- Risk prevention and evacuees care centre Bella Unión, Uruguay
- Resignification of spaces recovered from irregular residential occupation. Bella Unión, Uruguay
- Refurbishing of the Access bridge to the Pier and the Coastal areas of the San Javier town.
- Revolving fund for the consolidated city in medium-risk area, according to the Risk Map. Pilot case in Paysandú

Argentina

- Protection and resignification of the Artaláz Stream wetland. Colón, Argentina
- Remediation and resignification of vacant lots located between Defensa Norte and Cantera 25 de Mayo neighbourhood. Concepción del Uruguay, Argentina
- Environmentally sustainable hydrologic management at Esmeraldas Stream – Retarding basin. Fray Bentos, Uruguay.

- Protection against coastal erosion, and sundry repairs at the water treatment plant in the city of Concordia, Argentina
- Design of flood insurance for commercial and tourist premises in coastal areas. Entre Ríos, Argentina

c. Identification and recruiting of specific staff for activities of component 3 for the relevant country

Uruguay

- Identification, mapping and evaluation of ecosystem benefits on account of their contribution to climate change adaptation and connectivity in Argentina and Uruguay
- Adequacy of infrastructure required to upgrading resilience to CC in vulnerable human activities in protected areas, including tourism, livestock and beekeeping in the Estero de Farrapos Protected Area in Uruguay.
- Implementation of climate change ecosystem-based adaptation measures in the Rincón de Franquía Protected National Area in Uruguay.
- Restoration of vulnerable coastal ecosystems through monitoring of exotic species and planting of native species.

Argentina

- Identification, mapping and evaluation of ecosystem benefits on account of their contribution to climate change adaptation and connectivity in Argentina and Uruguay
- Restoration of vulnerable coastal ecosystems through monitoring of exotic species and planting of native species.
- Structural consolidation of historical buildings, protection of the coastal canyon and valorisation of the historic site Calera del Palmar or de Barquín, in El Palmar National Park (PNEP).

d. Identification and recruiting of specific staff for the activities of component 4 for the relevant country

Uruguay

- Development and implementation of labour reconversion strategies and resettled families´ productive activities in Paysandú, Uruguay

Argentina

- Socio-occupational capacity-building and labour reconversion projects' development in Entre Ríos, Argentina

e. Acquisition of goods and services (software, hardware, cloud space, among others, for components 2 and 3)
f. Identification and enabling of capacity-building activities specific for components 2 and 3 of the corresponding country
g. Ensuring that the development of the activities related to components 2 and 3 corresponding to the pertinent country are complied with according to the Work plan approved by the National Steering Committee
h. Components 2 and 3 must be fully managed by **AE – C2y3** corresponding to the pertinent country
i. Designing the annual work plan and delivering execution reports of Components 2 and 3 corresponding to the pertinent country during the meetings of the Steering Committee for its approval

2. **AE – C2y3** will attend the meetings of the National Steering Committee and National Subcommittees through the points of contact delegated for such purpose.

3. **AE – C2y3** will send to CAF the progress reports related to the provision of its services supporting the project implementation, as well as the costs involved.

4. **AE – C2y3** will submit the work plan on an annual basis to the National Steering Committee for its approval.

5. **AE – C2y3** will submit the work plan on an annual basis to the National Steering Committee for its approval.

Economic and Financial Management

6. The global budget delivered by the Adaptation Fund to CAF for the execution of the project will be delivered to **AE – C2y3** for the pertinent country, who will be in charge of all hiring and acquisitions according to the budget approved by the Adaptation Fund in the project document.
7. Each country´s **AE – C2y3** will manage and execute such funds as planned in the project document.

Hirings and Acquisitions

8. The terms of reference for hiring staff and consultancy services for project execution as well as the subscription of agreements with other entities, for example, universities and research centers, will be prepared by the project manager corresponding to the pertinent country and approved by the Project's National Subcommittees.

9. Both the acquisition of goods and services as well as staff recruiting by **AE – C2y3** for the relevant country will be performed according to its policies, rules, procedures and regulations, which must comply with:
    a. A transparency policy
    b. A policy for the prevention and control of the risk of asset laundering
    c. The Steering Committee must agree with the hiring process to be included in the annual work plan for its approval.

10. Payment and hiring requests must be made to **AE – C2y3** for the relevant country by each Project Coordinator once the products delivered have been approved.

Social and Environmental Protection

11. All Executing Agencies and Technical Agencies and the Implementing Agency must see that the Adaptation Fund's Environmental & Social and Gender Policy are followed.

12. With the final designs of the works (green – grey), the technician in charge of monitoring safeguards, grievances and complaints will conduct the environmental and social impact assessment.

13. Before starting works execution (green or grey), the pertinent Social and Environmental Management Plan will be submitted by **AE – C2y3** corresponding to the pertinent country supported by the technician in charge of monitoring safeguards, grievances and complaints, which will be approved by the Project's Steering Committee.

14. The environmental and social management plan must define the roles and responsibilities of all entities involved in the project for the implementation of the plan.

15. The project's Steering Committee will learn of the environmental impact assessment report and the environmental and social management plan.

Monitoring and Evaluation

16. The program will be permanently subject to monitoring and evaluation by the Project's national Subcommittees and the National Steering Committee and its members.

Reporting

17. The Project Manager corresponding to each country will support the preparation of quarterly progress reports of the project, reflecting compliance with the planned activities and actions, milestones achieved, any difficulties encountered and the work proposal for the following period.

Resources of the Adaptation Fund cannot finance:

- Current and/or capital expenses of the beneficiary - executing entity. Current expenses include those incurred by a financial entity not intended to create an asset but for consumption; that is, expenses intended for hiring human resources and acquiring the necessary goods and services for developing administrative functions;
- Personal services of the beneficiary - executing entity (wages, salaries, benefits, air tickets, traveling expenses, hotel cancellation, vehicle gas oil or rental);
- General utilities (water, internet, power and telephone bills, among others);
- VAT as well as any other taxes and fees;
- Capital expenses related to the creation of an asset such as the purchase and/or lease of lands, buildings, vehicles;
- Capital expenses (reimbursements) made before submitting the Application for technical cooperation with CAF;
- Expenses not related to the project's activities;
- Financial expenses incurred as a result of any actions taken in relation with the project;
- Representation expenses and alcohol beverages of the beneficiary - executing entity;
- No speculation activities or transactions, gambling or transactions related to the war industry.

Output	Activity	Responsible entity	Beneficiary entity	Country	Budget description	Subtotal	Argentina	Uruguay	Output Budget
Component 1									**$1.627.500**
1. Land management plans, protected areas management plans, and housing and water programs, under review or in progress, include the climate change perspective.	Activity 1.1. Analysis, revision and updating of the current state of different public policy instruments in place at territorial level (land use plans, protected areas plans, housing, water, health, infrastructure programmes and public investment, etc.) incorporating the climate change perspective.	regional executing entity	ARG-URU	Argentina-Uruguay	consultant fee	**$267.700**	**$161.850**	**$161.850**	**$563.700**
		regional executing entity	ARG-URU	Argentina-Uruguay	tickets and travel expenses	**$56.000**			
	Activity 1.2. Workshops-work meetings are being held to look into, review, update and validate the sundry instruments for territorial management, and use of riparian ecosystems in order to incorporate resilient strategies taking into account climate scenarios, with i) institutional technical teams, ii) local, departmental and provincial governments, with a focus on the analysis, review and update of the sundry instruments involved in territorial management and management of riparian ecosystems, iii) and local citizens.	regional executing entity	ARG-URU	Argentina-Uruguay	Training	**$220.000**	**$120.000**	**$120.000**	
		regional executing entity	ARG-URU	Argentina-Uruguay	publication	**$20.000**			
2. Methodological guidelines to assess impact, damages and losses have been designed and implemented.	Activity 2.1. Design of a methodology to collect, analyze and systematize data and information concerning impacts, damages and losses resulting from severe climate impacts, for further reporting and evaluation, including review of pre-existing methodologies, data bases, experiences and papers previously used by SINAE (Ur) and Civil Defence (Arg), and some other institutions.	regional executing entity	ARG-URU	Argentina-Uruguay	consultant fee	**$72.000**	**$41.400**	**$41.400**	**$238.800**
		regional executing entity	ARG-URU	Argentina-Uruguay	tickets and travel expenses	**$10.800**			
	Activity 2.2. Drafting up of a methodological guide and a record of events based on the tool designed in Activity 2.1. to reporting and evaluation of severe climate impacts and attaching priority to adaptation actions on both riverbanks of the lower Uruguay River.	regional executing entity	ARG-URU	Argentina-Uruguay	consultant fee	**$118.000**	**$59.900**	**$59.900**	
		regional executing entity	ARG-URU	Argentina-Uruguay	tickets and travel expenses	**$1.800**			
	Activity 2.3. Regional and subnational workshop addressing validation of the methodological guideline designed, and related capacity building/recording of events and definition of indicators required for the effective implementation of this guideline in communities involved in the Project. These workshops are focused on local authorities and technicians and are based on the Guideline / Events Log prepared for further implementation.	regional executing entity	ARG-URU	Argentina-Uruguay	Training	**$19.200**	**$18.100**	**$18.100**	
		regional executing entity	ARG-URU	Argentina-Uruguay	publication	**$17.000**			
3. The project adaptation outcomes have been incorporated into monitoring mechanisms of National Adaptation Plans, Adaptation Communications and National Determined Contributions (NDCs) for Argentina and Uruguay.	Activity 3.1. Drafting up of adaptation indicators concerning Project activties linked to NDC.	regional executing entity	ARG-URU	Argentina-Uruguay	consultants fee	**$30.000**	**$18.750**	**$18.750**	**$100.000**
		regional executing entity	ARG-URU	Argentina-Uruguay	tickets and travel expenses	**$7.500**			
	Activity 3.2. Monitoring of indicators and reporting of Project activities in each country.	regional executing entity	ARG-URU	Argentina-Uruguay	consultants fee	**$50.000**	**$31.250**	**$31.250**	
		regional executing entity	ARG-URU	Argentina-Uruguay	tickets and travel expenses	**$12.500**			
4. Strategies and best practices involving adaptation, climate risk management, territorial planning, territorial policy, housing infrastructure adaptation, recovery of vacant lands, have been shared by Argentina and Uruguay.	Activity 4.1. Bi-national participatory process to share good practice experiences and lessons learned addressing planning instruments and protocols related to health, housing, risk management, housing infrastructure, territorial policy, among others.	regional executing entity	ARG-URU	Argentina-Uruguay	Training	**$74.000**	**$47.000**	**$47.000**	**$180.000**
		regional executing entity	ARG-URU	Argentina-Uruguay	publication	**$20.000**			
	Activity 4.2. Design of a web platform to disseminate good practices, and lessons learned in countries involved. The update of the platform over the execution of projects is included.	regional executing entity	ARG-URU	Argentina-Uruguay	consultants fee	**$40.000**	**$43.000**	**$43.000**	
		regional executing entity	ARG-URU	Argentina-Uruguay	sofware	**$40.000**			
		regional executing entity	ARG-URU	Argentina-Uruguay	tickets and travel expenses	**$6.000**			
5. Flood Early Warning System has been consolidated.	Activity 5.1. Establishment of governance instruments and support for inter-institutional coordination for exchanges of information, actions (such as simulations) and stakeholders to strengthening up the lower Uruguay River´s Early Warning System (EWS).	regional executing entity	ARG-URU	Argentina-Uruguay	Training	**$25.000**	**$15.700**	**$15.700**	**$225.000**
		regional executing entity	ARG-URU	Argentina-Uruguay	publication	**$6.400**			
	Activity 5.2. Development and implementation of modelling, prediction, communication and training tools for floods EWS building from the CTM – CARU projections.	regional executing entity	ARG-URU	Argentina-Uruguay	consultants fee	**$24.000**	**$109.300**	**$84.300**	
		regional executing entity	ARG-URU	Argentina-Uruguay	sofware / hardware	**$105.000**			
		regional executing entity	ARG-URU	Argentina-Uruguay	tickets and travel expenses	**$9.600**			
		regional executing entity	Entre Rios	Argentina	hardware/software/telecommunications equipment	**$55.000**			
6. Updating and implementation of Regional Plans for Disaster Risk Management, including the Climate Change (CC) perspective, have been supported.	Activity 6.1. Revision and drafting of plans and some other local, regional, departmental, or water basin-based risk management tools for climate-related disasters incorporating key ACC actions focused on urban floods, based on a review of plans currently under way.	regional executing entity	ARG-URU	Argentina-Uruguay	consultants fee	**$216.000**	**$130.000**	**$130.000**	**$320.000**
		regional executing entity	ARG-URU	Argentina-Uruguay	tickets and travel expenses	**$44.000**			
	Activity 6.2. Capacity-building based on national and binational workshops, focused on managers and other local and subnational stakeholders, including organizations, communicators, media, professionals, addressing their involvement in the implementation of regional flood risk management plans.	regional executing entity	ARG-URU	Argentina-Uruguay	Training	**$50.000**	**$30.000**	**$30.000**	
		regional executing entity	ARG-URU	Argentina-Uruguay	publication	**$10.000**			
Component 2									**$6.500.000**
7. High risk area vacant lands from resettlements have been recovered and re signified to avoid new informal occupations	Activity 7.1. Resignification of the Union Portuaria, Ledesma and urban border areas in Paysandú, Uruguay.	CND	Paysadú	Uruguay	Works & Services	**$900.000**		**$1.000.000**	**$4.850.000**
					tickets and travel expenses	**$50.000**			
					Training	**$30.000**			
					Equipment Rental	**$20.000**			
	Activity 7.2. Resignification and renovation of vacant, flood-prone lots after resettlements. Atahualpa area in Salto, Uruguay.	CND	Salto	Uruguay	Works & Services	**$400.000**		**$455.000**	
					tickets and travel expenses	**$25.000**			
					Training	**$20.000**			
					Equipment Rental	**$10.000**			
	Activity 7.3. Resignification and renovation of flooding-prone vacant lots at the Sauzal Stream mouth, in Salto, Uruguay.	CND	Salto	Uruguay	Works & Services	**$600.000**		**$645.000**	
					tickets and travel expenses	**$20.000**			
					Training	**$10.000**			
					Equipment Rental	**$15.000**			
	Activity 7.4. Environmentally sustainable hydrological management at the Esmeralda Stream – Resignification of the Esmeralda´s neighborhood housing complex - Fray Bentos, Uruguay.	CND	Fray Bentos	Uruguay	Works & Services	**$210.000**		**$250.000**	
					tickets and travel expenses	**$10.000**			
					Training	**$15.000**			
					Equipment Rental	**$15.000**			
	Activity 7.5. Risk prevention and evacuees care Centre. Bella Unión, Uruguay.	CND	CND	Uruguay	Works & Services	**$268.000**		**$300.000**	
						$10.000			
						$10.000			
						$12.000			
	Activity 7.6. Resignification of flood prone high-risk public spaces recovered from irregular residential occupation. Bella Unión, Uruguay	CND	CND	Uruguay	Works & Services	**$167.000**		**$200.000**	
						$6.000			
						$12.000			
						$15.000			
	Activity 7.7. Protection and resignification of the Artaláz Stream Wetland. Colón, Argentina.	Executing unit Arg	Colón	Argentina	Works & Services	**$955.000**	**$1.000.000**		
					tickets and travel expenses	**$20.000**			
					Training	**$10.000**			
					Equipment Rental	**$15.000**			
	Activity 7.8. Remediation and resignification of vacant lots located within Defensa Norte and Cantera 25 de mayo Neighborhood. Concepción del Uruguay, Argentina.	Executing unit Arg	Concepción del Uruguay	Argentina	Works & Services	**$955.000**	**$1.000.000**		
					tickets and travel expenses	**$20.000**			
					Training	**$10.000**			
					Equipment Rental	**$15.000**			
8. Sustainable urban and public infrastructure has been implemented promoting climate change adaptation.	Activity 8.1. Environmentally sustainable hydrological management at the La Esmeralda Stream -hydrological lamination. Fray Bentos, Uruguay.	CND	Fray Bentos	Uruguay	Works & Services	**$210.000**		**$250.000**	**$1.250.000**
					tickets and travel expenses	**$10.000**			
					Training	**$15.000**			
					Equipment Rental	**$15.000**			
	Activity 8.2. Protection against coastal erosion, and sundry repairs at the water treatment plant in the city of Concordia, Argentina.	Executing unit Arg	Concordia	Argentina	Works & Services	**$960.000**	**$1.000.000**		
					tickets and travel expenses	**$40.000**			
	Activity 8.3. Refurbishing of the Access bridge to the Pier and the Coastal areas of the San Javier town.	CND	CND	Uruguay	consultants fee	**$120.000**		**$150.000**	**$150.000**
					tickets and travel expenses	**$10.000**			
					Training	**$10.000**			
					Equipment Rental	**$10.000**			
9. Solutions have been defined and financial mechanisms have been implemented to promote CCA housing and commercial buildings in medium risk areas.	Activity 9.1. Revolving fund for housing adaptations in flood medium-risk zones, according to the Risk Map. Pilot case in Paysandú.	CND	Local Financial Institution	Uruguay	consultants fee	**$50.000**		**$200.000**	**$250.000**
					fund	**$150.000**			
	Activity 9.2. Design of flood insurance for commercial and tourist premises in coastal areas. Entre Ríos, Argentina	Executing unit Arg	Secretariat of Environment ER	Argentina	consultants fee	**$50.000**	**$50.000**		

Component 3									**$2.412.500**
10. Ecosystemic services and benefits have been identified and assessed, including for CCA and Uruguay River ecosystems connectivity.	Activity 10.1. Identification, mapping and evaluation of ecosystem benefits on account of their contribution to climate change adaptation and connectivity in Argentina and Uruguay.	CND	SNAP	Uruguay	consultants fee tickets and travel expenses Training	**$40.000** **$5.000** **$5.000**		**$50.000**	**$200.000**
		Executing unit Arg	Secretariat of Environment ER	Argentina	consultants fee tickets and travel expenses Equipment Rental hardware/software/Satellite images Training	**$75.000** **$15.000** **$15.000** **$25.000** **$20.000**	**$150.000**		
11. New ecosystem-based adaptation measures have been designed and implemented.	Activity 11.1. Adequacy of infrastructure required to upgrade resilience to CC in vulnerable human activities in protected areas, including tourism, livestock and beekeeping in the Estero de Farrapos Protected Area in Uruguay.	Executing unit Arg	Secretariat of Environment ER	Argentina	consultants fee tickets and travel expenses Equipment Rental Training	**$75.000** **$15.000** **$15.000** **$20.000**	**$125.000**		**$2.212.500**
		CND	SNAP	Uruguay	ants fee (infrastructure planning and tickets and travel expenses Training Works & Services	**$50.000** **$15.000** **$11.417** **$332.000**		**$408.417**	
	Activity 11.2. Implementation of climate change ecosystem-based adaptation measures in the Rincón de Franquía Protected National Area in Uruguay	CND	SNAP	Uruguay	consultants fee tickets and travel expenses Training Supplies and equipment (for adaptation measures) Equipment Rental	**$30.000** **$2.500** **$2.500** **$20.000** **$5.000**		**$60.000**	
	Activity 11.3. Restoration of vulnerable coastal ecosystems through monitoring of exotic species and planting of native species.	CND	SNAP	Uruguay	fees (crews coordination) tickets and travel expenses Training comunication Equipment Rental s and equipment (purchase and maint	**$60.000** **$20.000** **$19.833** **$20.000** **$60.000** **$320.500**		**$500.333**	
		Executing unit Arg	National Parks	Argentina	consultants fee tickets and travel expenses Training purchase of inputs: plants and others	**$10.000** **$5.000** **$10.000** **$418.750**	**$443.750**		
	Activity 11.4. Structural consolidation of historical buildings, protection of the coastal canyon and valorization of the historic site Calera del Palmar or de Barquín, in El Palmar National Park (PNEP).	Executing unit Arg	National Parks	Argentina	consultants fee tickets and travel expenses Training purchase of inputs: plants and others	**$20.000** **$10.000** **$20.000** **$625.000**	**$675.000**		
Component 4									**$1.460.000**
12. Social vulnerability monitoring and evaluation tools have been devised with a particular focus on Human Rights, gender, and generations.	Activity 12.1. Development of a tool for analysis, monitoring and assessment of social vulnerability in each country, incorporating a human rights, gender and generations approach, based on the review of methodologies, background analysis and pre-existing experiences in terms of social Vulnerability.	regional executing entity	ARG-URU	Argentina-Uruguay	consultants fee tickets and travel expenses Training publication	**$40.000** **$10.000** **$10.000** **$10.000**	**$35.000**	**$35.000**	**$200.000**
	Activity 12.2. Review of social vulnerability in towns involved in the project; this review should be based on the tool designed in Activity 12.1. Drafting of a report of the review and the publication of results in each country.	regional executing entity	ARG-URU	Argentina-Uruguay	consultants fee tickets and travel expenses publication Training	**$70.000** **$15.000** **$10.000** **$35.000**	**$65.000**	**$65.000**	
13. Assessments of perception of social risks have been carried through towards the construction of resilience.	Activity 13.1. Drafting up of a methodology allowing for identification, estimation, and review of a risk social perception, and drafting up of a methodology-based document.	regional executing entity	ARG-URU	Argentina-Uruguay	consultants fee tickets and travel expenses Training publication	**$40.000** **$15.000** **$15.000** **$15.000**	**$42.500**	**$42.500**	**$200.000**
	Activity 13.2. Implementation of the methodology developed in Activity 13.1 allowing for social perception of risk identification, estimation, and review in local communities in each country, and further publication of outcomes in each country.	regional executing entity	ARG-URU	Argentina-Uruguay	consultants fee tickets and travel expenses Training publication	**$65.000** **$15.000** **$20.000** **$15.000**	**$57.500**	**$57.500**	
14. Strategies for assistance and capacity-building of the workforce made up by vulnerable populations have been promoted.	Activity 14.1. Capacity building strategy for the reconversion of the labor force of families who have been resettled in Paysandú, Uruguay.	CND	Paysandú	Uruguay	consultants fee tickets and travel expenses Training	**$165.000** **$15.000** **$20.000**		**$200.000**	**$400.000**
	Activity 14.2. Social and labor capacity-building, and drafting up of workforce capacity-building in Entre Ríos, Argentine	Executing unit Arg	Entre Ríos	Argentina	consultants fee tickets and travel expenses Training	**$160.000** **$15.000** **$25.000**	**$200.000**		
15.Social networks have been strengthened up through an exchange in Climate Change Adaptation (CCA) good practices and local risk management	Activity 15.1: Local, national and regional social networks strengthened up on subjects such as awareness and sensitivity vis-a-vis the role coastal systems and vulnerable ecosystems play in CC adaptation.	regional executing entity	ARG-URU	Argentina-Uruguay	consultants fee tickets and travel expenses Training publication	**$100.000** **$20.000** **$130.000** **$50.000**	**$150.000**	**$150.000**	**$300.000**
16.Communication, education and dissemination strategies have been implemented towards reducing vulnerability.	Activity 16.1. Identification of adaptation background and local risk management to address climate change involving the community and education and implementation of activities in the area of project intervention.	regional executing entity	ARG-URU	Argentina-Uruguay	consultants fee tickets and travel expenses Training publication	**$40.000** **$15.000** **$10.000** **$25.000**	**$45.000**	**$45.000**	**$360.000**
	Activity 16.2. Implementation of communication campaigns aimed at local communities in order to raise awareness about the effects of CC, the importance of adaptation and the SATs at the community level, including field missions and exchange the dissemination of	regional executing entity	ARG-URU	Argentina-Uruguay	consultants fee tickets and travel expenses Training	**$60.000** **$20.000** **$100.000**	**$90.000**	**$90.000**	
	Activity 16.3. Drafting up of methodological guidelines focused on communication and management of projects being executed as part of the CCA strategies.	regional executing entity	ARG-URU	Argentina-Uruguay	consultants fee tickets and travel expenses Training	**$50.000** **$15.000** **$25.000**	**$45.000**	**$45.000**	

$12.000.000 **$6.000.000** **$4.000.000** **$24.000.000**

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