REGIONAL PROGRAM PROPOSAL

PART I: PROGRAM INFORMATION

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

Countries:	Argentine Republic and the Oriental Republic of Uruguay
Focus area[1]:	Disaster risk reduction and early warning systems
Type of implementing entity:	Regional Implementation Entity (RIE)
Implementing Entity:	CAF–Development Bank of Latin America
Executing Entity:	Argentine Government Secretariat of Environment and Sustainable Development
	Ministry of Housing, Territorial Planning and Environment of Uruguay
Amount of financing requested:	$13,999,996 USD (in US Dollars equivalent)

[1] Thematic areas are: Food security; Disaster risk reduction and early warning systems; Transboundary water management; Innovation in adaptation finance.

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CONTEXT

1. Introduction

1. The program implementation area is located in the lower Uruguay River. Cities and riparian protected areas of significant importance are located along this river corridor, which is shared by Argentina and Uruguay.

2. The Program is aimed at promoting resilience in these communities and ecosystems, and reducing their vulnerability by means of developing instruments, tools and shared experiences for planning and adapting to climate change.

3. River floods are becoming increasingly frequent and severe due to the effects of climate change, thus causing serious damage to the infrastructure, generating economic losses and affecting the population in both countries. Consequently, it is important to manage and guide an adaptation process that includes strategies designed at the regional level and implemented at the local level, by means of policies and plans that consider the climate change perspective in communities and riparian ecosystems.

4. The international agenda identifies local governments as relevant agents to be empowered to deal with climate change adaptation, the reduction of disaster risks and to achieve sustainable development objectives. Working on a combination of these three frameworks of action has the common objective of reducing vulnerability and increasing resilience (UNFFCC, 2017).

5. There are several initiatives in the region, which focus on cities and guide and promote actions linked to building resilience in an integrated manner. Such is the case of Mercociudades, where the cities of Paysandú and Salto, which are included in this Program, participate. It is also the case of initiatives such as RAMCC (Argentine Network of Municipalities against Climate Change) in Argentina. The role of the local and community level in the implementation of climate change adaptation measures is central to this program, working in the line of Community Based Adaptation (CBA).

6. Considering that the resilience of cities involved in this Program provides substantial and inextricable support, and in line with the concept of Ecosystem-based Adaption (EBA), there is also the challenge of recovering riparian ecosystems (wetlands) by means of green or nature-inspired infrastructure. Many of the proposed interventions pursue the valuation and restoration of riparian environments in urban areas, as a buffer for surplus water, and in turn, as public recreational areas that favor social inclusion. On the other hand, another objective is to avoid a new informal occupation of the floodplains were some cities have previously carried out relocation processes, reducing the amount of population at risk of flooding while guaranteeing a human rights approach in adaptation action.

7. Regarding the ecosystems within the Program area, given that they operate with a logic that differs from that of urban areas, where jurisdictional limits do not come into play, it is necessary to understand their behavior as ecological corridors in order to pursue their conservation and sustainability. Three protected areas act as pillars; two of them fall under a national parks category: El Palmar (Argentina) and Esteros de Farrapos e Islas del Río Uruguay (Uruguay), and one of them is categorized as an environmental protection area, Rincón de Franquía (Uruguay). These areas are representative of the ecosystem of the lower Uruguay River and are considered within this program given their vulnerability to climate change.

8. To address the general objective of the Program, which aims at building climate change resilience at communities and ecosystems of the Uruguay River, several outputs will be developed in a comprehensive approach of climate risk management and community and ecosystem-based adaptation. These outputs are grouped complementary in four components:

9. Under Component 1 (Outcomes I and II), efforts will be made to strengthen public policy planning instruments, in a comprehensive strategy (territorial, public infrastructure and services, housing and protected areas, among others), incorporating medium- and long-term climate risk adaptation scenarios. In addition, the identification and quantification of losses and damage caused by climatic events, and appropriate methodology design, will better enable planning and as a result a better preventive policy. In turn, this can reveal the different vulnerabilities related to those impacts, useful for Outcome V. Simultaneously, an output will be centered on consolidating coordination, communication and forecasts for an early warning system for floods.

10. Under Component 2 (Outcome III), as a complement of climate risks mainstreaming in urban territorial planning policies, flood prone areas will be reclaimed in the form of "Linear Parks", thus avoiding the informal settlement of the most vulnerable groups in such areas, and shaping it as a space for social integration. On the other hand, for the consolidated urban areas where mid-income people reside, the implementation of a revolving economic fund will begin to finance small housing interventions that help reduce floods related damage and losses. Similarly, financial instruments, such as the creation of flood insurance for tourist activities in coastal areas, will be studied.

11. Under Component 3 (Outcome IV), outputs are oriented towards conservation policies in protected areas, as well as the identification and evaluation of ecosystem services and the design of adaptation measures based on ecosystems.

12. Under Component 4 (Outcome V), all the Outputs complement one another and have a cross cutting approach for the development of the other Components, taking into account a perspective of human rights, gender and generations. The vulnerability and social risk perception analysis; the generation and strengthening of networks or organizations; the development of communication strategies and the process of retraining will be instruments in building social resilience and sustainable territorial management.

13. Finally, workshops for the exchange of experiences and new knowledge, lessons learned, successful cases among local governments and managers of protected areas will be carried out simultaneously for all the components.

Table 1. Program Components, Outcomes and Outputs

COMPONENTS	OUTCOMES	OUTPUTS
COMPONENT 1: Territorial Planning and Risk Management	OUTCOME I National, subnational and local governments have been strengthened by means of the development of instruments, the exchange of experiences and the	1. Land management plans, protected areas management plans, and housing and water programs, under review or in progress, include the climate change perspective
		2. Methodological guidelines to assess impact, damages and losses have been designed and implemented

COMPONENTS	OUTCOMES	OUTPUTS
	inclusion of climate change in their planning and management instruments.	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.
	OUTCOME II Sub-national and local risk management strategies have been strengthened and community-based, early warning systems (EWS) for floods, have been consolidated in a coordinated manner.	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.
		5. Flood Early Warning Systems has been consolidated.
		6. Updating and implementation of Regional Plans for Disaster Risk Management, including the Climate Change (CC) perspective, have been supported.
COMPONENT 2. Priority measures to increase resilience in flood-prone cities	OUTCOME III The resilience of coastal cities has been increased through the implementation of structural and non-structural adaptation measures.	7. High risk area vacant lands from resettlements have been recovered and re signified to avoid new informal occupations.
		8. Sustainable urban and public infrastructure has been implemented promoting climate change adaptation.
		9. Solutions have been defined and financial mechanisms have been implemented to promote CCA in housing and commercial buildings in medium risk areas.
COMPONENT 3. Priority measures for the adaptive conservation of the vulnerable coastal ecosystems of the Uruguay River	OUTCOME IV Adaptive conservation measures have been implemented in vulnerable ecosystems on both banks of the Uruguay River, including the identification and evaluation of their ecosystem services	10. Ecosystemic services and benefits have been identified and assessed, including for CCA and Uruguay River ecosystems connectivity.
		11. New ecosystem-based adaptation measures have been designed and implemented.
COMPONENT 4. Priority measures to increase resilience and reduce social vulnerability	OUTCOME V Communities and social organizations increased their resilience in the framework of climate change adaptation and risk management of hydro-climatic disasters.	12. Social vulnerability monitoring and evaluation tools have been devised with a particular focus on Human Rights, gender, and generations.
		13. Assessments of social perception of risks have been carried through towards the construction of resilience.
		14. Strategies for assistance and capacity-building of the workforce made up by vulnerable populations have been promoted.
		15. Social networks have been strengthened up through an exchange in Climate Change Adaptation (CCA) good practices and local risk management strategies.
		16. Communication, education and dissemination strategies have been implemented towards reducing vulnerability.

Component 1: Territorial Planning and Risk Management

- This component includes all outputs aimed at strengthening the instruments for planning and comprehensive risk management in the face of climate change. First, territorial, urban and rural planning, housing, water, infrastructure, public investment and protected area management plans will be reviewed and updated to include the perspective of climate change and risk management in the lower Uruguay River. Secondly, a methodology for the evaluation of impact, damages and losses will be designed and implemented to register climate related disaster events. In particular, efforts will focus a community-based early warning system (EWS) to strengthen preparedness and response, taking into account the multiple vulnerabilities, gender and generations issues. Parallel to the Program's activities and in a transversal manner, periodic workshops will be held to disseminate and share lessons learned and good practices related to the different topics addressed. The Program's outcomes will serve as input for activities planned at the national level (national adaptation plans, for example) and will be included in Adaptation Communications and National Determined Contributions (NDCs) for Argentina and Uruguay, or other relevant instruments.

Component 2: Priority measures to increase resilience in flood-prone cities

- There are approximately 650,000 inhabitants in the cities participating in the Program. In some of these cities, up to 15-20% of the population is located in flood-prone areas. The challenge of increasing resilience to the impacts of climate change, requires comprehensive adaptation measures -including urban, environmental, social, economic, and financial measures- that involve the design of urban infrastructure that prevents the reoccupation of flood-prone areas where population relocation processes were carried out, the reforestation of vacant land and green areas, as well as financial assistance to strengthen public policies that are being implemented. Through this component, the selected coastal cities of the Uruguay River will increase their resilience to climate change by implementing urban, environmental, social, economic and financial adaptation measures. This includes the restoration of vacant lands from resettlements, the development of sustainable urban infrastructure, , as well as the design and implementation of financial funds (revolving funds, insurance, among others), normative and housing improvement instruments for medium and high-risk areas, as measures of climate change adaptation.

Component 3: Priority measures for the adaptive conservation of the vulnerable coastal ecosystems of the Uruguay River

- The ecosystems of the Uruguay River are very valuable due to their biological diversity, their role in providing ecosystem benefits and services, especially those related to the river's equilibrium and dynamics (buffer zones, water purification, flood regulation and temperature, prevention of erosion, among others). These ecosystems are affected by hydroclimatic alterations, which endanger the natural supply of natural resources, biodiversity and river dynamics. At the same time, these impacts are increased by the escalating coastal urbanization, the settlements along the river, which add new threats related to pollution processes and loss of water quality. Adaptation strategies based on ecosystems are suggested, which will include mapping ecosystem services, restoring significant ecosystems and the natural dynamics of the river by recovering the coast, the protection of environmental services and measures to reduce health-related problems in the cities.

Component 4: Priority measures to increase resilience and reduce social vulnerability

- Through this component, community-based adaptive measures that can be implemented on both banks of the Uruguay River and which can generate resilience in societal practices, will be designed and implemented. In first place, it seeks to strengthen and/or create spaces where civil society can get involved in climate change adaptation and community-based risk management measures, to improve their sustainability and ensure ownership by the community. Secondly, strategies will be designed to empower pre-existing social networks and/or create new ones, by exchanging community level lessons learned, good practices and spaces for citizen participation. Strategies to reduce socio-economic

vulnerability will be developed through work reconversion for families relocated from informal settlements. Tools to monitor and evaluate social vulnerabilities will be developed as well as strategies on communication, sensibilization and education.

2. Problem to address – Regional Context

Climate change in the lower Uruguay river

14. The Program's implementation area is centered on the lower Uruguay River, a transboundary water course whose watershed is part of the territories of Argentina, Brazil and Uruguay. It covers a total area of approximately 339,000 km^2 and has an average flow of 4,500 m^3/s. The Uruguay River has its origins in the Sierra do Mar (Brazil) and it measures 1,800 km up to its mouth in the Río de la Plata. It runs approximately 32% in Brazilian territory, 38% between the Argentina and Brazil border and 30% along the Argentina and Uruguay border.

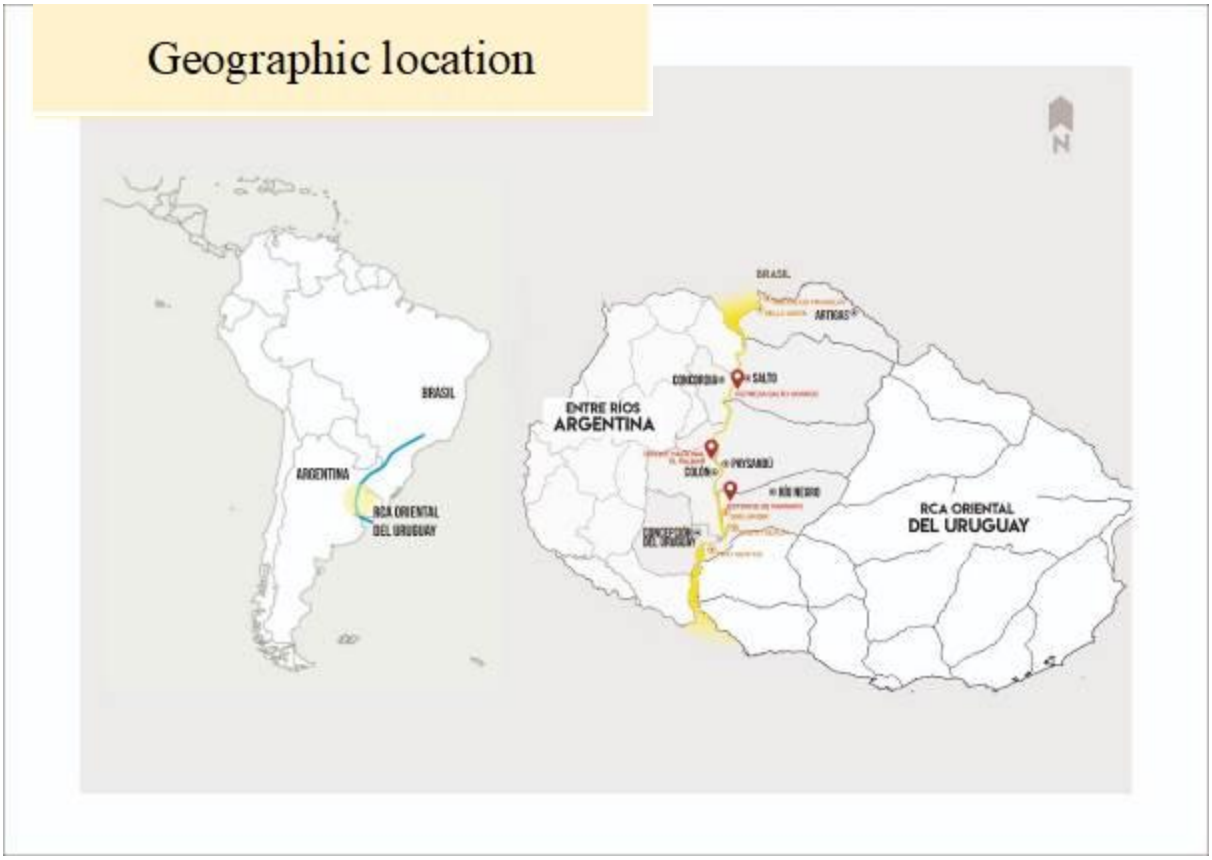
15. The geomorphology of the area is characterized by a homogeneous terrain without high elevations and with meandering courses that frequently suffer floods. This represents one of the main hydro-climatic threats for the region and is exacerbated by the effects of climate change. Upstream from the Program area, the river has numerous rapids, waterfalls and its banks have high ravines.

16. The region's climate is humid temperate, and the wide river input basin of the Uruguay river is located in zones that receive 2,000 mm of annual rainfall during winter and spring months, with variations ranging between 70 mm and 132 mm. The tropical and subtropical region of South America is characterized by the South American Monsoon, a system of seasonal atmospheric circulation in South America and the adjacent Oceans, which is conditioned by seasonal solar radiation and has an important influence on the hydroclimatic regime of the Plata Basin. One of its main characteristics is a defined annual precipitation cycle in most of the basin, with maximum records in the summer and minimum records in winter.

17. There has been an increase in average annual rainfall in this region since the 1970s, which, on one hand, facilitated the expansion of the agricultural frontier in the western zone surrounding the traditional humid region and, on the other hand, led to the permanent or transitory flooding of a large number of productive fields. Consequently, there was a significant increase in river flows, and although this brought benefits for the development of the hydroelectric sector, it also caused more frequent floods. There was also a considerable increase in the frequency of extreme rainfall in the region, which worsened in the 1990s.

18. In addition to the increase in average annual rainfall and extreme rainfall, a series of changes have affected the basin's hydrological system. This is due to the decrease of the soil's water infiltration and storage capacity, the decrease in the volume stored in the underground layers due to erosion and compaction, as a result of inadequate agricultural practices, afforestation with exotic species and deforestation of the natural forest. As a result, there is an increase in floods during times of maximum rainfall and an increase in droughts during periods of low rainfall.

Figure 1. Uruguay River basin and delimitation of the lower sub basin



(Arzamendia 2015, modified). Detail of the vulnerable cities on both banks of the Uruguay river (Adapted from a LANDSAT image- Copernicus 2017; –SIU NOAA, US Navy NGA-GEBCO).

19. The predicted climate change (CC) scenarios for this region are available in the Third National Climate Change Communication for Argentina (TNC Argentina, 2015[2]), in Argentina's Risk Map System for Climate Change, SIMARCC[3], and in Uruguay's Fourth National Communication (FNC, 2016[4]).

20. Projections predict increased extreme rainfall, which could increase the frequencies of high-water levels and floods and, therefore, could cause unplanned migrations and relocations, affecting basic services and environmental services, internal connectivity, access to health centers and educational institutions, increases in health risks due to vectors and pollution, effects on primary economic activities in peri-urban areas and tourism, among others.

21. The probable changes projected for the period 2020/2040 by the Argentinean Research Center for the Sea and the Atmosphere (CIMA), through a high-resolution climate model and with results from several global climate models, estimate that the high frequency of heavy rainfall and

[2] http://unfccc.int/resource/docs/natc/argnc3s.pdf.

[3] http://simarcc.ambiente.gob.ar

[4] https://www.mvotma.gub.uy/documentos/comunicaciones-nacionales/item/10008665-cuarta-comunicacion-nacional

flooding in currently affected areas will continue, with consequent negative impacts (physical, economic, social and environmental). In this communication (TNC Argentina, 2015), the increase in annual average precipitation in most parts of Argentina (and especially in the Northeast and the zone surrounding the traditional humid region) and the increase in extreme rainfall in a large part of the country's eastern and central areas, are identified as priority factors for the design and application of adaptation measures.

22. According to studies carried out for Uruguay's Fourth National Communication, based on the global climate models (CMIP5, IPCC 2013) that are best suited and forced by the RCP socio-economic scenarios and the generation of AR5 climate models (IPCC 2013), the following can be stated for the Uruguayan territory for the 1979 - 2005 and 2001-2014 historical periods:

    a. the evolution of the average annual change in surface temperature shows a similar behavior up to 2030 (+0.5 ° C) for both scenarios (RCP 4.5, RPC8.5); whereas for 2050, +1.0°C increases were estimated under the RCP 4.5 scenario and +1.5°C under the RPC8.5 scenario.

    b. Regarding the progression of the change in average annual precipitation over the country, it is noted that there will be slight increases under the RCP 4.5 scenario with increases of +0.10 to 0.15 mm per day for 2030 and under the RCP 8.5 scenario, figures are +0.15 to +0.20 mm per day for 2050.

23. Projections suggest that there will be a decrease in the number of frost days, a significant increase in the number of temperate nights, an increase in the duration of heat waves and a significant increase in the intensity of rainfall. Extreme events (heavy rains and winds, storms, hail, etc.) will continue to be more frequent. According to global and regional predictions, these events are also expected to be more frequent and intense over time.

24. Besides Argentina and Uruguay's climate change projections included in their National Communications and the projections carried out for the La Plata Basin, other pertinent studies confirm that future climate change projections show an increase the Uruguay River's flood risks due to higher average and extreme flows, caused by increased rainfall and extreme events.

25. Some studies (ECLAC, 2013)[5] developed climate change scenarios for the Uruguay River using the PRECIS climate projections for temperature and rainfall. The scenarios showed average flow increases of 33% in the B2 emissions scenario in the 2016-2026 period, up to an increase of 57% in the A2 emissions scenario for the period of 2091-2100, vis-à-vis the 1990-1999 period.

26. Another research paper[6] included projections on the 10-year frequency of daily events with water level above the evacuation threshold in Paso de los Libres, for B2 and A2 emission scenarios according to the VIC model forced with the unbiased PRECIS model outputs.

27. These hydrological scenarios of the Uruguay River show an increase in the frequency of flood events, which in 2091-2100 will be almost twice as high as those of the reference period (1990-1999). Likewise, during some decades, floods are more frequent under low emissions scenarios (B2) (2026-2035, 2046-2055 and 2091-2100) than for the highest emissions scenario (A2).

[5] Barros, Vicente "Escenarios hidrológicos de flujos medios en los ríos Uruguay y Paraná ", ECLAC 2013.

[6] Inés A. Camilloni, Ramiro I. Saurral and Natalia B. Montroull, 2013. "Hydrological projections of fluvial floods in the Uruguay and Paraná basins under different climate change scenarios", published in the International Journal of River Basin Management (11:4, 389-399)

Table 2. Results for the ETA regional climate model (10 km) for future scenarios (compared to the 1961 – 1990 period).

Macro Basin	Rainfall			Temperature		
	Periods					
	2011-2040	2041-2070	2071-2100	2011-2040	2041-2070	2071-2100
Upper Paraguay	Decreases throughout the year	Decreases DEF	Decreases DEF	Increases throughout the year >2°C DEF>3,5°C	Increases throughout the year >3°C	Increases throughout the year >3°C DEF>4°C
Lower Paraguay	Decreases SOM-DEF	Increases MAM	Increases MAN-SON	Increases throughout the year >2°C	Increases throughout the year >2,5 °C	Increases throughout the year >2,5 °C
Upper Paraná	Decreases throughout the year	Decreases DEF	Increases MAM-JJA-SON	Increases throughout the year >2°C	Increases throughout the year >2°C	Increases throughout the year >2,5 °C
Lower Paraná	Increases MAM-DEF	Increases MAM-DEF	Increases MAM-DEF	Increases throughout the year >2°C	Increases throughout the year >2°C	Increases throughout the year >2,5 °C
Upper Uruguay	Increases MAM-SON	Increases MAM-JJA-SON	Increases throughout the year	Increases throughout the year >2°C	Increases throughout the year >2,5 °C	Increases throughout the year >2,5 °C
Lower Uruguay	Increases DEF	Increases JJA-DEF	Increases MAM-DEF	Increases throughout the year >1°C	Increases throughout the year >2°C	Increases throughout the year >2,5 °C
Río de la Plata	Increases DEF	Increases DEF	Increases MAM-DEF	Increases throughout the year >1°C	Increases throughout the year >2°C	Increases throughout the year >2,5°C

Source: CIC

Vulnerability in cities and ecosystems of the lower Uruguay River

28. The low basin of the Uruguay River plays an important role in providing territorial structure to the cities, including some port cities, located along its margins and provides a direct physical link by means of binational bridges that communicate both countries (Fray Bentos - Gualeguaychú, Paysandú - Colón and Salto - Concordia). The fluvial riverbank is a centerpiece that boosts both banks from the economic, cultural, landscape and recreational points of view. The Binational Hydroelectric Power Plant of Salto Grande is located about 15 km upstream from the cities of Salto (Uruguay) and Concordia (Argentina) and it very important for the generation of electric power for both countries. In turn, the Mixed Technical Commission (CTM), which monitors the dam, is in charge of producing information in its Emergency Action Plan (PADE), regarding flood lines and recurrences This instrument is very useful as an input for the different activities of this project.

29. There are several threats of extreme events in the study area, such as: droughts, floods, cold and heat waves, strong winds, hail, heavy rains and severe storms. There are also vector-borne diseases associated with climate change and variability (dengue, chikungunya, yellow fever, zika) due to an increase in the distribution area and the presence of habitats that favor the growth of

insect populations in the face of changes in temperature conditions, relative humidity and rainfall in the region.

30. Besides all the threats, the floods caused by high water levels of the Uruguay River and its tributaries are the phenomena that generate the greatest struggles and have the strongest impacts in the cities along the river corridor. This is particularly so, in the presence of the ENSO phenomenon, during spring and autumn, which also increases the probability of large-scale rainfall vis-à-vis those historically recorded for the same periods of the year. The ENSO event begins in the month of September of the first year and ends in the first half of the second year, producing extraordinary floods in the water courses of the entire La Plata basin. This generates long lasting regional floods that have important social and economic impacts on both margins[7].

31. Between November 2009 and February 2010, the region was severely affected by the El Niño phenomenon (ENSO), which produced considerable floods that affected Uruguay's northern region and coastline, especially the cities of Artigas, Salto and Paysandú. In the summer of 2014, rainfall exceeded the monthly averages by 150% and 350%, triggering an emergency situation affecting the social, health, communication and agricultural sectors. As a result, 1% of public spending had to be allocated to address the emergency.

32. In general, hydro-meteorological events cause the most damage to both countries. In Uruguay, these events account for 73% of the National Emergency System's (SINAE) actions. According to the EM-DAT database for Argentina, between 1970 and 2015, 93% of major disasters were of hydro-meteorological origin (floods and avalanches caused by heavy rains), affecting 14 million people and causing losses of US $10 billion. This country was among the 10 countries most strongly affected by major disasters during 2016, amounting to 1,000 trillion dollars (EM-DAT, 2016). Between December 2015 and April 2016, 8,340 people were affected by rains and storms and 19,840 people were affected by floods due to river overflows.

33. The impacts of the floods also reflect the current level of vulnerability and exposure, which responds to the logics of occupation linked to the cities' different development stages. Historically, the region has experienced progressive urbanization and an acceleration of migratory processes, which have resulted in a significant increase in the urban and peri-urban population. The predominant hygienist vision of those days, which later gave rise to urbanism, legitimized the advance and occupation of floodplains and the need to "claim land from the river." The wetlands were perceived as lands that had to be sanitized, drained and filled for the expansion of cities. Therefore, there was a determined expansion process into floodable areas, because they were cheaper, and this allowed the middle socioeconomic sectors to secure a place where they could build their houses. The current configuration of the cities on both banks shows that this expansion has taken place not only on the banks of the Uruguay River – which was later enabled by means of defense embankments - but also in tributary river courses, which often become piped as part of urban drainage and create problems such as flash floods (referred to as "enchorradas" in Spanish) (Piperno, et. al. 2009). In subsequent decades, mainly since the 1990s and as a result of economic policies in the region, the expansion has become accentuated, although led by low-income population sectors that have settled informally on floodplains to solve their housing problem.

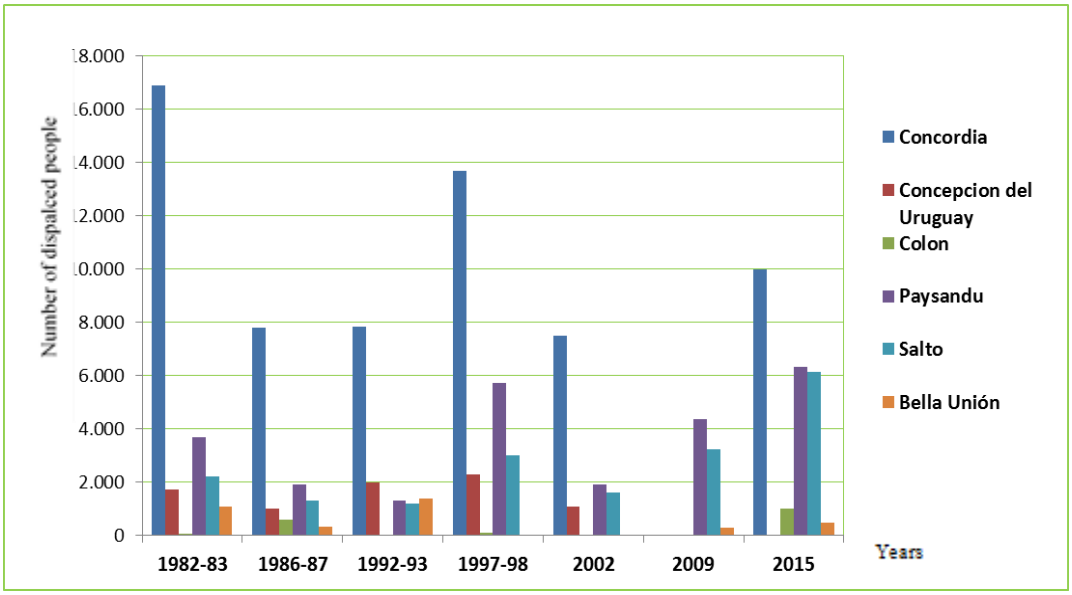
34. *Figure 1* shows the number of people displaced (evacuated and self-evacuated) due to successive floods that have taken place from 3 to 7 years, during a little over three decades (from 1983 to 2015) for the largest riverside cities in both countries. Concordia stands out as the most strongly affected city during the entire period, along with Paysandú and Salto, with approximately

[7] In the case of Argentina, the most affected provinces are usually Formosa, Chaco, Santa Fe, Buenos Aires, Misiones, Corrientes and Entre Ríos, where more than 90% of the population lives and more than 70% of the country's GDP is generated.

17,000 affected people in 1983. The recurrence of these floods provides a sense of the economic damage and social impacts they cause.

35. More recently, according to the Uruguay SINAE, between 5% and 15% of the population of the departments of Artigas, Paysandú and Salto (approximately 23,000 people) had to be evacuated in 2015 due to floods caused by river overflow. Human and economic resources were necessary to address this emergency and to support recovery efforts. In 2016, floods left thousands of displaced people in departments like Paysandú and during the first semester of 2017, 4,292 people were displaced from the coast of the Uruguay river.

Figure 1. Number of displaced people (evacuated and self-evacuated) during the great floods of the Uruguay river.



Source: Vulnerability Analysis, Adaptation Capacities and Climate Change Risk

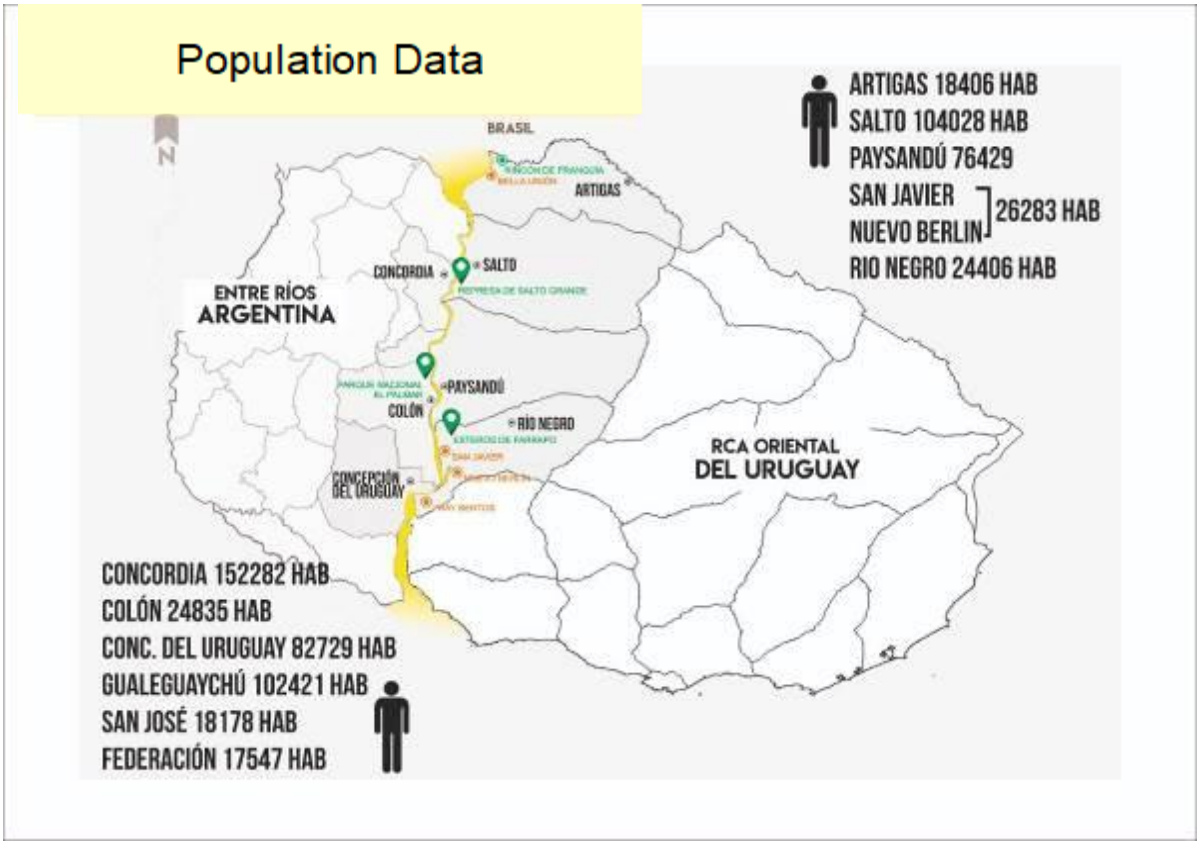
36. Considering that they are affected by recurrent floods, the following riverine cities are considered a priority for this program:

In the Oriental Republic of Uruguay:
i) Bella Unión and Rincón de Franquía, Artigas Department (population of 18,406 in 2011);
(ii) Salto, Salto Department (population of 104,028 in 2011);
(iii) Paysandú, Paysandú Department (population of 76,429 in 2011);
(iv) San Javier and Nuevo Berlín, Río Negro Department (population of 26,283 in 2011) and
(v) Fray Bentos, Río Negro Department (population of 24,406 in 2017).

In the Republic of Argentina, Entre Ríos province:
(i) Concordia (population of 152,282 in 2010);
(ii) Colón (population of 24,835 in 2010),
(iii) Concepción del Uruguay (population of 82,729 in 2010)
(iv) Gualeguaychú (population of 102,421 in 2010);
(v) San José (population of 18,178 in 2010) and
(vi) Federación (population of 17,547 in 2010)

37. These last three cities in Entre Ríos will only be directly benefited, especially through activities from components 1 and 4, since urban resilience actions (component 2) have been prioritized in riverine cities where more people and infrastructure are exposed to climate change.

Figure 2. Population, location of cities and national parks along the Uruguay river



38. According to the sensitivity, adaptation capacities and exposure analysis carried out for the cities in the Program, the cases of Bella Union, Concordia, Paysandú, Salto and Concepción del Uruguay are at high risk to climate change, given their high levels of vulnerability and exposure (*Table 3*). Colón and Fray Bentos are at a medium risk level. Finally, the smaller cities of Nuevo Berlín and San Javier have a low risk to climate change, compared to other cities (see Annex 10 – Summary: Climate Risk Profiles- Cities and Annex 11 – Vulnerability Analysis-Coastal Ecosystems).

Table 3. Cities and Climate Change Risk.

References: RC3: HIGH RC2: MEDIUM RC1: LOW

Country	Cities	Vulnerability	Exposure	Risk
Argentina	Concordia	**V3**	**E3**	**RC3**
	Concepción	**V3**	**E2**	**RC3**
	Colón	**V3**	**E2**	**RC3**

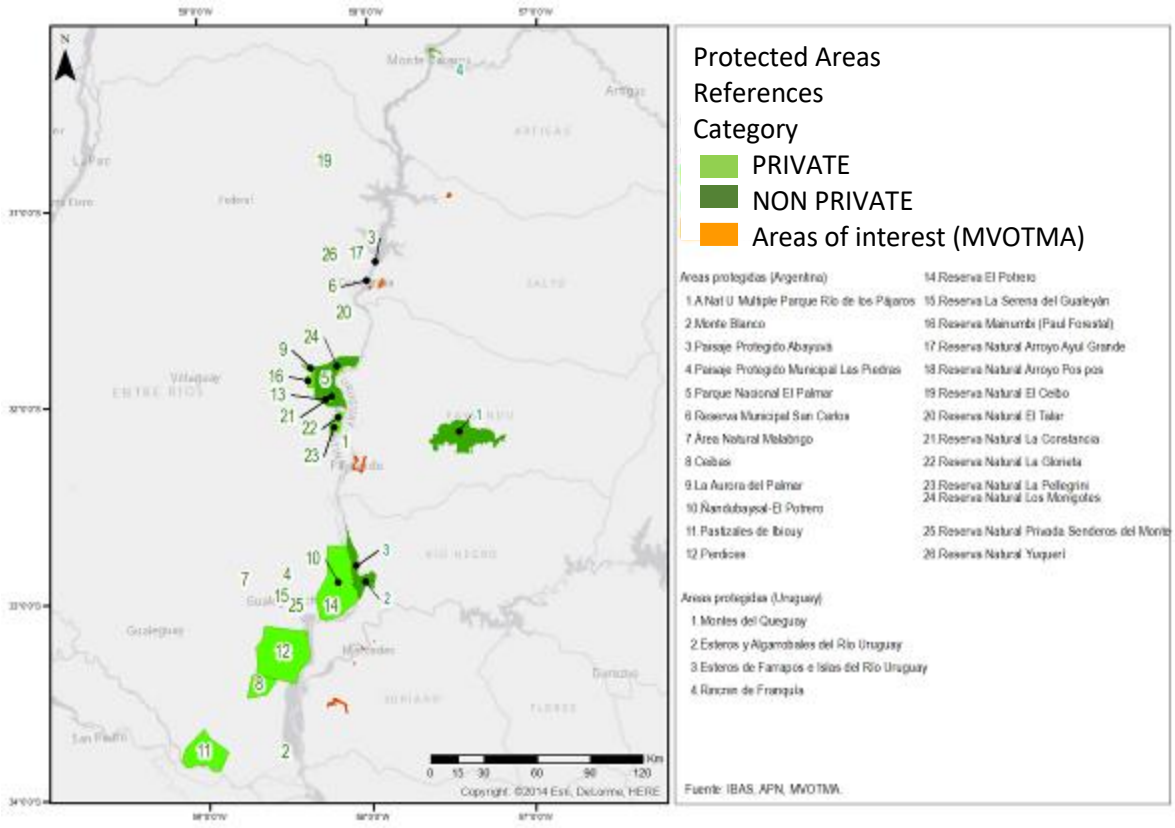
Uruguay	Salto	**V2**	**E3**	**RC3**
	Paysandú	**V2**	**E3**	**RC3**
	Fray Bentos	**V2**	**E2**	**RC2**
	Bella Unión	**V2**	**E3**	**RC3**
	Nuevo Berlín	**V2**	**E1**	**RC1**
	San Javier	**V3**	**E1**	**RC1**

Source: Annex 9 – Vulnerability Analysis

39. With regard to ecosystems, the Uruguay River functions as an ecological corridor of tropical biome species from Argentina and Brazil (Selva Misionera and Mata Atlántica) towards the more temperate zones of the lower stretch of the Uruguay River basin. Therefore, from the point of view of its biodiversity, its riparian forests and wetlands are resources shared by both countries and are relevant for regional conservation.

40. In the Argentine riverside, the National Parks Administration (APN) has two protected areas: El Palmar National Park and Predelta National Park, with more than 10,000 hectares of biodiversity protection. For its part, Uruguay has on the West bank the Esteros de Farrapos e Islas del Rio Uruguay National Park, with a surface of 16,810 hectares. In addition, these National Parks are part of the RAMSAR sites because they are globally significant wetlands. Although these are the most representative, a total of 26 Priority Areas (1 National Protected Area, 4 Municipal Protected Areas, 20 Private Protected Areas, 1 RAMSAR Site and 4 IBAs) amounting to a total approximate surface of 262,556 hectares, were also identified in the Uruguay River influence area. In Uruguay, 4 defined areas and a series of 16 uncategorized and unnamed Protected Areas that are considered a priority by the MVOTMA, were included in the information system. These Protected areas have a total approximate area of 70,115 hectares.

Figure 3. Protected areas and priority areas identified, considering the Uruguay River as the area of influence, with limits between the Province of Entre Ríos and homologous margins in the Uruguay departments.



*Source: First Vulnerability Analysis. Coastal Ecosystems of the Uruguay river (*Annex 11 – Vulnerability Analysis-Coastal Ecosystems)

41. Vulnerability is understood as the propensity or susceptibility of an ecosystem to be affected by the effects of climate change. In this sense, a vulnerability analysis of the Protected Areas of the Uruguay River was carried out, and as result, 12 highly vulnerable areas and 7 moderately vulnerable areas were identified (see Annex 11 – Vulnerability Analysis-Coastal Ecosystems).

42. Protected areas, along with their biodiversity, face numerous problems. Due to the pressure to use riparian forests on both banks of the Uruguay River, erosive processes are detected at different points of the coastal zone. Other impacts are due to the loss of habitat, changes in specific climatic conditions required by the species, poor connectivity between areas due to productive development, the invasion of exotic species and the effects of extreme climatic events. Therefore, managing protected areas under a climate change scenario requires facing important challenges, such as developing institutional capacity and implementing restoration and adaptation initiatives based on ecosystems. These are fundamental to ensure the provision of natural and cultural resources and ecosystem services to buffer and moderate the impact of floods, as well as to guarantee the equal participation of all the key actors involved in managing protected areas.

3. Institutional situation and commitments regarding climate change.

43. The Program seeks to promote the implementation of Nationally Determined Contributions (NDCs) National Adaptation Plans, and Adaptation Communications presented by Argentina and Uruguay under the Convention and the Paris Agreement, especially with regard to strengthening

actions and capacities to address the impacts of climate change and increase resilience at the regional and local levels.

44. Uruguay has evidenced its interest in addressing climate change through a cross-cutting approach in all public policies, by taking different institutional measures and strengthening public capacities in management and decision-making. In particular, there has been a Climate Change Unit since 1994, currently the Climate Change Division, in the Ministry of Housing, Territorial Planning and Environment (MVOTMA), which acts as an operational and executing body in matters pertaining to climate change.

45. In 2000, by means of Law number 17.283 on the General Law for Environmental Protection, the MVOTMA was designated as the competent national authority for the implementation and application of the Convention.

46. The National System for Climate Change Response and Variability (SNRCC) was created by Executive Decree number 238/2009 to coordinate and plan public and private actions required for risk prevention, mitigation and adaptation to climate change. The SNRCC is another highly significant instance for institutional development and strengthening and it is responsible for preparing the National Climate Change Response Plan published in January 2010 and the National Climate Change Policy during 2016.

47. The National Secretariat on Environment, Water and Climate Change of the Presidency of the Republic (SNAACC) was created more recently, in 2015, by means of Article 33 of Law number 19.355. In 2016, by means of Executive Decree number 172, this Secretariat was implemented and the National Environmental Cabinet and the National Environmental System (SNA) was also stablished with the objective of strengthening, articulating and coordinating Uruguay's public policies to protect the goods and services provided by ecosystems and fostering climate change adaptation, among others.

48. From the perspective of the protection of ecosystem, the National System of Protected Natural Areas (SNAP) of Uruguay was established by Law 17.234 of the year 2000. The objective of this law is to harmonize the criteria for planning and managing the protected areas, under certain categories, with a single regulation that sets the guidelines system. On the other hand, Uruguay has assumed multiple commitments regarding the conservation of biodiversity and protection of ecosystems as a State Party to the Convention on Biological Diversity (CBD). On the other hand, the law on Territorial Planning and Sustainable Development, establishes the general regulatory framework for territorial planning and sustainable development. Law 18.610 on National Water Policy defines priorities in terms of a river basin approach to integrated water resources management and includes the definition of programs and plans managing flood zones. Lastly, there is a National Emergency System since 2009, which is a permanent public system, aimed at protecting people, significant assets and the environment, in eventual or actual disasters, by coordinating the State's actions and ensuring the adequate use of available public and private resources, in order to foster sustainable national development. Besides its role in coordinating different areas of the State in the event of disasters, the National Emergency System also plays a role in promoting reduction, prevention, mitigation, care, preparation, intervention, rehabilitation and recovery strategies and is responsible for evaluating the different stages.

49. For its part, the Argentine Republic ratified the United Nations Framework Convention on Climate Change (UNFCCC) in 1994 by means of law No. 24.295. Subsequently, it ratified the Kyoto Protocol, through Law No. 25,438, enacted in 2001. The Argentine Secretariat of Environment and Sustainable Development (SAyDS) was designated as the enforcement authority of this law by means of Decree 2213/2002 of the Nation's Presidency. On the other hand, the National Climate Change Cabinet (GNCC) was created in 2016 by means of Decree 891, at the level of

the Chief of Cabinet, in order to coordinate policies on climate change and raise awareness on its relevance among members of society. The Cabinet is technically coordinated by the Secretariat of Climate Change and Sustainable Development and is composed of high-level representatives from several of the Ministries (Energy, Transport, Agro-industry, and Environment, among others). For their part, the Provinces are represented through the Federal Environmental Council (COFEMA), considering that natural resources belong to their jurisdiction. On the other hand, recently in Argentina (2017), the National System for Comprehensive Risk Management (SINAGIR) was created in order to strengthen and optimize actions aimed at risk reduction, crisis management and reconstruction. The consolidation of this system will strengthen the sustainability of the Project's accomplishments in this country.

50. In this context, this Program will seek to guarantee the participation of the different institutions involved, including public, private, academic and civil society institutions and organizations, through inter-institutional and intersectoral spaces in both countries.

PROGRAM OBJECTIVES:

Overall Objective:

51. The Program seeks to build resilience in the vulnerable coastal cities and ecosystems of the lower Uruguay river, both in Argentinean and Uruguayan territories, by developing instruments, tools and experiences for climate change adaptation planning and implementation as well as climate risk management.

Specific Objectives:

52. Reduce vulnerability conditions and contribute to build climate change and variability resilience in vulnerable coastal communities and ecosystems of the lower Uruguay river, including adaptation measures based on communities and ecosystems, while focusing and streamlining human rights, gender and generations perspectives.

53. Promote institutional strengthening by considering climate change mid and long-term scenarios in land management public policies, plans and programs for the vulnerable cities and ecosystems identified in each country.

54. Promote an integrated climate risk management in the identified cities and ecosystems for each country, fostering the development and implementation of early warning systems (EWS).

55. Reduce the coastal cities' vulnerability by implementing sustainable infrastructure adapted to the adverse effects of climate change.

56. Promote climate change adaptation (CCA) in both river´s margins by exchanging urban, environmental, social, educational and cultural experiences and knowledge management.

Promote the resilience of local communities, by identifying vulnerabilities, risk perceptions, and contributing to empower local capacities in order to reduce climate change impacts at local level.

COMPONENTS AND FUNDING:

Table 4. Program Components, Outputs, Outcomes, Activities and Budget

OUTPUT	ACTIVITY	TOTAL BUDGET
COMPONENT 1: Territorial Planning and Risk Management (USD 1,627,000)		
OUTCOME I National, subnational and local governments have been strengthened by means of the development of instruments, the exchange of experiences and the inclusion of climate change in their planning and management instruments		
1. Land management plans, protected areas management plans, and housing and water programs, under review or in progress, include the climate change perspective. (USD 563,700)	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.	323,700
	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.	240,000
2. Methodological guidelines to assess impact, damages and losses have been designed and implemented. (USD 238,800)	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.	82,800
	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.	119,800
	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.	36,200
3. The project adaptation outcomes have been incorporated into	Activity 3.1. Drafting up of adaptation indicators concerning Project activities linked to NDC .	37,500

OUTPUT	ACTIVITY	TOTAL BUDGET
monitoring mechanisms of National Adaptation Plans, Adaptation Communications and National Determined Contributions (NDCs) for Argentina and Uruguay. (USD 100,000)	Activity 3.2. Monitoring of indicators and reporting of Project activities in each country.	62,500
OUTCOME II Sub-national and local risk management strategies have been strengthened and community-based, early warning systems (EWS) for floods, have been consolidated in a coordinated manner		
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. (USD 180,000)	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.	94,000
	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.	86,000
5. Flood Early Warning System has been consolidated. (USD 225,000)	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).	31,400
	Activity 5.2. Development and implementation of modelling, prediction, communication and training tools for floods EWS building from the CTM – CARU projections.	193,600
6. Updating and implementation of Regional Plans for Disaster Risk Management, including the Climate Change (CC) perspective, have been supported. (USD 320,000)	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.	260,000
	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	60,000
COMPONENT 2. Priority measures to increase resilience in flood-prone cities **(USD 6,500,000)**		
OUTCOME III The resilience of coastal cities has been increased through the implementation of structural and non-structural adaptation measures		

OUTPUT	ACTIVITY	TOTAL BUDGET
7. High risk area vacant lands from resettlements have been recovered and re signified to avoid new informal occupations (USD 4,850,000)	Activity 7.1. Resignification of the Union Portuaria, Ledesma and urban border areas in Paysandú, Uruguay.	1,000,000
	Activity 7.2. Resignification and renovation of vacant, flood-prone lots after resettlements. Atahualpa area in Salto, Uruguay.	455,000
	Activity 7.3. Resignification and renovation of flooding-prone vacant lots at the Sauzal Stream mouth, in Salto, Uruguay.	645,000
	Activity 7.4. Environmentally sustainable hydrological management at the Esmeralda Stream – Resignification of the Esmeralda´s neighborhood housing complex - Fray Bentos, Uruguay.	250,000
	Activity 7.5. Risk prevention and evacuees care Centre. Bella Unión, Uruguay.	300,000
	Activity 7.6. Resignification of flood prone high risk public spaces recovered from irregular residential occupation. Bella Unión, Uruguay	200,000
	Activity 7.7. Protection and resignification of the Artaláz Stream Wetland. Colón, Argentina.	1,000,000
	Activity 7.8. Remediation and resignification of vacant lots located within Defensa Norte and Cantera 25 de mayo Neighborhood. Concepción del Uruguay, Argentina.	1,000,000
8. Sustainable urban and public infrastructure has been implemented promoting climate change adaptation. (USD 1,400,000)	Activity 8.1. Environmentally sustainable hydrological management at the La Esmeralda Stream -hydrological lamination. Fray Bentos, Uruguay.	250,0000
	Activity 8.2. Protection against coastal erosion, and sundry repairs at the water treatment plant in the city of Concordia, Argentina.	1,000,000
	Activity 8.3. Refurbishing of the Access bridge to the Pier and the Coastal areas of the San Javier town.	150,000
9. Solutions have been defined and financial mechanisms have been implemented to promote CCA housing and commercial buildings in medium risk areas. (USD 250,000)	Activity 9.1. Revolving fund for housing adaptations in flood medium-risk zones, according to the Risk Map. Pilot case in Paysandú.	200,000
	Activity 9.2. Design of flood insurance for commercial and tourist premises in coastal areas. Entre Ríos, Argentina	50,000
COMPONENT 3. Priority measures for the adaptive conservation of the vulnerable coastal ecosystems of the Uruguay River **(USD 2,412,500)**		
OUTCOME IV Adaptive conservation measures have been implemented in vulnerable ecosystems on both banks of the Uruguay River, including the identification and evaluation of their ecosystem services**.**		

OUTPUT	ACTIVITY	TOTAL BUDGET
10. Ecosystemic services and benefits have been identified and assessed, including for CCA and Uruguay River ecosystems connectivity.. (USD 200,000)	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.	200,000
11. New ecosystem-based adaptation measures have been designed and implemented. (USD 2,212,500)	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.	533,417
	Activity 11.2. Implementation of climate change ecosystem-based adaptation measures in the Rincón de Franquía Protected National Area in Uruguay	60,000
	Activity 11.3. Restoration of vulnerable coastal ecosystems through monitoring of exotic species and planting of native species.	944,083
	Activity 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).	675,000
COMPONENT 4. Priority measures to increase resilience and reduce social vulnerability **(USD 1,460,000)**		
OUTCOME V Communities and social organizations increased their resilience in the framework of climate change adaptation and risk management of hydro-climatic disasters.		
12. Social vulnerability monitoring and evaluation tools have been devised with a particular focus on Human Rights, gender, and generations. (USD 200,000)	Activity 12.1. Development of a tool for anlysis, 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.	70,000
	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.	130,000
13. Assessments of perception of social risks have been carried through towards the construction of resilience. (USD 200.000)	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.	85,000
	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.	115,000
14 Strategies for assistance and capacity-building of the workforce	Activity 14.1. Capacity building strategy for the reconversion of the labor force of families who have been resettled in Paysandú, Uruguay.	200,000

OUTPUT	ACTIVITY	TOTAL BUDGET
made up by vulnerable populations have been promoted. . (USD 400.000)	Activity 14.2. . Social and labor capacity-building, and drafting up of workforce capacity-building in Entre Ríos, Argentine	200,000
15. Social networks have been strengthened up through an exchange in Climate Change Adaptation (CCA) good practices and local risk management strategies. (USD 300.000)	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.	300,000
16 Communication, education and dissemination strategies have been implemented towards reducing vulnerability. (USD 360.000)	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	90,000
	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 good practices of the activity 16.1 .	180,000
	Activity 16.3. Drafting up of methodological guidelines focused on communication and management of projects being executed as part of the CCA strategies.	90,000

PROGRAM CALENDAR:

Milestones	Expected dates
Beginning of Program Implementation	August 2019
Mid-term review	February 2022
Program closure	July 2023
Final evaluation	May 2023

PART II: PROGRAM JUSTIFICATION

A. Program Components

Figure 4. Summary of the Program's Components, Outputs and Types of Activities

OUTLINE OF COMPONENTS, OUTPUTS AND TYPES OF ACTIVITY			
C1. Land use planning and risk management	**C2. Urban resilience**	**C3. CONSERVATION OF ECOSYSTEMS**	**C4. RESILIENCE AND REDUCTION OF SOCIAL VULNERABILITY**
P01. Review of land use plans in order to include CC	P07. Vacant lands recovered as green public areas, in order to prevent their occupation. ❋	P10. Identify and evaluate ecosystem services and connectivity in the Uruguay river ❋	P12. Analyze and monitor social vulnerability (human rights, gender, generations).
P02. Design the methodology to evaluate damages, losses, recording events	P08. Implementation of sustainable infrastructure for urban and public services ❋	P11. Design and implement ecosystem-based adaptation measures ❋	P13. Analysis, identification of social risk perception
P05. Consolidation of Early Warning systems for floods	P09. Design and create financial mechanisms to adapt homes and businesses❋		P14. Work reconversion strategies for vulnerable populations ❋
P06. Support to local and national plans on disaster risk with CC			P15. Strengthening social networks by means of exchanging experiences and strategies

						P16. Access to local and regional disaster risk management plans with CC	
P03. Results in national CC communications							
P04. Dissemination of good practices and lessons learned for the region							
Type of activity:							
	Analysis, methodological design		Direct interventions (works)		Binational or joint strategies	*	Joint outputs with different activities in each country

Below is a description of each Program component, outcome and output, as well as the program's Activities. A fact sheet providing additional details has been prepared for each proposed activity under each component. These fact sheets can be found in Annex 3 – Project description sheets (Components 2 and 3).

COMPONENT 1: Territorial Planning and Risk Management

This component includes all the Outputs aimed at strengthening the planning instruments and strategies of the territories involved in the Project, with emphasis on reducing climate change risks. Similarly, analysis and management tools will be enhanced to improve impact, damage and loss assessments and early warning system (EWS) through the unification of criteria and binational coordination. In parallel with the aforementioned activities, lessons learned and good practices in the areas addressed by the project will be periodically shared and disseminated. Results regarding adaptation will be systematized and will be included in National Adaptation Plans, Adaptation Communications and the National Determined Contributions (NDC) for Argentina and Uruguay.

Project Outcome i)

National, subnational and local governments have been strengthened by means of developing instruments, exchanging experiences and including climate change in their planning and management instruments

Output 1. Land management plans, protected areas management plans, and housing and water programs, under review in progress, include the climate change perspective.

Objectives: Review and update public policy instruments so that they include the climate change perspective and integrated risk management in the lower basin of the Uruguay River, involving local governments and key stakeholder across the territory. Training events and technical advisory consultancies will be used to include climate change adaptation criteria in different planning and urban and rural land use planning instruments, to open spaces for citizen participation and to train key actors, considering different types of vulnerability, gender issues and the right to the city.

Expected results: It is expected that by the end of the project, the different territorial planning and management instruments pertaining to national and local governments and protected areas, will include the climate change adaptation perspective.

Justification in terms of increasing resilience/reducing vulnerability: When territorial planning and public infrastructure (water, housing, etc.) investment plans include adaptation strategies, as well as the right to the city vision, the gender and generation approach, they become powerful preventive measures

regarding disasters and climate change adaptation, thus contributing to reducing vulnerability and building resilience.

Institutions responsible/Intervening stakeholders: ARG-URU National governments, subnational and local governments; NGOs

Activities or implementation instances:

Activity 1.1: Analysis, revision and updating of the current state of sundry 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.
Description: Technical analysis of the current state of public policy implementation and management instruments and if necessary update them including the climate change adaptation perspective. For this, it will be essential to identify, prepare and/or update the flood risk maps for both countries, in order to have adequate references that will guide the processes. It is suggested that management plans for protected areas are prepared/updated, in order to better address climate change effects.
Direct/indirect beneficiaries: National governments and local governments along the Uruguay river. Protected areas.
Duration: 4 years

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.
Description: organizing and delivering training workshops for national, local, departmental and provincial governments. In the case of protected areas, it is suggested that a bi-national learning space is created jointly with the SNAP and APN technical counterparts, to ensure that this integrated approach enables institutionalized implementation in both countries. Participatory instances for the validation of sectoral plans at the local level.
Direct/indirect beneficiaries: officials at the national, local, departmental and provincial levels. Local governments along the Uruguay River, protected areas. Officials of legislative bodies. Civil Society Organizations and citizens from the different locations.
Duration: 4 years.

Output 2. Methodological guidelines to assess impact, damages and losses have been designed and implemented.

Objectives: Develop a methodology for the identification and evaluation of the economic, social and environmental impacts of severe climate events in the program's locations. This will help identify priority adaptation actions to improve risk management planning throughout its different stages, thus increasing resilience.

Expected results: It is expected that the cities where the programme will be implemented will have the knowledge required to account for the losses and damages in a suitable manner and to plan the necessary adaptation actions.

Justification in terms of increasing resilience/reducing vulnerability: Understanding the type of losses and damages caused by climatic events in the programme area, will enable a stronger understanding of the various aspects regarding social, economic, environmental and infrastructure vulnerability in order to plan actions to strengthen resilience.

Institutions responsible/Intervening stakeholders: ARG-URU national, subnational and local governments through the SINAE, SNRCC and INE and the Civil Defense.

Activities or implementation instances

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 Defense (Arg), and some other institutions.
Description: Reviewing current methodologies, documentation, records, experiences and relevant information on methodologies in order to collect, systematize and produce information on impacts/damages/losses pertaining to climatic phenomena.
Direct/indirect beneficiaries: Local governments along the Uruguay river, national governments.
Duration: 4 years

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 evaluating severe climate impacts, and attaching priority to adaptation actions on both riverbanks of the lower Uruguay River.
Description: Analyzing information, developing and presenting the methodological guide and event recording log.
Direct/indirect beneficiaries: Local governments along the Uruguay river, national governments.
Duration: 4 years

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.
Description: organizing and delivering the regional validation workshops, training for authorities and local civil servants and the implementation of a pilot application of the methodology
Direct/indirect beneficiaries: Local governments along the lower Uruguay River and/or in neighboring localities whose officials can participate in the training event, national governments and CSOs.
Duration: 2nd, 3rd and 4th project years.

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

Objectives: The climate change adaptation and risk reduction measures will be part of the Monitoring mechanisms of the National Adaptation Plans, the Adaptation Communications and NDCs . Allowing for the measures to be tracked at national level and be considered as adaptation efforts for recognition under the Paris Agreement and to contribute to the Global Goal on Adaptation.

Expected results: It is expected that the project's achievements will be part of both countries' National Communications and/or Nationally Determined Contributions (NDC).

Justification in terms of increasing resilience/reducing vulnerability: this will provide greater information on lessons learned in the region.

Institutions responsible/Intervening stakeholders: ARG-URU national governments

Activities or implementation instances

Activity 3.1. Drafting up of adaptation indicators concerning Project activities linked to NDC.
Description: Preparing adaptation indicators.
Direct/indirect beneficiaries: National Governments.
Duration: 2nd, 3rd and 4th project years.

Activity 3.2. Monitoring of indicators and reporting of Project activities in each country.
Description: monitoring the indicators developed, preparing reports and publishing on the website. Reports will be published on a special website dedicated to the Project. Preparing adaptation indicators.
Direct/indirect beneficiaries: National Governments.
Duration: 2nd, 3rd and 4th project years.

Project Outcome ii)

Sub-national and local risk management strategies have been strengthened and community-based, early warning systems (EWS) for floods, have been consolidated in a coordinated manner.

Identifying, assessing and georeferencing climate risks, particularly floods, as well as developing hydrological models, climate scenarios and risk maps, will enable improving planning and risk management tools in both countries.

In this sense, Argentina and Uruguay have prepared flood risks maps involving the locations considered in this project. This is a key input for designing improvements and strengthening the implementation of the EWS on both sides of the river.

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.

Objectives: Adaptation strategies and good practices regarding risk management, territorial planning, territorial police, adaptation of housing infrastructure and recovery of available land, were shared at the binational level.
These sharing opportunities will be facilitated at the local level and will include governments, civil society organizations (CSOs) and key actors at the local level. Likewise, exchange opportunities will be promoted at the regional, national and binational levels, thus reinforcing existing networks.
Expected results: The meetings are expected to share "successful" experiences and lessons learned with local governments participating in the project and other governments in the region.
Justification in terms of increasing resilience/reducing vulnerability: Sharing good practices and lessons learned contribute to disseminating experiences throughout the entire region. Knowledge management and knowledge sharing are useful tools to promote participation and ownership as well as innovation and efficient use of resources.
Institutions responsible/Intervening stakeholders: ARG-URU National Governments, local governments, CSOs.

Activities or implementation instances

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.
Description: organizing and delivering the workshops and encounters at the local, regional, national and binational levels.
Direct/indirect beneficiaries: National Governments, local governments along the Uruguay river and other cities in the region.
Duration: 1st, 3rd and 4th project years.

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.

Description: designing and implementing a web platform with the good practices and lessons learned documents, for their dissemination.
Direct/indirect beneficiaries: National Governments, local governments along the Uruguay river and other cities in the region. Share the experiences with networks such as Mercociudades.
Duration: 1st, 3rd and 4th project years.

Output 5. Flood Early Warning System has been consolidated.

Objectives: Facilitate and promote the joint work among the pertinent organizations to improve the binational coordination of Early Warning Systems, especially with regard to information management and dissemination, monitoring, warning and response. Multiple vulnerabilities as well as human rights, gender and generation issues will be considered as part of community-based EWS coordination. Part of the EWS strengthening activities are complemented with Component 4 Outputs regarding the consolidation of networks, education and communication.

Expected results: It is expected that the different institutions providing information and monitoring the Uruguay River and the responding agencies will act in a coordinated manner and that the population will receive prompt information through different communication means, in order to prevent as much damage as possible.

Justification in terms of increasing resilience/reducing vulnerability: Currently, there is a system to monitor and forecast river levels in the cities involved in the project, which is operated by the Salto Grande dam and provides reliable information a few days in advance. This system has enabled the timely evacuation of at-risk population during the last years. Although the forecasting system could be improved in terms of data and information technology, the most important improvement needed for the early warning system as a whole, is related to the preparation phase and the communication strategy for the local population. Communication and information exchange between the participating institutions in both countries are necessary to ensure that the EWS is effective and helps anticipate flood risks and plan management actions before and during extreme events, minimizing social, environmental and economic losses.

Institutions responsible/Intervening stakeholders: ARG-URU national and subnational governments in collaboration with CTM Salto Grande, CARU, local governments with the Civil Defense / SINAE, MVOTMA-DINAGUA and other organizations that contribute to the generation of information, surveillance, warnings and response (Prefectures, Universities, CSOs, etc.).

Activities or implementation instances

Activity 5.1.

Establishment of governance instruments and support for inter-institutional coordination for exchange of information, actions (such as simulations) and stakeholders to strengthen the Uruguay River´s Early Warning System (EWS).
Description:
-Designing instruments for inter-institutional coordination in exchanging information, carrying out actions (such as drills) and actors for the development and coordination of flood Early Warning Systems for the lower Uruguay River.
-Drills to practice early warning situations and institutional coordination-action.
Direct / indirect beneficiaries: Local governments along the Uruguay River/neighboring localities and their communities, national governments.
Duration: 4 years

Activity 5.2.

Development and implementation of modelling, prediction, communication and training tools floods EWS building from the CTM – CARU projections.
Description:
Decide on the use of a geographic information model that can show in real time, the area potentially affected and can estimate the probable number of people to be evacuated and the key infrastructure under risk (example in Yi river in Durazno city and in Cuareim river in Artigas city). FEWS Deltares model.
Implement communication mechanisms: Cell App / Special web page that collects information for the community and for organizations involved in preparation and response.
Provide training to emergency response agencies on how to read and interpret information.
Computer equipment to strengthen the Entre Ríos Hydrometeorological Information Center (SIHER), located on the coast of the Uruguay River.

Direct / indirect beneficiaries: Local governments along the Uruguay River/neighboring localities and their communities, national governments.
Duration: 4 years

Output 6. Updating and implementation of Regional Plans for Disaster Risk Management, including the Climate Change (CC) perspective, have been supported.

Objectives: Disaster risk management plans at regional, departmental, river basin and/or local level are prepared, reviewed, updated and implemented including the climate change perspective. These plans are crucial to minimize the social, environmental and economic impacts of climate change induced events. The perspectives of different actors and their multiple vulnerabilities will be considered in the revision and/ or preparation of these plans, as well as human rights, gender and generation issues. These will also be carried out complementary to component 4, by strengthening networks, education and communication.

Expected results: Local governments and the different stakeholder involved are expected to acquire solid instruments for risk reduction and take ownership of their importance and results. As part of these instruments, it is expected that the Risk Management Plans enable a stronger integration or mainstreaming of different governmental areas in the programs and facilitate community involvement.

Justification in terms of increasing resilience/reducing vulnerability: The local government's coordination efforts and the institutional nature of the work it carries out with the communities in favor of disaster risk reduction, is a key strategy for climate change adaptation.

Institutions responsible/Intervening stakeholders: ARG-URU national governments, subnational and local governments and CSOs.

Activities or implementation instances

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 and other climate impacts, based on a review of plans currently under way.
Description: It includes the design of binational protocols and plans, especially focusing on health and climate change. A consultancy is foreseen for the design of protocols and binational scope plans, especially focusing on health and climate change.
Direct / indirect beneficiaries: national, subnational and local governments.
Duration: 1st, 2nd and 3rd project years

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.
Description: Organizing and delivering training workshops for the implementation of plans

Direct/indirect beneficiaries: national governments, local governments directly involved in the Project. Neighboring locations that can benefit from the training events/workshops. Professionals and civil servants, communicators and media.
Duration: 1st and 3rd years

COMPONENT 2. Priority measures to increase resilience in flood-prone cities.

There are more than 445,000 inhabitants in the cities selected for the implementation of the activities evaluated below. The areas affected by recurrent floods include the consolidated urban area and the floodplains, which are usually occupied by a highly socio economically vulnerable population. The activities promote the implementation of comprehensive adaptation measures (urban, environmental, social, economic and financial, with a human rights, gender and generations perspective), which involve strategies for city design, urban infrastructure, comprehensive relocation processes, resignification of vacant spaces and green areas. This requires technical and financial assistance from the Program to strengthen public policies and plans that are being implemented by both countries' governments.

Output 7. High risk area vacant lands from the resettlements have been recovered and re signified to keep informal occupations.

Context: The lands involved in these activities are areas that became vacant after families that were settled there had to be relocated because they were facing high flood risks. These lands could eventually be occupied once again by vulnerable families (as in other similar cases in the past), since they are very close to the city center and its services, and are closely linked to employment opportunities or other livelihoods in the areas surrounding the river.

Objectives: The activities under this output are aimed at ensuring that informally occupied flood areas are resignified as ecosystem protection and recreational spaces. This seeks to generate value for the city along its river banks, while avoiding new informal occupations that increase the vulnerability of the occupants as well as the entire city's vulnerability to floods. The Program and its activities also promote participatory spaces to foster community ownership, including the construction of infrastructure based on designs that have been prepared and proposed by local governments, with participation and support from subnational and national governments.

Activities 7.1, 7.2 and 7.3 refer to the "resignification" of vacant, urban, flood-prone land. Land in activities 7.1 and 7.2 was previously occupied by families who were relocated and land in activity 7.3 is a public area that has not been occupied.

Expected results: Set up new flood-compatible activities in vacant lands from resettlement policies, such as recreational parks or other related services. These activities will prevail over the land to be occupied, thus maintaining a lower flood-risk for the city and also improving the landscape along the river and in the riverside ecosystem. This will provide the city and its citizens with new high-quality public spaces and green areas, and at the same time avoiding new occupations in high-risk areas.

Activities or implementation instances

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

Description: The "Linear Park" Project in the city of Paysandú will be developed in order to promote re-zoning of a degraded area in the city, contribute to its resignification from the social perspective, and contribute to its integration with the consolidated city.

The Departmental Government of Paysandú is relocating 123 households whose homes are located below the 5.50 m security level. They are being relocated to a 6.50 m level, in order to reduce the number of people affected by flood events, Clarification on the status of the relocation process that will be finalized before the implementation of the present project starts has been provided in detail in the project files (Annex 3).

The project is aimed at promoting the rezoning of a degraded area in the city of Paysandú, contribute to its resignification and integration with the consolidated city. The project seeks to promote the territory's positive transformation, avoiding new occupations and shaping it as a space for social integration. The project is expected to intervene in these spaces, by supporting its re-zoning process and opening new spaces for collective use. A more powerful "anchor intervention" is suggested in order to promote a stronger sense of identity and ownership of these spaces among neighbors, who will continue to live in nearby areas after the end of the relocation process.

The project seeks to restore the ecosystem throughout the entire area, by means of a riverbank park, thereby supporting forward-looking interventions in the territory. It is very important to recover the environmental quality and the wetland, by means of soil movement and the generation of green infrastructure.

It is suggested that a green buffer zone be created in this area of the city. This green buffer zone will include native species, as well as a pedestrian coastal walkway parallel to the port access route containing various recreational areas.

Direct / indirect beneficiaries: 123 families, as well as the city's entire population, will benefit from a public green area designed with an inclusive, gender-sensitive approach.

Duration: 10 months

Institutions responsible/Intervening stakeholders: Paysandú Departmental Intendance (DP), Presidential Planning and Budget Office, Ministry of Social Development (MIDES), CIPUP, local educational, socio-environmental and cultural organizations.

Activity 7.2. Resignification and renovation of vacant, flood-prone lots after resettlements. Atahualpa area in Salto, Uruguay.

Description: The Salto Departmental Government relocated families frequently affected by floods, in the framework of the Housing Demand Departmental Plan. This process was completed in October 2018. Clarification on the status of the relocation process that will be finalized before the implementation of the present project starts has been provided in detail in the project files (Annex 3).

The Housing Plan promotes social inclusion from an environmental and housing comprehensive conception and human rights perspective and strengthens collective and inter-institutional management processes. Simultaneously to the present project, the Intendency is supporting the relocated families for their access to the labor conversion programs that are provided by the INEFOP (National Institute of Employment and Vocational Training) and MIDES (Ministry of Social Development). In this context, it is necessary to prevent new families from re-occupying vacant flood-prone properties. The "First Contingency Plan for Adaptation in Inhabitable Flooded Areas", a plan to re signify these vacant spaces, was prepared for this purpose. Currently, this plan is under implementation and assistance will be provided to shift the uses of this vacant land to favor of flood-compatible public activities. This will be done jointly with private actors such as sports clubs and other civil society organizations who will receive the territory under a commodatum agreement and will carry out recreational and leisure activities, thus preventing new occupations.

The project intends to work with the community to address issues such as environmental problems resulting from everyday practices; recover ecosystem services as a climate change adaptation measure and recover public spaces to enable community life and foster integration with the city's population. Also, promote increased ownership and sense of belonging among the different groups that live in the area, so that they look after it.

The idea is to create a linear park, where different sports and recreational activities can be developed following a floodplain concept, where the proposed infrastructures are designed to cope with these recurring events. In the areas further south (between Charrúa and 6 de Abril streets), an elevated zigzagging metal structure is proposed. This structure would create different spaces on each side and would become a viewing platform to see the park, the environment and the river from a different perspective.

Also, in line with the concept of an accessible public space, the design of the park is expected to include accessible games for people with disabilities and will also consider fundamental aspects related to the different generations and the gender perspective: security, lighting, visibility, mobility and integration.

Multifunctional spaces are suggested, where different types of activities can take place simultaneously, including areas equipped for sports, recreation spaces and an area with tiered grades where cultural activities can take place. Infrastructures that can be removed with a crane in case of floods.

The recovery of the natural space and its native forest in the Indigenous Park or "Vaymaka Pirú" is also considered. This will imply eliminating exotic species and foresting with native species. This activity will be supplemented by identifying ecosystem services (both environmental and cultural systems) and their revaluation, and planning environmental education activities.

An aspect worth highlighting in this proposal is the work and definition of priorities carried out jointly with the neighborhood commissions, educational institutions, sports clubs and local authorities, as this helps ensure that the community takes ownership of the project.

Direct/indirect beneficiaries: The 17 relocated families will be directly benefited, as well as the neighbors of the surrounding neighborhoods, who will be able to start enjoying the public spaces resulting from the urban recovery process. The city's entire population can use this public space, with inclusive, gender-sensitive design.

Duration: 14 months

Institutions responsible/Intervening stakeholders: Salto Departmental Intendance, Neighborhood commission Baltasar Brum, Primary and High School institutions in the area; SOCAT_IPRU; Sports Clubs (Club Remeros, Nacional Footbol Club). Ministry of Social Development through its program Uruguay Crece Contigo and Inmayores.

Activity 7.3. Resignification and renovation of flooding-prone vacant lots at the Sauzal Stream mouth, in Salto, Uruguay.

Description: The Sauzal stream empties into the Uruguay River in the area of greatest public affluence, called Costanera Norte. The lower area of the Sauzal stream is regularly affected by the floods of the Uruguay River and by the flash floods derived from the city's drainage system. These flood conditions cause this space to be vulnerable to pollution and deterioration, a fact that can be evidenced in the accumulation of all kinds of waste; illegal dumping of residential effluents; uses that are not authorized and/or are incompatible with the area's conditions. The deterioration of natural vegetation and proliferation of exotic vegetation are also evident, and this interferes with the stream's natural drainage system.

This activity suggests re-conditioning the banks of the Sauzal stream, to transform it into a linear park for recreational use, thus enhancing its environmental and landscape values, protecting natural green spaces and solving hydraulic problems that exacerbate the floods caused by the Uruguay River. Public spaces will be re-conditioned to mitigate the effects of future floods and land planning will include flood adaptation measures by means of this activity.

Sports and recreational spaces are foreseen, as well as a natural amphitheater, pedestrian bridges and equipment that can withstand floods and/or light elements that can be removed with a crane before floods. The park has been designed following accessibility, security, lighting, visibility, mobility and integration criteria.

The El Sauzal stream project will improve and adapt the spaces used for historical cultural activities ("El Andén" and its theater and dance companies, the "Muelle Negro" and its celebrations in memory of immigrants), but will also promote new activities and didactic equipment in relation to the history of the floods.

As for the project's sustainability, it is proposed that agreements are signed with the food stands that will be granted in commodatum, with the space's user groups (bikers, skaters, socio-cultural organizations, among others) that consider support in cleaning tasks and maintenance of the public space. Likewise, the Intendance's Department of Health and Hygiene will provide support to monitor informal discharges, in order to assuring an acceptable level of urban water quality.

Direct/indirect beneficiaries: People who use the park and the community in general, throughout the city; vulnerable neighbors of the park that will reduce their flood risk based on the recovery of the river bank that will increase the buffering effect at the time of flooding; women, as per design and as per best practices in the Gender Action Plan; people with disabilities will benefit from the adequacy of infrastructure; users of cultural spaces that will benefit from measures for protecting their common assets.

Duration: 15 months

Institutions responsible/Intervening stakeholders: Salto Intendance, food stands, Salta Plastic Artists Association (APLAS), candombe group Comparsa Tungele and the independent theatre company Kalkañal, which supports and carries out different cultural expressions in this space (theatre, music, conferences, workshops), biker and skater groups.

Activity 7.4. Environmentally sustainable hydrological management at the Esmeralda Stream – Resignification of the Esmeralda´s neighbourhood housing complex - Fray Bentos, Uruguay.

Description:

The La Esmeralda stream is located in the south east area of the City of Fray Bentos. Its basin, of 478 hectares, comprises an urban, suburban and rural area.

Due to its progressive expansion in recent years, the urban area of the middle basin is characterized by the increasing impermeability of its surface and by the existence of an insufficient pluvial drainage network. The strong impermeability causes reduced rainfall infiltration in the soil and therefore leads to the generation of greater volume of direct runoff. Additionally, meteorological phenomena associated with climate change, characterized by intense rains with a large volume of water in short periods of time, significantly contributes to exacerbate this flood situation.

This project (as well as 8.1) is part of the comprehensive project called "Infrastructure for the urban basin of La Esmeralda stream in the city of Fray Bentos", which sets forth a comprehensive solution to

the middle basin of La Esmeralda stream, focusing on two great aspects: on one hand, the hydrological and hydraulic solution by mitigating the effects of floods in urbanized areas (see Project 8.1) and on the other hand, working on the undeveloped areas of this basin.

The problem affecting the area is the flooding of urbanized areas, produced by river overflows as a result of heavy, sustained rainfalls, affecting not only houses but also infrastructures and equipment.

It was decided to intervene a downstream sector called "Parque Complejo Habitacional Esmeralda" (Esmeralda Housing Complex Park), whose objective is to promote civil society's use and ownership of non-urbanized areas.

The neighborhood's organized society, as well as the city's different institutions are constantly demanding spaces for recreation, leisure and enjoyment of green spaces in the area of intervention.

There are plans to set up a a flood compatible park on the east bank. It will be approximately 300 meters long, and between 15 and 20 meters wide and will host a walkway, a bike path, green infrastructure, lighting, rest areas (benches and tables) and health equipment and recreation stations.

There will be a multipurpose sports venue in the upper triangle facing Ibirapita Street (municipal registry at the back end of the Esmeralda housing complex). It will be suitable for carrying out activities in the area to enjoy the space and to promote ownership by the neighborhood and the city.

The riverbank's heavily forested area will be maintained and will be integrated to the park due to the ecosystem services they provide to the city.

These proposed spaces will host city-sponsored non-traditional sports activities that will take into account gender and generation issues as well as accessibility favoring social inclusion.

Direct/indirect beneficiaries: 2,080 direct beneficiaries and the population of the city in general.

Duration: 8 months

Institutions responsible/Intervening stakeholders: Rio Negro Departmental Intendance- Fray Bentos city.

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

Description:

In recent years, the city of Bella Unión has faced strong and recurring floods. The highest level recorded (8.57mts) was in June 2017. The consequences of this event affected 243 women, 217 children and 235 men, which amounts to a total of 695 people affected.

Bella Unión is known for having longer evacuation periods than the rest of the department, because the water return periods are significantly higher than in other zones in the territory. This forces victims to stay longer in the temporary facilities that accommodate them. Usually, most people and their belongings are moved to AFE sheds in Estación Cuareim, in precarious conditions.

In the last flood in the town of Bella Unión, it was difficult to accommodate families, and in some cases, the police and the judicial levels got involved in order to assist the affected population.

In addition to the floods, in recent years, the increased probability of important climate events taking place demonstrates the municipality's lack of infrastructure to provide immediate assistance to victims.

The attention to families during emergencies is the only action remaining to complete the adequate functioning of the EWS in this town.

For this reason, it is essential to have a multifunctional space that allows, on the one hand, to meet the needs of the population affected by different climatic phenomena; and on the other hand, that allows to generate instances of training of local population in times where there is not an emergency. This proposal is based on two fundamental aspects: on the one hand, developing a comprehensive perspective on disaster risk management, which seeks to promote prevention strategies, seeking to empower the local population in the face of new events. On the other hand, it seeks to address the diversity and heterogeneity of the population, seeking to ensure basic rights to it both in basic services (health, food, security) and contemplating population diversity (ages, gender, disability, health, ethnic-racial aspects).

The project includes the construction of a Center for Prevention of Risks and Attention to Evacuees, in the neighborhood of Las Láminas, which fulfills this role as a training center and coordination of actions of various local and departmental institutions and of attention to people affected by severe climate events, floods in particular. This space will have the services and spaces necessary to provide basic support to the affected population, based on international standards of humanitarian assistance (Sphere Project) contemplating the needs of the elderly, people with disabilities, children, pregnant women, etc. . A basic equipment services and attention to the health is contemplated, as well as conditions of personal security to attend a maximum of 20 families. It is expected that this multifunctional space will also become a replicable model with conditions appropriate to the needs and diversity of the people to be served. It is planned to optimize the use of this space as an interdisciplinary center for better understanding and learning on floods risks and climate change, which will contain a thematic room. It also proposes to develop a participatory management plan for the space.

Direct / indirect beneficiaries: 20 families who can be evacuated during a flood, will be direct beneficiaries. The entire population of Bella Unión will benefit indirectly, since this city will become a center for dissemination of knowledge on risk prevention, assistance during emergencies and other educational and training activities.

Duration: 7 months

Institutions responsible/Intervening stakeholders: Artigas Departmental Intendance, Bella Unión Municipality, SINAE, MVOTMA, CECOED (Emergency Coordination Center) Ministry of Interior (Police and Firemen). Ministry of Defense, Ministry of Social Development, Ministry of Public Health, and other local public and private institutions, as well as CSOs and neighbors involved with the subject.

Activity 7.6. Resignification of flood prone high risk public spaces recovered from irregular residential occupation. Bella Unión, Uruguay
Description:
Within the framework of the application and management of the Local Land-use Plan and Sustainable Development of the city of Bella Unión and its Microregion, the flood high risk areas have been defined. They have been identified based on the preparation of the Flood Risk Map, which determines the areas at low, medium and high flood risk.
In this sense, this strip has been identified along the entire coast, where priority actions lead to the relocation of families settled there, which in most cases also includes a high level of socio-economic vulnerability.
The objective of this project is to resignify the public coastal strip on the Uruguay River, which has been subject to relocation policies allowing for the recovery of natural areas. There are also future projects for this strip, focusing on recovering native forests and the coast, turning it into a natural space for recreation and other activities that are compatible with its flood-prone nature.

The resignification area in this first stage covers an area of approximately 4.5 hectares that has been released after the relocation of 16 families. It is the area on the Northwest coast of the city of Bella Unión, with a consolidated urban category soil, with a high flood risk (red zone in the flood risk map). The main objective, besides resignifying this area, is to re-zone the path that joins the coastal road towards Rincon de Franquía natural protected area, adding value to the recovery and consolidation of existing coastal ecosystems.

The actions that complement and consolidate the intervention in the area, are part of a resignification process that begins by relocating families settled there and implementing the Territorial Police, based on the Bella Union's municipality work to address this task.

Direct/indirect beneficiaries: The entire population of Bella Unión will benefit indirectly from the redefinition of the coastal strip on the Uruguay River through the recovery of the coast as a natural space for recreation and activities that are compatible with its flood-prone nature.

Duration: 1 year.

Institutions responsible/Intervening stakeholders: Departmental Intendance of Artigas- Bella Unión Municipality and MVOTMA.

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

Description: Population has expanded spontaneously in the Artaláz Stream Floodplain. Currently, there are consolidated neighborhoods of medium density with basic and precarious infrastructure, lack of quality public spaces and muddy streets that make access during rainy seasons very difficult. The relocation of some 20 families whose homes were built below the 10.5 m level in relation to the Port of Colón, is underway. The total area covers approximately 20 hectares on the southern margin of the stream, borders the Piamonte Avenue and connects to the East with the Protected Natural Area (ANP) "Parque de los Pájaros" where the stream empties into the Uruguay River.

This activity seeks to recover the wetland as an area for recreation, sports and tourism as well as an area to store surplus water of pluvial and fluvial origin.

The objectives of this activity are: i) to preserve the wetland's ecosystem services, especially with regard to its buffer function, temporarily retaining water during floods and thus increasing the resilience of the basin; ii) to promote environmental education and ecological tourism, highlighting the importance of ecosystem services provided by wetlands, iii) to avoid the resettlement of families in floodplains; iv) create green spaces in city areas that lack such areas, thus providing leisure spaces for its inhabitants as well as tourists; and v) clean the Artaláz stream basin, generating a green corridor along its banks.

The design of this public park considers the gender perspective, as well as inclusion and security considerations: games that foster inclusion, ramps, adapted bathrooms, breastfeeding areas, different uses of space and lighting, among others.

Direct/indirect beneficiaries: The residents of Barrio Juan Domingo Perón/San Gabriel -approximately 2,500 people- will directly benefit from the project's results. In addition to this, the population of the city of Colón and tourists can take advantage of a natural area is currently unavailable.

Duration: 12 months

Institutions responsible/Intervening stakeholders: Colón Municipality, Entre Ríos Province and Argentina national government.

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

Description**:** This project considers recovering an unused urban area in order to create a public space for the sector, by including recreational and sports areas for nearby neighborhoods, for the entire city and for visiting tourists. The area will be maintained as a storage area for surplus rainfall water (about 11 hectares), and a large green area will act as an urban lung near the most densely populated central area. Future occupations of this sector involving any type of settlement, will be avoided. This area, which currently has some local species, will be protected and enhanced by eliminating invasive alien species and planting native species that are suitable for said habitat and are capable of surviving floods.

The natural reservoir will be used as a lagoon, and there will be walkways and inclusive parks around it. There are plans to include pedestrian walks and bike paths following the natural drainages and to build walkways in points where they cross the wetlands, thus promoting contact with nature and facilitate sighting of native animals. These paths will include urban outdoor gymnasiums with an area that will include groups of public toilets. In the southern sector, the existing “San Jose” park will receive inclusive games, trails, landscapes and an area with toilets and storage for park maintenance. There will also be lighting along the pedestrian trails, bike paths and at informative signage points. The project’s design considers the gender perspective and other considerations to ensure that different groups, including vulnerable and marginalized groups, can easily use and enjoy the area.

Direct/indirect beneficiaries: It is expected that this will benefit some 18,000 people directly and some 70,000 indirectly.

Duration: 12 months

Institutions responsible/Intervening stakeholders: Concepción del Uruguay Municipality, Entre Ríos Province.

Output 8. Sustainable urban and public infrastructure has been implemented promoting climate change adaptation.

Context: Adapted and resilient urban infrastructure is essential to promote the population’s capacity to adapt to the effects of climate change. Drinking water supply systems, sewers, urban solid waste management, among others, that consider Climate Change and future scenarios will significantly reduce the vulnerability of relocated communities and thus contribute to improving their quality of life.

Objectives: implement infrastructure works that contribute to strengthening the population’s adaptation capacity in climate change at-risk areas.

Expected results: Sustainable and climate change adapted urban infrastructure, has been designed and implemented.

Activities or implementation instances

Activity 8.1. Environmentally sustainable hydrological management at the La Esmeralda Stream hydrological lamination. Fray Bentos, Uruguay.

Description:

This activity (as well as 7.4) is part of the comprehensive project called "Infrastructure for the urban basin of La Esmeralda stream in the city of Fray Bentos", which sets forth a comprehensive solution for the middle basin of La Esmeralda stream, focusing on two main aspects: on one hand, the hydrological and hydraulic solution by mitigating the effects of floods in urbanized areas and on the other hand, working on the non-urbanized areas of this basin (see Project 7.4).

The problem affecting the area is the flooding of urbanized areas, produced by river overflows as a result of heavy, sustained rainfalls, affecting not only houses but also infrastructures and equipment.

Different alternatives were assessed when defining the comprehensive project. These alternatives are based on combining upstream hydrologic lamination and a new design to channel runoff surpluses that cannot be conducted using current infrastructure.

The project proposes a hydrological and hydraulic solution, thus mitigating the effects of flooding in urbanized areas.

After analyzing these alternatives, a combination of lamination measures using pipes (one located in "Vía Ferrea" and another in "Rivera") was selected, using the current trace of the stream channel, but with a concrete bottom and grass slopes. It was also decided to intervene the "Tulipán" affluent, with an interceptor that captures the runoff and leads it to La Esmeralda waters below the current discharge, away from the conflict point.

Urban enhancement of this sector consists on the retarding basin slopes, to use them as flood compatible play spaces, auxiliary soccer fields, men's and women's hockey, during times when it is not performing its water retention role.

Additionally native species will be planted in the area surrounding the retarding basin.

Direct/indirect beneficiaries: 6700 inhabitants. The whole city will also benefit from this works, since it will reduce the impact of floods.

Duration: 10 months.

Institutions responsible/Intervening stakeholders: Rio Negro Intendance- Fray Bentos city

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

Description: There is a sustained coastal erosion process affecting the right bank of the Uruguay River, upstream and below the intake of the water treatment plan and near the intake towers and decanters site. This has been a problem for the past 25 years and is the result of the variability of the river's levels and flows, added to the frequent occurrence of "Niño" years and the high hydraulic activity. This coastal erosion endangers the operation of the plant that provides water to the entire city.

This intervention will allow approaching a problem originated in the last 25 years over the Uruguay river´s coast, upstream and downstream of Concordia´s water treatment plant.

Based on a study carried out by Universidad Tecnológica Nacional Regional Concordia, "Protection of the coasts at the Water Treatment Plant, Concordia, Entre Ríos", which analyzes the technical, economic and environmental aspects of three possible alternatives, it was decided that protection with gabions and mattresses will be used, to give continuity to the concrete wall built approximately between 1980 and 1981, in order to stop the erosions that were occurring on the coast, up to the hard-edged breakwater barrier. It is also necessary to add a geotextile in the gabion/natural soil interface, to prevent water from dragging the finer particles.

Due to their composition, gabions and mattresses are not a waterproof barrier for infiltration and percolation waters. With that, mainly in hydraulic protection works, the flow lines remain unaltered and

there is minimum impact to local flora and fauna. They are quickly integrated into the surrounding environment, thus allowing the ecosystem to recover almost completely to how it was before the works.

Direct/indirect beneficiaries: The whole population with access to the drinking water network of Concordia (200,000 inhabitants).

Duration: 10 months

Institutions responsible/Intervening stakeholders: provincial and municipal institutions involved in water supply in Concordia.

Activity 8.3: Refurbishing of the Access bridge to the Pier and the Coastal areas of the San Javier town, Rio Negro Department, Uruguay.
Description:

The rehabilitation of the pier access bridge and the coast of the city of San Javier must be observed from a regional perspective, including the two complementary points of view of tourism and land-use planning projects, both of which were designed and are currently being implemented by the departmental government.

This project, called " Rehabilitation of the pier access bridge and the coast of the city of San Javier, Uruguay" is aimed at addressing the risk of partial or total collapse of its structure, which would significantly impact various aspects of people's daily life, tourism and protected natural areas. The structure of the bridge is affected due to coastal erosion and Uruguay´s river flows, which have being increasing due to climate change. Plans include not only solving the structural problem that is affecting the bridge, but also improving its accessibility, with a renewed design that better fits its surrounding environment.

The pier area hosts nautical activities that take place in the Uruguay River and represents a central area of the local tourist circuit as well as other small scale fishing activities.

Also, the bridge is the "gate" of access to the beach adjacent to the pier to the south, which is the only one in the town where people can easily come walking or riding a bicycle. Visiting the local beach "Puerto Viejo" requires the use of other types of vehicles, since it is approximately 5.5 km away.

In this context, maintaining and improving the pier access bridge becomes important to ensure the growth and development of nautical ventures, in order to give continuity to the local tourist circuit that integrates the coastal zone with the urban route. This will also allow visitors and San Javier neighbors' enjoyment of the coastal edge.

Direct/indirect beneficiaries: 1781 inhabitants, plus the visitors that visit the area year-round.
Duration: 10 months
Institutions responsible/Intervening stakeholders: Departmental Intendance of Rio Negro

Output 9. Solutions have been defined and financial mechanisms have been implemented to promote CCA in medium-risk housing and commercial buildings in medium risk areas.

Context: The social, psychological and economic effects of the floods have periodically affected vulnerable communities for decades, making it difficult for them to recover. The development of different financial instruments will help support families by means of sustainable solutions to adapt their housing conditions in medium risk areas, which are not subject to relocation plans. The exchange of experiences

and good practices at the regional level will contribute to achieving effective solutions and fostering society's ownership of the project.

Objectives: implement financial instruments to adapt the houses and commercial buildings in areas with medium flood risk**.**

Expected results: Increase the resilience of the population living in coastal urban areas, reduce the vulnerability of the tourism industry and other productive activities.

Institutions responsible/Intervening stakeholders: Depends on the activities

Activities or implementation instances:

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

Objective: Facilitate the means to adapt and improve the quality of housing in medium flood risk areas, by means of no-interest loans, subsidies, building permits and technical advice.

Context: There is a history of different housing credit loans in this country, whose results have been evaluated positively, both in terms of compliance with payment commitments and the relevance of their implementation. MVOTMA's Urban Rehabilitation Program is an example of this. Efforts are being made within the framework of the project to revisit this instrument and adjust it for the implementation of flood adaptation measures.

Description: Creation of a new funding window in an existing Revolving Fund in order to facilitate the means for adapting and improving the quality of housing, through interest-free loans, subsidies and technical advice, in areas with adequate service infrastructure at the urban level. This will encourage its inhabitants' permanence will attract new ones, with repercussions on available housing.

The project seeks to promote residential rehabilitation and improvement of buildings, through owners, in areas with adequate service infrastructure at the urban level, encouraging the adequate permanence of its inhabitants, with repercussions on available housing and at the same time avoiding depressed and damaged urban-housing situations.

There are plans to have a new funding window in the existing Revolving Fund that will allow beneficiaries' funds reimbursements to be allocated to new credits in the program's different action lines. The maximum loan amounts, as well as the requirements to access the credit will be defined in the framework of the project, considering aspects such as location and up to date tax obligations, among others. Throughout the project's implementation, the IDP will perform a quarterly assessment including rendering of accounts regarding progress made, and an evaluation of what has been accomplished.

Credits to be used to adapt homes to floods are aimed at all households under this situation. The project seeks to address the particular infrastructure situation of all dwellings located in medium risk flood zones (according to the city's risk map), specifically in the Port sector. Particular attention will be paid to the diversity in the population composition of the area and their capacity to meet their payment

commitments, considering situations such as elderly people, people with disabilities, single-parent homes, etc.

Creation of the Fund:

The loan will support the implementation of actions in new buildings or reforms, such as:

- Measures aimed at guaranteeing the hermetic nature of ground floors.

- Building entrance steps, flood locks on doors and waterproofing walls.

- Build structures to withstand the pressure and under-pressure produced by water.

- Finished floor level of the dwelling must be above the street level and above the +10 Port level, in relation to the TR 100 curve (100 years return period).

- The internal sanitary installation shall be designed and built in order to minimize the risk to its inhabitants, and it must have non-return valves.

- The electrical installation must be adapted to flood situations, in order to minimize the risk to inhabitants' lives.

- It is forbidden to build basements

- Construction of upper floors shall be promoted as a contingency measure for floods.

- Refurbishing and/or repairing the house after the event.

The tool's design will be open to citizen's participation and will consider the needs of people with multiple vulnerabilities (female heads of household, senior citizens, people with disabilities), for the definition of eligible investments and to identify what type of barriers these groups face when trying to access this type of tools.

Microcredits amount to USD 5000 for each of the 40 estimated beneficiary homes.

Direct/indirect beneficiaries: This program's target population is included in the consolidated flooding area detailed above, which meets the credit requirements. The inhabitants of the 40 selected homes will directly benefit for the program. Since this is a pilot programme that can be later used across Uruguay, the indirect beneficiaries account for around 5.000 people.

Duration: 2 years

Institutions responsible/Intervening stakeholders: MVOTMA, Urban Rehabilitation Office, Departmental Intendance of Paysandú

Activity 9.2. Design of flood insurance for commercial and tourist premises in coastal areas. Entre Ríos, Argentina.

Description: Argentine coastal towns of the Uruguay River constitute a growing tourist corridor, based on the beauty of its landscapes and beaches, places of great historical value, carnivals and hot springs, among other attractions.

Floods have a severe impact on the sector, and not only affect facilities, businesses and stores located near rivers and streams, but also affect tourism income levels in vulnerable localities. Many of these businesses or riverside stores are located in low areas, precisely because of the nature of their activity and the tourism services they offer.

Besides the damages and losses caused by the floods resulting from river floods or heavy rains, losses are also linked to a decrease in tourists' visits and stays[8].

There are very few cases of insurance policies and tools that protect the population and its assets from floods, so it is necessary to seek for expertise and recommendation from insurance specialists, in order to assess possible and feasible alternatives for the design of relevant insurance solutions for the tourism sector in the light of the impacts of in floods. This process will include gender considerations during the tool's feasibility study and design (for example, proposing affirmative actions to promote access to insurance for women-led SMEs).

Direct/indirect beneficiaries: Flood insurance is of interest for: a) the governments, who receive claims from sectors affected by these events; b) the beneficiaries themselves, once it is implemented; and c) insurance companies that can develop a new product.

Duration: 10 months

Institutions responsible/Intervening stakeholders: municipal and provincial stakeholders participate in the design and financial entities with proven experience in the insurance field.

COMPONENT 3. Priority measures for the adaptive conservation of the vulnerable coastal ecosystems of the Uruguay River.

The ecosystems of the Uruguay River are very valuable due to their biological diversity, their role in providing ecosystem benefits and services, especially those related to the river's equilibrium and dynamics (buffer zones, water purification, flood regulation and temperature, prevention of erosion, among others). These ecosystems are affected by climatic events, which endanger the natural supply of natural resources, biodiversity and the environment. At the same time, these impacts are increased by the increasing coastal urbanization which adds new threats related to pollution processes and loss of water quality.

Adaptation strategies based on ecosystems are suggested, including:

- mapping ecosystem services,
- restoring significant ecosystems and the natural dynamics of the river,
- recovering the coast,
- protecting environmental services and
- implementing measures to reduce health-related problems in the cities.

There are numerous national, departmental / provincial, local / municipal and private as well as international Protected Areas, mainly RAMSAR Sites and IBAs (BirdLife International) in the area of Program implementation. These Protected Areas have varying degrees of managing and conservation progress. Furthermore, there are also exchange activities between the El Palmar National Park (Argentina) and the protected area Esteros de Farrapos e Islas del Río Uruguay (Uruguay). There is also an intention to sign a formal agreement between the National Parks Administration (APN) in Argentina and the SNAP (MVOTMA's National System of Protected Natural Areas) in Uruguay.

[8] In Colón for example, a locality with one of the highest tourism revenues, river floods during the summer reduce tourists' visits and permanence by 50%, which strongly affects the sector throughout the locality. Compared to summer seasons where some 760,000 rooms are occupied, and revenue amounts to more than ARS1,600,000 -considering accommodation, food, excursions and travel-, in the summer of 2016, revenues were reduced to approximately ARS 811,000, for the same items, due to floods.

Project Outcome iv). Adaptive conservation measures have been implemented in vulnerable ecosystems on both banks of the Uruguay River, including the identification and evaluation of their ecosystem services.

Output 10. Ecosystemic services and benefits have been identified and assessed, including the CCA and Uruguay River ecosystems connectivity.

Context: Climate change generate alterations in ecosystems and the distribution of species that need to be considered in management plans for protected areas and other biodiversity conservation measures.

Healthy coastal ecosystems contribute to climate change adaptation, with favorable consequences for the population, infrastructures and vulnerable activities on both banks of the river. It is necessary to identify, evaluate and promote the provision of these ecosystem services in protected areas' management plans and in other biodiversity conservation measures.

Objectives: The identification and mapping of ecosystem services will significantly contribute to territorial planning and management; risk management and risk reduction; building resilience and to the improvement of sanitary and health conditions. Ecosystem-based solutions are known to be sustainable and efficient.

Expected results: Reduce coastal ecosystems' vulnerability to climate change by adapting their management plans.

Justification in terms of increasing resilience/reducing vulnerability: This activity contributes to the implementation of Adaptation Measures, by identifying vulnerable sites and protecting wetlands, thus ensuring that they provide ecosystem services such as flood control, replenishment of groundwater, water filtration and purification, stabilization of the coast and protection against extreme events. Wetlands are important biodiversity reservoirs and all these services highlight their conservation as a key climate change mitigation and adaptation strategy.

Institutions responsible/Intervening stakeholders:

Provincial Secretariat for the Environment. National Parks Administration of Argentina, and the National Protected Areas System (SNAP) MVOTMA, of Uruguay.

Activities or implementation instances:

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.

Description: This activity includes collecting, analyzing and systematizing information regarding ecosystem services and their benefits, including identifying and evaluating them, as well as setting baselines and including them in information systems. It also includes preparing a Proposal for the Comprehensive Coastal Management of the Uruguay River Contributory Basins -Argentinian Bank- Province of Entre Ríos and the implementation of two pilot-scale projects. This activity will include analyzing the evaluation of benefits, considering the different links subject to gender conditions, especially those involving productive aspects.
The ecosystem services' main geographic scope is the Estero de Farrapos e Islas del Río Uruguay Protected Area and the El Palmar Yatay RAMSAR Site.

In general terms, the project takes into account ecosystem services related to the protected areas on both banks of the Uruguay River, as well as natural environments surrounding urban areas that are included in the project. In particular, adaptation actions based on ecosystems will be taken into account

in the selected urban centers, as well as riparian ecosystems linked to these urban centers, and selected protected areas on both banks of the Uruguay River, in particular the El Palmar RAMSAR site and the Estero de Farrapos e Islas del Río Uruguay Protected Area (PNEFIRU).

El Palmar Yatay is a site of international importance and it is recognized by the Ramsar Convention. It measures 21,450 hectares and it contains the El Palmar National Park (8,500 hectares). This site maintains the original ecosystem services since its creation in 2011 and protects an area of Yatay palm trees (Syagrus Butia yatay). Besides containing the National Park, the site also contains privately owned productive lands and protected areas, including among other relevant properties, the private reserve "La Aurora del Palmar" and other public areas, including uninhabited islands that receive migratory birds from other South American countries.

In the surroundings of the RAMSAR site, the predominant economic activities are related to agriculture or forestry (there is an existing agreement between National Parks and the main owners of neighboring ranches, for the so-called buffer zone, ZAM). However, there are also neighboring urban populations organized in the so-called "Tierra de Palmares Municipalities Association", where other activities such as tourism, trade, handicrafts, etc. are carried out. The lower areas of the Park and the RAMSAR site in general, adjacent to the Uruguay River, are suffering the consequences of the river's increasing water levels. This, added to the increase of severe rainfall, will generate more frequent river overflows and floods, as has been occurring every year to a greater or lesser degree.

It is important to point out that there are areas along the coast of the Uruguay River, where the river ridge has varying levels of erosion. The condition of the ridge is very important for the establishment of the riparian forest - which provides the ecosystem service to mitigate the impact of the floods - and would also affect the flood regime in the wetland. A field survey carried out when preparing the PNEFIRU management plan evidenced varying grades of erosion processes, depending on the wetland sector, including certain points with erosion levels.

A report on the functional role of the ridge in the PNEFIRU protected area should be prepared, in order to evaluate its condition and the erosion's potential effects wetland's structure and water regime, and to define vulnerability zones. The guidelines for the restoration of the ridge will also be identified. This activity would reinforce the implementation of the PNEFIRU's current management plan, in relation to the ridge's restoration program, "carry out an evaluation based on technical-scientific criteria regarding the pertinence of restoring the ridge and recommend actions in that sense".
Direct/indirect beneficiaries: area population targeted by the Management Plan.
Duration: Year 1.

Output 11. New ecosystem-based adaptation measures have been designed and implemented.

Context: The analysis on the vulnerability of coastal ecosystems of the Uruguay River found in Annex 11 – Vulnerability Analysis-Coastal Ecosystems , describes the impacts on erosion and drainage that led to the proposed activities. The processes to be developed will be carried out in strategic places, considering both their fragility and the importance of contributing to minimize the impact of climate change on the most vulnerable species.

In Uruguay, the National Park Esteros de Farrapos e Islas del Río Uruguay was particularly identified by the SNAP as an area with characteristics that make the conservation of species vulnerable to climate change suitable[9]. On the other hand, there are two localities in the area of influence of the protected

[9] For example, this area can preserve patches of grassland of medium and dense height that are suitable for vulnerable species (e.g. Anthus nattereri), and wet grassland areas with tall grasses (for example, relevant for Alectrurus risora, and Sporophila palustris), and marshlands with emergent vegetation and estuaries where the conservation of some species

area, San Javier and Nuevo Berlín, with areas that are exposed to floods linked to the dynamics of the Uruguay River. It is important to point out that there are areas where the river ridge has varying erosion levels, along the coast of the Uruguay River. This erosive process is strongly linked to the dynamics of the Uruguay River and it is intensified by anthropogenic activities and the increase of extreme events. The presence of invasive alien species is also affecting natural ecosystems which help mitigate the impact of floods.

Argentina prioritizes actions in the Palmar Yatay Ramsar Site, particularly in the El Palmar National Park, characterized by palm-tree ecosystems (Butia yatay) combined with grasslands that may have a varied proportion of woody shrubs and trees. The landscape includes riverine forests located on the banks of the Uruguay River and the main tributary streams. There are grasslands in the lowest and flood-prone areas. This National Park is severely affected by the invasion of exotic species. Although various efforts have been made to control these species, they have failed to produce the expected impact and the invasion of exotic species has persisted, thus affecting the conservation of existing ecosystems.

It should be noted that future climatic conditions and their effects add up and in some cases, exacerbate the severity of the invasion of exotic species and their impact. Current global climate change is causing changes in the adequacy of local climates for native species, in the abundance of native species within existing distributions and in the nature of their interactions with native communities. Climate and landscape characteristics determine the limits of the geographical distribution of the species and the seasonal conditions for their growth and survival. Additionally, plants affected by climate change may be more vulnerable to insects or pathogens.

In this context, managing the Uruguay River requires a large-scale and joint management approach that needs to be coordinated between Argentina and Uruguay, in order to enable the conservation of natural ecosystems and the mitigation of climate change effects.

Objectives: This output's activities are aimed at identifying and evaluating impacts such as erosion and drainage problems and providing sustainable solutions to recover ecosystem services and restoring ecosystems in coastal areas, reducing the risks of floods and their negative effects.

Expected Results:

Increase resilience and reduce the vulnerability of targeted areas and in terms of production and habitat. Likewise, planned activities seek to reduce vulnerability to climate change by increasing local users' capacity and diversifying their economic activities. Finally, technological innovations and associated management models are expected to produce demonstrative experiences at the national level, and methodological guidelines and good practices for the design, construction and maintenance of infrastructures in protected areas in the context of climate change.

Institutions responsible/Intervening stakeholders: both public sector and private sector actors will be involved, according to the activities.

Activities or implementation instances:

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.

Description: This activity contributes to reducing vulnerability to climate change by increasing the capacities of local users and diversifying their economic activities. It also represents a technological innovation because it becomes a reference point at the national level and provides future guidelines for the construction of certain infrastructures in protected areas in a climate change context.

is strategic (e.g. redfish, Pardirallus maculatus) as it contributes to make it more resilient to the increase in sea level and projected extreme events.

Throughout the 450 km of coasts along the Uruguay River, varied productive activities such as livestock, agriculture, afforestation, beekeeping, tourism and urban development are carried out. The island sector consists of young and older islands, unsuitable for permanent ventures (production, settlements) due to the constant alteration of its surface.

In order to reduce the pressure on the wetland in the long term, nature based tourism will be promoted as a complementary activity, to ensure that affected families' incomes remain stable so that they can continue to maintain their main, traditional activity (livestock, based on the forage use of the Esteros de Farrapos e Islas del Río Uruguay National Park wetlands). This activity will promote community collaboration in the conservation and use of the Park and will contribute to the inclusion of women and youth, acknowledging their productive role and facilitating and promoting their leadership in tourism activities.

Specifically, the public tourism use plan will be strengthened and implemented by including diversification options for the economic activity of farmers belonging to the Rural Development Association, who have the right to use forage in the estuaries. This initiative will be carried out with strong participation from the affected community and will promote training activities, as well as the exchange of experiences and good practices in community tourism, both at a regional and binational level.

Beekeeping is carried out in flood-prone coastal areas and on specific islands of the protected area. The project will support this activity in coordination with tourism development, including it in the tourism output, and making infrastructure improvements and strengthening the capacities of beekeepers.

In order to avoid possible undesired effects associated with tourism, this activity will include the definition of good practices and institutional guidelines for the design, construction and maintenance of infrastructure in protected areas, particularly in wetlands and implementing demonstrative cases to scale up good practices and be used as a reference for other initiatives that promote infrastructure in wetlands and other vulnerable ecosystems. This activity also includes monitoring efforts, to ensure that it contributes to conservation, increased knowledge on the pressure that livestock and other activities cause to fragile environments (conservation of the ridge, breeding sites and fish feeding) and the relationship between grazing and the dispersal and control of invasive alien species (IAS) *Gleditsia triacanthos*, one of the most important threats in the area that modifies the structure of the riparian forest.

Direct/indirect beneficiaries: Rural Development Association, Estero Group, and "Los Girasoles" Civil Association, producers (Nuevo Berlin Development Association, San Javier Development Association, Nuevo Berlin Tourism League.

Duration: 3 years.

Institutions responsible/Intervening stakeholders: DINAMA/ MVOTMA, MDN , MGAP , MI (Río Negro Departmental Authorities), MINTURD, , National Institute of Colonization, Río Negro Departmental intendance, Civil Society Organizations (Estero Group and "Los Girasoles" Civil Association), producers (Nuevo Berlin Development Association, San Javier Development Association, Nuevo Berlin Tourism Leage, Nuevo Berlin and San Javier mayor's office. Tourism group.

Activity 11.2: Implementation of climate change ecosystem-based adaptation measures in the Rincón de Franquía Protected National Area in Uruguay.

Description: In the Rincón de Franquía protected area that conserves habitat and/or species (IUCN-category VI), there are erosive processes on the coast as a result of more frequent and intense increases in the flow of the Uruguay River in the sections associated with the Linear Park and Los Pinos beach.

In order to identify ecosystem zones that are more vulnerable to flooding, and to design and implement pilot conservation and adaptation measures based on ecosystems, such as replanting with native species, an assessment and diagnosis will be carried out on the coastal erosion process and its respective environmental adaptation and/or restoration measures.

Direct/indirect beneficiaries: Indirect beneficiaries include the coastal population, as well as the tourism industry and visitors.
Duration: 4 years.
Institutions responsible/Intervening stakeholders: National Protected Areas System (SNAP) Uruguay

Activity 11.3. Restoration of vulnerable coastal ecosystems through monitoring exotic species and planting native species.

Description: Invasive species and climate change are two of the greatest threats to biodiversity and the provision of ecosystem services worldwide. Climate change could increase opportunities for Invasive Alien Species (IAS), whose ability to adapt to disturbances such as fires, floods and droughts, provides an opportunity to colonize and settle in new environments.

In the coast of the Uruguay River, biological invasions, particularly woody exotic invasions, are the main threat to native ecosystems. This is a particularly severe problem for the main protected areas on this coast. This is the case of the Esteros de Farrapos and Palmar Yatay RAMSAR Sites (Argentina).

Even though the Woody Exotic Invasive Species' threat affects this site's whole basin, it has increased the most at the El Palmar Natural Park, where the impact is strongest. The reason why the problem is worse in areas where there has been a biodiversity conservation program is addressed in the El Palmar National Park Management Plan (Resolution HD APN Nª 86/2016), which raises the need to include this concern in the management of protected areas. This project contributes to this matter.

It should be noted that initiatives in this area were extended to the forest establishments adjacent to the El Palmar National Park, which first created private protected areas and were then integrated into the buffer zone (ZAM) of said National Park, through a formal agreement with the National Parks Administration. Approximately 500 to 1000 privets will be extracted from the trail area and approximately 200 native species will be planted along the coasts and beaches: Nectandra angustifolia, Myrcianthes cisplatensis, Ocotea acutifolia, Enterolobium contortisiliquum, Albizia floodla, Pouteria salicifolia and Inga uruguensis.

The Esteros de Farrapos e Islas del Rio Uruguay National Park and Ramsar site: the National Park covers an area of 16,810 hectares. 68% of the property is owned by the nation and 32% is privately owned. The site is an important area for bird conservation (IBA).

The Farrapos wetlands are one of the largest wetlands in the country. They are characterized by the presence of several environments, including the coastal ridge and its associated vegetation: the riparian forest. The riparian forest provides the flood-buffer ecosystem service, which is particularly relevant in a context of increased frequency of extreme events. Some plant species particularly decrease the river's erosive energy, protecting the ridge. The ridge, a fluvial deposit that forms a longitudinal elevation in the margin of the Uruguay River, contains the water level inside the wetland and protects it when the water level increases. The ridge's condition is crucial for the establishment of the riparian forest and also affects the flood regime. On the other hand, the islands of the Uruguay River are relevant for the biological connectivity between the wetlands on the margins of the river in Uruguay and Argentina, and are enclaves for the southern dispersion of elements of the Paraná forest. The edges of the islands have ridges where riverbanks develop with a diversity of species. The regulation of the water flow generated by the ridges, allows small lagoons "*guachas*" to develop inland. These small lagoons are linked to permanently or temporarily flooded areas, with plant associations adapted to these water variations. These lagoon areas are especially important as they offer shelters during drought periods.

The activity seeks to control the invasion of alien species in the project's geographic scope. It should be noted that at the end of the project, different levels control will be achieved in both countries.

In Uruguay, the scope of the project is to control the invasion of alien species along 52 km of coastline. This will allow the river ridge and the riparian forest to progress towards a good conservation status and

maintain the provision of ecosystem services. The good conservation status indicators are those included in the monitoring system of the area's management plan.

In Argentina, the scope of this project will focus on controlling invasive alien species (IAS), a process that will be subsequently included in protocols and reference plans for the restoration of ecosystems in the coastal region of the Uruguay River. While there is a broad consensus on the seriousness of the impacts caused by IAS, there are numerous approaches to dealing with this problem, thereby justifying the need for protocols. At the ecosystem results level, the activity seeks to control of the invasion of exotic species in an area measuring approximately 3,500 hectares.

For this end, activities will be carried out with the purpose of creating capacities in the Uruguay river coast, by means of a Woody Exotic Invasive Species management plan. This includes setting up groups to develop a toolbox that includes the set of scientifically tested applicable protocols for the different species, as well as recommendations on good practices to ensure their sustainability. This activity includes: (1) Implementation of a set of modalities and operations for the control of woody invasive alien species. These modalities and operations will include technical and operational information that will enable them to become reference material at the regional level (Argentina and Uruguay), (2) Implementation of a phytosanitary and eco-epidemiological surveillance plan for the early detection of new pests in species of special value (Argentina), (3) Implementation of restoration actions in environments affected by climate change and IAS (Argentina and Uruguay), (4) Prepare a tool box (sets of protocols) for the control of woody exotic invasive species, adapted to the cases of the Uruguay River coastline (Argentina and Uruguay), (5) Communication and dissemination campaign to foster community participation, setting up a buffer zone for the PNEP, the RAMSAR Yatay Site and the EFIRU National Park (Argentina and Uruguay), (6) Create an environment that fosters regional collaborative work between El Palmar and the EFIRU National Park, in order to contribute to interinstitutional strengthening (Argentina, APN and Uruguay, SNAP).

Direct/indirect beneficiaries: coastal population, tourism industry and visitors

Duration: Years 1, 2, and 3

Institutions responsible/Intervening stakeholders:

Institutions responsible: Entre Ríos Secretariat of the Environment and El Palmar National Park (Argentina's National Parks Administration). Uruguay's National System's Division for Protected Areas and Esteros de Farrapos e Islas del Río Uruguay National Park Administration. National Directorate for the Environment.

Intervening stakeholders in Argentina: Palmar Yatay RAMSAR Committee, Aurora del Palmar Wildlife Refuge, Habitat y Desarrollo Foundation, establishments that are part of the El Palmar National Park Buffer Zone, El Palmar National Park, Private Reserves of the Tierra de Palmares Microregion, INTA Stations in the area , CAL Bancos del Caraballo, Researchers in the RAMSAR Palmar Yatay Site influence areas, Representatives of the Palmares-Butiazales Route (or Butia Network), Entre Ríos Secretariat of Culture, Entre Ríos Secretariat of the Environment, Entre Rios Directorate of Natural Resources, Municipalities of the Tierra de Palmares microregion, CARU, UNER, NGOs: CEyDAS and Tecove Mymba, among others

Intervening stakeholders in Uruguay: PNEFIRU Specific Advisory Commission: DINAMA/ MVOTMA, Fray Bentos Municipality, Ministry of Livestock, Agriculture and Fisheries (General Directorate of Renewable Natural Resources and National Directorate of the Environment), Ministry of the Interior (Río Negro Departmental Headquarters), Ministry of Tourism, Administrative Commission of the Uruguay River (Uruguayan Delegation), National Institute of Colonization, Río Negro intendance, Civil Society Organizations (Estero Group, Civil Association "Los Girasoles"), producers (Nuevo Berlin Development Association, San Javier Development Association, tourism league of Nuevo Berlin, mayor of Nuevo Berlín and San Javier, Faculty of Sciences. A human-resources focused alliance will be created with the Ministry of National Defense (Uruguay) in order to create a sustainability strategy.

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

Description*:* The Calera del Palmar historical site, located in the PNEP, is a historical complex dating back to the colonial period (1650-1810). It comprises various building structures that sit on the Uruguay River's ravine and coast. Throughout time, the buildings in the sector have changed hands but have performed a similar main purpose, up to the creation of PNEP in 1966. The original historical buildings were built by the Guaraní Jesuit society and illustrate stone architecture, along with the use of lime and cowhide for building purposes. It is the oldest buildings in the Province.

Nowadays, the historical site is endangered by two major factors: one is the passage of time, which is inexorably wearing these structures, which are settled on mud or mortar of lime and mud. The other factor is the climatic phenomena, especially river floods, torrential rains and persistent humidity.

Since it is located in the vicinity and on the same ravine, the historical site is very vulnerable to flooding. In particular, when a Southeast blow or *sudestada* occurs during a flood, it causes big waves that often hit against the old structures. These floods of the Uruguay River respond to torrential rains that affect the upper basin of the Uruguay River and fill the Salto Grande dam located about 60 km upstream of the project area.

The site is located between levels 21 and 7 (IGN). The latter reaches the kilns and the dock, buildings closer to the river bank and is therefore the most affected by flooding.

Nowadays, the historical site is the second most visited sector of the PNEP. It is undoubtedly an educational and tourist attraction and both organized groups in tours as well as families and visitors in general, find it striking to recognize the Jesuit presence in this area, which is far away from the traditionally known Jesuits areas. It is a unique sample of the historical heritage built during the colony, which is related to the Jesuit ranches of Córdoba and forms a corridor of relics that joins the Provinces of Entre Ríos, Corrientes and Misiones along the coast of the Uruguay River, in Argentina. There are also relics in the Oriental Republic of Uruguay.

Given its importance, as well as its condition, current vulnerability and considering it can be reversed, it has been prioritized for conservation purposes and the necessary investments to that effect.

This activity seeks to consolidate the structures of the Calera del Palmar and improve the conditions for visitors. For this, the following interventions are foreseen:

1. Carry out remediation, structure consolidation and defense of coastal margins works and enhance the ruins that mitigate the effects of rainfall and flooding on the historical site.

2. Determine in advance the effects that local rainfall has on: i) the historical site's micro surface runoff and ii) the effects of infiltration on the rocks and soils that sustain the historic structures (lime kiln and others), in order to consider them in the works (hydrogeological aspects).

3. Implement the archaeological works and carry out monitoring events complementary to the works.

4. Improve accessibility to trails and infrastructure for visitors to the historical site, enhancing the whole site.

5. Carry out environmental impact studies for all tasks and interventions if required, according to the regulations in force at the NPC.

6. Share results with the community.

Direct/indirect beneficiaries: Since the Jesuit Stations of Córdoba and the Jesuit Missions of the provinces of Corrientes and Misiones were declared World Heritage Sites, this former industrial area, as part of the Jesuit missions as a whole, provides cultural and educational benefits to humanity.

Secondly, it benefits the entire Argentine and Uruguayan people since it is one of the roots of their cultural identity. In third place, it benefits the inhabitants of neighboring towns: Ubajay, Colón, San José, San Salvador, Villa Elisa, Concordia, among other localities who can enjoy their visits and in turn, benefit from the influx of visitors (by providing accommodation and supplies) from large cities who frequently visit the area, for example from Paraná, Santa Fe, Rosario and Buenos Aires.

Institutions responsible/Intervening stakeholders: National Parks Administration, Ministry of the Environment and Sustainable Development, the project's executing entity; National Technological University. Concordia Headquarters (Hydrogeological studies); and Félix de Azara Natural History Foundation (archaeological studies).

Component 4: Priority measures to increase resilience and reduce social vulnerability

Community-based adaptation measures will be designed and implemented on both banks of the Uruguay River as well as the strengthening of the knowledge of local communities regarding climate change, as part of this component. The objective is to enhance the capacities and knowledge of local communities regarding climate change impacts as well as to empower social networks in the implementation of adaptation measures, thus contributing to the generation of resilience in their practices. It seeks to strengthen and/or create spaces where civil society participates in climate change measures and community risk management, to improve their sustainability and ensure community's ownership. For this, activities will be carried out to analyze the multiple social vulnerabilities, taking into account gender, generations and human rights issues, as well as the implementation of socio-economic, cultural and educational vulnerability reduction strategies. Also social perception of climate change risks will be performed to consider the subjectivities and previous knowledge of the communities. Also there will be a focus on relocated families' work or productive reconversion, strengthening social networks, community participation, and climate change communication and education.

Outcome v) ***Communities and social organizations increased their resilience in the framework of climate change adaptation and risk management of hydro-climatic disasters***

Output 12. **Social vulnerability monitoring and evaluation tools have been devised with a particular focus on human rights, gender, and generations.**

Objectives: contribute to better understand, analyze, evaluate and monitor social vulnerability, through tools and methodologies that include information available at the country level.

Expected results: Methodological tools have been developed for analyzing, evaluating and monitoring the Project area's social vulnerability and have been made available to local, subnational and national governments for appropriate decision-making.

Justification in terms of increasing resilience/reducing vulnerability: knowledge on social vulnerability conditions of the population is critical for adequately and effectively addressing necessary measures to reduce risks, build and increase resilience and adapt to climate change. This process will allow for a better identification of adaptation measures that adequately relate to local contexts while empowering local communities. Education, social participation and communication are essential tools to achieve these objectives.

Institutions responsible/Intervening stakeholders: ARG-URU national governments, subnational and local governments, CSOs and overall population.

Activities or implementation instances:

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.

Description: review and analyze literature and successful experiences on social vulnerability. Prepare a monitoring instrument that integrates the human rights, gender and generations approach (Annex 9 – Vulnerability Analysis). From the human rights perspective, aspects regarding specific population groups will be considered (children, adult population, elderly people, gender, people with disabilities, migrant population, ethnic and racial diversity), as well as aspects related to decent employment, decent housing, access to information, services, spaces for citizen and cultural participation, among others.

Direct/indirect beneficiaries: Local governments along the Uruguay River, subnational and national governments.

Duration: 4 years

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.

Description: Implement the monitoring and analysis instrument developed in activity 12.1. Implement the test application, make adjustments, and enhance the instrument.

Direct/indirect beneficiaries: Local governments along the Uruguay river, subnational and national governments.

Duration: 2nd and 4th year (including monitoring and results)

Output 13. Assessments of social perception of risks have been carried through towards the construction of resilience.

Objectives: Design an appropriate methodology to analyze the social perception of climate risks in both countries' localities, in order to guide the adaptation and climate risk reduction processes in coastal communities and monitor its evolution.

Expected results: Methodological backgrounds have been identified and a methodology have been developed for the analysis of social perception of climate risks, to be implemented by both countries.

Justification in terms of increasing resilience/reducing vulnerability: Contribute to strengthen communities and their resilience. It is important to learn how communities experience risks, their widespread beliefs and people's positions regarding risk and risk management. This knowledge allows adapting the different measures and interventions proposed to reduce the risks, generating greater awareness and ownership in the beneficiary communities of the Project.

Institutions responsible/Intervening stakeholders: ARG-URU national governments, subnational and local governments, CSOs.

Activities or implementation instances

Activity 13.1. Drafting up of a methodology allowing the identification, estimation, and review of a risk social perception, and drafting up of a methodology-based document**.**

Description: Methodologies will be selected and a methodology will be developed to determine the levels of social perception of climate risks of potential threats and assess existing vulnerability conditions. Participatory strategies will strengthen capacities and increase resilience in order to reduce and prevent the negative effects of disasters. To develop this methodology, different theories,

background information and experiences in the subject matter will be assessed. Also, the methodology may be applied in pilot cases in order to evaluate it and enhance it before implementing it.

Direct/indirect beneficiaries. Direct: Local governments along the Uruguay River, subnational and national governments, CSOs. Indirect: vulnerable, flood-prone communities**.**

Duration: 1st and 2nd years.

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.

Description: The development of a methodology to analyze the social perception of climate riskin the Program's localities, will enable its subsequent implementation in the territory. This will result in a very interesting analysis on the social risk perception at the regional level as well as each countries' similarities, differences and distinctive features. A document will be prepared with all this information and will include the common results as well as results regarding both margins of the river.

Direct/indirect Beneficiaries: Direct: Local governments along the Uruguay River, subnational and national governments, CSOs. Indirect: vulnerable, flood-prone communities.

Duration: 3rd and 4th year.

Output 14. Strategies for assistance and capacity-building of the workforce made up by vulnerable populations have been promoted.

Objectives: contribute to improve people's economic conditions and their livelihoods through work reconversion strategies, based on training activities and identification of regular income sources in order to reduce their socioeconomic vulnerability and foster their social inclusion.

Expected results: It is expected that resettled population are strengthened by new and sustainable labor insertion strategies by training and reconversion.

Justification in terms of increasing resilience/reducing vulnerability: It is expected that labor reconversion strategies implemented with resettled population will allow for the family's living hoods and resilience to increase also allowing the families to access jobs that are unrelated to their previous unsustainable settlements, while achieving a higher income that will reduce their socio-economic vulnerability and exclusion.

Direct /indirect beneficiaries: Direct: vulnerable communities.

Responsible institutions / stakeholders involved: depends on each activity

Activities or implementation instances

Activity 14.1. Capacity building strategy for the reconversion of the Creation and implementation of a labor force of families who have been resettled in Paysandú, Uruguay

Description: The objective is to contribute to create and generate stable and sustainable income, so they can overcome vulnerability and social exclusion situations. To this end, the following actions will be carried out: a) Training: professional training tailored for each enterprise; b) Continuity in social support; c) Subsidy - working capital; d) Regulation for classifying and selling waste; e) Location of productive activities separate from relocation housing; and f) Work reconversion: learn about the families' productive activities and capacities in order to development other tentative undertakings, according to their potential.

Besides the specific work that will be carried out according to the type of entrepreneurship, it is suggested that cross-cutting actions be carried out for all families, prioritizing training and carrying out workshops on cross-cutting issues for all enterprises. These cross-cutting issues include youth employment, persons with disabilities, migrants, gender, entrepreneurship, institutional aspects and legal instruments, as well as links to other public policies to support entrepreneurship (access to financing, third-sector activities, formalization, commercialization, etc.).

To this end, work will be carried out in coordination with MIDES, INACOOP, MTSS, MIEM, ANDE, INEFOP, among other public policy institutions related to the target populations and their undertakings.

Direct/indirect beneficiaries: waste-sorting families, brickmaker families, animal production families.

Duration: 4 years

Institutions responsible/Intervening stakeholders: National and subnational governments, employment and training institutions, CSOs, local private companies, MVOTMA, Ministry of Livestock, Agriculture and Fisheries (MGAP), Ministry of Social Development (MIDES), National Cooperatives Institute (INACOOP), Ministry of Labor and Social Security (MTSS), Ministry of Industry, Energy and Mining (MIEM), National Development Agency (ANDE), National Institute of Employment and Vocational Training (INEFOP)

Activity 14.2: Social and labor capacity-building, and drafting up of workforce capacity-building in Entre Ríos, Argentina

Description: The activity is part of the program "Caring for our common home", which is carried out by the Ministry of Social Development of the Government of Entre Ríos, inspired by Pope Francis' Encyclical Letter Laudato Si', which encourages young people to look after themselves, others and nature, by developing productive projects that generate decent work. Between 2016 and 2018, some 200 young people facing psychosocial vulnerability participated in this Provincial initiative, covering aspects such as recycling materials, gastronomy, hairdressing, fabric work and carpentry. This activity seeks to take advantage of the experience accumulated by this program to extend it to sectors whose social vulnerability is exacerbated by hydroclimatic phenomena, including the impacts they may suffer in their homes or settlements, and the effects that these phenomena may have on their livelihoods. This activity also strengthens the capacities of families that have been relocated to safer areas. In this sense, the project seeks to strengthen livelihoods, reduce vulnerability, and increase resilience among families and the community, by means of personal development actions, strengthening self-esteem, transforming habits regarding environmental sustainability and developing capacities to care for each person's habitat.

Developing work skills and promoting autonomy in the design and implementation of people's own productive projects are part of the project's commitment to future sustainability, not only by promoting decent work but also by encouraging people to look after nature, the environment, the community, and the "Common House".

As a result, it is expected that at least 80 people from different relocated families or families that have been placed in medium risk areas, who are facing socio-economic vulnerability conditions, will be trained on different trades and activities; and that at least 80 productive or service projects are set up in order to be implemented by beneficiaries (including individual and collective initiatives).

Direct/indirect beneficiaries: 80 people over 18 years old from the Project locations. Therefore, the Project will benefit 80 families with high socioeconomic vulnerability, who have agreed to relocation because they were living in areas highly exposed to floods of hydroclimatic origin, or who are joining relocation processes at the time of project implementation, or who still live in flood risk zones and their livelihoods are linked to the river and its dynamics.

Duration: 4 years

Institutions responsible/intervening stakeholder: Secretary of the Environment of Entre Ríos (SAER); Ministry of Social Development, National Secretariat of Social Economics; Municipalities; Community organizations, commercial and civil associations.

Output 15. Social networks have been strengthened up through an exchange in Climate Change Adaptation (CCA) good practices and local risk management strategies.

Objectives: Promote community participation, strengthening citizen networks and existing spaces or creating new ones that contribute to society's empowerment in terms of risk reduction, increased resilience and adaptation to climate change. Efforts will be made to identify existing initiatives on local risk management and/or adaptation, possible strategies, roles and functions, as well as possible joint actions at local and regional level, in coordination with local governments.

Expected results: Networking with local institutions and organizations has been promoted and/or strengthened to support risk reduction and climate change adaptation processes, thereby creating simultaneous opportunities for exchange and mutual enrichment between localities and countries.

Justification in terms of increasing resilience/reducing vulnerability: Knowledge management and lessons learned exchange among local social organizations and citizen networks allow to achieve more robust adaptation measures which are anchored in the community's practices and culture. Climate risk reduction and climate change adaptation processes are local in nature and cannot be implemented by a few actors, even governmental actors. These processes require training and strengthening institutions and organizations so that they are able to support these processes with their points of view and contributions, generating networks and common areas for joint work. Binational and regional exchange of experiences will strengthen the local organization and citizen networks.

Institutions and intervening stakeholders: Civil society institutions and organizations, local governments, national governments.

Activities or implementing instances:

Activity 15.1: Local, national and regional social networks strengthened on issues such as awareness and sensitivity vis-à-vis the role coastal systems and vulnerable ecosystems play in CC adaptation.

Description: At the local level, the generation and strengthening of citizen networks such as communal councils, neighborhood councils, etc., will be promoted, in order to strengthen networks and citizen participation in climate risk reduction and climate change adaptation. These spaces will be useful to advance work on EWS and Risk Management Plans, as set forth in Component 1. The intention is to ensure that different groups are represented in these spaces, and organizations involving young people, women, senior citizens, migrants, ethnic racial organizations, people with disabilities, as well as educational, professional, cultural and productive organizations, will be convened.

Direct/indirect beneficiaries: Direct: local institutions, organizations and social networks working on these issues. Indirect: local governments, CSOs, cultural and educational organizations and population in general, national governments.

Duration: 4 years

Output 16. Communication, education and dissemination strategies have been implemented towards reducing vulnerability.

Objectives: promote knowledge and raise awareness on climate risks and climate risk reduction, on climate change adaptation and the increase of resilience in the community in general, through communication actions and training and education instances, in formal and non-formal settings. Coordinate this objective with the implementation of the EWS and the Risk Management Plans under Component 1.

Expected results: The population has increased sensitivity and awareness regarding the social construction of risks and risk reduction, considering climate change and its consequences, to improve the adaptation of vulnerable communities and society in general. In order to address the general population's right to information, different communication, education and dissemination strategies are considered, integrating universal accessibility aspects (e.g. subtitled videos, training opportunities with audio guides, etc.).

Justification in terms of increasing resilience/reducing vulnerability: A community that is aware and informed on the natural and social dynamics of its environment, has increased adaptation capacities and better tools for action and can also offer support to ongoing processes and contribute to their sustainability. An informed community can also change its habits as part of cultural change, thereby implementing small actions that contribute to local transformations in favor of resilience.

Institutions and intervening stakeholders: Institutions and organizations, national and local governments, CSOs, educational and cultural organizations.

Activities or implementing instances

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.

Description: This activity includes:
a) research of background information on good practices in education and local interventions to reduce climate risks and achieve adaptation at local level.
b) designing and implementing of educational networks and training courses on climate change, risks and resilience, aimed at formal educators at all levels; c) developing educational support materials for training actions and preparing didactic materials, including activities proposed by trained teachers to address issues in formal and/or non-formal educational environments; d) designing and implementing an online course for teachers and students interested in the aforementioned topics; and developing courses, conferences and thematic seminars for professionals from different areas and disciplines. e) exchange of good practices in climate change adaptation education. It will be particularly ensured that these activities consider inclusive access to training activities, as well as the gender perspective and inclusive language in educational and outreach materials.
Direct / indirect beneficiaries: Direct: teachers, social communicators, students, recipients of communication pieces. Indirect: local, subnational and national governments, CSOs population in general.
Duration: 4 years

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.

Description: This activity includes a cross-cutting initiative involving the preparation of informative material to be shared with actors and relevant sectors in the community and the design and implementation of thematic communication campaigns for both countries, with a regional (binational) focus. These activities will particularly include the gender perspective and use inclusive language in

communications. This activity includes: a) developing graphic, digital and audiovisual materials regarding climate change adaptation and the importance of ecosystems; b) designing and installing signage in parks, promenades, urban reserves, protected areas and other green public spaces, that contribute to reducing risks, increasing resilience, adapting to climate change; c) develop thematic talks, dissemination activities and open workshops and/or workshops for key actors.

Direct / indirect beneficiaries: Direct: teachers, social communicators, students, recipients of communication pieces. Indirect: local, subnational and national governments, population in general.

Duration: 4 years

Activity 16.3: Drafting up of methodological guidelines and resources focused on communication and management of projects being executed as part of the CCA strategies.

Description: This activity includes: a) selecting contents and organizing concepts; b) developing methodological guides; and c) carrying out the design, layout, printing and/or online publication of guides.

Direct/indirect beneficiaries: Direct: teachers, social communicators, students, recipients of instances and pieces of communication. Indirect: local, subnational and national governments, population in general.

Duration: 3rd and 4th years

B. Describe how the program will promote new and innovative solutions for climate change adaptation, such as new approaches, technologies and mechanisms.

57. Dealing jointly with problems, designing strategies to address them as a region and implementing them at the local level is innovative for both countries. This becomes a strategic vision to achieve sustainable solutions, in opposition to isolated actions. The creation of new spaces for interaction, networks, knowledge dissemination and learning between both countries, is a central output of the Program.

58. The set of actions set forth in the various Outputs are guided by the human rights-based approach, which integrates and prioritizes human rights already included at the constitutional and legal levels and the so-called "new rights agenda". This new agenda considers, among other aspects, gender issues and intergenerational relations, as well as disability, sexual diversity, cultural diversity and the right to the city. The inclusion of rights that are diffused in the public agenda, and in governmental actions related to urban development, housing and habitat, is also a government priority. These rights include, among others, the right to health, the right to housing, the right to a healthy environment, the right to healthy and affordable drinking water and the right to sanitation. Therefore, this initiative effectively includes the rights approach in public policies, particularly regarding housing, habitat and urban development, and promotes institutional development in line with these definitions.

59. The change in the design of infrastructure plans, utilities, territorial planning and housing plans will unleash future transformations in the region. The new perspective including climate change and the reduction of climatic risks in a cross-cutting manner in various territorial management plans, works and services, will be critical for climate change adaptation.

60. The joint development of a methodology to assess impacts, damages and losses, as well as a shared record of disaster events, will be an innovative output in various ways. It will be innovative

due to its approach encouraging countries to share information, and, because it develops a joint systematization mechanism and associated survey technologies.

61. The formalization and coordination of early warning mechanisms among the various organisms that interact in the basin, will become the first experience carried out so far.

62. The preparation of local or regional risk management plans will be an innovative approach and practice for the region, as opposed to the presence, albeit limited, of plans that only consider emergency response. This action will encourage a stronger focus on disaster prevention among local governments.

63. Recovering and re-signifying public green spaces as flood buffering measures, will become a practice that breaks with old urban planning paradigms in cities of both countries. There will be a renewed focus on sustainable and resilient cities, which will integrate urban infrastructures with "green" constructions and ecosystems, and will consider the social, natural, economic and cultural diversity in their design while actively including citizen participation.

64. The implementation of a specific Revolving Fund window to carry out domestic interventions in homes in consolidated flood-prone urban areas, is considered an innovation. By facilitating small changes to housing, it is possible to prevent families from suffering major losses. This will be an unprecedented experience for both countries and if successful, it will be replicated in other cities. Similarly, insurance for tourism ventures in coastal areas is unprecedented and its success can be transmitted to other tourist cities in the region.

65. The adaptation approach based on riparian ecosystems is very important, since the floodplains of the Uruguay River are among the ecosystems with the greatest number of threatened species in the world. This is mainly due to the advance of the agricultural frontier, the chemical contamination of water, habitat degradation, invasion of exotic species, alteration of river flow regimes, overexploitation of fishing resources and urbanization. Therefore, achieving coordinated management of ecosystem conservation between both countries is very important. For this, systematization, inventory and monitoring of ecosystem services (mapping, monitoring, systematization, etc.) are innovative mechanisms for conservation policies on the banks of the Uruguay River and are also necessary measures to plan their adaptation contribution to the region.

66. The regional landscape of the Uruguay River has suffered significant habitat loss and fragmentation, and this had caused threats and biodiversity reduction. It is therefore necessary to ensure they are interconnected. Green infrastructure is one of the measures that facilitate the generation of biological corridors between existing natural areas, thus improving the overall ecological quality of coastal ecosystems. Green infrastructure will also help maintain ecosystems in good conditions, so that they can continue to provide their valuable services to society, such as clean air, pure water and flood-buffering.

67. The green designs to be implemented in the cities' linear parks in the Program, will enable integrating riparian ecosystems with nearby urban centers, through an innovative development that will challenge the classic gray urban infrastructure paradigm. It will incorporate green roofs, rain gardens, artificial wetlands to retain surplus water and absorb pollutants, control and replace invasive exotic species with native species, and provide support by including these issues in public policies and in society, by means of new pedagogical approaches focused on environmental education along with developing native plant nurseries.

68. The creation of green infrastructure will help natural areas connect among themselves, for example through green corridors, fauna walkways and crossing points, and will also improve the

environment's overall ecological quality in order to make it more respectful and permeable to wildlife. Green infrastructure will help maintain ecosystem services and, therefore, wild fauna and flora. Ecosystems, which are enriched by the diversity of life within them, contribute a whole series of valuable and economically important goods and services to society, such as water purification, soil fertilization or carbon storage. They also play an important role in the fight against climate change, as they increase resilience to the effects of climate change, for example, by means of flood-buffering effects.

69. Tools to monitor social vulnerability and social perception of climate risks are innovative mechanisms to strengthen community-based adaptation. For this, mechanisms that include a human rights, gender and generations perspective, will also be developed to highlight local capacities, social networks and participatory strategies.

70. As a significant experience for urban adaptation, the Resettlement National Plan of Uruguay, was awarded with the Momentum of Change Lighthouse Activity for the Urban Poor by the UNFCCC Secretariat during the 20th Conference of the Parties in Lima in 2014. This experience considers the relocation of families affected by poverty who live in flood-prone areas, based on three fundamental components: socio-territorial integration, generating opportunities to access decent housing with adequate and sustainable utilities in safe urban areas; promoting access to the Social Protection System, which allows families to overcome exclusion factors, such as health, education, training to improve employment opportunities and income, among others; and the recovery of vacant space after the settlement's complete relocation, in order to use it as a public park or for other non-residential alternatives[10].

71. Another significant experience in Argentina that can serve as a model for the region is the case of the city of Santa Fe (capital of the province that borders Entre Ríos on the eastern edge). This city implemented a Risk Management Municipal System, creating a pioneering mechanism for flood risk governance at the local level. It received the UN Sasakawa Award 2011 for Disaster Risk Reduction. The city currently includes a resilience-based approach in its municipal policies and is one of the Rockefeller Foundation's 100 Resilient Cities.

C. Describe how the program provides economic, social and environmental benefits, with particular reference to the most vulnerable communities and vulnerable groups within the communities, including gender considerations.

72. Developing and strengthening Disaster Risk Management tools and EWS are critical to prevent and mitigate the negative social, economic and environmental effects of climate change, especially with regard to floods that especially affect the most vulnerable sectors of the localities involved.

73. **Social benefits**: Considering future climate scenarios is the development of cities' planning instruments and works, will significantly contribute to improving the population's quality of life and its social and territorial integration. Examples of this are the urban infrastructure works for the reduction of the impacts of overflows and the recovery of vacant land as a result of relocations, which will generate new public spaces for the cities.

74. The activities set forth in this Program will support previously resettled communities or ongoing resettlements that are part of processes led and financed by both governments. These activities include securing public services and infrastructure for new resettlements, monitoring social vulnerability and social risk perception, recovery of vacant flood-prone areas and ensure they are used as public and flood-buffer areas, in order to prevent new informal occupations that can lead

[10] (http://unfccc.int/secretariat/momentum_for_change/items/8692.php).

to additional resettlements, work reconversion solutions for previously resettled people, communication strategies, education and dissemination, among others.

75. On the other hand, relocated population will have new opportunities to integrate to the city, access its services and consider opportunities for work reconversion, through training and development of new ventures.

76. In this regard, it should be noted that the UNFCCC Secretariat has recognized Uruguay's National Resettlement Plan, which is aimed at reducing the vulnerability of low-income population sectors and its exposure to floods[11].

77. For its part, the identification and evaluation of non-climatic impacts (erosion, surface waterproofing, deforestation) and the provision of sustainable and ecosystem-based solutions in order to recover the ecosystems and their services and benefits (maintaining coastal line and improving natural resource management) will significantly reduce the risks of floods and their negative effects, which particularly affects the most vulnerable sectors of local communities.

78. Vulnerability analysis and monitoring activities will allow local governments to identify priorities and efficient solutions to reduce vulnerability. Likewise, this will enable evaluating the results of said measures and including them in lessons learned and in future replications.

79. Communication and community dissemination strategies, based on their risk perceptions, will promote greater awareness of the importance of climate change. This will increase people's capacity to cope with these phenomena and will thereby reduce their vulnerability and increase their resilience.

80. Community-based adaptation measures, which include education, communication and awareness-raising strategies, as well as strengthening existing social networks, will contribute to promoting resilient, collaborative communities with increased awareness of climate threats as well as prevention strategies and early warning regarding new severe events.

81. The overall improvement of people's living conditions leads to social cohesion and a decrease in conflicts, which in turn leads to strengthened social networks and contributes to social unity, thereby reducing violence levels. Local achievements in terms of social inclusion in the demonstration sites will be used as a model to scale up to other regional and national strategies.

82. Regarding principles such as "Access and Equity", "Marginalized and Vulnerable Groups", "Gender Equity and Women's Empowerment" principles, the project was designed with a significant focus on participation and inclusion. Several activities involving participation and validation processes have been carried out and others will be carried out.

83. With regard to gender considerations, data will be discriminated in all consultative and participatory instances. Likewise, the gender approach is considered in the design of communication, dissemination and awareness activities, as well as work reconversion and social risk perception activities, among others. In this regard, the Project has prepared a Gender Assessment and a Gender Action Plan for each Project activity (Annex 7 – Gender Evaluation and Action Plan which includes, among others, the preparation of diagnoses that contain gender issues and considers the participation of a gender specialist with experience in climate change

[11] Uruguay National Resettlement Plan https://unfccc.int/climate-action/momentum-for-change/lighthouse-activities/national-resettlement-plan

projects, flood emergency or related issues, and the inclusion of gender specific indicators in policies and strategies' monitoring system.

84. **Economic benefits:** The implementation of financial mechanisms such as insurances or revolving funds for housing improvements, as well as work reconversion opportunities for relocated communities, provide direct economic benefits. As the same time, the implementation of resilient infrastructure generates direct and indirect economic benefits through the increase in job creation and avoiding costs stemming from emergency response to extreme events. The enhancement of improved houses also represents additional economic benefits for both the owners and the site area.

85. Additional economic benefits will be achieved in the short term by reducing disaster risk, reducing flood damage in intervened urban areas and in protected areas, including the protection of cultural heritage and its implications for tourism. Project activities will also allow various economic sectors to carry out medium and long-term planning exercises to reduce the negative impacts of climate change, by contributing to increased knowledge regarding the most vulnerable groups and the improvement of their quality of life.

86. The implementation of climate change adapted infrastructure will ensure that it functions and will guarantee the population's access to services. It will also reduce compensation and recovery expenses for local governments.

87. Work reconversion and transition will reduce the population's economic vulnerability and will increase the resilience of communities and institutions that are affected by the climate change effects.

88. Target populations' increased climate change resilience will strengthen income generation, as well as the introduction of additional livelihood options, such as tourism, in previously unforeseen areas

89. **Environmental benefits**: The ecosystem-based adaptation measures are the most significant environmental aspects of the Programme. Strengthening and connecting protected areas, mapping ecosystem services and benefits, as well as coastal and green areas recovery interventions, will contribute to ecosystems and diversity conservation and enhancement. Land management plans will promote the effective use of natural resources, through the recovery of vacant land that will be transformed into natural parks or buffer areas for surplus water and the promotion of environmental services.

90. Besides developing climate resilience among vulnerable communities and ecosystems, activities implemented as part of the infrastructure and protected areas intervention will provide multiple environmental benefits, including: i) strengthening ecosystems, including the provision of goods and services; ii) conservation of biodiversity; iv) mitigation of the effects of floods in densely populated areas; v) greater water availability and quality; vii) reduced environmental degradation. In addition, the activities to resignify vacant post-relocation areas will improve the environmental conditions of adjacent areas and cities as a whole, by increasing the number of square meters of green areas per inhabitant. The program will provide opportunities to test and evaluate adaptation approaches in various ecological contexts to exchange good practices. This will facilitate the expansion of project interventions and increase environmental benefits on a broader scale in Argentina and Uruguay.

D. Describe or provide an analysis of the cost-effectiveness of the proposed Program and explain how the regional approach would support cost-effectiveness.

91. The projects planned under the requested adaptation program will directly benefit an approximate population of 655,000 people, who are located in urban spaces that are highly vulnerable to the effects of climate change. The program is also aimed at preserving and rehabilitating protected areas and their ecosystem services, contributing to increase the local population's resilience and thus reduce the risk level of future climate impacts.

92. The regional approach is justified given that there are equivalent dynamics, activities and areas that are subject to similar climate change pressures and effects. This approach and the joint work that stakeholders from both countries will carry out in many of the activities, will avoid duplication and will improve potential synergies, thus improving the proper use of the resources provided by the Adaptation Fund.

93. The regional approach is also critical in the program's cost-effectiveness and sustainability strategy. It includes a series of measures that benefit both countries (climate change adapted planning instruments and territorial management, an improved early warning system, resignification of high-risk areas, protection and adaptation measures for protected areas, training and work reconversion of vulnerable groups), where mechanisms for the implementation and dissemination of experiences have been a fundamental part in the preparation of the profiles and their subsequent development. The shared experiences and the action plan are deemed to be highly replicable to other regional areas with similar problems and the implementation of the different projects will provide significant experiences in this regard.

94. It is important to note that the Program's beneficiaries (people, livelihoods and natural areas) will be occasionally favored by more than one programmed measure, which multiplies the positive effects of the intervention and reduces the costs per unit. It is important to emphasize that even though more than one project can potentially benefit the same group/area, these are not mutually exclusive since they address different aspects related to the beneficiaries' livelihoods and assets or differentiated risk levels. Each measure has different adaptation objectives; for example, the early warning system will help reduce the loss of lives and movable assets, while measures to adapt housing and insurance to tourist activities will help reduce losses in real estate and livelihoods.

95. Additionally, the program clearly emphasizes improving institutional capacities and training intervening actors at different levels, by means of activities included throughout the program components. These activities, along with proposals on green infrastructure and ecosystem-based adaptation measures, have a low relative cost, and represent non-regret adaptation measures, given that once they are implemented, they offer immediate benefits and act on a wide range of future scenarios.

96. The participation of public agencies, civil society and beneficiaries will contribute to the program's cost-effectiveness, ensuring that activities are adequately planned and implemented and respond to local priorities, and it will also promote complementarity with other active and planned programs and projects, avoiding duplicities and waste of resources.

97. CAF, on the other hand, has proven experience in financial intermediation in the region, and the proposed program scheme is the most cost-effective way to operate and guarantees low administrative and transaction costs.

98. In short, the cost-effective nature of the project and its interventions is promoted at different levels, for example: the regional approach enables achieving a stronger impact, through learning

and joint implementation while management costs are reduced. This approach also ensures wider results dissemination, and more effective and efficient coordination and responses to risks. Commitment and acceptance from communities where the projects will be developed and collaboration between national, regional and local public bodies in both countries will ensure that investments in infrastructure and adaptation measures are strictly monitored in the long term.

99. The activities included in **Component 1** are aimed at two priority objectives, on the one hand, improving territorial planning and management instruments by including climate change and strengthening early warning systems. Both contribute to increasing the resilience of people in two moments: on the one hand, including climate change in planning and management instruments will lead in the medium term, to a reduction in the amount of activities and assets that are located in risk areas, which will lead to a significant reduction in future losses associated with climate events. On the other hand, the improvement of the early warning system will also contribute to reducing potential losses and damages of assets, including human lives, in the event of climate events. These measures are cost effective because investments in prevention (the regulation of adequate land uses is a preventive measure) are much lower than the cost of asset restitution and/or repair once the events have occurred, besides the loss of life that has been avoided.

100. The contribution **Component 1** will go beyond the limit of the cities that adopt these measures, since the methodology used to introduce changes in the planning instruments may be replicated to the group of municipalities in both countries. It is important to highlight that in this component, the binational-regional approach will enable increasing benefits through joint learning and solutions with a comprehensive vision.

101. Other measures that ensure the cost effectiveness of **Component 1** include the expected dissemination of results and the close link to activities programmed in **Component 4**. This will ensure that results are widely shared, by means exchanging best practices in media and social networks, enabling stronger ownership of results and supporting the implementation of measures.

102. Activities in **Component 2** focus on improving intervened cities' resilience through hybrid infrastructure projects and by means of recovering and safeguarding green spaces that protect the coast as well as public and private assets located in medium- and high-risk areas. This approach combines green, blue and gray infrastructure (or hybrid actions) and this is convenient because it provides multiple benefits such as recreation opportunities, psychological well-being and pollution control[12], flexibility and applicability to varying situations and the growing evidence regarding its cost effectiveness. In the Netherlands, it has been determined that alternative investments for flood control, such as changes in land uses and the restoration of flood systems, are justified when ecological measures and the socio-economic benefits resulting from providing support, are included in the long term[13].

103. Besides, interventions under **Component 2**, along with the determinations to be included in the territorial planning instruments and the early warning system (**Component 1**) and the improvement of the relocated population's capacities and the dissemination of information and knowledge (**Component 4**), will reduce the risk to people and infrastructures by avoiding the occupation of high-risk areas. These actions will also prevent (reduce) the need for emergency response operations caused by floods and their associated costs. On the other hand, the

[12] Gómez-Baggethun E, Gren Å, Barton DN et al (2013) Urban ecosystem services. In: Elmqvist T, Fragkias M, Goodness J et al (ed.) Urbanization, biodiversity and ecosystem services: challenges and opportunities. Springer Netherlands, Dordrecht, pp 175–251.

[13] Brouwer R, van Ek R (2004) Integrated ecological, economic and social impact assessment of alternative flood control policies in the Netherlands. Ecol Econ 50:1–21.

relocation areas were built considering climate change, which makes them more sustainable and protects inhabitants' living conditions and opportunities and makes them more resilient.

104. Improving and changing the uses of high-risk coastal urban areas will reduce the vulnerability of low-income people and, at the same time, these groups will receive training and support to improve their chances of entering the formal labor market, increasing their resilience to potential adverse effects and avoiding the irregular occupation of highly vulnerable spaces.

105. The cost effectiveness of the measures in **Component 2** have been estimated by considering the unit cost per beneficiary. Given that there are no alternative projects, it wasn't possible to compare the unit costs of selected actions vis-à-vis other intervention alternatives. However, considering the annual benefits that were estimated for the cost-benefit analysis, the intervention cost can be compared with the cost of not intervening, which in this case would be equal to the estimated annual annualized losses throughout the projects' life. In this case, all projects yield positive amounts when the cost of the intervention per beneficiary is discounted from the amount of the estimated annual losses and this ensures the interventions' positive impact in economic terms.

106. In aggregate, the activities of **Component 2** will directly benefit some 224,000 people, at an annualized cost of $15 per beneficiary (counting the entire useful life of the projects), and the annualized losses avoided would amount to $ 63.5, so the annualized benefits generated amount to $49 per beneficiary/year during the entire life of the projects.

Table 5. Direct beneficiaries. Costs per beneficiary and losses avoided. Component 2

Project	Direct Beneficiaries	Annual Costs		Annual losses (avoided)		Losses (avoided) minus costs per beneficiary
		Annualized Intervention	Per Beneficiary	Annualized Intervention	Per Beneficiary	
7,1	620	645,917	1,042	$1,917,596	$3,092.90	$2,051
7.2 and 7.3	85	581,325	6,839	$1,426,510	$16,782.47	$9,943
7.4 and 8.1	2,080	121,109	58	$679,436	$326.65	$268
7,5	100	43,958	440	$264,371	$ 2,643.71	$ 2,204
7,6	200	75,806	379	$285,337	$1,426.69	$1,054
7,7	2,500	344,250	138	$4,058,841	$1,623.54	$1,486
7,8	18,000	344,250	19	$1,886,320	$104.80	$86
8,2	200,000	1,125,896	6	$3,612,500	$18.06	$12
9,1	500	30,502	61	$110,221	$220.44	$159

107. A cost-benefit analysis was carried out for the infrastructure actions of **Component 2**. Restrictions were encountered in the economic valuation of all the potential benefits of the interventions, so the decision was made to use the WRI-developed value of infrastructure losses in urban spaces, which is a standardized methodology for damage assessment. In this case, these damages were considered as benefits, given that the projects protect/revalue the most potentially sensitive spaces of the intervened urban networks. An exception was made in specific

cases (see Annex 8), where the valuation of damages and emergency costs of the 2009 flood in Uruguay were used[14].

108. The results of the Cost-Benefit Analysis were favorable for all the cases evaluated: all the projects show positive NPV and IRR that exceed the social discount rate, so they add benefits to the beneficiary population. Furthermore, given that these intervention projects take place in public areas, their benefits extend to the entire population (See Annex 8 – for details).

Table 6. Profitability Indicators. Cost-Benefit Analysis. Component 2.

Activity	NPV	IRR	CBI
7,1	$1.246.604,83	9%	0,21
7.2 y 7.3	$1.336.249,30	11%	0,34
7.4 y 8.1	$1.686.851,48	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	$1.551.561,76	26%	1,14
8,2	$2.313.736,68	44%	1,08
9,1	$548.525,05	77%	1,86

109. **Component 3** addresses solutions rooted on ecosystem-based adaptation measures. This program's interventions contribute to the protection of public goods and the whole population in this region will benefit from the protection and rehabilitation of public goods. Moreover, protecting and rehabilitating the ecosystems will help sustain the livelihoods of flood-prone local population.

110. Activity 10.1 is aimed at evaluating and valuating the contribution of ecosystem services in the program's protected areas, with the objective of preserving and strengthening them. This will reduce local residents and producers' vulnerability, thus increasing their resilience. This approach entails multiple benefits that exceed the costs in the medium and long term. The management of ecosystems linked to socio-ecological systems will strengthen the ecological processes and services that are essential for building resilience to multiple pressures.

111. Activity 11.1 consists of studying and developing productive infrastructure actions to support the resilience of small farmers of Estero de Farrapos and reduce their potential pressure on the protected area during flood events. The project's execution cost is $41/ha., and cost effectiveness will be pursued by involving producer communities in designing the measures to be implemented, and by promoting activities with reduced impact for the estuary, such as beekeeping and sustainable tourism.

112. Activity 11.2 focuses on ecosystem-based adaptation measures for natural spaces. These are considered to be more cost-effective than other adaptation measures based on the provision of infrastructures[15], when the former can be implemented. For example, an analysis of alternatives for coastal protection in Vietnam through physical infrastructure or through the conservation and

[14] Impacto de las inundaciones de noviembre de 2009 en Artigas, Salto and Paysandú, (Impact of the november 2009 floods in Artigas, Salto and Paysandú) GGIR-UDELAR-PNUD.

[15] Jones, H.P., D. G. Hole y E. S. Zavaleta. 2012. Harnessing nature to help people adapt to climate change. Nature Climate Change 2: 504-509.

restoration of vegetation found that the first option was almost 23 times higher and offered the same protection level[16]. In this case, the intervention will cost $100/ha (this estimate was made based on 600 Ha of the protected area located in Bella Unión).

113. Activity 11.3 consists of restoring coastal ecosystems by controlling exotic species and revegetating with native species. The project intends to act on 8,420 Ha. between the PAs of Argentina and Uruguay, which implies a cost of $127 per Ha. The costs of this type of projects vary widely, depending on the location, the method to be implemented, the surface to be restored and the initial situation, among other aspects. Notwithstanding information limitations, it can be assured that the activity is cost effective, given that the value per hectare intervened is well below standard references. For example, Schrimer and Field[17] defined values ranging between $603 and $8,125 per Ha for 50 Ha projects.

114. A Cost Benefit Analysis was prepared for Activity 11.4, using as criteria the incremental benefits in the number of visitors and the increased economic income resulting from the improvement of the visitation infrastructure in the site chosen for the intervention. Based on these assumptions, this project is beneficial from the economic and social point of view for the 25-year life span that was analyzed. It reports a positive NPV, a 14% IRR, which is higher than the social discount rate used and the CBI evidences that for every dollar invested throughout the project life, an additional 0.25 dollars is generated (this is included in the annex of Component 2 projects).

115. **Component 4** includes a series of program support measures that will help increase social resilience, by monitoring the population's vulnerability conditions and developing education and dissemination tools, in order to expand knowledge and ownership of adaptation measures by beneficiaries and the institutions responsible of implementing them.

116. **Component 4** also specifically includes support to the group of vulnerable families who were relocated, by means of training and developing productive initiatives based on local experience, to improve their possibilities of entering the labor market and increase their resilience in the medium and long term. Therefore, activities considered in this component contribute to maintaining the entire program's cost effectiveness, by means of documentation, training, participation and dissemination, thereby increasing different actors' understanding and involvement.

E. Describe how the project is consistent with national or subnational sustainable development strategies, including, where appropriate, national or subnational development plans, poverty reduction strategies, national communications or national adaptation programs of action, or other relevant instruments. If applicable, consult the relevant regional plans and strategies, whenever they exist.

117. The project is fully aligned with and contributes to the objectives and priorities of the Government of Uruguay's policies and plans.

118. As mentioned above, Uruguay has adopted a National Climate Change Policy with an 2050 horizon and submitted its First Nationally Determined Contribution to the Paris Agreement (NDC) in November 2017. The Programme will contribute to different dimensions of the aforementioned Policy. Regarding the social dimension: promotion of the population's adaptation capacity and resilience in the face of climate change and variability, with emphasis on socially and climatically vulnerable groups; strengthening climate-related disaster risk management at the national,

[16] Asian Development Bank. 2015. Ecosystem-based approaches to climate change challenges in the Greater Mekong Subregion.

[17] Schrirmer, J., Field J. The Cost of Revegetation, ANU Forestry, Australia, 2000.

departmental and local levels, by means of coordinating different institutions and the population, articulating normative and fiscal instruments; and promoting the development of cities, communities, human settlements and sustainable and resilient infrastructures in the face of climate change. Regarding the environmental dimension, the following can be highlighted: promotion of the conservation, recovery and restoration of natural ecosystems, and the provision of ecosystem goods and services, based on adaptive management; the reduction of climate change vulnerability conditions in fluvial and coastal areas through ecosystem-based adaptation actions, which minimize losses and damages.

119. Regarding Uruguay's First NDC, the project will support a set of priorities and measures to adapt to climate change. The following are the most relevant: assign new uses to resignify the flood-prone zones; at least eight flood-prone cities have an early flood warning system; promotion of adaptation measures in at least 30% of cities with more than 5,000 inhabitants; at least seven departments have regional, departmental or municipal plans for local adaptation; at least six protected areas consider climate change in their Management Plans; adaptive management is applied to 20% of the coastal strip of the Uruguay River, the Rio de la Plata and the Atlantic Ocean, specially the most vulnerable sections.

120. Sustainable development planning in the territory is a governmental priority and the Law on Territorial Planning and Sustainable Development is in place since 2008. This Law promotes a comprehensive approach to planning and includes local territorial planning plans as one of its instruments. Among other aspects, this law allows responding to climate risks. Therefore, it is possible to state that the project is consistent with this policy to the extent that land management plans, among others, are expected to include the climate change perspective.

121. Another relevant aspect of the project is related to climate risk management and early warning systems, which is in line with Uruguay's policy on this matter. In 2009, the National Emergency System was established by law with the purpose of protecting people, significant assets and the environment in the event of disasters. In this framework, Early Warning Systems have been designed for several flood-prone cities throughout the country, and protocols have been drawn up for the different stages of integrated climate risk management.

122. The project is also aligned with the national policy on biodiversity, as it considers Law for the Creation of the National System of Protected Areas of 2000, which provides a fundamental tool for planning and managing protected areas. The project also considers its regulatory Decree, which includes protected areas' Management Plans, therefore allowing the inclusion of climate change adaptation elements.

123. With regards to water resources, Uruguay has a National Water Policy, which was approved by Law in 2009. This policy states that water resources management will focus on using them in an environmentally sustainable manner and will consider climate variability as well as extreme events, with the purpose of mitigating its negative impacts, especially as they affect people. Likewise, the National Water Plan approved in 2017 includes instruments for integrated water management (watersheds, aquifers and urban waters) in its planning processes. The climate risk approach is an important part of these instruments.

124. Uruguay was also recently (January 2018) awarded support by the Green Climate Fund Preparatory Program, to develop a National Adaptation Plan for Cities and Infrastructure, which will also catalyze actions and previous experiences in a new systemic approach to CCA in cities. Flood-prone cities along the Uruguay River are some of the priority areas for said NAP.

125. Argentina's NDC considers climate change adaptation its main priority, especially considering climate change adverse effects that have already affected the territory. In this context, Argentina

includes aspects related to adaptation in its National contribution, in accordance with article 7.10 and 7.11 of the Paris Agreement. The NAP preparation process has begun within the framework of the National Cabinet on Climate Change and it will respond to priorities identified by each of the different sectors, jurisdictions (represented through the Federal Council of the Environment - COFEMA - and the participation of municipal representatives) and relevant actors from civil society, academia and the private sector. The NAP, which will have sub-national and sectoral chapters, will serve to prioritize adaptation actions at the national level, and to generate a conceptual and institutional framework that will enable the design and implementation of local adaptation plans by other actors. It should be noted that the country is implementing two adaptation projects in the agricultural sector (amounting to US $9,936,817), based on funds delivered by the Adaptation Fund. These projects allow financing specific adaptation measures in highly vulnerable communities. In this regard, the projects are linked: in the northeast of Argentina, with the adaptation and resilience of family farming to the impact of climate change and variability; and in the southwest of the Province of Buenos Aires, with climate resilience and sustainable land management.

126. The Federal Plan for Flood Control is being implemented by the Ministry of Public Works and is partially financed by the Water Fund. This plan focuses on the reduction of the effects of floods and the development of water infrastructure. Proposed activities will support this Federal Plan and will complement it through lessons learned, pilot experiences and good practices.

127. The SINAGIR National Plan for Disaster Risk Reduction, which is currently being prepared, was considered and will be taken into account by the Project.

128. Regarding the Ramsar Convention on Wetlands, which Argentina adheres to by means of Laws No. 23.919 and No. 25.335, the Strategy for the Conservation and Sustainable Use of Fluvial Wetlands of the La Plata Basin will be supported by the ecosystem-based initiatives proposed in the project. Technical cooperation between the countries' basins will be enhanced by means of knowledge management, lessons learned, information exchange and good practices.

129. Moreover, the following projects, policies and local plans among others, will be supported and capitalized:
    - Local Plan of Land Planning and Sustainable Development of the city of Paysandú, and its Microregion
    - Plan for Land Planning and Sustainable Development of the city of Salto and its Microregion
    - Fray Bentos local plan and its area of influence.
    - Urban Water Plan of the city of Salto.
    - Environmental Diagnosis of Entre Ríos, Territorial Strategic Plan.
    - Concordia Development Plan.
    - Strategic Plan of Concepción del Uruguay.
    - Planning for the Urban Environmental Development of Colón, for Argentina.
    - Provincial Strategy for low carbon and climate change resilient development of Entre Ríos

F. Describe how the Program meets relevant national technical standards, where applicable, such as environmental assessment standards, building codes, etc.

130. The Program will comply with all applicable local and national legislation regarding environmental and social review, monitoring and evaluation, including requirements concerning participation, consultation and access to public information. The Program will consider national and local regulations regarding the management of acquisitions, protected natural areas, territorial planning, standards, construction codes. Likewise, it will comply with CAF and AF's

environmental and social policies and principles and will develop an environmental and social management instrument for the implementation and administration of the entire Program.

131. The legislation and regulations relevant for each country are listed below.

For Argentina:

- Law 25.675: Environmental National Policy. Environment General Law

Minimum standards National Law for sustainable and adequate environmental management, biological diversity preservation and protection and the implementation of sustainable development (Art 1°).

It designates the following instruments for environmental policy and management: territorial planning, environmental impact assessment, monitoring system for the development of anthropogenic activities, environmental education, environmental information and diagnose system, economic regime for sustainable development promotion. (Art 8)

All works or activities developed in the National territory, which might significantly affect the environment or any of its components, or may impact community members' health, will undergo an environmental impact assessment before its implementation. (Art 11)

The procedure starts with the presentation of an environmental sworn statement stating whether the works or activity will affect the environment. The competent authorities will state the need of an environmental impact assessment (EIA), whose requirements will be established in a separate law for each jurisdiction. When required, an EIA will be developed, and an environmental impact statement will be issued to approve or decline such works or activity(Art 12).

Authorities will be responsible for the dissemination of the environmental conditions and the effects that ongoing or envisaged anthropogenic activities may have on the environment. ((Art 18) Authorities should institutionalize consultations and audiences as mandatory requirements for the approval of activities that could cause significant negative environmental effects. Participants' opinions or objections will not be binding (...) (Art. 21)

Decree 4977 regulates the above-mentioned law, by establishing activities categorization, minimum requirements for EIA, Environmental Management Plans, Environmental Audits, community and stakeholder´s participation, among others.

Entre Rios subscribes to the above-mentioned law by Resolution 038/10 and recognizes Municipalities' competence regarding territorial planning and environmental certifications.

- Law 25831: Access to public information:

This law establishes minimum standards and procedures for environmental protection in order to guarantee the right to access environmental public information.

- Law 25688: Environmental regime for water management:

Establishes minimum requirements for water preservation and rational use. This law will be considered in the design and implementation of public services and coastal defenses and their corresponding EIAs.

- Law 25916: Urban Waste Management:

Establishes minimum standards for environmental protection regarding urban waste management. Entre Ríos Province subscribes and establishes its Urban Waste Management system by Law 10311.

- Law 24051 Hazardous Waste Management:

Sets minimum requirements for Hazardous Waste Management including its generation, manipulation, transport and final disposal. Entre Rios subscribes this national regulation by means of Law 8880. Note that this Project does not foresee the generation of hazardous waste. Nevertheless, some construction activities may lead to the generation of a minimum amount of non-domestic waste. The corresponding EIA will set forth the guidelines for each particular case regarding these regulations and will include a Waste Management Plan as part of its Environmental Management Plan (both are mandatory)

- Law 22.351 – National Parks, Natural Monuments and National Reserves
- Guiding Principles of the Water Policy of the Republic of Argentina

For Uruguay:

- General Law for Environment Protection (Nº 17.283, December 28th, 2000):

Sets the environmental policy´s principles and environmental managements instruments (environmental impact evaluations, system of protected natural areas, among others).

- National Policy on Climate Change to 2050 (November 3rd, 2017):

Aimed at promoting climate change adaptation and mitigation in Uruguay, contributing to the country's sustainable development.

- Law on the creation and management of Natural Protected Areas National System (Nº17.234 February 22nd, 2000), and its Regulating Decree (Nº52 from 2005)

- National Water Policy Law (Nº 18.610 October 2nd, 2009):

It states that everyone has the right to access safe water and sanitation. It also establishes guidelines and instruments for the management, conservation and protection of water resources. Article 8 states that in order to achieve sustainable management of binational water resources, international coordination and cooperation, as well as citizen participation shall be promoted throughout the planning, management and control stages

- Law on Territorial Planning and Sustainable Development (Nº18.308 June 18th, 2008):

Sets the general regulating framework for land management and sustainable development, defines planning, participation and acting competences and instruments. Guides land management to achieve national and general interests. Its regulating Decree 221/2009 sets that all land management should include environmental issues, by means of an Environmental Strategic Assessment.

- National Emergency System Law (Nº 18.621 October 25th, 2009):

Creates a National Emergency System aimed at protecting people, significant assets and the environment, in case of an eventual or an actual disaster situation, by means of the State's coordination with the adequate use of available public and private resources, in order to foster national sustainable development.

- Law on decentralization and citizen participation; (Nº 19.272 September 18th, 2014)

It sets a third level of Government, stating that population centers with over 2.000 inhabitants, will constitute a Municipality and its territorial circumscription should conform a unit, with social and cultural identity, with common interests that justify the existence of representative political structures that enable citizen participation.

- Law on the Environment (N°16.466 January 19th, 1994):

Establishes the Environmental Impact Assessment and Environmental Authorizations regime. Regulating Decree 349/2005

- Law on the Right to Access Public information (N°18.381 October 17th, 2008):

Promotes transparency in administrative functions across all public organisms and ensures people's fundamental right to access public information.

- Law 17.234 of 2000 and its modifications:

Sets the framework for the development and management of the Natural Protected Areas National System (SNAP).

G. Describe whether there is duplication of the Program with other funding sources, if applicable.

132. There is no duplication with projects funded from other sources. On the contrary, the proposed actions and measures complement the efforts that both countries are undertaking, especially those focusing on strengthening land management plans, resettlement programs and institutionalization of existing EWS.

133. **Argentina** has been working on the promotion of disaster risk management through interinstitutional initiatives such as the current Risk Management Work Commission formed by specialists from different entities that are related to knowledge and scientific investigation with the support and coordination of the Ministry of Science, Technology and Productive Innovation´s (MINCYT) Technological Articulation Secretariat. Its main goal is to organize and coordinate the Science, Technology and Innovation National System, in order to generate suitable coordination among the System´s members to contribute to the prevention of natural disaster related emergencies.

134. In 2016, the Inter-American Development Bank (IADB) approved the Emergency Program for Immediate Response to Flooding in Argentina (AR-L1245) in order to support affected people's transition to recover their regular social and economic activities, through the rehabilitation of road and water infrastructure regarding flood protection, public use buildings such as damaged schools and evacuation centers. The program also expects to contribute to reestablish basic services such as water and electric energy in affected areas, and to contribute to clean vector-prone areas.

135. In **Uruguay**, the Climate Change National Policy, which is in force since 2017, provides a framework for guidelines on sectorial policies regarding adaptation, such as water resources,

land planning, housing and biodiversity. The country is currently developing a National Adaptation Plan for Cities and Infrastructure (NAP Cities) which is supported by the Green Climate Fund (GCF) Readiness Programme and focuses on identifying vulnerabilities and actions in urban areas and infrastructures throughout the country.

136. On the other hand, the Housing and Habitat Policy has become a State policy since 2005 and includes five-year master plans. The priorities of the five-year Housing Plan 2015-2019 include consolidating the Land Policy, in order to generate sustainable conditions for the Housing and Habitat Plan, as well as supporting ongoing efforts to revert the problem of precarious housing from the "right to the city" point of view, and working in an intersectoral environment. In this way, MVOTMA and Departmental Intendances developed housing plans for the relocation of communities living in flood-prone areas. These actions are implemented with national funds and are complemented with IADB funding, through the Planning and Budget Office of the President's office.

137. Regarding risk disaster management, the SINAE, through the Euroclima Program funded by various agencies, started in 2015 to develop a Disaster Risk Management Plan based on Regional Plans including climate change adaptation.

138. Also, since the approval of the Water National Policy, progress has been made in the preparation of a Water Plan, which defines programs and projects that address water and sanitation infrastructure aspects in the different departments and particularly the definition of risk maps and infrastructure solutions in flood-prone cities, in the framework of the preparation of Urban Water Plans linked to local Territorial Planning.

139. The present Program and the initiatives describe above would seek synergy and complementarity through inter-institutional coordination among the entities participating in the project. For that, a steering committee of various institutions with enough representation to influence the programs of their own institutions will be created. Thus, to facilitate this action, dialogue spaces will be created (Outcome I, II and V) so that the synergy opportunities between the adaptation fund program and the initiatives of its own institutions can be continuously reviewed. This participation will include institutions of government, and local and private sector organizations.

140. Regarding how the Program incorporates the lessons learned in its construction, Output 4 is designed precisely to promote the exchange between lessons learned and good practices. This is captured in the product 2 and 12 with the need to generate a greater standardization of methodologies and formats for the management of adaptation to climate change.

141. Activity 11.3 is a clear example of how the present Program collects and assimilates lessons learned from past initiatives. One of the countries has specific experience in the chemical control of exotic species while the other has experience in the physical control of these species. Thus, within the framework of the present Program, both countries will share lessons learned individually in the control of aliens to work together on the riverside of the Uruguay River and restore vulnerable coastal ecosystems.

142. Another of the lessons learned relates to dealing with operational challenges. For this reason, this Program has worked on an optimal division of labor, and it has been necessary to involve a regional entity for the execution of binational vision (outputs: 1 and 4) and two local execution entities (outputs: 2 and 3) (see annex 12). In this way the operational challenges are faced, each institution can play an active role in the division of labor and contribute with their experience.

143. From the ecosystems point of view, the following interventions are taking place:

- "Landscapes and National protected Areas System" project carried out by MVOTMA ,with funding from UNDP and GEF, which includes a pilot site that surrounds Montes de Queguay, Esteros de Farrapos e Islas del Uruguay and Esteros y Algarrobales del río Uruguay NPAs.

- Also, the “Value chains and governance in protected areas and their surroundings” project, carried out by MVOTMA, along with UNDP and the French Facility for Global Environment, which strengthens the pilot and the “A biological corridor in Uruguay´s west littoral” project, carried out by CEADU with support from the European Union. There is no duplication in any of these projects, but rather opportunities for synergies.

H. Describe the learning and knowledge management component to capture and disseminate lessons learned.

144. The Project understands that a regional approach in crucial to face the effects of climate change and to implement sustainable and resilient adaptation measures to face the changes taking place in the hydrological regime of a shared river.

145. Government authorities, institutions and organizations, as well as civil society, community-based organizations and educational institutions play different and important roles in the identification, design and implementation of such measures.

146. In this sense, the exchange and integration of information, good practices, lessons learned, and knowledge management are key tools to promote participation and ownership, innovation and efficient allocation of resources and efforts.

147. Regarding disaster risk management, planned activities include workshops and training for local and regional governments, to address positive experiences on land management, strategies for the development of sectorial plans regarding risk management and EWS, among others. These workshops and trainings will offer opportunities for learning and exchanging knowledge, in order to gather information, unify criteria and set regional strategies. Training will be provided to officers, legislators, communication media and communicators, among others, to strengthen technical capacities and create regional knowledge. Validation workshops will contribute first-hand substantial information.

148. Plans, protocols and maps that include the climate change perspective will be included in the resulting documents: land management and sectorial plans, disaster risk management plans, EWS, protocols, maps of ecosystem services and benefits, risk and vulnerability maps, damage and loss assessment methodologies, among others.

149. Regarding vulnerability reduction and resilience building, various workshops will be carried out for local and regional governments, community organizations, educations institutions, among others. These workshops seek to generate knowledge, exchange experiences in adaptation (financial, normative) and in sustainable and resilient infrastructure (urban and housing), vulnerability reduction strategies and the design of pilot programs and projects.

150. Documenting, organizing, standardizing and systematizing this information in digital platforms, will contribute to the proposed activities´ efficiency and effectiveness and the sustainability of their results. Alliances, networks and information exchange tools and protocols (observatories, publications, monitoring indicators) will be set up in order to ensure that the exchange of information and knowledge is maintained over time and to that it is updated. Awareness, communication and dissemination plans and actions will be focused on local communities (formal and informal education, publications, field missions).

151. The exchange and dissemination of information with other basins and other supplementary projects such as Mercociudades (of which Paysandú and Salto and the Argentina Networks of Municipalities against Climate Change are members) will be encouraged to reinforce the above-mentioned tools.

I. Describe the consultation process, including the list of stakeholders consulted during the preparation of the Program, with particular reference to vulnerable groups, including gender considerations, in accordance with the Adaptation Fund's environmental and social policy.

152. The Consultation Process that was carried out is described in detail in Annex 4 –

153. Validation workshops with civil society and especially with the affected population, were structured to encourage vulnerable groups and key project stakeholders to express their opinions regarding the intervention and to ensure that these are documented and considered in the design of the project draft. Annex 4, The Consultation Process includes the systematization of the different consultation and participation instances since the preparation of the Pre-Concept, through the preparation of this Full Proposal. In both cities, work meetings were held with local authorities, and field visits and workshops with community members were carried out.

154. A participatory approach was used throughout the formulation of the Binational Project, involving key local actors (recipients and beneficiaries) in preparing the proposal.

155. In this sense, during the formulation of the pre-concept, the consultation process started with a first workshop held with national authorities from both countries where initial ideas and guidelines for a comprehensive and regional approach were discussed, and the cities involved in the project were preliminary identified. The process then involved a visit to the territory[18] with government authorities, local technical teams and possible beneficiaries of the selected intervention areas, with the objective of identifying and validating the threats/problems and needs of the territory. This enabled a consensus on the objectives, results and measures planned to respond to these problems.

156. During the formulation Concept Note[19], the consultation process focused on opening participation opportunities with the community, to prioritize proposed measures for each locality, and thus contribute to decision-making processes and strengthen social capital. It is also very important that national authorities in both countries (SAyDS and MVOTMA) and CAF representatives actively participated in the visits, as the Adaptation Fund's scope in supporting climate change adaptation actions was clearly explained.

157. During the last stage of formulation -the full proposal-, preparing the proposal jointly with the communities involved making necessary adjustments to obtain a more precise definition of the project and the subprojects (updating budgets, plans and maps of the intervention areas, collection of supporting documentation), and the dissemination of the final proposal. Many of the stakeholders who were invited to participate in this process also participated in all other instances carried out in their localities and this enabled a strong trust bond to develop between the parties involved and contributed to their active cooperation in the formulation of the proposal.

158. Besides the participation of the national focal points in the consultation bodies, the participation of provincial authorities of Entre Ríos, and authorities and technical teams (planning, public works, environment, finance, social promotion, civil defense, among others) of the Intendance of Colón, Concepción del Uruguay, Concordia, Paysandú, Salto, Fray Bentos, Artigas, Villa Unión, Río Negro, as well as the Mixed Commission of Salto Grande, CARU, the National System of Protected Areas of Uruguay and the Administration of National Parks of Argentina. In the workshops and meetings with the community / beneficiaries and vulnerable groups, neighbors from the intervention areas participated (e.g., from Barrio San José, Barrio Cantera 25, Barrio Las Chapitas), as well as representatives of civil society organizations.

159. During the preparation of the Pre-concept Note, two workshops were held between July 17th and 24th, with the presence of national authorities from Argentina and Uruguay, and two other

[18] Consultation process during the preparation of the pre-concept note.
[19] Consultation process during the preparation of the concept note.

workshops were held in vulnerable cities of the Uruguay River with national, departmental provincial and local authorities; one in the city of Concordia (Argentina) and the other one in the city of Paysandú (Uruguay). Representatives of the cities of Gualeguaychú, Concordia, San José, Liebeg and Concepción del Uruguay in Argentina and the departments of Artigas, Salto, Paysandú and Río Negro in Uruguay participated in these workshops. These workshops included an induction block on the AF characteristics, collaboration between AF and CAF and between AF and both countries, as well as illustrative examples of other AF projects. Aspects eligible for the Project that had been previously identified by each city were discussed in groups. The attendees were over 100 representatives of different technical and political areas from different levels of government.

160. For the preparation of the Concept Note, the Project promoted different participating opportunities for public institutions, academy and social organizations. A field mission was carried out between December 4th and 8th with the participation of CAF, SAyDS, MVOTMA and Entre Ríos Province representatives, from the cities of Concepción del Uruguay, Paysandú, Colón, Concordia, Salto, Río Negro, Fray Bentos, Bella Unión, San Javier, as well as social and private organizations, neighbors, the consultant responsible for the Concept Note and the vulnerable stakeholders' analysis. The cities of Concordia, Colón and Concepción del Uruguay in Entre Ríos Province, Argentina and the cities of Salto and Paysandú from Uruguay were visited.

161. The following actors participated in the Field Mission and the Project Validation Workshops (December 4-8, 2017): officials from CAF, SAyDS and MVOTMA teams, as well as officials from the Province of Entre Ríos, from the cities of Concepción del Uruguay, Paysandú, Colon Concordia, Salto, Río Negro, San Javier, representatives of social organizations, private organizations, neighbors and the consultant responsible for the formulation of the Program. Furthermore, a specialist participated in the mission and carried out a consultation in order to identify the profile of vulnerable groups in each of the participating places. For this, interviews were conducted with randomly selected inhabitants from the intervention areas, participants of the validation workshops (representatives of NGOs, businessmen, merchants, housewives, etc.) and interviews were conducted with the main stakeholders.

162. Consultation/ validation workshops were carried out with the following objectives: i) validating the Project's proposals with vulnerable groups and stakeholders/beneficiaries; ii) documenting and assessing vulnerable groups' opinions according to AF requirements; iii) validating new proposals from beneficiaries and iv) providing opportunities for beneficiaries, key stakeholders and vulnerable groups to voice their opinions and validate issues related to the project.

163. During the sessions, participants were provided with a summary of the Project´s logical framework and with an explanation of the AF funding scheme and the activities to be developed in the city were the consultation took place. During the group work, an observer voiced participants' concerns and opinions. In the plenary session, each group presented and documented the work carried out by each group.

164. Also, meetings were held with technical teams and field visits were carried out to the following locations where interventions are envisaged. Requirements were recorded, and the proposals were reviewed jointly with officers and technicians in charge.

- Cantera 25 neighborhood, Concepción del Uruguay (with previous visit to Defensa Sur[20])
- Unión Portuaria, Ledesma y Paysandú neighborhoods
- El Palmar National Park, Colón
- Water treatment plant and eroded coast, Concordia

[20] This Defense is already finished in the city and is very similar to the North Defense, which is currently under construction. There are plans to include parks, walkways, equipment, furniture and lights in vacant spaces, which are protected by the defense, for the social and recreational use of these areas that operate as reservoirs for rains and that, should therefore not be occupied with new settlements.

- Muelle Negro and linear area Sauzal stream, Salto

165. During the design mission carried out in July 2018, it was possible to focus on gender issues and their relationship to the projects, based on the survey carried out with neighbors, municipal officials and other actors.

166. Thus, in Concepción del Uruguay it has been pointed out that, in the neighborhoods surrounding the park, there are many single mothers and many prolific mothers. Allegations of gender-based violence have increased, probably because women are more encouraged to ask for help. Also, many women work collecting and recycling waste, and many carry out this activity in their home. The surveys point out that women are more affected by floods because flood-prone areas have greater presence of prolific women and are responsible for 0-6-year-old children and elderly people's health. They suffer from more respiratory and skin diseases due to these events, and these diseases need immediate attention. Women are also in charge of their households and make decisions on what elements to take and what elements to leave in the house during floods. If women have informal jobs, emergency situations affect them because they must leave their job (e.g., domestic cleaning) to deal with the situation.

167. Surveys report that in order to cope with floods, women need different types of support: housing, work, school support to finish high school, as well as work reconversion; training in gardening and farming; training in gender and climate change; and training in environmental issues for urban recyclers.

168. In the city of Colón, the impact of the floods affects the inhabitants of the neighborhoods that are being relocated. They have pointed out that in the neighborhoods surrounding the park and in the park area, harassment is common. Therefore, special attention should be paid to entrances to the linear park, avoiding a long coastal road that does not have exits in case of harassment situations. It is important to plan exit routes along the entire stretch, considering the importance of lighting and including a playground to encourage visits with children.

169. In the consultations held in the city of Paysandú, it has been pointed out that, if women have informal jobs, the emergency situation affects them because they must leave their jobs to deal with the situation. Therefore, it is necessary to support them so that they do not have to leave their informal jobs to care for others, and rethink the treatment of emergency events (camps), but especially rethink the treatment of post-emergency events, when they have to return to their homes.

170. In the city of Salto the impact of the floods is related to the rise of the level of the Uruguay River, but it is also related to surges. The impact on cultural venues is also pointed out- there are no notorious differences between women and men's affectation.

171. A final consultation with the potential beneficiaries was carried out between November 19th and 23rd, 2018. The mission of the field trip was to strengthen the dissemination of the Program and thus finalize the consultation process in the territory with local authorities, key actors, beneficiaries and vulnerable groups involved in the prioritized activities, regarding the measures included, the expected benefits, the environmental and social risks and the proposed mitigation measures. This process had begun in 2017. During the consultation, the advances and analyses carried out during the preparation of the program's full proposal document, such as gender, vulnerability and cost-effectiveness analyzes, were presented in order to include comments and observations from key stakeholders. The team was integrated by the Factor team, CAF's program coordinator and executive official, SAyDS and MVOTMA officials, who began activities in the city of Montevideo by disseminating the Program and reviewing the full proposal document, as well as local authorities, subnational and local officials of Argentina and Uruguay.

172. As agreed in the July mission, a visit was made to Fray Bentos and the Intendance of Río Negro summoned non-governmental organizations, potential beneficiaries and vulnerable groups involved in the activities in the zone to participate in meetings to analyze the full proposal document. The same took place with local authorities, organizations, beneficiaries and vulnerable groups involved in Bella Union, who were summoned by the Government of Salto. The mission finalized in the Uruguayan coast, where advances were shared in Paysandú.

173. The mission to the Argentine coast included the cities of Concordia, Colón and Concepción del Uruguay where the studies carried out were shared with local and provincial authorities of Entre Ríos, social organizations, beneficiaries and vulnerable groups.

174. The Environmental and Social Management Plan includes a complaints mechanism and a monitoring, evaluation and monitoring program that can be used by anyone to file a complaint for the Program managers.

J. Provide justification for funding requested, focusing on the total cost of adaptation reasoning

175. This Project seeks to contribute to resilience and adaptation of vulnerable coastal cities and ecosystems of the Uruguay river in both Argentinean and Uruguayan margins, by means of developing instruments, tools and experiences for planning and adaptation to climate change and climate variability. In this sense, the Project will contribute to further strengthen existing national processes for the design and implementation of climate change policies and strategies, focusing on cities and ecosystems on both margins of the Uruguay river. It also fosters the implementation of concrete actions and the generation of experiences based on such solutions, that could be replicated in other cities of both countries, increasing the scope of these best practices.

176. On the other hand, the Project will promote dissemination and increased awareness among people, which don't require allocating large amounts of funds but still have a wide outreach and a positive and synergic effect on capacities for greater resilience.

177. Support from the Adaptation Fund will enable the implementation of an integrated strategy that best suits the region's specific conditions in the implementation areas. This strategy includes policy planning, the implementation, monitoring and evaluation of specific actions and the corresponding coordination with other nationally implemented actions, as well as knowledge generation and target population's strengthened capacities.

178. In particular, AF funds will focus on the four strategic components of the Program: i) land use planning and risk management, ii) priority actions to increase urban resilience, iii) climate change adaptation measures for the conservation of the Uruguay River ecosystems; and iv) priority measures to increase social resilience.

Component 1- Land use planning and risk management:

<u>Baseline (without Project):</u>

179. Currently, territorial planning and management instruments, as well as sectorial plans for basic infrastructure and services and the NPA management plans have different degrees of progress and implementation and lack a regional integrated vision and future climate change scenarios. The region also lacks unified and coordinated EWS and Disaster Risk Management instruments that include the climate change perspective.

180. Relevant local and regional institutions related to these areas (land management, services, legislation, among others) also have different capacities and knowledge regarding risk management and climate change adaptation. There are no common criteria, parameters or systems in the region for flood related impact, damage and loss assessment, especially in urban areas.

Scenario with contribution from the Program

181. Developing and improving Disaster Risk Management instruments and EWS will prevent and mitigate the negative social, economic and environmental effects of climate change, especially with regard to floods.

182. Territorial and NPA planning and management plans as well as sectorial plans, will be reviewed and updated including the climate change perspective and future scenarios. This will confer these plans a shared vision and regional approach, by means of the exchange of knowledge and experiences.

183. Updated EWS will be implemented, and coordination and communication channels will be generated in order to increase their efficiency and contribute to prevention measures and disaster management. Workshops and trainings will be carried out to build capacities within the institutions to develop resilient and sustainable adaptation measures and regional solutions. Shared methodological guides will be developed to estimate and assess impact, damages and losses, in order to enable the collection and systematization of information regionally.

Component 2 – Priority actions to increase urban resilience:

Baseline (without the Program):

184. Many areas inhabited by communities affected by the effects of climate change (floods) that were relocated, have not undergone a resignification process and are vacant, which puts them at risk of being occupied by new inhabitants who will require new relocations. Furthermore, in some localities there are low, flood-prone areas that are very close to urban centers, which may be attractive for new spontaneous or informal settlements if they are not given a clear alternative use.

185. Urban infrastructure (roads, services, etc.) is not adapted to new or future climate change scenarios, making it mostly ineffective. Vulnerable communities do not have access to such services, which increases their vulnerability to extreme events. This type of infrastructure is also more likely to generate contamination and unhealthy conditions.

186. On the other hand, relocations have often caused community members' loss of traditional work and income sources given that some tasks were carried out in the floodplains. This loss of work and income sources contributed to increase their vulnerability.

Scenario with contribution from the Program

187. Recovering vacant land by means of actions planned as part of the Program will not only avoid new occupation but will also provide inhabitants with new public spaces and the recovery of ecosystem services that will contribute to climate change adaptation.

188. The implementation of climate change adapted infrastructure will ensure that it is available, and that people can access its services. It will also reduce compensation and recovery expenses for local governments.

189. Financial adaptation measures will significantly reduce beneficiary families' vulnerability and will increase their resilience.

Component 3 – Climate change adaptation measures for the conservation of the Uruguay River ecosystems:

Baseline (without the Program):

190. Currently, ecosystem services and benefits and ecosystems' connectivity are not fully understood or considered in matters regarding climate change adaptation and quality of life. This often leads to the adoption of inefficient or counterproductive measures that can exacerbate the effects of climate change or reduce ecosystem services (water regulation, coastal defense, etc.) and its resilience.

191. Productive activities, as well as the implementation of infrastructure has sometimes severely affected ecosystems, reducing their services and benefits towards climate change.

Scenario with contribution from the Program

192. The identification and mapping of ecosystem services and benefits will significantly contribute to land planning and management, risk reduction and management, resilience building and people´s quality of life.

193. Additionally, the identification and evaluation of non-climatic impacts (erosion, soil sealing, deforestation), and the delivery of sustainable and ecosystem-based solutions in order to recover ecosystems and their services and benefits, will considerably reduce flood risks and their negative effects.

Component 4 – Priority measures to increase social resilience:

- Baseline (without the Program):

194. Currently, local governments haven't collected, documented and systematized information regarding communities´ vulnerability conditions, in order to identify priority and effective measures to address them.

195. Vulnerable communities, as well as affected families and institutions by flood have suffered increased vulnerability and reduced resilience due to the impact on their economic activities and livelihoods.

- Scenario with contribution from the Program

196. Activities related to vulnerability analysis and monitoring will allow local governments to identify priorities and implement effective solutions for its reduction. Also, they will be able to assess these measures results and incorporate them to the lessons learned for future replications.

197. Work reconversion measures will reduce communities´ economic vulnerability and will increase the resilience of affected people and institutions.

198. The communication and dissemination strategies for communities will be based on climate change risks perception and will raise awareness on the importance of climate change adaptation, and preventive and mitigating measures, increasing communities' ability to face them, thus reducing their vulnerability and increasing their resilience.

K. Describe how the sustainability of the Program's results has been considered when designing the Program.

199. The Project is aligned with national and subnational policies that have been strengthened over the last years and that offer an ideal opportunity for the development and implementation of local actions. Once the Project has progressed, these actions can provide feedback on new strategic lines regarding those policies, at the local and national levels. Long-term planning instruments that consider climate change and future scenarios will be prioritized, contributing to the Project´s sustainability.

200. On the other hand, including adaptation in subnational processes such as land management, promotes the consideration of locally-designed solutions and decision making with a long-term preventive approach. Also, government administration will be strengthened by the generation and inclusion of capacities in the field of climate change and how to address some of its impacts.

201. In this sense, the Project works with national and local authorities that are responsible for local development and climate change adaptation. Local governments constitute key stakeholders for the implementation of the Project´s activities, but will also include regional governments, national organisms, academic institutions and civil society organizations. Institutional coordination will be promoted, as well as the creation of networks that will maintain the Project in the institutional agendas.

202. Regarding concrete actions, ecosystem-based adaptation measures are considered to be those that contribute to greater resilience and, therefore also contribute to sustainability, as well as climate change adapted infrastructure. Likewise, initiatives to strengthen national protected areas are part of processes that already have a budget allocation, maintenance staff as well as community support. The above ensures sustainability of these solutions, beyond funding from the AF.

203. Financial measures such as revolving funds, insurances and work reconversion, will contribute to the economic sustainability of climate change adaptation, especially in the medium and high-risk areas of vulnerable cities. Particularly, the revolving fund which is designed for assisting flood affected communities, for housing and productive infrastructure adaptation, will be available to benefit other affected people, as beneficiaries will return the subsidies they received.

204. Lastly, the communication strategy and plan, along with education related activities, will also contribute to the sustainability of results, since they contribute to increased information, knowledge and awareness on climate change, risk reduction, and resilience building.

205. This strategy will also be designed with a gender approach in order to ensure women´s access to relevant information. For this, a Gender Action Plan has been developed (Annex 7 – Gender Evaluation and Action Plan).

L. Provide an overview of the environmental and social impacts and risks identified as relevant for the project / programme.

206. Annex 5 – Evidence-based identification of environmental and social risks provides an analysis of the Program's impacts and risks regarding the Adaptation Fund's Environmental and Social Principles. The mitigation measures designed for these potential impacts are developed in the Program's Environmental and Social Management Plan (Annex 6 – Environmental and Social Management Plan).

207. The Environmental and Social Management Plan (ESMP) developed for the Program includes specific measures to prevent and mitigate the risks and adverse environmental and social impacts identified in all activities. In this Annex, the planned mitigation measures are presented in accordance with the respective identified risks. Specific information is provided on the agencies responsible for carrying out and verifying these mitigation measures.

208. As part of the Environmental and Social Management Plan, it is required that all the activities undergo an environmental and social risk assessment before they are implemented. Depending on the findings, a mitigation measure template should be presented and shared. In Annex 5 – Evidence-based identification of environmental and social risks , additional details are presented in a matrix that provides information on activity, risks identified according to the Adaptation Fund's environmental and social policy, environmental and social impacts in case that risks materialize, mitigation measures and parties responsible for verification. This matrix will in general reinforce the program's set of monitoring and evaluation actions and is organized by component and by activity. The table below shows the identified risks associated.

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 Farrapos National Park Estuary 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 warranted in some activities. Channels should be widened up in the case of the consolidation of the SAT (Outcome 5 of Component 1), and in Component 2: 7.3 Sauzal Stream 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 will 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	Marginalised vulnerable groups have been identified. **There is no risk** that the project may prevent access of vulnerable and marginalised 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/farming 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 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 committed gender measures will not be properly applied. The Executing Entities and the Implementing Entity will supervise their implementation.
6. Core Labour Rights	AR – NO URU - NO	The project will be executed in line with CAF's standards, which apply all core labour standards as identified by the International Labour 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 species 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 Farrapos National Park.
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.
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 minimise the use of natural resources, waste production and pollutants release. These aspects will be monitored by the Project as required in the ESMP.
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.

Risks Identification per E&S Principles		
Checklist of E&S Principles	**Risk Associated**	**Risks Associated**
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 harbouring unique natural or cultural values, that are recognised 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.
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 Farrapos National Park Estuary can be mentioned.

209. Components 1 and 4 are categorized as low risk (Category C) because of their nature of capacity building (training, workshops, review of strategies and plans, 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. Overall, the general risk categorization for the Program is established as B.

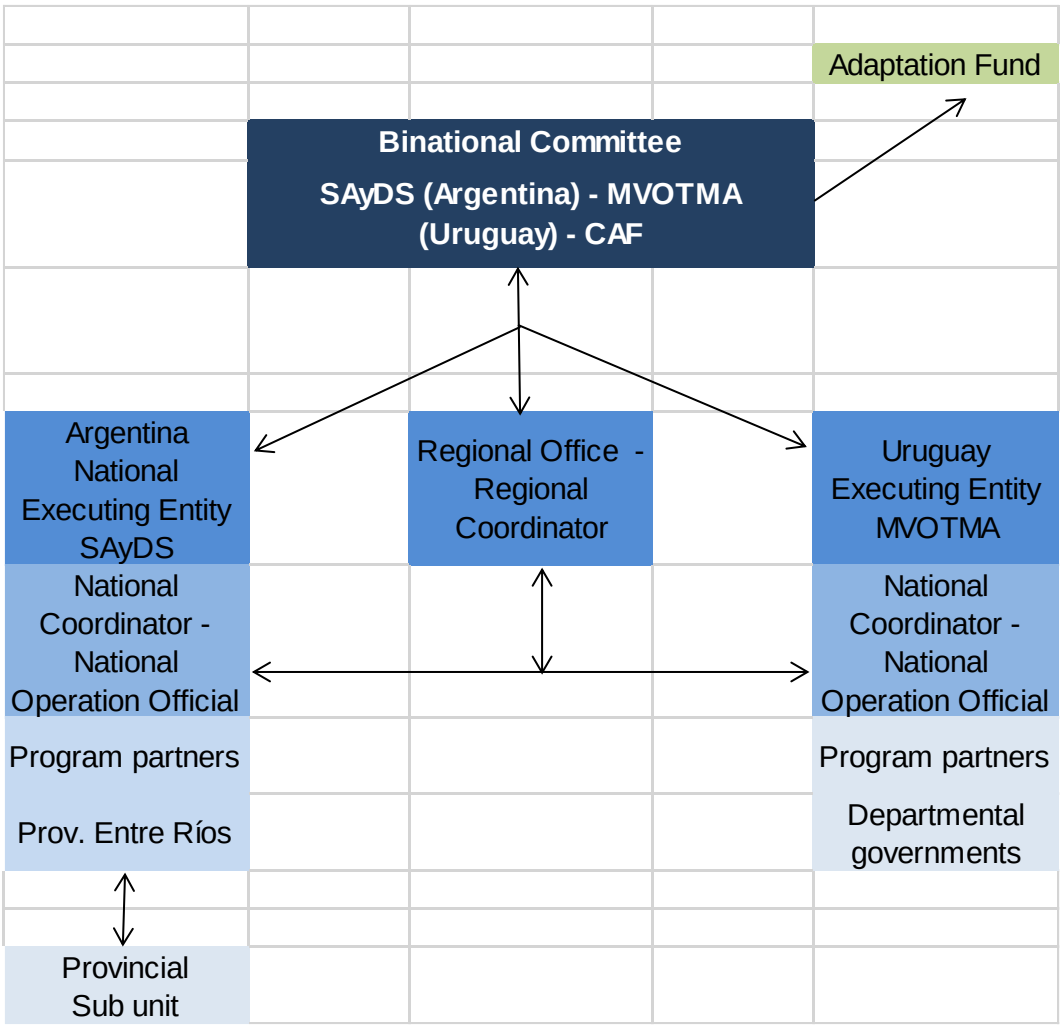
210. The Program has developed a complaints and grievances mechanism in order to adequately and effectively respond to requests, complaints or claims that may arise at any stage of the Program cycle. To do this, the entire population will be informed how to submit a request in each of the implementation sites of the Program. Periodically, the results of the cases received must be disseminated, and this information will also be used as feedback to improve the operation of the Program.

PART III: IMPLEMENTATION ARRANGEMENTS

A. Describe arrangements for managing the Program at the regional and national levels, including coordination arrangements within and between countries. Describe whether the potential to partner with national institutions and, where possible, with national implementing entities (NIE) has been considered and included in management agreements.

I- Organizations involved in the Program:

Figure 5 . Program Implementation Arrangements



CAF will be the implementing entity. The project will be implemented following CAF's administrative and financial regulations as agreed with the Adaptation Fund. CAF will designate an officer from the

Environment and Climate Change Directorate to be the focal point for project coordination (i.e., CAF´s focal point).

The role of CAF is to guarantee the execution of the projects in compliance with the AF policies: environmental, social, gender and fiduciary.

i) Regional/binational level:

- CAF – Development Bank of Latin America (implementing agency)
- Program's Binational Steering Committee
- Salto Grande Mixed Technical Commission (CTMSG)
- Rio Uruguay Administrative Commission (CARU)

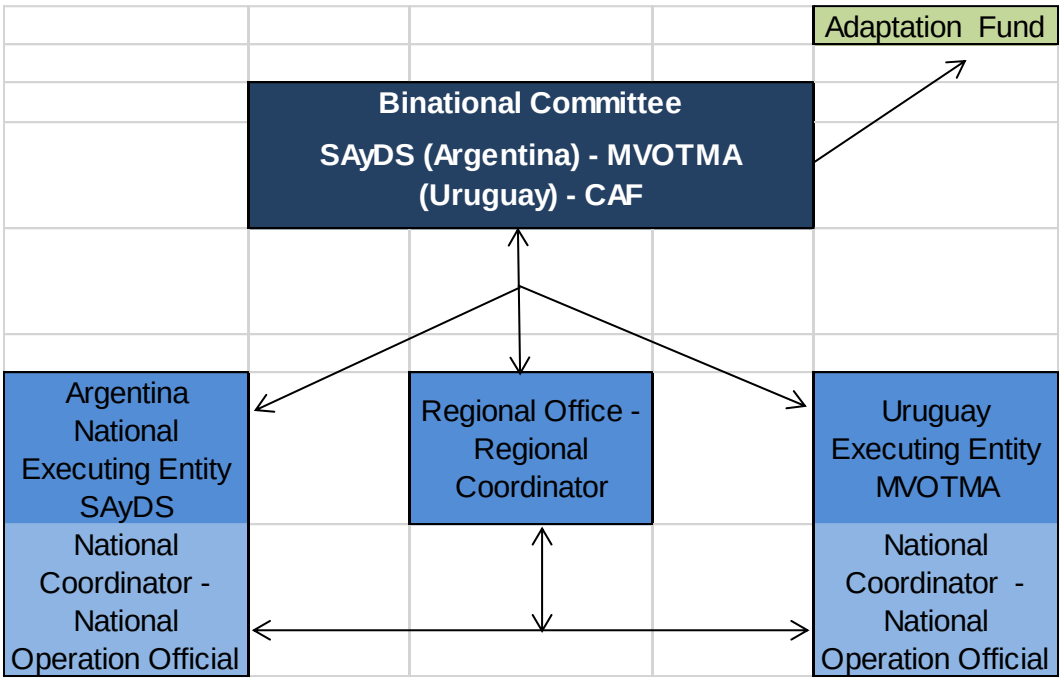
CARU has officially accepted the joint invitation of the Government of Argentina and Uruguay to actively participate and support the development of Output 5. CARU has an in-house Department of Hydrology which carry out different taks in relation to modelling and reporting levels of the river. This work is done also with information and support from the Salto Grande Mix Technical Commission. It is expected that during the Project, procedures and predictive models can be consolidated improving the early warning capacities including with the relationship with national institutions and local communities in terms of communication tools.

ii) National Level:

- Argentine Secretariat of Environment and Sustainable Development (SAyDS).
- Ministry of Housing, Territorial Planning and Environment of Uruguay (MVOTMA).
- The Ministry of Foreign Affairs and Worship of Argentina and the Uruguay Ministry of Foreign Affairs may also be included in the Program's governance model.

The framework document for this proposal is the *"Memorandum of understanding for environmental and sustainable development cooperation",* subscribed on May 4th, 2017 between MVOTMA and SAyDS. This document sets climate change, coastal areas, NPAs and biodiversity conservation as cooperation priorities

Some potential roles of the NIEs could imply the transfer of lessons learned and good practices in the implementation of AF projects in both countries to the Implementing Entity and to the Executing Entities.



iii) Subnational, Provincial/Departmental and Municipal Levels

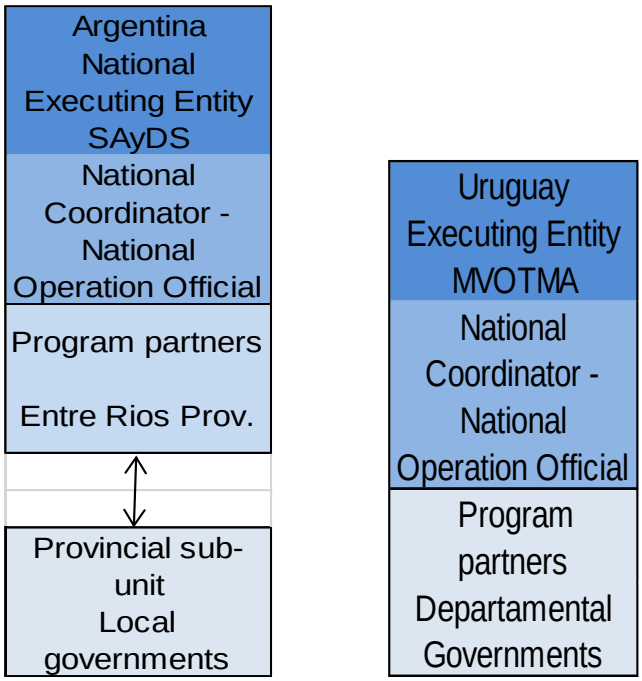
- For Uruguay:

  Departmental Governments Artigas, Salto, Paysandú and Río Negro.

- For Argentina:

  Provincial Government of Entre Ríos.

  Local governments of Colón, Concordia, Concepción del Uruguay, Gualeguaychú and Federación.



II- Planned Guidance/ Coordination system

An executive Binational Steering Committee (BNC) will be established for the Project, integrated by one (1) representative from the Argentinean Government through the SAyDS, one (1) representative from the Uruguayan Government through the MVOTMA, and one (1) CAF representative. The Ministry of Foreign Affairs and Worship of Argentina and the Uruguay Ministry of Foreign Affairs may also be invited to join the BNC, based on a BNC resolution, as agreed in the Concept Note.

The BNC will be the Program's highest authority, where decisions will be made by consensus, and annual operating plans, procurement plans, etc. will also be approved by consensus.

The BNC will invite representatives from the National Executing Entities and the Regional Coordination, who will be responsible for informing members of the BNC on progress and proposals regarding the Program's activities.
See

Annex 12 – Terms of Reference for Implementing

III- Operational Structure:

A Regional Office (RO) will be constituted for the implementation of the Program's binational outputs and activities. It will submit the annual plans for the binational outputs to the BNC for its approval. The RO will be managed by a Regional Coordinator who will interact with CAF and will coordinate activities with the National Coordinators. The Regional Coordinator will be designated by the Project's BNC.

Both MVOTMA and SAyDS will create a national executive unit (NEU) within their structure. Each NEU coordination will be under a National Coordinator (one for Uruguay and one for Argentina) who will report to the BNC. National coordinators will be selected by each country. Argentina will also create

a provincial subunit based in Entre Rios, which will be coordinated by the Argentine National Coordinator.

Each NEU coordination will be supervised by a National Operational Officer (one for Uruguay and one for Argentina) who will interact with CAF. Both National Operational Officers will be selected by the BNC, based on the respective countries' proposal.

CAF will receive the funds through their Special Funds Administrative Direction (DAFE). Each country will receive their funds through each CAF country office, which will determine the disbursement mechanisms.

B. Describe the measures to manage financial risks and the Program's risks

Table 7. Program's financial risks and mitigation measures

Identified risks	Type	Risk assessment	Mitigation measures
Changes in national and/or departmental governments may lead to lack of support of the Project's activities.	Political	Low	At the binational level, the project is supported in the *"Memorandum of understanding for environmental and sustainable development cooperation",* subscribed on May 4th, 2017 between each country's corresponding ministry of the environment (MVOTMA and SAyDS), supporting both countries' intent to cooperate in these matters. The project´s actions are supported in the Climate Change National Policies, developed jointly with political and social stakeholders. Besides, there is a strong institutionalization regarding climate change issues in the National System for Climate Change Response framework, where national and subnational governments are represented. In the case of Argentina, the project's sustainability lies in the National Cabinet of Climate Change and the COFEMA and the municipal and provincial entities involved
Lack of compromise from local communities may lead the interventions to fail.	Social	Low	The community relations plan will be developed throughout the introduction phase, but it is known that governments are continuously working with affected groups, since floods are their main concern. Community stakeholders have been consulted from the beginning and have been included to the project's implementation.
Insufficient financial resources to implement Project´s activities.	Financial	Low	A detailed budget will be prepared, and the project's implementation will be supervised in order to identify financing gaps in a timely manner.
Relocation processes that are being carried out by intendancies and municipalities as part of their risk management policies have not been completed at the beginning of the project.	Social	Low	As part of risk management policies, and independent from this project, some of the intendancies and municipalities are carrying out relocation processes for families that live in high-risk flood-prone areas. It is in these vacant areas where this project will implement works of Component 2. Given the progress of these processes, it is expected that they will be finalized when the project begins. In any case, the local authorities have shown their commitment to guarantee that the processes are concluded (see letters of commitment from the intendancies and municipalities with ongoing processes). Each of the project description sheets assess ongoing processes in each municipality during the project's design (see Annex 3).

Climate- or ENSO-related risks might affect the implementation of components 2 and 3 of the programme in case extreme flooding events occur during the recovering and resignification works.	Climate	Medium	The floods are taking place every 2-3 years and the project lasts 4 years, so there is likely to be a moment of flooding during the implementation of the project. The risk is classified as Medium because the works of the project are the construction of linear parks and other structures that are designed to withstand flood phenomena and that throughout their life cycle they will be exposed to this phenomenon. Therefore, it can be said that, based on their nature, the uncomplete works would not be severely affected in the case of an event. The Early Warning that today are emitted by Salto Grande through CARU and the Civil Protection services, will allow to act with sufficient time to avoid economic and material losses. With regards to Contractors, they will be requested to include protection measures in their Work Plan that shall include measures for the works and infrastructures and of the personnel, against floods and other hydro-meteorological risks. This can cover, among other aspects, considerations of the location of the workmen, construction materials, appropriate storage places at a sufficient height, training in H&S that includes response to flood events. These aspects will be reviewed and approved by the environmental and social safeguards technician.

C. Describe the measures for environmental and social risk management, in line with the Environmental and Social Policy of the Adaptation Fund.

211. The Environmental and Social Management Plan (ESMP) developed for the Program includes specific measures to prevent and mitigate the risks and adverse environmental and social impacts identified in all its activities.

212. As described in Part II, the results of the Categorization of Components showed that Component 1 and Component 4 are classified as low risk (Category C) and Components 2 and 3 are classified as medium risk (Category B). Overall, the general risk categorization for the Program is established as B.

213. As part of the Environmental and Social Management Plan, it is required that all the activities undergo an environmental and social risk assessment before they are implemented. Depending on the findings, a mitigation measure template should be presented and shared. See Annex 5 – Evidence-based identification of environmental and social risks and the Environmental and Social Management Plan (ESMP) in Annex 6 – Environmental and Social Management Plan

214. A Safeguards expert will be hired by the Project to specifically monitor safeguards, complaints and grievances. This Expert will be in charge of overseeing the implementation of the Environmental and Social Management Plan and the Project's Gender Action Plan. He/she will be responsible for drafting semi-annual reports for conveyance to project-related National and Regional Implementing Entities and inform over quarterly meetings on any possible risks. He/she will be responsible for updating both Plans whenever unforeseen impacts and risks are identified. Further details are provided in Section 3 of the ESMP.

D. Describe the monitoring and evaluation arrangements and provide a budgeted M&E plan.

215. Program Monitoring and Evaluation will be carried out in compliance with standard CAF requirements, as agreed with the Adaptation Fund. Annual Performance Reports including the Adaptation Fund's Results Tracker will be prepared.

216. An independent mid-term evaluation and an independent final evaluation will be carried out to assess progress and lessons learned.

Monitoring and Evaluation Plan

Type of M&E activity	Responsible parties	**Budget USD** (does not include Project team)	Frequency
1. Initiation workshop	CAF	20000	Within two months after signing the agreement
2. Inception Report	Project Regional Coordinator	None	Within two months after the initiation the Workshop
3. Monitoring progress of project indicators	Adaptation specialist Regional and national coordinators CAF	Team support costs were included in the Project's implementation	Semi-annual
4. Supervision of environmental, social and gender safeguards	Safeguards specialist Regional and national coordinators CAF	Team support costs were included in the Project's implementation	Semi-annual
4. Quarterly and annual reports (PPR)	Project Regional and National Coordinators Project team CAF	20000	PPR submitted every year (no later than two months after the end of the reporting year). The first PPR must be submitted one year after the beginning of project execution (initiation workshop date). The last PPR will be submitted no later than two months after the end of the reporting year.
5. Field missions	Project Regional and National Coordinators	30000	Annual
6. Binational meetings	Project Regional and National Coordinators Project team CAF	25000	Annual
6. Audits	CAF	50000	Annual
7. Independent mid-term evaluation	CAF Project team Independent consultants hired to carry out the evaluations	30000	Year 2
8. Independent final evaluation	CAF Project team Independent consultants hired to carry out the evaluations	40000	Year 4. Three months before project closure

Type of M&E activity	Responsible parties	**Budget USD** (does not include Project team)	Frequency
9. English translation of mid-term and final evaluations	CAF	15000	Years 2 and 4
10. Final project report	Project team CAF	None	One month before project closure
11. Closing workshop	National and regional coordinators CAF	20000	Last month of project implementation
Total estimated cost		250,000	

E. Include a results framework for the Programme proposal, including milestones, targets and indicators.

Impact: Increased resiliency at the community, national, and regional levels to climate variability and change	**Core Indicator**: No. of beneficiaries

Result	Indicators	Baseline	Mid-term and final goals	Means of verification	Assumptions
Project Objective: build resilience in the vulnerable coastal cities and ecosystems of the lower Uruguay river, both in Argentinean and Uruguayan territories, by developing instruments, tools and experiences for climate change adaptation planning and implementation as well as climate risk management.	Number of people (men and women) protected by improved risk-reduction measures, and climate change adaptation planning and implementation in the lower Uruguay river, both in Argentinean and Uruguayan territories.	No activities like the proposed are being implemented	By the end of the project, at least 600.000 vulnerable people in the project area will benefit from the proposed activities to cope with climate change and vulnerability	Monitoring of the progress of the activities	Successful implementation Interest and support from national and local authorities
OUTCOME I					
National, subnational and local governments have been strengthened by means of the development of instruments, the exchange of experiences and the inclusion of climate change in their planning and management instruments	% of project area with instruments adjusted to address climate change	0	By the end of the project, 100% of the project area is covered by the adjusted instruments to address climate change	Monitoring of the progress of the activities	Successful implementation of the activities included in this Outcome Interest and support from national and local authorities
Output 1. Land management plans, protected areas management plans, and housing and water programs, under review or in progress, include the climate change perspective					

Result	Indicators	Baseline	Mid-term and final goals	Means of verification	Assumptions
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.	Number of instruments that were updated with focus on risk and climate change	0	End of project: at least 2 Protected Areas plans, and at least 1 instrument for each locality/department involving housing, water, health, infrastructure and public investment are updated	Plans updated and approved	Interest and support from local authorities National and local authorities willing to support and finance the implementation of the plans
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.	Number of members of territorial technical teams who participate in workshops-work meetings (broken down by gender and age)	0	Medium term: 40 (50% from each country) End of project: 60 (50% from each country)	Reports of workshops, workshop evaluation forms, lists of participants	Members of technical teams are willing to participate in the workshops-meetings and incorporate risk management into their work
	Number of officials of local, departmental and provincial governments who participate in workshops-work meetings (broken down by gender and age)	0	Medium term: 40 (50% from each country) End of project: 100 (50% from each country, including at least 1 legislator from each block)	Reports of workshops, workshop evaluation forms, lists of participants	Officials are willing to participate in the workshops-meetings and incorporate risk management into their work
	Number of citizens (broken down by gender and age) who participate in workshops-work meetings	0	Medium term: 27 (at least 3 in each of the 9 cities, of which at least 1 is a woman) End of project: 60 (5 in each of the 12 cities in the extended area, with at least 2 women in each) End of project: 1	Reports of workshops, workshop evaluation forms, lists of participants	An effective and gender-sensitive call is made, reaching the relevant stakeholders of CSOs

Result	Indicators	Baseline	Mid-term and final goals	Means of verification	Assumptions
Output 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.	Methodology document has been developed	0	End of project: 1	Technology document is delivered, workshop or other presentation instances	Entities that provide information are willing to provide the necessary information reports and databases and contribute with their knowledge
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.	Methodology document has been developed	0	End of project: 1	Methodology document is delivered, workshop or other presentation instances	Entities that provide information are willing to provide the necessary information in reports and databases and contribute with their knowledge
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 /	Number of officials who participated and received training (broken down by gender and age); Results on events that have been shared .	0	End of project: 50 - At least 1 representative of local authorities and 2 local technicians (1 man, 1 woman) from each of the 9 locations of direct intervention, and at least 20 representatives of departmental / provincial authorities.	Workshop reports, workshop evaluation forms, lists of participants	The methodology is attractive and useful Local officials and technicians are willing to participate in the workshops and incorporate the use of the guide in their work

Result	Indicators	Baseline	Mid-term and final goals	Means of verification	Assumptions
Events Log prepared for further implementation.					
Output 3. The project adaptation outcomes have been incorporated into monitoring mechanisms of 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	Indicators document has been developed	0	End of project: 1	Indicator document delivered, workshop or other presentation instances. Monitoring reports prepared with the proposed methodology and published on official websites	National institutions validate the indicators and are willing to include their report in the NDCs.
Activity 3.2. Monitoring of indicators and reporting of Project activities in each country.	Monitoring indicators, completion of mid-term evaluation and final evaluation	0	Mid-term: monitoring indicators of years 1 and 2 and mid-term evaluation. End of project: monitoring of years 1 to 4, mid-term evaluation and final evaluation.	Monitoring reports and evaluations delivered	Project resources are made available for monitoring and evaluations
OUTCOME II					

Result	Indicators	Baseline	Mid-term and final goals	Means of verification	Assumptions
Sub-national and local risk management strategies have been strengthened and community-based, early warning systems (EWS) for floods, have been consolidated in a coordinated manner.	No. of staff of targeted institutions that have shared strategies and best practices involving adaptation, climate risk management, territorial planning, territorial policy, housing infrastructure adaptation, recovery of vacant lands.	Targeted institutions have not developed integrated strategies	At the end of the project, 20 institutions will have shared strategies and best practices (11 local governments, and 9 national institutions of the two countries, including Administration of National Parks, CTM-Salto Grande, CARU, Civil Defenses).	Project records	Successful implementation of the activities included in this Outcome Interest and support from national and local authorities
	Percentage of target population covered by the enhanced Flood Early Warning System.	The existing system allows the timely evacuation of at-risk population. Although the forecasting system could be improved, the most important improvement needed for the early warning system is related to the preparation phase and the communication strategy for the local population.	At the end of the project, 100% of the target population is covered by the enhanced Flood Early Warning System	Project records	
	Number of risk management plans and other management instruments reviewed and implemented	0	At the end of the project, at least 10 risk management plans and other management instruments are reviewed and implemented (at least one in each city).	Project records	
Output 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					

Result	Indicators	Baseline	Mid-term and final goals	Means of verification	Assumptions
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.	Number of local officials involved (broken down by gender and age)	0	End of project: 60 - At least 2 representatives of local authorities and 2 local technicians (1 man, 1 woman) from each of the 9 locations of direct intervention, and at least 20 representatives of departmental / provincial authorities.	Reports of workshops, workshop evaluation forms, lists of participants	Experiences and learnings are attractive and useful Local officials and technicians are willing to participate in the workshops and incorporate the lessons learned in their work
	Document with conclusions of binational workshops	0	End of project: 1	Records of shared lessons learned among key actors (via web or other virtual systems)	
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.	Web platform in operation	0	End of project: 1	Web visits records	The platform is kept updated Officials and members of technical teams are willing to incorporate the use of this tool in their work and feed it with new content
	Number of local officials and members of technical teams trained in the use of the web platform (broken down by gender and age)	0	End of project: 80 - At least 2 representatives of local authorities and 2 local technicians (1 man, 1 woman) from each of the 9 locations of direct intervention and protected areas, at least 20 of the localities of indirect intervention and at least 20 representatives of departmental / provincial authorities.	Reports of workshops, workshop evaluation forms, lists of participants	
Output 5. Flood Early Warning Systems have been consolidated					
Activity 5.1. Establishment of governance instruments and support for inter-institutional coordination for exchanges of information, actions (such as	Document with conclusions of binational workshops	0	End of project: 1	Document delivered, workshop or other presentation instances.	The instruments are prepared in a participatory manner with the appropriate key actors

Result	Indicators	Baseline	Mid-term and final goals	Means of verification	Assumptions
simulations) and stakeholders to strengthening up the lower Uruguay River´s Early Warning System (EWS).	Number of governance instruments	0	End of project: 2 (1 per country), or 1 regional	Document delivered, workshop or other presentation instances.	The learnings are systematized and shared Local officials and members of technical teams are willing to participate and incorporate the instruments in their work The relevant entities include the funds for the future operation and maintenance of the systems in their financial plans The instruments consider the affected population's different types of vulnerabilities
	Number of participants (broken down by gender and age)	0	End of project: 200 (50% in each country, including local, departmental and national government officials, response office staff, CARU, CTM, protected areas, at least 40% women)	Reports of workshops, workshop evaluation forms, lists of participants	
	Amount of Alert drills	0	Medium term: at least 1 drill per year that covers all cities End of project: at least 4 drills covering all cities	Reports of description and results of the drills and presentation of conclusions and learning	
	Amount and types of products for communication-notice of the drills	0	At least 3 warning communication instruments developed	Report on how the instruments work	
	Amount and types of products for the generation of flood information	0	End of project: 1 completed flood prediction model	Report on the operation of the model and its predictions	
	Number of designated leaders (broken down by gender and age)	0	End of project: at least 1 leader for each location and protected area (50% men, 50% women)	Minutes on the appointment of leaders	

Result	Indicators	Baseline	Mid-term and final goals	Means of verification	Assumptions
	Number of communication networks established	0	End of project: at least 1 network for each location and protected area	Validated communication network protocols	
	Web platform in operation	0	End of project: 1	Records of web visits	The platform remains updated Officials and members of technical teams are willing to incorporate the use of this tool in their work and feed it with new content
Activity 5.2. Development and implementation of modelling, prediction, communication and training tools for floods EWS building from the CTM – CARU projections.	Number of local officials and members of technical teams trained in the use of the web platform	0	End of project: 200 (50% in each country, including local, departmental and national government officials, response office staff, CARU, CTM, protected areas, at least 40% women)	Reports of workshops, workshop evaluation forms, lists of participants	
Output 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.	Number of risk management plans and other management instruments reviewed and implemented	0	End of project: at least 1 instrument for each locality / department incorporates key CC adaptation actions focused on urban floods	Plans and protocols approved and distributed	Interest and support from local authorities National and local authorities willing to support and finance the implementation of the plans

Result	Indicators	Baseline	Mid-term and final goals	Means of verification	Assumptions
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	Number of managers, communicators and other local actors who received training (broken down by gender and age)	0	End of project: 120 (50% of each country, and 50% men – 50% women)	Reports of workshops, workshop evaluation forms, lists of participants	Communication agents are willing to incorporate the knowledge acquired
OUTCOME III					
The resilience of coastal cities has been increased through the implementation of structural and non-structural adaptation measures.	M2 of surface resignified vulnerable vacant lands No. of protection works carried out.	0	Medium term: 49,000 m2 End of project: 113,000 m2 of vulnerable vacant lands resignified End of project: 11 works carried out	Project records	Successful implementation of the activities included in this Outcome Interest and support from national and local authorities
	Number of financial mechanisms ready for scaling-up	0	End of project: 2	Project records	
Output 7. Vulnerable vacant lands in the resettlements have been recovered, thus adding a new significance to the territory to keep informal occupation in check					
Activity 7.1. Resignification of the Union Portuaria, Ledesma and urban border areas in Paysandú, Uruguay.	Resignification produced	0	End of project: 1	Maps, pictures, work documentation, certification.	Authorities guarantee the quality of designs and works Authorities include the resources for the maintenance of the new infrastructure in their financial plans
	Resignified surface (m2)	0	Medium term: 10,000 m^2 End of project: 20,000 m^2		
	Employment generated (broken down by gender and age)	0	End of project: 10 jobs (at least 30% women)		
Activity 7.2. Resignification and renovation of vacant, flood-prone lots after resettlements. Atahualpa area in Salto, Uruguay.	Resignification produced	0	End of project: 1	Maps, pictures, work documentation, certification.	Authorities guarantee the quality of designs and works
	Resignified surface (m2)	0	Medium term: 10,000 m^2 End of project: 30,000 m2		

Result	Indicators	Baseline	Mid-term and final goals	Means of verification	Assumptions
	Employment generated (broken down by gender and age)	0	End of project: 10 jobs (at least 30% women)		Authorities include the resources for the maintenance of the new infrastructure in their financial plans
Activity 7.3. Resignification and renovation of flooding-prone vacant lots at the Sauzal Stream mouth, in Salto, Uruguay.	Resignification produced	0	End of project: 1	Maps, pictures, work documentation, certification.	Authorities guarantee the quality of designs and works Authorities include the resources for the maintenance of the new infrastructure in their financial plans
	Resignified surface (m2)	0	Medium term: 1,000 m^2 End of project: 3,000 m^2		
	Employment generated (broken down by gender and age)	0	End of project: 20 jobs (at least 30% women)		
Activity 7.4. Environmentally sustainable hydrological management at the Esmeralda Stream – Resignification of the Esmeralda´s neighborhood housing complex - Fray Bentos, Uruguay.	Resignification produced	0	End of project: 1	Maps, pictures, work documentation, certification.	Authorities guarantee the quality of designs and works Authorities include the resources for the maintenance of the new infrastructure in their financial plans
	Resignified surface (m2)	0	Medium term: 3,000 m^2 End of project: 9,000 m^2		
	Employment generated (broken down by gender and age)	0	End of project: 10 jobs (at least 30% women)		
Activity 7.5. Risk prevention and evacuees care Centre. Bella Unión, Uruguay	Works carried out	0	End of project: 1	Maps, pictures, work documentation, certification.	Authorities guarantee the quality of designs and works Authorities include the resources for the maintenance of the new infrastructure in their financial plans

Result	Indicators	Baseline	Mid-term and final goals	Means of verification	Assumptions
Activity 7.6. Resignification of flood prone high-risk public spaces recovered from irregular residential occupation. Bella Unión, Uruguay	Resignification produced	0	End of project: 1	Maps, pictures, work documentation, certification.	Authorities guarantee the quality of designs and works Authorities include the resources for the maintenance of the new infrastructure in their financial plans
	Resignified surface (m2)	0	Medium term: 10,000 m^2 End of project: 20,000 m^2		
	Employment generated (broken down by gender and age)	0	End of project: 10 jobs (at least 30% women)		
Activity 7.7. Protection and resignification of the Artaláz Stream Wetland. Colón, Argentina.	Resignification produced	0	End of project: 1	Maps, pictures, work documentation, certification.	Authorities guarantee the quality of designs and works Authorities include the resources for the maintenance of the new infrastructure in their financial plans
	Resignified surface (m2)	0	Medium term: 10,000 m^2 End of project: 20,000 m^2		
	Employment generated (broken down by gender and age)	0	End of project: 10 jobs (at least 30% women)		
Activity 7.8. Remediation and resignification of vacant lots located within Defensa Norte and Cantera 25 de mayo Neighborhood. Concepción del Uruguay, Argentina.	Resignification produced	0	End of project: 1	Maps, pictures, work documentation, certification.	Authorities guarantee the quality of designs and works Authorities include the resources for the maintenance of the new infrastructure in their financial plans
	Resignified surface (m2)	0	Medium term: 5,000 m^2 End of project: 21,000 m^2		
	Employment generated (broken down by gender and age)	0	End of project: 10 jobs (at least 30% women)		
Output 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.	Protection works carried out	0	End of project: 1	Maps, pictures, work documentation, certification.	Authorities guarantee the quality of designs and works Authorities include the resources for the maintenance of the
	Resignification produced	0	End of project: 1		
	Resignified surface (m2)	0	Medium term: 2,000 m^2 End of project: 7,000 m^2		

Result	Indicators	Baseline	Mid-term and final goals	Means of verification	Assumptions
	Employment generated (broken down by gender and age)	0	End of project: 10 jobs (at least 30% women)		new infrastructure in their financial plans
Activity 8.2. Protection against coastal erosion, and sundry repairs at the water treatment plant in the city of Concordia, Argentina.	Protection works carried out	0	End of project: 1	Maps, pictures, work documentation, certification.	Authorities guarantee the quality of designs and works Authorities include the resources for the maintenance of the new infrastructure in their financial plans
Activity 8.3. Refurbishing of the Access bridge to the Pier and the Coastal areas of the San Javier town.	Protection works carried out	0	End of project: 1	Maps, pictures, work documentation, certification.	Authorities guarantee the quality of designs and works Authorities include the resources for the maintenance of the new infrastructure in their financial plans
Output 9. Solutions have been defined and financial mechanisms have been implemented to promote CCA in 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.	Design finalized	0	End of project: 1	Design document	Authorities guarantee monitoring and oversight of the loans once the project is finished
	Amount of loans granted (broken down by gender and age)	0	Medium term: 30 End of project: 70 (at least 40% of women-led households)	Documentation regarding the call, representations and awards.	

Result	Indicators	Baseline	Mid-term and final goals	Means of verification	Assumptions
	Amount of housing adaptation works carried out	0	Medium term: 20 End of project: 40 (at least 40% in women-led households)	Reports on the works carried out	
Activity 9.2. Design of flood insurance for commercial and tourist premises in coastal areas. Entre Ríos, Argentina	Design finalized	0	End of project: 1	Minutes on delivering the document to insurance chambers	Authorities commit to implement insurance, allocating human and financial resources
OUTCOME IV					
Adaptive conservation measures have been implemented in vulnerable ecosystems on both banks of the Uruguay River, including the identification and evaluation of their ecosystem services	Hectares of vulnerable ecosystems covered by adaptive conservation measures, including identification and evaluation of their ecosystem services	Although some advances have been made in the identification of ecosystemic services, no comprehensive approach between the two margins has been implemented	End of project: 3,500 ha	Project records	Successful implementation of the activities included in this Outcome Interest and support from national and local authorities
Output 10. Ecosystemic services and benefits have been identified and assessed, including the 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.	Completion report	0	End of project: 1	Use of the report through the information system integrated by key stakeholders on both margins.	Authorities incorporate conclusions in planning
	Mapping and assessment of ecosystem services has been disseminated	0	End of project: at least 5 publications and 2 events to share results (1 in each country)	Publication on official websites, press articles	Authorities are willing to share the results with the community
Output 11. New ecosystem-based adaptation measures have been designed and implemented.					

Result	Indicators	Baseline	Mid-term and final goals	Means of verification	Assumptions
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.	Number of people trained in tourism management in protected areas (broken down by gender and age)	0	End of project: ≥ 30 (at least 50% women)	Reports of workshops, workshop evaluation forms, lists of participants	Invitations to training events are effective and gender sensitive. There are proposals for adequate adaptation of infrastructure, taking into account labor efforts Demonstration cases are monitored, taking into account environmental and social aspects Authorities promote the implementation of the community program and are willing to allocate resources
	Number of participants in exchange activities (broken down by gender and age)	0	End of project: ≥ 50 (at least 50% women)	Reports of workshops, workshop evaluation forms, lists of participants	
	Number of people benefiting from investments (broken down by gender and age)	0	Medium term: 15 End of project: 37 (at least 40% women)	Beneficiary registration	
	Number of demonstrative cases developed and disseminated.	0	End of project: at least 3. Of these, at least 1 with lessons learned in environmental and social aspects including gender	Reports on demonstration cases; documentation of presentation of results	
	Community impact monitoring program developed and implemented	0	End of project: 1	Program report; report of program activities	
Activity 11.2. Implementation of climate change ecosystem-based adaptation measures in the Rincón de Franquía Protected National Area in Uruguay	Evaluation and diagnosis of coastal erosion process and proposal for adaptation measures	0	Medium term: 1 End of project: 1	Diagnostic document	Authorities guarantee the quality of the works Authorities incorporate

Result	Indicators	Baseline	Mid-term and final goals	Means of verification	Assumptions
	Pilot project implemented on the coast; coast length protected by the implementation of the pilot (m)	0	End of project: 1 pilot project implemented (approximately, 200 m of protected coastline)	Pictures, monitoring reports	resources for the maintenance of the new infrastructure in their financial plans
Activity 11.3. Restoration of vulnerable coastal ecosystems through monitoring of exotic species and planting of native species.	Exotic invasion surface under control (km of coast)	0	Medium term: the removal of exotic species is achieved by Gleditsia Triacanthos along 52 km of coastline	Pictures, monitoring reports	Interest and support from local authorities National and local authorities are willing to support and finance the implementation of the plans
	Hectares treated with methods for the elimination of Invasive Species in Argentina and Uruguay	0	End of project: 52 km of coast is under control End of project: Treatment of approximately 3,500 hectares (30% of the area with MILD infestation, 50% of the areas with MODERATE infestation, 70% of the areas with STRONG infestation)	Control reports prepared by each country	
	Systematization report of information on harmful threats and pests for species of special value	0	End of project: 1	Systematization report	
	% of disturbed areas restored	0	End of project: Restoration of 10% of disturbed areas	Pictures, monitoring reports	
	Number of plans and protocols developed and edited	0	End of project: 3	Approved plans	

Result	Indicators	Baseline	Mid-term and final goals	Means of verification	Assumptions
	% of implementation of the dissemination campaign as part of the communication campaign for community participation and the creation of buffer zones	0	Medium term: 50% End of project: 100%	Publications, press releases, systematization of events, minutes	
Activity 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).	% works advance	0	Medium term: 40% End of project: 100%	Documentation of call to works, representations and awards, work certification, monitoring reports	Authorities guarantee the quality of the works Authorities include in their financial plans the resources for the maintenance of the new infrastructure
OUTCOME V					
Communities and social organizations increased their resilience in the framework of climate change adaptation and risk management of hydro-climatic disasters.	Number of vulnerability and social perception methodologies designed and tested.	0	End of project: 2	Project records	Successful implementation of the activities included in this Outcome Interest and support from national and local authorities
	Number of people (men and women) reached by the awareness raising capacity building activities.	0	Medium term: 200 (50% women) End of project: 500 (50% women)	Project records	
Output 12. Social vulnerability monitoring and evaluation tools have been devised with a particular focus on Human Rights, gender, and generations.					

Result	Indicators	Baseline	Mid-term and final goals	Means of verification	Assumptions
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.	Number of participants in meetings and details of agencies or institutions represented (disaggregated by sex and age)	0	End of project: 30 local government officials on the Uruguay River, subnational and national governments (at least 40% women)	Meeting minutes, lists of participants	Authorities are willing to incorporate the monitoring instrument in the implementation of their policies and guarantee human and economic resources for this purpose
	Monitoring instrument developed, including human rights, gender and generations indicators.	0	End of project: 1	Monitoring instrument report	
	Dissemination of shared documents with the tools and methodologies to be implemented.	0	End of project: 100% of published documents	Publication on official websites, press articles	
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.	% Local and regional data collected in local analyzes and monitoring activities	0	End of project: 100% of local and regional data collected	Local analyses and monitoring reports	Participating institutions ensure the flow of information
	% generated information that is included in current computer tools	0	Medium term: 30% End of project: 100%	Progress reports on the incorporation of information in computer tools	
Output 13. Assessments of social risk perception 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	Methodology document developed	0	Medium term: 1	Report on the methodology developed	Authorities are willing to incorporate the results of the implementation of

Result	Indicators	Baseline	Mid-term and final goals	Means of verification	Assumptions
perception, and drafting up of a methodology-based document.					the methodology to design their policies
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.	Document of analysis and estimation of social perception	0	Medium term: first stage End of project: first and second stage completed	Document finalized and disseminated	
	Number of participants in consultation instances (broken down by gender and age)	0	Medium term: 50 (50% in each country) End of project: 200 (50% in each country)	Reports of systematization of queries; Pictures; List of Assistants	
Output 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.	Number of work reconversion proposals offered to the population settled in flood-prone areas.	0	Medium term: 40 End of project: 100	Report on proposals and testing of these with key actors and the population	Work guidelines are defined in conjunction with the community An adequate selection process is carried out Students' progress is monitored, and they are supported to join the work force
	Number of people who complete the training (broken down by gender and age)	0	Medium term: 40 End of project: 100 (at least 40% women)	Evaluation forms, participant lists, attendance, certificates of completed training	
Activity 14.2. Social and labor capacity-building, and drafting up of workforce capacity-building in Entre Ríos, Argentina	Number of people trained (broken down by gender and age)	0	Medium term: 40 End of project: 100 (at least 40% women)	Evaluation forms, participant lists, attendance, certificates of completed training	Work guidelines are defined in conjunction with the community

Result	Indicators	Baseline	Mid-term and final goals	Means of verification	Assumptions
	Number of marketing networks created and / or consolidated	0	End of project: 1 in each city	Report of network activities	An adequate selection process is carried out Students' progress is monitored, and they are supported to join the work force
Output 15. Social networks have been strengthened up through an exchange in Climate Change Adaptation (CCA) best 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.	Number of strengthened networks	0	End of project: at least 1 local social network per country	List of participating entities of the networks, media of these registered, products / activities of the published networks.	National and local authorities willing to support these initiatives
	Number of registered organizations and institutions	0	End of project: at least 5 in each country		
	Number of participants in workshops and meetings (broken down by gender and age)	0	Medium term: 30 End of project: 70		
	Number of joint strategies scheduled	0	End of project: at least 1 focused on urban resilience and 1 focused on ecosystem-based adaptation		
Output 16. Communication, education and dissemination strategies have been implemented towards reducing vulnerability.					
16.1 Identification of adaptation background and local risk management to address climate change involving the community	Experiences implemented	0	End of project: at least 2 experiences per country	Experiences carried out at schools in the coastal zone	The experiences and learnings are attractive and useful

Result	Indicators	Baseline	Mid-term and final goals	Means of verification	Assumptions
and education and implementation of activities in the area of project intervention	Number of trained teachers and communicators (broken down by gender and age)	0	End of project: 100 teachers and communicators (at least 50% women)	Reports of workshops, workshop evaluation forms, lists of participants	Local actors are willing to participate in the workshops and incorporate the lessons learned in their work
	Number of attendees or participants in general population training / education activities (broken down by gender and age)	0	Medium term: 150 (50% women) End of project: 500 (50% women)	Reports of workshops, workshop evaluation forms, lists of participants	
	Number of courses, seminars, conferences developed.	0	At least one course, seminar or conference per year	Reports, evaluation forms, lists of participants	
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	Number of communication action strategies implemented	0	End of project: at least 2 public campaigns and 2 guides produced and distributed	Records of campaigns in newspapers, radios and all media to check for presentation of campaigns	Communication is effective and its contents attractive and useful for the population Methodological guidelines are shared and included by stakeholders in the planning process.
	Experiences implemented	0	End of project: at least 2 experiences per country	Records of exchanges	
	Number of participants of workshops / thematic talks (broken down by gender and age)	0	Medium term: 150 End of project: 500	Reports of workshops, workshop evaluation forms, lists of participants	
16.3. Drafting up of methodological guidelines focused on communication and management of projects being executed as part of the CCA strategies.	Methodological materials prepared and shared	0	End of project: at least 2, one with an urban resilience approach and the other with an ecosystem-based adaptation approach	Publications, press releases, systematization of events, minutes	

F. Demonstrate how the project / programme aligns with the Results Framework of the Adaptation Fund

Project Objective(s)[21]	Project Objective Indicator(s)	Fund Outcome	Fund Outcome Indicator	Grant Amount (USD)
This project will build resilience in the vulnerable coastal cities and ecosystems of the lower Uruguay river, both in Argentinean and Uruguayan territories, by developing instruments, tools and experiences for climate change adaptation planning and implementation as well as climate risk management.	Number of people (men and women) protected by improved risk-reduction measures, and climate change adaptation planning and implementation in the lower Uruguay river, both in Argentinean and Uruguayan territories.	Outcome 1: Reduced exposure to climate-related hazards and threats	1. Relevant threat and hazard information generated and disseminated to stakeholders on a timely basis	**225,000**[22]
		Outcome 2: Strengthened institutional capacity to reduce risks associated with climate-induced socioeconomic and environmental losses	2. Capacity of staff to respond to, and mitigate impacts of, climate-related events from targeted institutions increased	**180,000**[23]
		Outcome 3: Strengthened awareness and ownership of adaptation and climate risk reduction processes at local level	3.1. Percentage of targeted population aware of predicted adverse impacts of climate change, and of appropriate responses	**660,000**[24]
		Outcome 4: Increased adaptive capacity within relevant development sector services and infrastructure assets	4.2. Physical infrastructure improved to withstand climate change and variability-induced stress	**7,458,417**[25]
		Outcome 5: Increased ecosystem resilience in response to climate change and variability-induced stress	5. Ecosystem services and natural resource assets maintained or improved under climate change and variability-induced stress	**1,204,083**[26]
		Outcome 6: Diversified and strengthened livelihoods and sources of income for vulnerable people in targeted areas	6.2. Percentage of targeted population with sustained climate-resilient alternative livelihoods	**650,000**[27]
		Outcome 7: Improved policies and	7. Climate change priorities are integrated	**1,622,500**[28]

[21] The AF utilized OECD/DAC terminology for its results framework. Project proponents may use different terminology, but the overall principle should still apply

[22] Correspond to project output 5. See project budget.

[23] Correspond to project output 4. See project budget.

[24] Correspond to project output 15 and 16. See project budget.

[25] Correspond to project output 7 and 8 and activities 11.1 and 11.4. See project budget.

[26] Correspond to project output 10, outputs 11.2 and 11.3. See project budget.

[27] Correspond to project output 9 and activities 14.1 and 14.2. See project budget.

[28] Correspond to project outputs 1, 2, 3, 6, 12 and 13. See project budget.

		regulations that promote and enforce resilience measures	into national development strategy	
Project Outcome(s)	**Project Outcome Indicator(s)**	**Fund Output**	**Fund Output Indicator**	**Grant Amount (USD)**
OUTCOME I National, subnational and local governments have been strengthened by means of the development of instruments, the exchange of experiences and the inclusion of climate change in their planning and management instruments.	% of the project area covered with instruments adjusted to address climate change.	Output 7: Improved integration of climate-resilience strategies into country development plans	7.1. No. of policies introduced or adjusted to address climate change risks (by sector)	**902,500**
OUTCOME II Sub-national and local risk management strategies have been strengthened and community-based, early warning systems (EWS) for floods, have been consolidated in a coordinated manner.	No. of staff of targeted institutions that have shared strategies and best practices involving adaptation, climate risk management, territorial planning, territorial policy, housing infrastructure adaptation, recovery of vacant lands.	Output 2: Strengthened capacity of national and sub-national centres and networks to respond rapidly to extreme weather events	2.1.2 No. of targeted institutions with increased capacity to minimize exposure to climate variability risks (by type, sector and scale)	**180,000**
	Percentage of target population covered by the Flood Early Warning System.	Output 1.2: Targeted population groups covered by adequate risk reduction systems	1.2.1. Percentage of target population covered by adequate risk-reduction systems	**225,000**
	Number of risk management plans and other management instruments reviewed and implemented	Output 7: Improved integration of climate-resilience strategies into country development plans	7.1. No. of policies introduced or adjusted to address climate change risks (by sector)	**320,000**
OUTCOME III The resilience of coastal cities has been increased through the implementation of structural and non-structural adaptation measures.	M2 of surface resignified vulnerable vacant lands No. of protection works carried out.	Output 4: Vulnerable development sector services and infrastructure assets strengthened in response to climate change impacts, including variability.	4.1.2. No. of physical assets strengthened or constructed to withstand conditions resulting from climate variability and change (by sector and scale)	**6,250,000**
	Number of financial mechanisms ready for scaling-up	Outcome 6: Diversified and strengthened livelihoods and sources of income for vulnerable people in targeted areas	6.1 Percentage of households and communities having more secure access to livelihood assets	**250,000**
OUTCOME IV Adaptive conservation	Hectares of vulnerable ecosystems covered	Output 5: Vulnerable ecosystem services and natural resource	5.1. No. of natural resource assets created, maintained or	**2,412,500**

measures have been implemented in vulnerable ecosystems on both banks of the Uruguay River, including the identification and evaluation of their ecosystem services	by adaptive conservation measures, including identification and evaluation of their ecosystem services	assets strengthened in response to climate change impacts, including variability	improved to withstand conditions resulting from climate variability and change (by type and scale)	
OUTCOME V Communities and social organizations increased their resilience in the framework of climate change adaptation and risk management of hydro-climatic disasters.	Number of vulnerability and social perception methodologies designed and tested.	Output 7: Improved integration of climate-resilience strategies into country development plans	7.2. No. of targeted development strategies with incorporated climate change priorities enforced	**400,000**
	Number of people (men and women) reached by the awareness raising capacity building activities.	Output 6: Targeted individual and community livelihood strategies strengthened in relation to climate change impacts, including variability	6.1.1.No. and type of adaptation assets (tangible and intangible) created or strengthened in support of individual or community livelihood strategies	**400,000**
		Output 3: Targeted population groups participating in adaptation and risk reduction awareness activities	3.1 No. of news outlets in the local press and media that have covered the topic	**660,000**

G. Include a detailed budget with budget notes, broken down by country, as appropriate, on the use of the Executing Entity's management fee, and an explanation and a breakdown of the implementing costs.

The detailed budget is included in Annex 13 –

Cost of activities (1)	$12,000,000
Executing entity (2)	$962,959
Program Cost (1+2) (A)	$12,962.959
CAF Fee (B)	$1,037,037
Total financing request (A+B)	$13,999,996

Budget of activities

Output	Activity	Responsible entity	Beneficiary entity	Country	Budget description	Year 1	Year 2	Year 3	Year 4	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	$200.000	$67.700			**$267.700**	**$161.850**	**$161.850**	**$563.700**
		regional executing entity	ARG-URU	Argentina-Uruguay	tickets and travel expenses	$10.000	$46.000			**$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	regional executing entity	ARG-URU	Argentina-Uruguay	Training	$90.000	$50.000	$80.000		**$220.000**	**$120.000**	**$120.000**	
		regional executing entity	ARG-URU	Argentina-Uruguay	publication		$20.000			**$20.000**			

	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.	regional executing entity	ARG-URU	Argentina-Uruguay	consultant fee	$30.000	$12.000	$30.000		**$72.000**	**$41.400**	**$41.400**	**$238.800**
		regional executing entity	ARG-URU	Argentina-Uruguay	tickets and travel expenses	$5.000	$5.800			**$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	$60.000	$20.000	$38.000		**$118.000**	**$59.900**	**$59.900**	
		regional executing entity	ARG-URU	Argentina-Uruguay	tickets and travel expenses	$1.800				**$1.800**			
	Activity 2.3. Regional and subnational workshop addressing validation of the methodological guideline designed, and	regional executing entity	ARG-URU	Argentina-Uruguay	Training	$15.000	$4.200			**$19.200**	**$18.100**	**$18.100**	
		regional executing entity	ARG-URU	Argentina-Uruguay	publication			$17.000		**$17.000**			

	related capacity building/recordin g 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 Communication s and National Determined Contributions (NDCs) for Argentina and Uruguay.	Activity 3.1. Drafting up of adaptation indicators concerning Project activities linked to NDC.	regional executing entity	ARG-URU	Argentina-Uruguay	consultants fee	$20.000	$10.000			**$30.000**	**$18.750**	**$18.750**	**$100.000**
		regional executing entity	ARG-URU	Argentina-Uruguay	tickets and travel expenses	$5.000	$2.500			**$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	$40.000	$10.000			**$50.000**	**$31.250**	**$31.250**	
		regional executing entity	ARG-URU	Argentina-Uruguay	tickets and travel expenses	$8.000	$4.500			**$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	$30.000	$12.000	$32.000		**$74.000**	**$47.000**	**$47.000**	**$180.000**
		regional executing entity	ARG-URU	Argentina-Uruguay	publication			$20.000		**$20.000**			
	Activity 4.2. Design of a web platform to	regional executing entity	ARG-URU	Argentina-Uruguay	consultants fee	$30.000	$10.000			**$40.000**	**$43.000**	**$43.000**	

	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	sofware	$20.000	$20.000			**$40.000**			
		regional executing entity	ARG-URU	Argentina-Uruguay	tickets and travel expenses	$5.000	$1.000			**$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	$15.000	$10.000			**$25.000**	**$15.700**	**$15.700**	**$225.000**
		regional executing entity	ARG-URU	Argentina-Uruguay	publication	$3.000	$3.400			**$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	$15.000	$9.000			**$24.000**	**$109.300**	**$84.300**	
		regional executing entity	ARG-URU	Argentina-Uruguay	sofware / hardware	$80.000	$25.000			**$105.000**			
		regional executing entity	ARG-URU	Argentina-Uruguay	tickets and travel expenses	$5.000	$4.600			**$9.600**			
		regional executing entity	Entre Rios	Argentina	hardware/software/telecommunications equipment	$30.000	$25.000			**$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	$180.000	$36.000			**$216.000**	**$130.000**	**$130.000**	**$320.000**
		regional executing entity	ARG-URU	Argentina-Uruguay	tickets and travel expenses	$24.000	$20.000			**$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	$30.000	$20.000			**$50.000**	**$30.000**	**$30.000**	
		regional executing entity	ARG-URU	Argentina-Uruguay	publication		$10.000			**$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	$100.000	$500.000	$200.000	$100.000	**$900.000**		**$1.000.000**	**$4.850.000**
					tickets and travel expenses		$30.000	$20.000		**$50.000**			
					Training		$30.000			**$30.000**			
					Equipment Rental	$10.000	$10.000			**$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	$50.000	$100.000	$200.000	$50.000	**$400.000**		**$455.000**	
					tickets and travel expenses	$5.000	$10.000	$10.000		**$25.000**			
					Training		$10.000	$10.000		**$20.000**			
					Equipment Rental	$2.000	$7.000	$1.000		**$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	$100.000	$200.000	$200.000	$100.000	**$600.000**		**$645.000**	
					tickets and travel expenses	$5.000	$10.000	$5.000		**$20.000**			
					Training		$5.000	$5.000		**$10.000**			
					Equipment Rental	$5.000	$5.000	$5.000		**$15.000**			
	Activity 7.4. Environmentally sustainable hydrological management at the Esmeralda Stream – Resignification of the Esmeralda´s	CND	Fray Bentos	Uruguay	Works & Services	$10.000	$100.000	$100.000		**$210.000**		**$250.000**	
					tickets and travel expenses	$5.000	$5.000			**$10.000**			
					Training	$5.000	$10.000			**$15.000**			
					Equipment Rental	$5.000	$10.000			**$15.000**			

	neighborhood housing complex - Fray Bentos, Uruguay.												
	Activity 7.5. Risk prevention and evacuees care Centre. Bella Unión, Uruguay.	CND	CND	Uruguay	Works & Services	$68.000	$100.000	$100.000		**$268.000**		**$300.000**	
						$5.000	$5.000			**$10.000**			
							$10.000			**$10.000**			
							$12.000			**$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	$67.000	$100.000			**$167.000**		**$200.000**	
							$6.000			**$6.000**			
						$2.000	$10.000			**$12.000**			
							$15.000			**$15.000**			
	Activity 7.7. Protection and resignification of the Artaláz Stream Wetland. Colón, Argentina.	Executing unit Arg	Colón	Argentina	Works & Services	$50.000	$200.000	$600.000	$105.000	**$955.000**	**$1.000.000**		
					tickets and travel expenses			$20.000		**$20.000**			
					Training			$10.000		**$10.000**			
					Equipment Rental			$15.000		**$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		$200.000	$100.000	$655.000	**$955.000**	**$1.000.000**		
					tickets and travel expenses			$20.000		**$20.000**			
					Training			$10.000		**$10.000**			
					Equipment Rental			$15.000		**$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		$30.000	$80.000	$100.000	**$210.000**		**$250.000**	**$1.250.000**
					tickets and travel expenses			$10.000		**$10.000**			
					Training			$5.000	$10.000	**$15.000**			
					Equipment Rental			$5.000	$10.000	**$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	Concordía	Argentina	Works & Services	$160.000	$690.000	$100.000	$10.000	**$960.000**	**$1.000.000**		
					tickets and travel expenses			$20.000	$20.000	**$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	$90.000	$10.000	$10.000	$10.000	**$120.000**		**$150.000**	**$150.000**
					tickets and travel expenses			$2.000	$8.000	**$10.000**			
					Training		$1.000	$2.000	$7.000	**$10.000**			
					Equipment Rental			$2.000	$8.000	**$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				**$50.000**		**$200.000**	**$250.000**
					fund		$150.000			**$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	$20.000	$30.000			**$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		$10.000	$20.000	$10.000	**$40.000**		**$50.000**	**$200.000**
					tickets and travel expenses			$5.000		**$5.000**			
					Training			$5.000		**$5.000**			
		Executing unit Arg	Secretariat of Environment ER	Argentina	consultants fee		$10.000	$65.000		**$75.000**	**$150.000**		
					tickets and travel expenses		$5.000	$10.000		**$15.000**			
					Equipment Rental		$5.000	$10.000		**$15.000**			
					hardware/software/Satellite images		$10.000	$15.000		**$25.000**			
					Training			$20.000		**$20.000**			
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		$10.000	$65.000		**$75.000**	**$125.000**		**$2.212.500**
					tickets and travel expenses			$15.000		**$15.000**			
					Equipment Rental			$15.000		**$15.000**			
					Training		$10.000	$10.000		**$20.000**			
		CND	SNAP	Uruguay	consultants fee (infrastructure planning and design)		$10.000	$40.000		**$50.000**		**$408.417**	
					tickets and travel expenses			$15.000		**$15.000**			
					Training			$11.417		**$11.417**			
					Works & Services	$32.000	$50.000	$250.000		**$332.000**			

	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		$5.000	$25.000		**$30.000**		**$60.000**	
					tickets and travel expenses			$2.500		**$2.500**			
					Training			$2.500		**$2.500**			
					Supplies and equipment (for adaptation measures)			$20.000		**$20.000**			
					Equipment Rental		$5.000			**$5.000**			
	Activity 11.3. Restoration of vulnerable coastal ecosystems through monitoring of exotic species and planting of native species.	CND	SNAP	Uruguay	fees (crews coordination)		$50.000	$10.000		**$60.000**		**$500.333**	
					tickets and travel expenses		$5.000	$15.000		**$20.000**			
					Training		$4.000	$15.833		**$19.833**			
					comunication		$10.000	$10.000		**$20.000**			
					Equipment Rental	$10.000	$10.000	$40.000		**$60.000**			
					supplies and equipment (purchase and maintenance)	$80.000	$10.000	$230.500		**$320.500**			
		Executing unit Arg	National Parks	Argentina	consultants fee		$5.000	$5.000		**$10.000**	**$443.750**		
					tickets and travel expenses			$5.000		**$5.000**			
					Training		$5.000	$5.000		**$10.000**			
					purchase of inputs: plants and others	$18.750	$100.000	$300.000		**$418.750**			
	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	$5.000	$5.000	$10.000		**$20.000**	**$675.000**		
					tickets and travel expenses	$5.000		$5.000		**$10.000**			
					Training	$5.000	$10.000	$5.000		**$20.000**			
					purchase of inputs: plants and others	$125.000	$100.000	$400.000		**$625.000**			
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,	regional executing entity	ARG-URU	Argentina-Uruguay	consultants fee	$20.000	$10.000	$10.000		**$40.000**	**$35.000**	**$35.000**	**$200.000**
					tickets and travel expenses	$4.000	$2.000	$4.000		**$10.000**			
					Training	$4.000	$2.000	$4.000		**$10.000**			
					publication		$10.000			**$10.000**			

	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.	regional executing entity	ARG-URU	Argentina-Uruguay	consultants fee	$35.000	$25.000	$10.000		**$70.000**	**$65.000**	**$65.000**	
					tickets and travel expenses	$5.000	$5.000	$5.000		**$15.000**			
					publication		$10.000			**$10.000**			
					Training	$20.000	$15.000			**$35.000**			
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	$20.000	$20.000			**$40.000**	**$42.500**	**$42.500**	**$200.000**
					tickets and travel expenses	$10.000	$5.000			**$15.000**			
					Training	$10.000	$5.000			**$15.000**			
					publication		$15.000			**$15.000**			
	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	$20.000	$20.000	$25.000		**$65.000**	**$57.500**	**$57.500**	
					tickets and travel expenses	$5.000	$5.000	$5.000		**$15.000**			
					Training	$10.000	$10.000			**$20.000**			
					publication		$15.000			**$15.000**			
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	CND	Paysandú	Uruguay	consultants fee	$15.000	$50.000	$100.000		**$165.000**		**$200.000**	**$400.000**
					tickets and travel expenses		$15.000			**$15.000**			
					Training	$10.000	$10.000			**$20.000**			

	Paysandú, Uruguay.												
	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		$20.000	$140.000		**$160.000**	**$200.000**		
					tickets and travel expenses		$10.000	$5.000		**$15.000**			
					Training		$15.000	$10.000		**$25.000**			
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.	regional executing entity	ARG-URU	Argentina-Uruguay	consultants fee	$20.000	$40.000	$40.000		**$100.000**	**$150.000**	**$150.000**	**$300.000**
					tickets and travel expenses	$5.000	$5.000	$10.000		**$20.000**			
					Training		$70.000	$60.000		**$130.000**			
					publication		$50.000			**$50.000**			
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	$20.000	$20.000			**$40.000**	**$45.000**	**$45.000**	**$360.000**
					tickets and travel expenses	$5.000	$10.000			**$15.000**			
					Training		$10.000			**$10.000**			
					publication		$25.000			**$25.000**			
	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 good practices	regional executing entity	ARG-URU	Argentina-Uruguay	consultants fee	$30.000	$30.000			**$60.000**	**$90.000**	**$90.000**	
					tickets and travel expenses	$10.000	$10.000			**$20.000**			
					Training	$10.000	$90.000			**$100.000**			

	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.	regional executing entity	ARG-URU	Argentina-Uruguay	consultants fee	$25.000	$25.000			**$50.000**	**$45.000**	**$45.000**	
					tickets and travel expenses		$15.000			**$15.000**			
					Training		$25.000			**$25.000**			
					Total cost activities	**$2.359.550**	**$4.232.700**	**$4.204.750**	**$1.203.000**	**$12.000.000**	**$6.000.000**	**$6.000.000**	

Budget on the Implementing Entity management fee use:

Main categories	Budget
Financial administration of project funds and accounting services.	$250.000
Translations	$57.037
Project oversight. Including visits to project sites to verify quality of deliverables, and overseeing independent evaluations.	$250.000
Audits / Interventorias ($40000 USD per year)	$200.000
Independent Mid Term Review, Independent Terminal Review, Inception Report, Final Project Report, PPR (4 years 5.000), AF Environmental and Social and Gender Policy fulfillment.	$200.000
Technical support and backstopping by personnel from CAF.	$80.000
Total Implementation Entity	$1.037.037

Budget on the Executing Entities management fee use:

Executing entity	Country	Main categories	Budget
Regional Executing Entitiy (EE-C1y4)	Argentina y Uruguay	Financial administration of project funds and accounting services.	$80.000
		Project oversight. Including visits to project sites to verify quality of deliverables and overseeing independent evaluations.	$156.000
		Equipment and furniture	$7.200
		Miscellaneous expenses	$3.800
		Total Regional Executing Entitiy	**$247.000**
National Executing Entity in Uruguay (EE-C2y3-Uruguay)	Uruguay	Financial administration of project funds and accounting services.	$80.000
		Project oversight. Including visits to project sites to verify quality of deliverables and overseeing independent evaluations.	$268.180
		Equipment and furniture	$6.000
		Miscellaneous expenses	$3.800
		Total National Executing Entity in Uruguay	**$357.980**
National Executing Entity in Argentina (EE-C1y4)	Argentina	Financial administration of project funds and accounting services.	$80.000
		Project oversight. Including visits to project sites to verify quality of	$268.180

		deliverables and overseeing independent evaluations.	
		Equipment and furniture	$6.000
		Miscellaneous expenses	$3.800
		Total National Executing Entity in Argentina	**$357.980**
		Total Executing Entities	**$962.959**

H. Include a disbursement calendar with milestones.

YEAR	DISBURSEMENT	PERCENTAGE
Year 1	USD 2,799,999.1	20%
Year 2	USD 4,899,998.5	35%
Year 3	USD 4,899,998.5	35%
Year 4	USD 1,399,999.6	10%

	Cost of activities				Total Disbursement	%
	Year 1	**Year 2**	**Year 3**	**Year 4**		
Cost of activities	$2.400.000	$4.200.000	$4.200.000	$1.200.000	$12.000.000	86%
Executing entity	$192.592	$337.036	$337.036	$96.296	$962.959	8%
Implementation entity	$207.407	$362.963	$362.963	$103.704	$1.037.037	8%
Total	$2.799.999	$4.899.999	$4.899.999	$1.400.000	$13.999.996	
Percentage	20%	35%	35%	10%	100%	
Estimated Date	**1 August 2019**	**1 August 2020**	**1 August 2021**	**1 August 2022**		

PART IV: GOVERNMENT ENDORSEMENT AND CERTIFICATION BY THE IMPLEMENTING ENTITY

A. Record of government endorsement[29]

(Enter Name, Position, Ministry)	Date*: (Month, day, year)*
(Enter Name, Position, Ministry)	Date*: (Month, day, year)*
(Enter Name, Position, Ministry)	Date*: (Month, day, year)*

B. **Implementing entity certification**

I certify that this proposal has been prepared in accordance with guidelines provided by the Adaptation Fund Board, and prevailing National Development and Adaptation Plans (……list here…..) and subject to the approval by the Adaptation Fund Board, commit to implementing the project/programme in compliance with the Environmental and Social Policy of the Adaptation Fund and on the understanding that the Implementing Entity will be fully (legally and financially) responsible for the implementation of this project/programme.	
Name & Signature Implementing Entity Coordinator	
Date: *(Month, Day, Year)*	Tel. and email:

6. Each Party shall designate and communicate to the secretariat the authority that will endorse on behalf of the national government the projects and programmes proposed by the implementing entities.

Project Contact Person:
Tel. And Email:

ANNEXES:

Annex 1 – Acronyms and abbreviations

Annex 2 - Bibliography

Annex 3 – Project description sheets (Components 2 and 3)

Annex 4 – Consultation process

Annex 5 – Evidence-based identification of environmental and social risks

Annex 6 – Environmental and Social Management Plan

Annex 7 – Gender Evaluation and Action Plan

Annex 8 – Cost-Benefit Analysis

Annex 9 – Vulnerability Analysis

Annex 10 – Summary: Climate Risk Profiles- Cities

Annex 11 – Vulnerability Analysis-Coastal Ecosystems

Annex 12 – Terms of Reference for Implementing Parties

Annex 13 – Detailed Budget