



## ADAPTATION FUND

### REGIONAL PROJECT/PROGRAMME PROPOSAL

#### PART I: PROJECT/PROGRAMME INFORMATION

##### **Climate change adaptation in vulnerable coastal cities and ecosystems of the Uruguay River.**

Countries: Argentina Republic and Oriental Republic of Uruguay  
Thematic Focal Area1: Disaster risk reduction and early warning systems  
Type of Implementing Entity: Regional Implementing Entity (RIE)  
Implementing Entity: CAF – Corporación Andina de Fomento (Latin American Development Bank)  
Executing Entities: Ministry of Environment and Sustainable Development of Argentina and Ministry of Housing, Land Planning and Environment of Uruguay.

Amount of Financing Requested: 13.999.996 USD (in U.S Dollars Equivalent)

## Project / Programme Background and Context:

### 1.1. Problem to be addressed – regional perspective

1. The Project's implementation is focused on the lower Uruguay river's littoral area, specifically in the vulnerable coastal cities and ecosystems in both Argentinean and Uruguayan territories. The lower Uruguay river's littoral plays a main role being a structuring element for territorial balance since most cities and port-cities are located in it, with border bridges between the two countries (Fray Bentos – Gualeguaychú; Paysandú – Colón; and Salto – Concordia). The basin of the Uruguay river occupies part of Argentina, Uruguay and Brazil, with a total area of approximately 339.000 Km<sup>2</sup> and an average flow rate of 4.500 m<sup>3</sup> s<sup>-1</sup>. It's origin is located in Serra do Mar (Brazil), and runs for 1.800 Km until it reaches Río de la Plata. A 32% of its course flows through Brazilian territory, 38% forms the Brazil-Argentina boundary and a 30% forms the Argentina-Uruguay boundary.
2. The Project's area topography is characterized by a homogeneous landform without high elevations, creating meandric waterways, making it highly vulnerable to floods as one of its main hydro-climatic threats, which has been exacerbated by the effects of climate change (CC). (See additional maps on [Annex 3](#)).

<sup>1</sup> Thematic areas are: Food security; Disaster risk reduction and early warning systems; Transboundary water management; Innovation in adaptation finance.

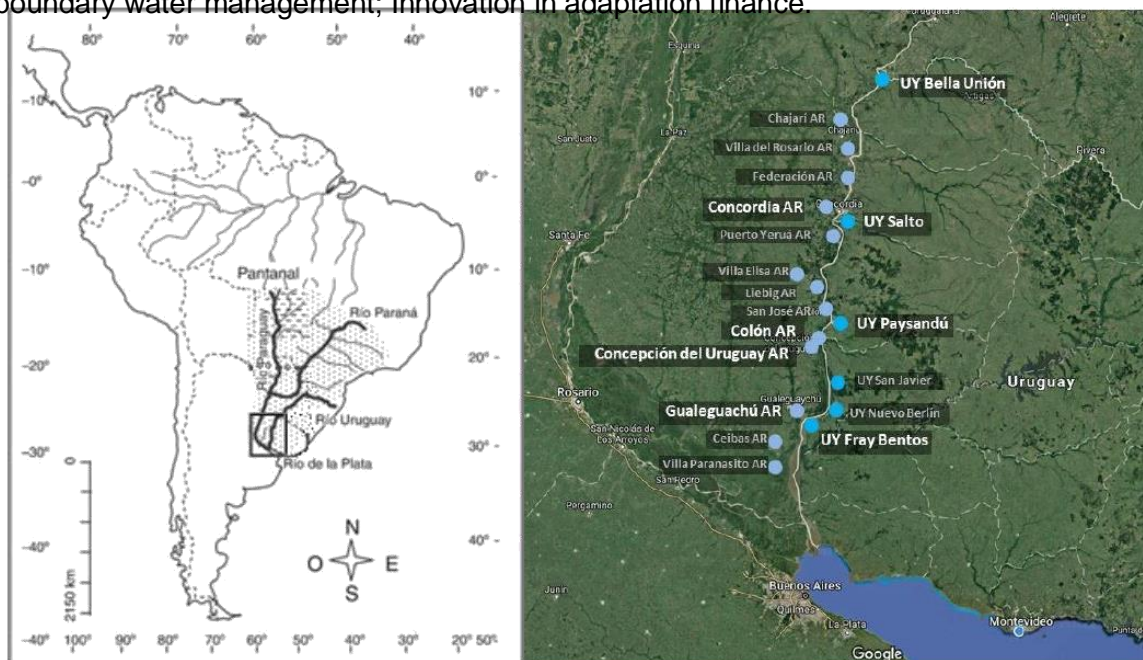


Figure 1. La Plata Basin and lower Uruguay river sub basin (Modified from Arzamendia 2015). Detail of vulnerable cities on both margins of the Uruguay river (Adapted from LANDSAT image-Copernicus 2017; -SIU NOAA, US Navy NGA-GEBCO).

3. On its middle course, the binational Hydroelectric Power Plant “Salto Grande” is located approximately 15 km North from Salto (Uruguay) and Concordia (Argentina) cities. This artificial dam is crucial for retaining water for power generation and also serves as regulating its flow in order to reduce the effects of high peak floods. The riverside constitutes a territorial structuring backbone in both margins which is valued from its socio economic, cultural, recreational and landscape point of view.
4. The Uruguay river and its littoral represents a ecological corridor that flows and connects both countries and it is also a natural entry for Argentina and Brazil’s tropical species (Misiones’ rainforest and Mata Atlántica respectively) to more temperate zones in the lower Uruguay’s basin. These characteristics (biodiversity, riparian forests and wetlands) make it of relevance for national and regional conservation. In the Argentinean side, the National Parks Administration (APN) has two Natural Protected Areas (NPA): El Palmar and Predelta National Parks with over 10.000 hectares of biodiversity conservation. On the other side, Uruguay has the Esteros de Farrapos Islas del Uruguay National Park and Algarrobales of the Uruguay río NPA with a total of 18.000 hectares. Both El Palmar and Esteros de Farrapos e Islas del Uruguay are part of RAMSAR convention for being wetlands of global relevance.
5. Due to the pressure on riparian forests in both Uruguay river’s margins, erosive processes are detected in different coastal areas as well as significant floods during extreme precipitations in the lower and upper river. In this context, the need of implementing restoration and adaptation measures based on ecosystems becomes fundamental in order to ensure buffering areas for floods regulation, natural and cultural resources provision and ecosystemic services.
6. The Region’s climate is temperate and wet while the lower Uruguay basin is located in areas with 2000 mm annual precipitations, with monthly average variations between 70 mm to 132 mm in Winter and Spring, provoking overflows with thirty to sixty days delays. Upstream of the Project’s area, the river presents numerous rapids, waterfalls and cliffs. South America’s tropical and subtropical areas are characterized by the South American Monsoon, a seasonal atmospheric circulating system in South America and adjacent oceans, that is conditioned by seasonal solar radiation that has a marked influence in the La Plata basin hydro-climatic regime, being that the well-defined annual rainfall cycle is one of its main characteristics, with reports of higher values during Summer and lower values during Winter.

*Table 1. Results for regional climate model ETA (10 Km) for future scenarios (compared to period 1961-1990). Results present a raise in temperature and precipitations for lower Uruguay river basin. Source: CIC*

Macro  Basin	Precipitation s			Temperature		
	Periods					
	2011-2040	2041-2070	2071-2100	2011-2040	2041-2070	2071-2100
Upper Paraguay	Decreases all year	Decreases DJF	Decreases DJF	Increases all year>2°C	Increases all	Increases all year>3°C

				DJF>3,5°C	year>3°C	DJF>4°C
<b>Lower Paraguay</b>	Decreases SOM-DEF	increases MAM	Increases MAM-SON	Increases all year>2°C	Increases all year>2,5 °C	Increases all year>2,5 °C
<b>Upper Paraná</b>	Decreases all year	Decreases DJF	Increases MAM-JJA- SON	Increases all year>2°C	Increases all year>2°C	Increases all year>2,5 °C
<b>Lower Paraná</b>	Increases MAM-DJF	Increases MAM-DJF	Increases MAM-DJF	Increases all year>2°C	Increases all year>2°C	Increases all year>2,5 °C
<b>Upper Uruguay</b>	Increases MAM-SON	Increases MAM-JJA- SON	Increases all year	Increases all year>2°C	Increases all year>2,5 °C	Increases all year>2,5 °C
<b>Lower Uruguay</b>	increases DJF	Increases JJA-DJF	Increases MAM-DJF	Increases all year>1°C	Increases all year>2°C	Increases all year>2,5 °C
<b>La Plata river</b>	Increases DJF	increases DJF	Increases MAM-DJF	Increases all year>1°C	Increases all year>2°C	Increases all year>2,5°C

7. Since the 70s, there has been an increase of mean annual precipitations in the project's area, which, on one hand expanded the agricultural frontier West of the perispheric traditional wet area, and on the other hand, gave place to permanent or transitory floods of a significant amount of productive fields as well as populated urban areas. There has also been a considerable increase of the rivers' flow rate, and even if this led to benefits for the hydroelectric sector, it also generated a greater frequency of floods and important socio economic disruptions. There has been also a considerable increase in the extreme precipitations rate in the region that was exacerbated during the 90s and has caused significant damages from floods, destructive winds and hail associated to these events. Additionally, the basin's hydrological system has been modified due to the reduction of infiltrating and water storage capacity in the soil system, a reduction of the volume of water stored in the underground layers due to erosion and compression due to urbanization, inadequate farming practices, afforestation with exotic species and deforestation of the natural vegetation causing an increase of floods during maximum precipitations and an increase of droughts during scarce precipitations. The integration of these factors leads to recurrent disasters caused by floods in the last decades, with an average rate of one or two per year.



8. The projected scenarios for climate change (CC) for this region are available in Argentina's Third National Communication on Climate Change (TCNCC Argentina, 2015<sup>2</sup>) and in Argentina's Climate Change Risk Maps National System (SIMARCC – <http://simarcc.ambiente.gob.ar>). Projections foresee a tendency to greater extreme precipitations, which could generate an increase in the overflows and floods rate and, by this, non planned migrations and resettlements, impacts on basic services and ecosystemic services, internal connectivity, access to health and education services, an increase in health risks caused by vectors and contamination, impacts on primary economic activities in peri-urban areas and touristic activity among others. Probable changes projected for period 2020-2040 by the Argentinean Sea and Atmosphere Investigation Centre (CIMA) with a high resolution climatic model and with results from various global climatic models, estimate that the high rate of extreme precipitations and floods in the current affected areas will continue with the corresponding negative impacts (physical, economic, social and environmental). In the TCNCC Argentina 2015, the increase of mean annual precipitations for the whole country (and especially in the Northeast and the perispheric area of the traditional wet region) as well as the increase of extreme precipitations in most of the East and Centre of the country are identified as priorities for the design and implementation of adaptation measures.
9. According to the studies developed for the Fourth National Climate Change Communication of Uruguay (CCNCC, Uruguay) based on most suitable global climatic models (CMIP5; IPCC 2013) and forced by RCP socio economic scenarios and the generation of climatic models AR5 (IPCC 2013), it is observed for Uruguayan territory for historic periods 1979-2005 and 2001-2014 that:
  - a. the evolution of the mean annual surface temperature has a similar behaviour until 2030 (+0.5°C) for both scenarios (RECP 4.5; RCP8.5), while for 2050 raises of +1.0°C have been estimated under RCP4.5 scenario and of +1.5°C under RCP8.5 scenario.
  - b. Regarding the evolution of mean annual precipitation in the country the study indicates that there will be light increases under RCP4.5 scenario with raises of +0.10 to 0.14 mm day<sup>-1</sup> for 2030 and of +0.15 to +0.20 mm day<sup>-1</sup> under RCP8.5 scenario for 2050.

<sup>2</sup> The Country Report for Argentina about the TCN CC to the UNFCCC (2015; 26). <http://unfccc.int/resource/docs/natc/argnc3s.pdf>.

10. "El Niño – South Oscillation" (ENOS), is a cyclic meteorological phenomena which is characterized by an increase in the sea temperature in the Equatorial Pacific and an inversion of the atmospheric circulation over the ocean. When these raises and variations exceed certain thresholds, El Niño activates its cycle, which can last over one year and expand its effects over a significant geographical spectrum, altering regional climatic regimes and causing regional floods, droughts and great rural fires. An ENOS event strength is characterized by two indexes: South Oscillation Index (SOI), which actual value is of -20 (as lower, as stronger); and the El Niño Oceanic Index (NOI), which value for December 2015-February 2016 quarter is of 2.2. In order to compare, in the last ENOS events, the NOI values for the same quarter of 1982/3 and 1997/8 were of 2.1 and 1.6 for 1991/2.

11. Projections indicate that there will be a decrease in the amount of days with frost, a significant amount of warm nights, an increase in the length of hot waves and an increase in the precipitation's intensity. The extreme events (rains, intense winds, storms, hail, etc.) will continue to become more frequent. According to global predictions, it is also expected for these events to become more frequent and intense with time.
12. Beyond Argentina and Uruguay's climate change projections developed in their National Communications and the climate change projections developed for the La Plata Basin, all of these already included in the Concept Note, other relevant studies confirm that future climate change projections increase flood risks in the Uruguay river due to larger mean and extreme flows because of higher rainfall means and extreme events: ECLAC with support from UKAID, AECID, EU, German and Danish cooperation, and IADB (Barros, Vicente "Hidrological scenarios of mean flows in the Uruguay river and the Paraná river", ECLAC 2013.) developed river flow climate change scenarios for the Uruguay river using PRECIS climate projections for temperature and rain. The flow scenarios indicated flow increases from 33% at the B2 emission scenario in 2016-2026 year period to 57% increase in the A2 emission scenario for the 2091-2100 year period in relation to the 1990-1999 year period. Another research performed by Inés A. Camilloni, Ramiro I. Saurral & Natalia B. Montroull in 2013 on "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) included the projections on the decadal frequency of daily events with water level above the evacuation threshold at Paso de los Libres for the B2 and A2 emission scenarios according to the VIC model forced with the unbiased PRECIS climate model outputs. The VIC model included the following Regional Climate Models: 1. RCM PRECIS INPE/CPTEC (Brazil), boundary: HadAM3P (B2, A2); 2. RCM PROMES Universidad de Castilla-La Mancha (Spain), boundary: HadCM3 (A1B); 3. RCM RCA Swedish Meteorological and Hydrological Institute (Sweden), boundary: ECHAM5 (A1B) 4. RCM RegCM3 Universidade de São Paulo (Brazil), boundary: HadAM3 (A1B); 5. RCM LMDZ Institut Pierre-Simon Laplace (France), boundary: LMDZ global (A1B). These hydrologic scenarios of the Uruguay River show an increase in the frequency of flooding events that by 2091–2100 almost double those of the reference period (1990–1999). Likewise, for some decades, floods are more frequent under the low emission scenario (B2) (2026–2035, 2046– 2055 and 2091–2100) than for the highest one (A2).

## **1.2. Problems to be addressed – local perspective**

13. In both countries, 90% of the population lives in populated areas, and the main cities have a littoral location. Usually these lowlands are inhabited by highly vulnerable populations, with low income, poor housing conditions and scarce access to basic services. Floods negative effects have been, in most cases, exacerbated in addition the complex social conditions by the inadequacy of infrastructure and the built environment to new climatic conditions.
14. Floods originated by river overflows are one of the most pressing problems in littoral cities. They are related to the Uruguay river's own hydrodynamic as well as to socio territorial aspects that relate to the existing vulnerability and exposure levels, enhancing the events' severity.

15. Since severe storms and floods became more frequent, with greater effects on people, infrastructure damages and economic losses; it is utmost important to organize and orientate the adaptation process locally and regionally through policies and plans that consider CC perspectives and communities' and ecosystems' vulnerability. Floods cause great disturbances in regional economies and in the socio cultural development of the affected cities. In this sense, it is relevant to strengthen disaster risk management focussing on prevention and early warning, the adaptation of housing and urban infrastructure with sustainable characteristics and resilient to the new climatic circumstances.
16. During the last decades, Latin America has undertaken a progressive urbanization process and an acceleration of migration which have determined a significant increase in urban and peri urban population living in marginal areas. Concurrently, greater mobility between countries and regions facilitated an increase in the sanitary events incidence among vulnerable populations, especially of climate change and variability associated diseases. Example of this are vector-transmitted diseases (dengue, chikungunya, zika and yellow fever) due to an increase in the distribution areas and favourable habitats for insect populations' development related to changes in the temperature, relative humidity and precipitations in the region.
17. Moreover Natural Protected Areas (NPA) and their biodiversity, face numerous climate change associated problems. Main impacts are caused by habitats loss (especially in riverine coastal areas), changes in specific climate conditions required by species, poor connectivity of natural areas due to productive development, exotic species invasion and the effects of extreme climatic events. Therefore, NPA's management under a CC scenario faces important challenges, such as institutional capacities development, habitats fragmentation reduction and big scale connectivity maximization, promotion and management of buffering zones among these areas and fostering stakeholders' equitable participation in their management.

### **1.3. Social, economic and environmental context**

18. In both countries, a high percentage of the population inhabit populated locations, especially those with littoral locations. Even if most of these cities were founded in lower risk high areas, further expansions have frequently occupied littoral areas and low lands. Most of these lands have been occupied by highly vulnerable communities. Damages from intense precipitations and floods by river's overflows have been exacerbated by inadequacy of infrastructure and the built environment to the new climatic conditions.
19. The Project's area is particularly sensitive to extreme events such as droughts, floods, hot and cold waves, strong winds, hail, strong rains and severe storms. ENOS raises the higher magnitude precipitations probability to those recorded historically for the same period in the region.
20. In Uruguay, ENOS can be particularly noticed on the country's North and Norwest. Especially during Spring and Autumn, ENOS increases the probability that rains become of higher magnitude regarding historic data for the same period. In Argentina, ENOS starts on September and ends on the following year's midterm, provoking extraordinary overflows of La Plata basin's rivers. This fact

leads to regional long term floods with significant social, economic impacts, especially in provinces like Formosa, Chaco, Santa Fe, Buenos Aires, Misiones, Corrientes y Entre Ríos, were more than 90% of the population lives and more than a 70% of the county's GDP is generated.

21. Climate related disasters have taken a big toll in both Argentina and Uruguay. During 1970-2015 Argentina was affected by 97 mayor disasters (EM-DAT, 2016), beign 93% of them of hydro climatic origin (floods and landslides caused by strong rains), affecting 14 million people and causing US\$ 10 million losses. In Uruguay, hydro-meteorological events represent 73% of the National Emergency System's (SINAE) actions. Littoral floods are the most frequent affecting more than 65.000 people that had to be evacuated during the last 10 years.
22. The vulnerability of the population to Uruguay river's coastal cities have increased and their current socio economic conditions with visible impacts on housing and urban infrastructure are clear evidence. Between November 2009 and February 2010, the region was severely affected by El Niño phenomenon (ENOS), leading to considerable floods such as in November-December 2009 which impacted Uruguay river's basin and affected Uruguay's North and littoral areas, especially Artigas, Salto and Paysandú cities. During Summer 2014 (January-February), rainfall exceeded monthly averages on a 150-350%, activating an emergency situation regarding social and sanitary conditions as well as agriculture and roads which lead to the allocation of 1% of public expenditure to face the emergency in orderto start up an agricultural emergency fund, road repairing and other economic measures for different affected sectors.

In Annex maps is presented estimated number of people, homes and houses affected by floods

23. On 2015, between 5 and 15 % of Artigas, Paysandú and Salto's population (approximately 23.000 people) had to be evacuated due to the river's overflow floods. This situation also required human and economic resources to attend the emergency and early recovery. On 2016, floods left thousands of displaced people in departments such as Paysandú, and during 2017 more than 4.292 people were displaced for the Uruguay river's littoral.
24. During 1960-2010, precipitations increased in almost all the Argentinean territory, with inter annual and inter decade variations. Greater raises were recorded for the country's East with a 200 mm increment in some areas. Between December 2015 and April 2016, 8.340 people were affected by rains and storms and 19.840 were affected by floods from river overflows.
25. Extreme precipitations have caused recurrent floods in the upper and lower Uruguay river. In addition, erosive processes in its margins due to the pressure held on riparian vegetation (deforestation, agriculture, and urbanization) increase the regional ecosystem's vulnerability.
26. During the last decade Uruguay developed a robust nationwide process to prepare flood risk maps in flood prone cities, this process is leaded by the National Water Directorate (DINAGUA) of the Ministry of Housing, Land Planning and Environment, these maps are prepared working in coordination with Departmental Governments. These flood risk maps follow an specific methodology that includes observed flood recurrence levels (for example using the 100 year period to define high risk threats) and also socio-economic data in relation to vulnerabilities, some maps also include quality of housing data. The flood risks maps are included into local land planning process to provide basis for land management strategies. The flood risk maps are based on hydrological threats information that includes: historical flow and rain series that are statistically

adjusted and that consider historical registries of extreme flood events. Current flood risk maps in Uruguay DO NOT consider climate change scenarios, since there are no specific climate change river flow and level scenarios performed at urban scale yet in Uruguay, however these flood risk maps do include methodological updating mechanisms that allow for adjustments to include new hydrological information and land use changes.

#### **1.4. Long term adaptation actions in the public policy framework**

27. Both national governments and the subnational government of the area consider necessary to present a regional Project to the Adaptation Fund (AF) that focuses on the lower Uruguay river and its influence area. Uruguay river played a significant role in both countries' development and the increase of precipitations have lead to social and land management problems that need to be supported by adaptation measures that increase the resilience of the vulnerable coastal urban areas and ecosystems from a regional perspective and in front of a rising vulnerability to CC effects scenarios.
28. Considering their riverside location, their population's characteristics and existing precedents, the following vulnerable cities and ecosystems are considered as priorities for this Project since they present high flood risks and require effective and sustainable solutions in order to increase their resilience and adaptation capacity to face CC:

##### *In Oriental Republic of Uruguay:*

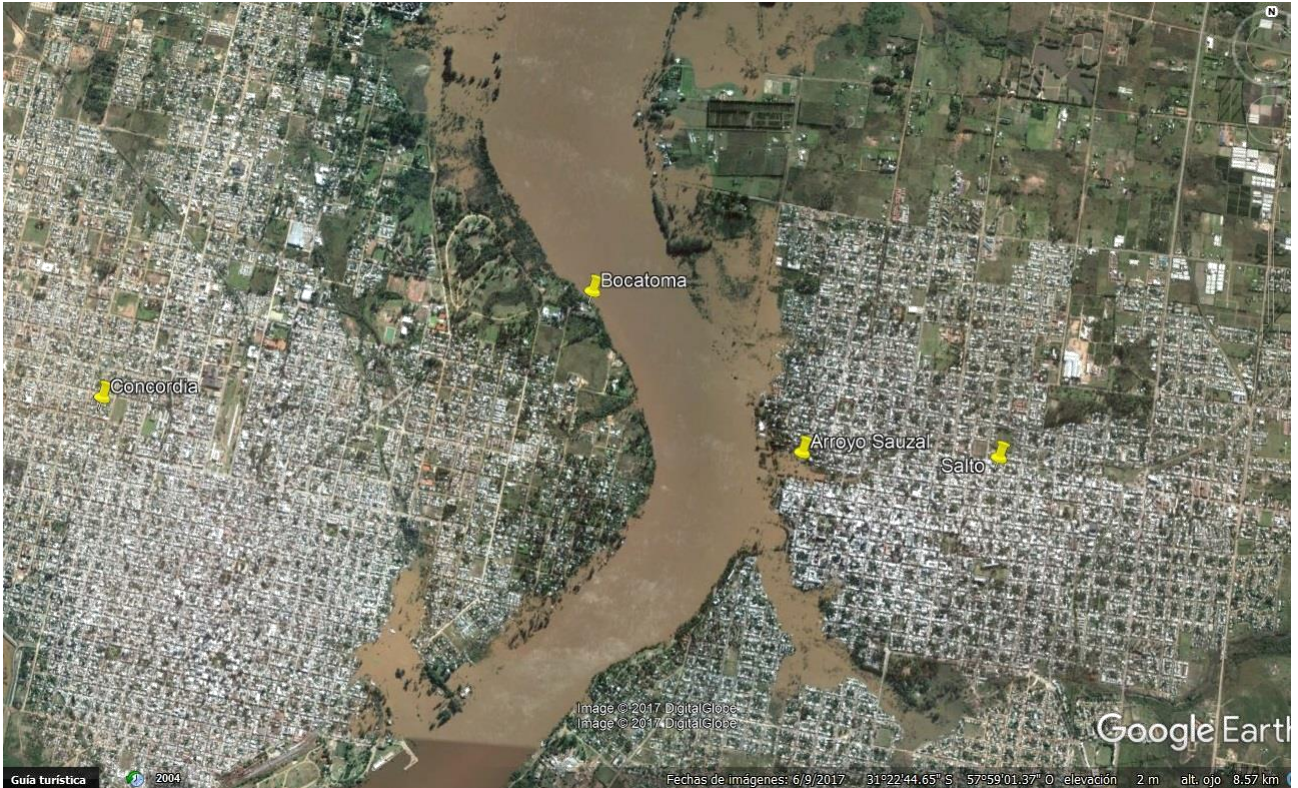
- a) Bella Unión and Rincón de Franquía National Protected Area, Artigas Department (with a 18.406 population in 2011);
- b) Salto, Salto Department (with a 104.028 population in 2011);
- c) Paysandú, Paysandú Department (with a 76.429 population in 2011);
- d) San Javier and Nuevo Berlín (with a 26.283 population in 2011), and Esteros de Farrapos e Islas del Uruguay National Protected Area, Rio Negro Department.
- e) Fray Bentos, Rio Negro Department (with a 24.406 population in 2017).

##### *In Argentinean Republic:*

- f) Concordia (with a 152.282 population in 2010);
- g) Colón (with a 24.835 population in 2010),
- h) Concepción del Uruguay (with a 82.729 population in 2010),
- i) Gualeguaychú (with a 102.421 population in 2010);
- j) San José (with a 18.178 population in 2010),
- k) Federación (with a 17.547 population in 2010)
- l) Ibicuy (with a 4900 population in 2010)
- m) Villa Paranacito (with a 4210 population in 2010)
- n) El Palmar National Park, all in Entre Ríos Province.

29. National Protected Area of Rincón de Franquía in Uruguay, forms part of the National Protected Areas System (SNAP) since 2013. It is located in the Norwest border of Artigas department, in the Uruguay and Cuareim rivers confluence, North of Bella Union with a 12.200 population, being the second most populated city in Artigas Department, considering perispheric neighbourhoods and populated centres the population raises to 18.406 people.

30. Through an environmental assessment in Concordia city, the deterioration of services infrastructure (sewage, potable water, among others), as well as a critical relationship between urban and natural areas due to an inadequate waste management have been determined along with the careless management of streams, Uruguay river's riverside, coastal erosion processes and the challenges for evacuating water excess. In this framework coastal protection measures are proposed where the water intake and water treatment plant for the whole city are located (152.282 people in 2010). There is a permanent severe erosion process in this area which is exacerbated with every Uruguay river's overflow.



*Photo 1: Concordia (Argentina) – Bocatoma's City Affected (Water Input for City Affected) – Salto (Uruguay) Urban pattern modified by floods in Arroyo Sauzal in Salto City. September 2017 (Google Earth)*





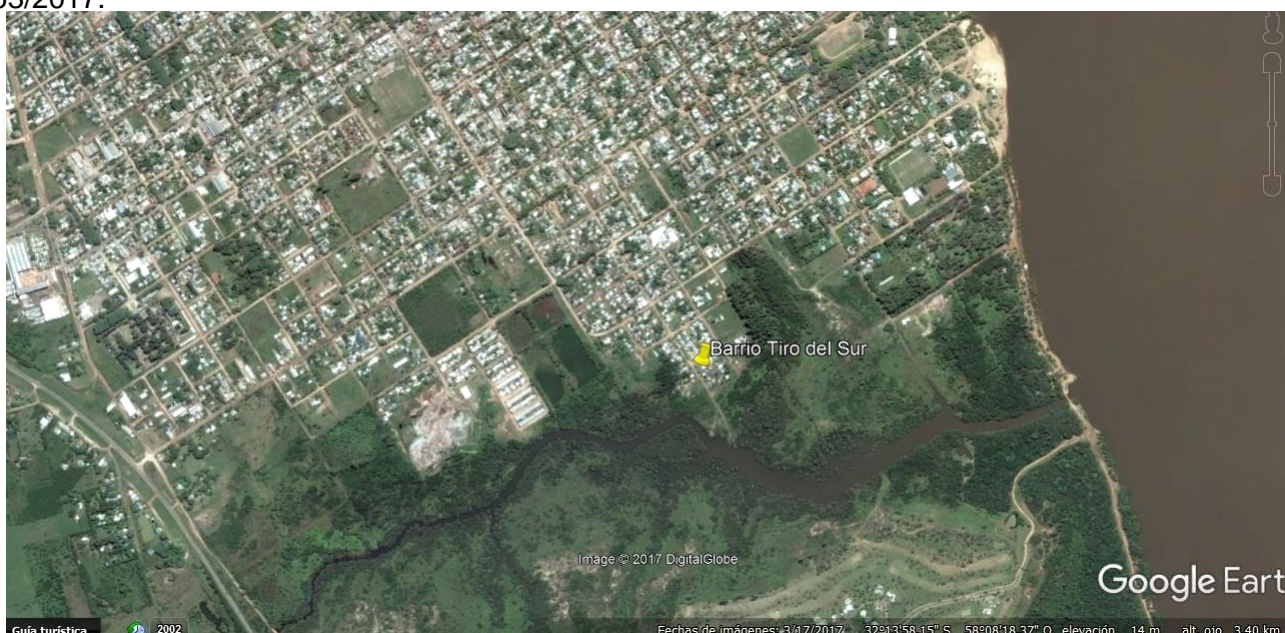
Photo 2: Concordia (Argentina) – Bocatoma's City Affected (Water Input for City Affected). Uruguay River Eroded. Visit December 2017. (Project Team Photography)

31. For Salto city, the implementation of the “Urban Water Plan for Salto” and the development of a city’s risk map are envisaged. Also, the improvement and resignification of the floodable river side by the implementation of “Sauzal Linear Park” is considered, creating a new recreational space for the community and preventing new informal occupation.



Photo 3: Salto (Uruguay) – Red line shows inundation level). Visit December 2017. (Project Team Photography)

32. In Paysandú, a portion of the population is occupying irregular settlements. The river level for Paysandú is 9.10 m, that means more than three meters from the security height of 5,5 m. The selected locations for adaptation measures implementation are Union Portuaria and Barrio Ledesma settlements, both characterized by a great social vulnerability population, with families that have settled in these areas a long time ago. The resignification of both neighbourhoods relocation locations is envisaged, were a housing plan is in course and relocation stages in relocations zones. Also, the development of a revolving fund to adapt mid risk housing in the Port area and the implementation of measures in the urban stream of “Curtiembre Wetlands” and the mouth of the Sacra stream.
33. Regarding Colón city, the proposed activities include resignifying vacant areas in order to transform them into recreational, tourism and environmental education spaces, among others establishing a buffer area for water storage associated to a protected area (Artaláz stream, San José neighbourhood and riverside paths) which is annexed to the Municipal Ecologic Reserve Parque Río de los Pájaros, launched by civil society and formalized by Municipal Ordinance 53/2017.



*Photo 4: City of Colón (Argentina) – Tiro sur Neighborhood impacted by flooding. (Google Earth)*

34. El Palmar National Park is located in Entre Ríos province's Centre-East, with an 8.500 hectares surface, where an association of Yatay palms and grassland are predominant. The protected area belongs to the Espinal eco-region, with some typical communities and species from Pampean grasslands and Paraná forest. It was declared a RAMSAR site on 2011.
35. Esteros de Farrapos e Islas del río Uruguay National Protected Area constitutes a system of fluvial wetlands, islands and islets that flood temporary or permanently due to the Uruguay river's overflows. It has an extension of 17.000 hectares and was declared as part of RAMSAR

convention in 2004. Nuevo Berlin settlement is in its South border and San Javier settlement is in its North border.

36. Exchange and joint learning activities have been developed between both the El Palmar National Park and the Esteros de Farrapos e Islas del río Uruguay National Protected Area's staff and relevant stakeholders. Progress on the development of a Binational Park as a biological ecosystem corridor from a regional and local scale is considered as well as rethinking measures that tend to native revegetation and exotic species management. Work is being coordinated on adaptive measures, including the development of different census, base line data and maps integrating both rural and urban areas in a comprehensive manner. Also the protection of Jesuit Ruins located in El Palmar National Park has been identified as an strategic measure in order to prevent further damage and collapse risks due to coastal erosion.
37. For San Javier and Nuevo Berlín settlements the design and implementation of a management and use strategy for the catchment basin to Esteros de Farrapos and these towns is proposed. Such strategy supposes an adaptation measure for intensive and extensive productive
38. activities in the area (afforestation, dry farming, milk parlours, bee keeping and fishing) and their associated lifestyles. This will also contribute to solving environmental conflicts such as the MEVIR housing project's biological oxidation lagoons in Nuevo Berlín and San Javier that are located in floodable areas. Recovery and protection measures (design and implementation) are proposed for the coast, including coastal ecosystems and existing archaeological sites in Esteros de Farrapos, Nuevo Berlin and San Javier.
39. The adaptation of both accesses to San Javier is critical since they remain unusable during Uruguay's river and tributaries' overflows, as well as the design and implementation of storm drainage and public spaces for low areas in the future growth sections of the city.
40. For Concepción del Uruguay the intervention of El Gato stream's mouth into El Molino stream was identified within the Uruguay river flood plain in order to prevent future settlements and to enhance storage and drainage functions of an extensive urban area. This will take place once the North Defence, now in construction, is finished and includes Cantera 25 de Mayo and San Isidro neighbourhoods among others. This area is located close to the town's civic centre (almost 9 blocks away) where neglected neighbourhoods have settled without access to basic public services such as drinking water and sewage and that are affected with overflows of over 5,5 meters (being the borders of El Gato stream the first to be evacuated during these events).





Photo 5: Colón (Argentina) – Red line shows inundation level). Visit December 2017. (Project Team Photography)

41. Fray Bentos, the capital city of Rio Negro department has also been selected for this Project. It is located on the Uruguay river's East margin, has an strategic port and is connected to Entre
42. Ríos province in Argentina by the Libertador General San Martín bi national bridge, it has a population of 24.406. The city has an internal stream, that is tributary to the Uruguay river and is often flooded in relation to macrodreinage flows.
43. Gualeguaychú is the head city of Gualeguaychú Department and has a 7.086 m2 surface. It is located Southeast of Entre Ríos province and has an area of extensive beaches on the Gualeguaychú and Uruguay rivers, South of the city. It has an 83.116 population (2010) and it is included in the global activities of the Project. In this city, coastal neighbourhoods and those located near the port suffer the greater impacts, even though losses and damages exceed these areas due to the affectation on the touristic sector during overflow periods.
44. San José is located very near from Colón, and is exposed to the same phenomena, but suffers from lighter effects. Uruguay River Administrative Commission (CARU) has declared high contamination indexes for the river in this area, due to the lack of sewage treatment plants, and the use of agrochemicals from the farming sector.

45. In these coastal towns, and in some smaller ones such as Federación and Islas del Ibicuy, actions from different components and products will be developed, such as land management plans, risk management with a CC perspective, damage and loss assessment, early warning system (EWS), vulnerability analysis and reduction and social risk perception identification for resilience construction, as well as communication and education activities.
46. In the overall framework, the Project aims to promote the Nationally Determined Contributions (NDC) and the Adaptation Communications presented by Argentina and Uruguay under the Paris Agreement, especially those regarding actions and capacities strengthening to face CC impacts and increase resilience regionally and locally.
47. Uruguay's interest on mainstreaming CC into public policies has been made evident through different institutional measures and capacity building for public managing and decision making. Particularly on 1994 the Climate Change Unit was created, now Climate Change Division, within the Ministry of Housing, Land Planning and Environment (MVOTMA) that has operative and executive functions regarding CC. On 2000, through the General Environment Protection Act number 17.283, MVOTMA was designated as the competent national authority for the's domestic implementation of the United National Framework Convention on Climate Change (the Convention). Another significant milestone in the institutional development and strengthening was the creation of the National Climate Change and Variability Response System (SNRCC) by Executive Decree number 238 in 2009, for coordinating and planning the public and private actions necessary for CC risk prevention, mitigation and adaptation. It is the SNRCC who develops the National Climate Change Response Plan which was published on January 2010 and the Climate Change National Policy during 2016. SNRCC has two different working areas: the Coordination Group and the Advisory Commission. The Coordination Group is chaired by the MVOTMA, and vice-presidencies are in charge of the Ministry of Livestock, Agriculture and Fisheries and the Planning and Budget Office. The Coordination Group is also conformed by the Ministry of Industry, Energy and Mining, the Ministry of Foreign Affairs, the Ministry of Public Health, the Ministry of Tourism, the Ministry of National Defence, the Ministry of Economy and Finance, the Congress of Mayors and the National Emergency System. Also the Ministry of Social Development, the Ministry of Education and Culture, the Ministry of Transport and Public Works, the Uruguayan International Cooperation Agency and the Uruguayan Meteorology Institute have previously participated or participate as guests of the Coordination Group. The Advisory Commission is organized in working groups formed by technicians of the Coordination Group organisms as well academics and representatives of the private sector and the organized civil society. More recently, in 2015, Law 19.355 by its Article 33, created the Presidency's National Environment, Water and Climate Change Secretariat (SNAACC) and in 2016 by Executive Decree 172, such Secretary was regulated and the National Environmental System (SNA) was created to strengthen, articulate and coordinate Uruguay's public policies in order to protect the ecosystem's services and assets and increase climate change adaptation (CCA) among others. The SNA gathers the Environmental National Cabinet representatives (also created by Executive decree 172), the SNAACC, the water public agency – Obras Sanitarias del Estado –, the Uruguayan Meteorological Institute, the SNRCC and the National Emergency System. The Environment National Cabinet is formed by the President of the Republic and the Ministers of MVOTMA; of Livestock, Agriculture and Fisheries; Energy and Mining; National Defence; Public Health and Economy and Finance.

48. From the conservation perspective, by the Act number 17.234 from 2000 Uruguay created the National Protected Areas System (SNAP), with the objective to unify planning and management criteria for protected areas, under determined categories, with a unique regulation that states planning guidelines. Its specific objectives are the biological diversity and ecosystems protection (...), natural habitats protection, (...), especially those indispensable for the survival of endangered species, preserve singular samples of natural and cultural landscapes, among others. Besides, Uruguay has assumed multiple compromises regarding biodiversity conservation and ecosystem protection being a State Party to the Biological Diversity Convention (BDC) subscribed on 1992 and ratified by Act number 16.048 in 1993. On the other hand, the Land Management and Sustainable Development Act number 16.048 of 2008 established a general regulation framework for land management and sustainable development which includes the identification of risk zones in human settlements, the management instruments and procedures to design and adopt territorial plans and programs as well as projects with territorial incidence. This Act states that land planning instruments should orientate future urban development towards non floodable areas, identified by the pertinent state organisms in water management. Also, the Act number 18.610 on National Water Policy defines priorities regarding the comprehensive water management with a hydrographical basin approach and contemplates the definition of plans and programs for floodable zones. Finally, in 2009 the National Emergency System was created with permanent nature for the people, significant assets and environment's protection before the probability or occurrence of disasters, by means of the State's joint coordination with the appropriate use of public and private available resources, in order to foster national sustainable development.
49. On the other hand, Argentina Republic has ratified the Convention by Act number 24.295 on June 1994. Later, it ratified Kyoto Protocol by Act number 25.438 in 2001. Argentina's Ministry of Environment and Sustainable Development (MAyDS) was designated as enforcement authority of this Act by Presidential Decree 2213/2002. In the other hand, in 2016, by Decree 891 the National Cabinet of Climate Change (GNCC) was created within MAyDS in order to articulate CC policies and create awareness on its relevance within society. The Cabinet is chaired and coordinated by the Cabinet of Ministries which is integrated by 17 Ministries (Energy, Transport, Agro industry, Environment, among others). Provinces are represented through the Federal Council for the Environment (COFEMA), considering that natural resources belong to their jurisdiction. Each government organism, through its higher authority, has designated a head member (no lower than National Director) and an alternate, who represent their respective agendas (national and provincial) in the Committee meetings. On the other hand, Argentina recently in 2017, created the National System for Comprehensive Risk Management (SINAGIR) to strengthen and optimize the actions for risk reduction, crisis management and reconstruction. The system's consolidation will contribute to the Project's achievements sustainability in the country.
50. In this context, the Project will pursue the different related institutions and organizations participation, including those public, private, academic and from the civil society, through interinstitutional and inter sectorial spaces for both countries.



## **1.5. Project / Programme Objectives:**

### **General Objective:**

51. The Project aims to build resilience in the vulnerable coastal cities and ecosystems of the Uruguay river, both in Argentinean and Uruguayan territories, by developing instruments, tools and experiences for adaptation planning and implementation as well as managing climate change and variability impacts and risks.

### **Specific Objectives:**

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

## 1.6. Project Components, Outcomes, Outputs And Budget

Project's components	Expected Outcomes	Expected Outputs	Output Budget	Component Budget
<b>1. Territorial adaptation and flood risk management policies, plans and instruments</b>	i) National and sub national governments have been strengthened by tools developed, experiences exchanged and CC inclusion in their planning and management instruments.	1. Land management plans, Protected areas management plans and housing and water programs, in revision or in progress, include the CC perspective.	USD 900.000	<b>USD 2.000.000</b>
		2. Methodological guides have been designed for impact, damages and losses assessment.	USD 100.000	
		3. Project's adaptation results have been included in the monitoring mechanisms of the Adaptation Communications and National Determined Contributions for Argentina and Uruguay.	USD 100.000	
		4. Strategies and best practices regarding adaptation, risk management, land planning, territorial police, housing infrastructure adaptation and vacant land recovery have been shared binationally.	USD 100.000	
	ii) Risk management sub national strategies have been strengthened and flood's early warning systems (EWS) have been developed in a coordinated manner.	5. A flood's EWS has been consolidated.	USD 200.000	
		6. Update and implementation of Regional Disaster Risk Management Plans have been supported including CC perspective.	USD 600.000	
<b>2. Priority measures to increase flood prone cities' resilience.</b>	Resilience in coastal cities has been increased by the implementation of structural and	7. Vulnerable vacant land from resettlements has been recovered and re signified to prevent informal re occupation.	USD 5.000.000	<b>USD 6.000.000</b>

Project's components	Expected Outcomes	Expected Outputs	Output Budget	Component Budget
	non structural adaptation measures.	8. Technical assistance and sustainable urban and public services infrastructure have been implemented in new resettlements on secure land.	USD 500.000	
		9. Solutions have been design and financial mechanisms have been implemented to promote CCA in mid risk housing and commercial buildings.	USD 500.000	
<b>3. Priority measures for adaptative conservation of vulnerable coastal ecosystems.</b>	iv) Adaptative conservation measures have been implemented in vulnerable ecosystems on both margins of the Uruguay river including their ecosystemic services identification and assessment.	10. Ecosystemic services and co benefits have been identified and assessed, including CCA and Uruguay river's ecosystems connectivity.	USD 500.000	<b>USD 3.062.000</b>
		11. New ecosystem-based adaptation measures have been designed and implemented.	USD 2.562.000	
<b>4. Priority measures for increasing social resilience.</b>	v) Communities and social organizations have incremented their resilience based on CCA and on hydro climatic disaster risk management framework	12. Social vulnerability monitoring and assessment tools have been developed with a human rights, gender and generations approach.	USD 200.000	<b>USD 1.400.000</b>
		13. Social risk perception assessments, have been implemented for resilience building.	USD 200.000	
		14. Assistance and labour reconversion strategies have been promoted for vulnerable population.	USD 400.000	
		15. Social networks have been strengthened by exchanging best practices on CCA, and local risk management strategies	USD 300.000	
		16. Communication, education and dissemination strategies have been implemented for vulnerability reduction.	USD 300.000	

5. Project/Programme Execution cost (A)	USD	500.959
6. Total Project/Programme Cost (B)	USD	12.462.000
7. Project/Programme Cycle Management Fee charged by the Implementing Entity (8% * (A+B))	USD	1.037.037
<b>Amount of Financing Requested</b>	<b>USD</b>	<b>13.999.996</b>

### 1.7. Projected Calendar:

Milestones	Expected Dates
Start of Project/Programme Implementation	March 2019
Mid-term Review (if planned)	September 2021
Project/Programme Closing	February 2024
Terminal Evaluation	December 2023

## II: PART PROJECT / PROGRAMME JUSTIFICATION

### A. Project Components.3

#### COMPONENT 1: Territorial adaptation and flood risk management policies, plans and instruments

The Project's implementation area is the lower Uruguay river's littoral, focusing on vulnerable coastal cities and ecosystems, especially regarding floods, both on Argentinean and Uruguayan sides. A high percentage of the population inhabits coastal cities where most vulnerable socio economic communities occupy high flood risk areas and face intensification of extreme events due to CC. National and sub national governments have achieved some progress in including CC perspective and climate scenarios. It is imperative to orientate adaptation processes in the Uruguay river basin by strengthening public policies and planning instruments considering CC, in cities, communities and ecosystems, as well as in the integrated risk management and early warning systems.

**Outcome i)** National and sub national governments have been strengthened by tools developed, experiences exchanged and CC inclusion in their planning and management instruments.

**Output 1.** Land management plans, protected areas management plans and housing and water programs, in revision or in progress, include the CC perspective.

Public policies instruments will be reviewed and updated for the inclusion of CC perspective and integrated risk management in the Uruguay river lower basin, involving local governments and key stakeholders. The unification of criteria integrating CCA and climatic risk management perspective in land planning will be achieved by means of training and consultancy. In parallel, training for public managers and members of local legislative areas on analyzing, modifying, observing, authorizing or rejecting planning instruments, is envisaged.

**Activity 1.1:** Analysis, review and update of the different public policy instruments on a territorial scale (protected areas, housing, water, health, risks, etc.) incorporating CC perspective and integrated disaster risk management for the implementation of adaptation measures in the basin by generating technical working groups.

**Activity 1.2.** Workshops for subnational and provincial governments focusing on analysis, review and update of different land management and coastal ecosystems administration instruments.

**Activity 1.3.** Training workshops for local legislative officials integrating CCA and risk management concepts into land management plans.

**Activity 1.4.** Workshops with community participation, focused on the development, revision and/or validation of the local and sectorial plans in order to incorporate strategies to build resilience considering climate scenarios

***Output 1 inputs and budget:*** 20 technical meetings and 20 participative workshops, 10 technical documents developed and approved, four climate change specialists consultants in climate change, land planning, risk and environment managing for sub national technical assistance. USD.900.000.

**Output 2.** Methodological guides have been designed for impact, damages and losses assessment.

This tool will enable economic, social and environmental impact identification and assessment regarding severe climate events in the project's locations. This will contribute to identifying priority adaptation actions for improving risk management in its different stages, and to increment socio ecosystem resilience.

**Activity 2.1** Precedents, experiences and documents analysis for designing a methodology for gathering and systemizing data and information regarding impacts, damages and losses as consequences of severe climate phenomena, for their report, evaluation and adaptation actions prioritization.

**Activity 2.2** Development of a methodological guide based on the analysis performed in Activity 2.1, for severe climate impacts report and evaluation and for prioritizing adaptation actions in both margins of the Uruguay river.

**Activity 2.3** Regional workshop for validating the methodological guide and indicators definition, required for its effective implementation in the project's communities.

**Activity 2.4** Subnational training workshops on methodological guide's implementation for local authorities and technicians.

**Output 2 inputs and budget:** One consultancy for methodological guide design and development, one regional workshop and four sub national training workshops. USD 100.000.-

**Output 3.** Project's adaptation results have been included in the monitoring mechanisms of the Adaptation Communications and National Determined Contributions (NDC) for Argentina and Uruguay.

**Activity 3.1** Adaptation indicators development, for the project's activities regarding NDC and Adaptation Communication.

**Activity 3.2** Indicators' monitoring and report of the project's activities in both countries.

**Output 3 inputs and budget:** One binational consultancy for monitoring and follow-up. USD 100.000 .-

**Output 4.** Strategies and best practices regarding adaptation, risk management, land planning, territorial police, housing infrastructure adaptation and vacant land recovery have been shared binationally.

Binational exchange will focus on CCA capacities, resilience building and vulnerability reduction for local governments and communities. This represents an opportunity to install a coordinated approach through training and exchange spaces for knowledge, best practice experiences and lessons learnt regarding management and planning.

These exchange spaces will be implemented at local level with binational representation, including government, civil society's organizations (CSO) and local key stakeholders. Regional and bi national exchange will be fostered reinforcing existing networks. Knowledge management and exchange are useful tools to promote participation and ownership as well as innovation an efficient use of resources.

**Activity 4.1** Bi national workshops for sharing best practices experiences, lessons learnt regarding planning instruments, health protocols, housing infrastructure, risk management, territorial police, among others.

**Activity 4.2** Consultancy for protocols design and bi national scope plans focused on Health and Climate Change.

**Output 4 inputs and budget:** Three bi national workshops, two technical consultancies. USD. 100.000.-

**Outcome ii)** Risk management sub national strategies have been strengthened and flood's early warning systems (EWS) have been developed in a coordinated manner.



Identification, assessment and georeferencing of climate change risks focused on floods, combined with the development of hydrological models and risk maps will enable planning tools and risk management improvement in both countries.

In this sense, Argentina and Uruguay have developed initial flood risk maps that involve some of the cities considered for this project. This represents a key input for the improvement and strengthening of the EWS implementation in both sides of the Uruguay river.

**Output 5.** A flood's EWS has been consolidated.

Information communication and exchange among intervening institutions from both countries is a key tool for an effective EWS that contributes to flood risk forecasting and management actions planning before and during extreme events, minimizing social, economic and environmental damages.

In present time there is a system for monitoring and forecasting flows and river levels in cities involved in the project; the system is operated by the Salto Grande Dam. The system is feed by hydrometeorologic stations located in the basin, precipitation forecasts and other meteorological variables. The technical team of the Dam present a daily report, that includes the forecast of the Dam operation and the forecast of river levels in nearby cities. This system provided reliable information with a few days in advance. If a flood is expected, the Dam technical team communicates directly to the National Emergency System of Uruguay and to each of the Departmental Emergency Coordination Centres of the cities in risk.

This system has allowed to evacuate in a timely manner the population at risk during the last years. Recently the Salto Grande Dam has included in its webpage the level forecast and in 2017 the Dam has developed a mobile phone application to communicate directly to the population the level forecast.

Link to the daily report:

<https://www.saltogrande.org/docs/hidrologia/Comunicado.pdf?1518302051>

Even though the forecast system could be improved in terms of data and computing, the most important improvement needed for the EWS as a whole is the preparation phase and the communication strategy to the local population. The project aims at improving the response information, by including **a geographic information model that can present at real time the current and potential affected area and that can estimate probable evacuated population numbers and key infrastructure under high risk.** (In the cities of Durazno in the Río Negro river and Artigas in the Cuareim river, there is a similar EWS approach currently under full scale development).

**Activity 5.1** Bi national workshop for existing information, resources and involved institutions identification for EWS implementation.

**Activity 5.2** Strengthening and further development of existing climate services on both countries and regional collaboration for flood EWS improvement.

***Output 5 inputs and budget:*** Two workshops and consultancy for EWS design and implementation through climate services strengthening. USD 200.000.-<sup>4</sup>

**Output 6.** Update and implementation of regional Disaster Risk Management Plans have been encouraged including climate change perspective.

Regional disaster risk management plans are crucial for minimizing the events social, environmental and economic impacts. The identification of the current situation and priorities for integrated risk management participative planning on territory with a prospective approach, will enable the implementation of more efficient and effective measures.

**Activity 6.1** One consultancy for reviewing and/or developing regional disaster risk management plans incorporating CCA in both countries.

**Activity 6.2** Local climate disaster risk management instruments development and implementation, focusing on urban floods, and implementation of CCA key actions.

**Activity 6.3** Training on plans' implementation for managers and other local stakeholders, including organizations, communication media and professionals.

**Activity 6.4** Binational workshops for sub national organizations and governments involved on regional flood risk management plans implementation.

**Output 6 inputs and budget:** 20 workshops, four technical consultancies specialized on disaster risk management and two technical consultancies regarding disaster risk communication. USD 600.000.

## **COMPONENT 2. Priority measures to increase flood prone cities' resilience.**

Selected cities in the Project add up to over 655.000 inhabitants, where some cities up to 15-20% of its population are in located in flood risk areas. These areas that are frequently affected by floods are flood plains usually occupied by highly socio economically vulnerable communities as well as mid risk consolidated urban area.

The challenge of increasing resilience regarding climate change impacts requires comprehensive adaptation measures (urban, environmental, social, economical and financial), that involve city and urban infrastructure design, encompassing resettlement processes, vacant land and green spaces re signification, as well as technical and financial assistance to strengthen public policies that are being implemented.

**Outcome iii).** Resilience in coastal cities has been increased by structural and non structural adaptation measures implementation.



*Photo 6: Urban pattern modified by floods in Salto City, September 2017 (Google Earth)*

**Output 7.** Vulnerable vacant land from resettlements has been recovered and re signified to prevent informal re occupation.

Floodable areas that have been informally occupied by vulnerable communities can be re signified as ecosystem conservation, recreation areas, among others, generating added value to the city's river sides and preventing new informal occupation. In this sense, participative spaces will be promoted for the activities' ownership by the community. Also, infrastructure operations will be based in the local governments design with CSO's participation and support.

Activities 7.1, 7.2 and 7.3 relates to the "resignification" of flood prone vacant urban land, whereas 7.1 and 7.2 are from previously occupied land, where houses have being (or are currently being) resettled into secure land and 7.3 which was not previously occupied. All these areas might be occupied again by poorer families (as other similar cases where seen in the past), since they are very close to the city centre and its services and in close relation to jobs opportunities or other living hoods around the river. In this regard, a key strategy to avoid new occupations in these vacant lands, which will increase again the level of flood risk of the city and the number of vulnerable families living in flood prone areas, is to establish new activities in the vacant land that are flood compatible, such as recreational parks or other related services. These activities will prevail the land to be occupied maintaining a lower flood risk in the city and also will improve the riverside landscape as well as the riverside ecosystem, as well as to bring the city new high quality public spaces and green areas for the citizens

**Activity 7.1** Union Portuaria, Ledesma and Paysandú's urban border resignification. Paysandú, Uruguay.

A linear park project will be designed to promote a degraded urban area's re-zoning, to contribute to its resignification from the social dimension and to contribute to an integration process with the consolidated city. Paysandú's subnational government is relocating 161 people whose houses are under the security height, not only based on the housing situation but also because of their fragile income sources. Through territorial inspectorate, a territorial control initiative in Paysandú since 2016, vacant land has been kept from reoccupation once their inhabitants have been relocated. In this context, a positive transformation of vacant land is proposed, through its enhancement as cohabitation space and promotion of citizen control. Through the intervention in these spaces and the improvement of the river's border to generate new collective spaces, previous occupants will continue to live in close areas but which are safer in terms of flood risks after the resettlement process.

**Activity 7.2.** Resignification and refurbishment of flood prone vacant land after resettlements in Salto, Uruguay.

Subnational government of Salto has implemented a resettlement process of those families regularly affected by floods in the Salto's Housing Demand Plan. This plan promotes social inclusion processes from an environment and housing comprehensive conception, strengthening collective and interinstitutional management process. Vulnerable families' resettlement is carried out by participative consulting processes. In this context, the need to avoid reoccupation of flood prone vacant land by new families is raised. For this purpose a resignification plan has been developed for these spaces. Currently, such plan is being implemented and assistance will be provided for the resignification of vacant land for public use with floods compatible activities with participation of private stakeholders such as sport clubs and other CSO activities, to give in "cession of use" regime the use of the land and generate recreational and leisure activities and prevent reoccupation.

**Activity 7.3.** Adaptation approach in the treatment of Sauzal stream's mouth. Salto, Uruguay.

Sauzal stream flows into the Uruguay river, the greater gathering point in the North Riverfront (Costanera Norte). The Sauzal stream's river side refurbishment is proposed for the implementation of a linear park for recreational use, enhancing its environmental and landscape attributes, protect the natural green spaces and solve hydraulic problems that exacerbate floods by the Uruguay river's overflows. Public spaces will be reconditioned in order to support future floods and its territorial planning will be designed including adaptation measures for floods and their impacts.

**Activity 7.4** Sustainable hydrologic management in Laureles Stream. Fray Bentos, Uruguay.

Since de 50's Laureles stream coasts (Uruguay river's affluent) have been occupied by low and mid-low income population. That situation created a degraded urban border that suffers macro drainage related floods. The Fray Bentos and Influence Area Local Plan has aimed to change this unplanned growth and spontaneous residential uses, to orientate a sustainable urban development with planned urbanizations, with complete infrastructure, services and public spaces where Laureles stream has an essential role in a city that contemplates climate change impacts with a prospective view. The mid basin urban area, due to its progressive expansion during the last years, is characterized by a growing sealing surface and an inadequate drainage network for the current situation. The great soil sealing from urbanizations leads to a lower infiltration of rainfall and thus, a greater volume of direct runoff. Additionally, extreme events related to CC, with significant water volumes in short periods of time, contribute to exacerbate this situation. In this way, the main course and surroundings are affected by floods during intense precipitations. River overflows that affect housing were registered (i.e. April 2016 floods) and families had to be evacuated.

On the other hand, in the short term, various housing projects will be implemented, which implies the sealing of an extensive surface and the construction of new storm drainage infrastructure. As a consequence, an important increase of the water flowing into the stream in a shorter period of time is to be expected. Such increase will make these effects more frequent and will affect greater spaces.

In order for the Laureles Stream to lower flood risk in surrounding housing areas, the stream must adequately carry extreme macrodrainage flows, from extreme short term rainfall. In this regard the health of the margins needs to be improved by restoration of native vegetation of the margins and floodplains, cleaning away informal waste disposals, improvement of drainage infrastructure that reaches the stream, at to actively prevent possible erosion sites. The general improvement of the natural conditions of the stream and its margin and floodplains will increase the capacity of the stream to absorb higher flows during extreme rain events

**Activity 7.5** Los Pinos coastal zone restoration and protection. Bella Unión- Artigas, Uruguay.

Los Pinos coastal zone is located 5 Km from Bella Unión and is the only recreational coastal zone in the Artigas department. A Uruguay riverside avenue was recently built that communicates the city with Los Pinos. Such construction increased the value of the area enabling a greater influx of people from Bella Unión, but also erosion was increased during recent floods that reached extraordinary heights. In the last 20 years, 60 m of riverbanks were lost. Artigas government has an hydraulic study where impacts from Uruguay river's currents are assessed, as a base for a further comprehensive study that includes hydraulic, environmental and social analysis and CC scenarios that leads to an executive project of midterm implementation.

The proposed action for the Los Pinos coastal zone is the restoration of native vegetation in the Uruguay river margin where higher risks of erosion has being identified. Also the project will assist the inclusion of a climate change projection into the current hydraulic study to improve the relevance of its conclusions in relation to local adaptation strategies!

#### **Activity 7.6** Artalaz stream protection and re signification. Colón, Argentina.

Wetland's recovery as a recreative, sports and touristic space that also serves as water excess storage from rains and overflows. This area is characterized by low floodable zones within the stream's flood plain where residential uses have spontaneously expanded. Currently they constitute consolidated neighbourhoods of medium density, basic and precarious infrastructure, lack of quality public spaces and muddy streets that make access difficult during rainy seasons. The relocation of those houses under 10,5m in reference to Colón port is envisages for year 2018. The whole area has a 20 hectare surface over the river's south margin. Its limits are Piamonte Av and "Río de los Pájaros" NPA on the East where the stream flows into the Uruguay river.

#### **Activity 7.7** Vacant land between North Defence and Cantera 25 de Mayo neighbourhood recovery and re signification. Concepción del Uruguay, Argentina.

North Defence is currently under construction. It is located in the city's North where El Gato and El Molino streams flow into de Uruguay river, within its flood plain. It is regularly affected by the Uruguay river's overflows and by intense rainfall in the basin. The reason for this is that the stream is the natural drainage of an extensive urban area, including Cantera 25 de Mayo and San Isidro neighbourhoods.

The Defence building, which mitigates flood risk due to the river's overflow, will alleviate the storm water through a bomb. This should be completed with the area's recovery in order to generate an urban suture, emphasizing on public use with the incorporation of recreational activities and sports for the whole community (close neighbourhoods and the rest of the city). As an adaptation measure, a 25 hectares area will be conserved as an water excess storage as well as re signifying an extensive area as an urban green heart close to the city's centre and avoiding further occupation.

**Output 7 budget:** USD 5.000.000.-

**Output 8.** Technical assistance and sustainable urban and public services infrastructure has been implemented in new resettlements on secure land

Adapted and resilient urban infrastructures are essential to consolidate relocation processes and to define a long term effective solution. Potable water and sewage services, urban waste management, among others, that consider climate change and future scenarios will significantly reduce the

relocated communities' vulnerability and improve their life quality. Previous experiences in the region will be considered and pilot projects will be implemented.

The activities under Output 8 implies the provision of urban and public services adapted and resilient infrastructure on neighborhoods where vulnerable people have been previously resettled or are currently being resettled (by processes led and funded by the governments) from flood prone areas. This will guarantee their provision during extreme events as they will be designed considering CC actual and future scenarios, considerably reducing the communities' vulnerability and building resilience as well as enhancing their life quality.

**Activity 8.1** Adapted and sustainable urban infrastructure design and implementation on secure land for resettlements. Salto and Paysandú, Uruguay.

The availability of secure land with basic urban services is a bottleneck for resettlement plans. The Project will contribute to generate secure urban land for resettlements, as well as for the design and implementation of infrastructure which is compatible with climate conditions.

Currently flood risk resettlement housing plans are being supported both by the Ministry of Housing, Land Planning and Environment and the Departmental Government. The usual approach to resettlements is that the national government finance the new houses, mainly by grants to their new owners or by soft loans, and the Departmental Government provides the urban land for the new houses with complete public services including electricity, drinking water and sanitation, among other services such as schools, public transport, etc. However in many cases there is not enough new secure urban land ready to receive families from resettlement programmes, mainly because of the lack of services, especially sanitation and drainage. This activity aims at providing new sustainable services to secure land in order to speed up resettlements process of flood risk vulnerable communities. These services such as sanitation and drainage will be developed under innovative green infrastructure design, that is expected to be more cost-effective and with greater resilience to extreme climate events.

**Activity 8.2** Protection against coastal erosion and repairs for the water treatment plant. Concordia, Argentina.

This intervention will enable to approach a problem originated in the last 25 years over the Uruguay river's coast, upstream and downstream of Concordia's water treatment plant. This plant supplies all the city's population (200.000 people) jointly with perispheric perforation in the more remote areas.

Protection against coastal erosion and repairs for the water treatment plant. Concordia, Argentina.

According to general projections regarding climate tendencies and the intensification of hydrological and meteorological extreme events, erosive processes will continue to exacerbate. Based on these scenarios, this activity proposes to protect the coastal zone where the water intake of Concordia's and surroundings treatment plant is located as an adaptation measure aiming to guarantee this basic service for the city. This area is affected by erosive processes on every river's overflow, and also, part of the pumping equipment remains under water, which obstructs its access for operation and repairs.

This activity envisages different solutions based on the different characteristics of each delimited area, including various reparations for the water intake building in order to guarantee its stability and operation, especially during overflows.

In summary, the following technical solutions are proposed<sup>1</sup>:

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<sup>1</sup> Repairs for the water intake have been projected by the Concordia's water entity and the coastal protection project has been based on an extensive work developed in the Facultad Regional Concordia of the National Technological University, with municipal technical staff's supervision. It is available in the following link: <http://ria.utn.edu.ar/handle/123456789/1052>

- a) The construction of lateral walls, since the actual masonry walls (North side) present cracks. New walls attached to the original ones will be built out of ferroconcrete with their corresponding reinforcements.
  - b) Implementation of an access for machinery to the water intake. Since the actual access is not paved and presents a significant gradient the access for machinery is difficult when maintenance is required. This new access will be approximately 45 meters long and 3 meters wide and will facilitate access to the water intake assuring provision of the service during overflows which are becoming more frequent.
  - c) Elevated access to the pumping system for maintenance and repairs during river overflows.
- Coastal protection for the adjacent area of the water intake.

**Activity 8.3** Lavardén and San Pantaleón neighbourhoods storm drainage remediation. Concordia, Argentina.

Remediation of the storm drainage in these cities area that is receiving important neighbourhoods of social interest. This area is characterized by the presence of pronounced depressions in the inner parts of blocks becoming inhabitable, wasting land in a residential area of town. The proposal consists in the implementation of a superficial system, in order to ensure the flow of storm water into the main ducts that compose the underground system.

**Product 8 budget:** USD500.000.-

**Output 9.** Solutions have been designed and financial mechanisms have been implemented to promote CCA in mid risk housing and commercial buildings.

Flood's social, psychological and economic effects have regularly impacted on these vulnerable communities for decades, making their recovery very difficult. These instruments will support these families with sustainable solutions in order to adapt their housing conditions in mid risk areas, which are not subject to relocation plans. The experiences and best practices exchange in a regional level will contribute to achieve effective solutions and the society's ownership.

Solutions have been designed and financial mechanisms implemented to promote CCA in mid risk housing and commercial establishments" will provide direct benefits to vulnerable communities since they will have the opportunity to improve and adapt their housing conditions that have been affected periodically by floods, receiving economic support as well as technical assistance. This will enhance their life quality and healthiness conditions. Regarding touristic and commercial establishments, these activities will not only improve and adapt the establishment's conditions regarding flood damages but will also guarantee income sources for the owners and employees, assuring the sustainability of the touristic sector

**Activity 9.1** Revolving fund for mid risk housing. Paysandú and Salto, Uruguay.

Revolving fund creation for housing and commercial constructions affected by less recurrent floods in mid risk areas. A micro credit scheme is envisaged with no interests and technical assistance from subnational governments for constructive adaptation actions regarding electrical and sanitary facilities, mezzanine, among others which are included in the local plans.

In Paysandú and Salto there is an estimation of around 4000 houses located in mid risk areas, most of these houses have good construction materials and families usually have higher income. Under government policies the families living in this mid risk areas are usually not entitled to resettlement policies, however a more cost-effective approach can be taken into account in relation to the adaptation of these houses to floods, such adaptation could include minor construction adjustments in key elements, these adjustments could cost approximately from 5000 to 15000 USD. Eventhough the actual budget for the activity has not being defined at the concept note stage, it is envisaged that the initial revolving fund could reach around 2% of mid risk houses as a pilot programme to test the policy approach. Also to note is that at concept note stage the main source of funding for the revolving fund is the initial grant by the AF, however other sources may be identified at a later stage once the programme is in place, and that initial results can be measured. One of the main non-financial costs is the provision of technical assistance from architects and other technicians, such as plumbing and electricity, in this regard the Departmental Governments have professionals and technicians in place to support such assistance. As a pilot experience financed jointly with Departmental Municipalities, the Fund is sufficient to evaluate and define if this adaptation measure can be effectively applied in the flood zone of cities that have a varied socio-economic composition and therefore require differentiated instruments.

**Activity 9.2** Design of a flood insurance for coastal commercial and touristic establishments.  
Entre Ríos, Argentina.

In most coastal towns of the Uruguay river involved in this Project, main income sources are related to tourism. Significant amount of commercial, gastronomic and hotel establishments, among others, are located in coastal or low areas, precisely for their proximity to the river and it recreational, social, cultural, environmental, view and touristic benefits.

In these areas, the overflows that extend during long vacational periods, cause devastating effects due to damages and losses of income sources related to the partial or total interruption of the economic activities. In this sense, it is utmost important to generate risk transference financial measures such as insurances, that tend to protect the entrepreneurship's income and local associated economies.

In the Project's framework, a feasibility assessment will be undertaken and a customized insurance will be designed according to the criteria and parameters that are defined in the Project's context.

**Output 9 inputs and budget:** Technical consultancies for the revolving fund and insurance design. Initial funding for revolving fund. USD 500.000.-

### **COMPONENT 3. Priority measures for adaptative conservation of vulnerable coastal ecosystems.**

Uruguay river's natural ecosystems have a significant value for their biological diversity and their role in benefits and ecosystemic services supply, especially those regarding river's dynamic regulation contributing to a dynamic balance (buffer zones, water purification, floods and temperature regulation, erosion prevention, among others). These ecosystems are affected by severe climatic events, jeopardizing the river's natural dynamic, biodiversity and environmental services supply. In paralel, these impacts are increased by the growing coast urbanization, river side settlements, incorporating new threats related to pollution processes and water quality loss.



Adaptation strategies based on ecosystems are suggested, which include mapping of ecosystemic services, restoration of significant ecosystems and river's natural dynamic through coastal recovery, environmental services protection and measures to reduce health related issues in towns.

**Outcome iv)** Adaptive conservation measures have been implemented in vulnerable ecosystems on both margins of the Uruguay river including their ecosystemic services identification and assessment.

Uruguay river's coast has been severely affected by anthropogenic activities (deforestation, infrastructure installation, soil compaction and urbanization) for decades, altering its natural dynamic and balance leading to erosive and degradation processes that have been deepened by the extreme events and their social, environmental and economic effects.

Adaptation pilot programmes will be designed for their implementation aiming to promote a useful adaptation methodology in areas with ecosystemic relevance to enhance biodiversity conservation in the climatic threats context. These programs should contemplate environmental services mapping and assessment in a way that the link between ecosystems and human activities contribute to climate risk reduction in the community and economic spheres.

Numerous NPA (national, local, private) are located in the Project's implementation area with different progress in their management, conservation, institutional agreements, projects and initiatives.

There are exchange activities between El Palmar National Park (Argentina) and Esteros de Farrapos e Islas del Uruguay Protected Area (Uruguay) and the intention of a formal agreement between Argentina's National Parks Administration (APN) and MVOTMA – SNAP from Uruguay.



*Photo 8: El Palmar National Park, December 2017. (Project Team Photography)*

**Output 10.** Ecosystemic services and co benefits have been identified and assessed, including CCA and Uruguay river's ecosystems connectivity.

Identification and mapping of these characteristics will significantly contribute in territorial planning and management, risk reduction and management, resilience building and the improvement of sanitary and health conditions. Ecosystem based solutions are known for being sustainable and efficient.

Climate change and variability alter ecosystems and species distribution which require consideration in the NPA management plans and other biodiversity conservation measures.

Healthy coastal ecosystems support CCA, with favourable consequences for population, infrastructure and vulnerable activities in the river's margins. It is necessary to identify, assess and promote ecosystemic services supply in the NPA's management plans and other biodiversity conservation measures.

**Activity 10.1:** Ecosystemic services and benefits identification, their mapping and assessment regarding their contribution to CCA and connectivity in Argentina and Uruguay.

The envisaged activities include: information compilation, analysis and systematization; analysis for ecosystemic services and benefits' identification and assessment and their incorporation into an information system; baseline and terminal measurement.

The main geographic scope of ecosystem services is in relation to the Estero de Farrapos e Islas del Río Uruguay National Protected Area and El Palmar National Park, however depending on which ecosystemic service is being mapped the geographical scope may change accordingly to better reflect the geographical interrelation between conservation and restoration sites and the sites where the service is provided, also some mapping insights on ecosystem services will be included in relation to some of the urban areas addressed in the project.

In general terms the project takes into account those ecosystem services that relate to the protected areas in both margins of the Uruguay river, as well as those natural surroundings around the urban areas that will be addressed in the project. In particular ecosystem-based adaptation actions will be taken into account in the selected urban centres, riparian ecosystem linked to these urban sites, and selected protected areas in both margins of the Uruguay river, in particular El Palmar National Park and Estero de los Farrapos e Islas del Río Uruguay protected area.

The main ecosystem services provided by riverside ecosystem of the Uruguay river are: hydrological regulation, sedimentation dynamics processes, nutrient retain and release cycles, habitat for biodiversity, trophic chains, among others. In this regard, there is huge importance in the intervention to reverse erosive processes, to promote native revegetation and the control of the expansion of exotic species.

Ecosystemic services taken into account:

- Hydrological regulation: healthy riverside ecosystems reduce the impact of river floods, by flooding areas of low human activities, as well as they reduce the impact of drought by providing water and humidity to the surrounding drier ecosystems. This service is key in terms on climate change, where there could be exacerbated variability and more frequent extreme events of both floods and droughts.

- Habitat for biodiversity: ecosystems support key functions in the productive processes, including pollinizing species that play an important role in the surrounding crops. Moreover, in the context of climate change, including the increase of mean temperature and rainfall, as well as increase climate variability and the frequency and intensity of extreme events, it is expected that species distribution change as well. To work upon healthy ecosystem connectivity becomes crucial to allow for species to better adapt and to be more resilient to climate change.

- Reduction of coastal erosion and sedimentation process dynamics: increased climate variability becomes a basis for the increase of erosion capacity of the river. This higher coastal erosive process also includes a modification of the sedimentation process. If riversides can count on robust and healthy ecosystems, this ecosystems can reduce the erosive effects.

- Nutrient cycles and trophic chain: robust and healthy ecosystems are key to ensure adequate nutrient cycles and trophic chains that are basic for relevant productive processes in the project area, among them fish availability and fisheries.

-Recreational touristic spaces, in relation to enjoy and education of local population and visitants: Uruguay river ecosystems, especially those in the protected areas, have an special significance in order to support better living conditions for the local population, including children and women and the poor. Riparian ecosystems and their biodiversity have become one of the attractions for recreation, education and tourism at present time and more is expected in the future. In this context ecosystem conservation becomes a key strategy in order for ecosystems to become more resilient towards a more threatening future in terms of climate but also with higher use.

**Output 10 inputs and budget:** Technical consultancies. Equipment procurement for field and informatics surveys. Software and high resolution images procurement. Workshops and meetings. USD 500.000.-

**Output 11.** New CCA ecosystem-based measures have been implemented.

The identification and assessment of impacts such as erosion and drainage problems, and the provision of sustainable solutions to recover ecosystemic services and to facilitate ecosystem restoration in coastal zones reduce flood risks and its negative effects. Also, it constitutes valuable information for planning and management policies and the development of regulations.

**Activity 11.1** Necessary adapted infrastructure for increasing resilience within NPA, for activities such as tourism, livestock breeding and dairy farms, fisheries and apiculture in Argentina and Uruguay.

Within the Esteros de los Farrapos e Islas del Río Uruguay Protected Area several low impact production activities are held, most of these activities rely on infrastructure such as boardwalks for tourism, wiring for cattle breeding, or bee squares for apiculture. These activities and infrastructures could be at flood risk depending on their specific location and the type of materials or technical design criteria. The project aims at identify such vulnerable infrastructures and where possible will suggest and support its adaptation, whereas a relocation into higher zones, or to improve its materials or design standards in order to decrease the level of risk of such activities in relation to floods.

In terms of tourism: a redesign of the walking trails and support infrastructure in terms of climate change. This trails go through flood prone areas, in this regard the project will support the adaptation of trails, observation decks, walkways and shelters, as well as the modalities of their use in order to lower the risk of both the infrastructure and the visitants.

In terms of apiculture: apiculture is being developed in flood prone riverside areas and specific islands in the protected area, this activity requires adapted infrastructure when flood arises so as to quickly move hives and other supporting materials through water. The project will support in improving the infrastructure and other equipment, as well as to increase the knowledge and capacities of the beekeepers to cope with flood, including by developing protocols based on EWS.

In terms of livestock breeding: livestock smallholders are frequent in the Estero de los Farrapos area integrating production with ecosystem conservation. The project will aim at supporting the smallholders to improve their management skills based on EWS when flood events happens, as well as to provide them with adequate equipment for improved cattle management during these episodes.

**Activity 11.2** Design and implementation of a sustainable use and management strategy for Esteros de Farrapos area and its relationship with Nuevo Berlín and San Javier. Rio Negro, Uruguay.

The actions under this Acitiviyall speak to the relationship between Nuevo Berlin and San Javier cities with the Estero de los Farrapos and Islas del Río Uruguay Protected Area, where there is an intimate relationship between the ecosystem of the Protected Area with its adaptation related services to the urban environment.

The strategy will enable to solve environmental conflicts such as the MEVIR housing project's biological oxidation lagoons in Nuevo Berlín and San Javier that are located in flood prone areas. Design and implementation of recovery and protection measures (are proposed for the levee, paleo coast, including beach ecosystems and existing archaeological sites in Esteros de Farrapos, Nuevo Berlin and San Javier. Building an additional stretch of Nuevo Berlin's riverside boardwalk<sup>1</sup> and definition of public spaces on Santa Rosa beach<sup>2</sup>. Adaptation actions for houses located on San Javier's north east urban border<sup>3</sup>, adjacent to Esteros de Farrapos. regarding the last three actions of the activity:

1.Nuevo Berlin's riverside boardwalk requires an expansion at a high level in order to be usable upon higher river levels, an adequate boardwalk will also help the conservation of the riverside ecosystem, and a healthy riverside ecosystem will also provide for less erosion and the a better protection for the boardwalk itself.

2.Santa Rosa beach in Nuevo Berlin is very delicate in terms of its riverside conformation, including its surrounding vegetation, which prevents erosion. The definition of usable public spaces will help the conservation of the most delicate areas in order to prevent erosion during high level floods.

3.In the connecting area between north west San Javier with Estero de los Farrapos Protected Area there are few houses in a high frequency flood prone area, adaptation actions will be explored in relation to the ecosystem conservation or other adaptation actions in order to decrease the flood risk.

**Activity 11.3** Implementation of pilot adaptation measures based on ecosystems on Rincón de Franquías NPA, Uruguay.

Identification of the most flooded vulnerable zones and the design and implementation of pilot conservation and ecosystem based adaptation measures, such as revegetation with native species.

**Activity 11.4** Coastal protection for the conservation of the river side forest surrounding the water intake. Concordia, Argentina

As mentioned on Activity 8.2, the protection of the coastal area near the water intake of the treatment plant includes activities that aim to stop the erosive processes that affect the riverside forest located in the right margin of the Uruguay river. This area, besides hosting valuable native species, acts as a buffer zone against the variations of the river's height, and its protection is critical for increasing the water intakes' sustainability and the progressive loss of soil during overflows.

**Activity 11.5** Restoration of selected vulnerable coastal ecosystems, through the integration of exotic species control and through revegetation with native species. Argentina and Uruguay.

Restoration activities include joint binational field actions involving public, private and civil society stakeholders with a "learning by doing" approach, in each countries' cities.

Development, implementation and assessment of methodological guidelines for ecosystem restoration. Strengthening of human and institutional (public, private and social) capacities for ecosystem restoration including NPA staff, service agencies and interested neighbours. Development of strategy for post project action's sustainability, and its corresponding document.

**Activity 11.6** Project for Heritage site's protection review, implementation and assessment. El Palmar National Park, Argentina.

Development, implementation and assessment of Public use of a cultural heritage composed of jesuitic rests of the former guarani missions that are placed inside of Parque Nacional el palmar and

are particularly vulnerable to erosion caused by floods . these activities are protection of cultural heritage inside the park will be developed in Argentina, historical ruins Online can be accessed from the national park It is one kilometer away across The construcción on the bank of the Uruguay River , the se ruins, which belonged to an ancient lime facility, unveil the remains of limekilns, an old jetty and some old houses built by the river. experiences, lessons learnt and capacities exchange with Uruguay, key stakeholders and are envisaged as well as linkage actions with similar cultural heritage sites along the Uruguay river basin.

**Product 11 inputs and budget:** USD 2.562.000.-

#### **COMPONENT 4. Priority measures for increasing social resilience.**

Climate change adaptation measures promoted by the government should be oriented to resilience building with approach on human rights, gender and generations. This involves developing comprehensive adaptation measures based on communities, and considere in their design and implementation social, economic and cultural aspects for each community.

Also, is considered the promotion of communities' vulnerability monitoring regarding the project's activities' implementation, as well as knowledge of the risk social perception, implementation of foresting measures for labour reconversion for the most vulnerable communities. Also, the project considered education and communication strategies that contribute to best practices experiences exchange and local empowerment based on local and regional social networks 'strengthening.

**Outcome v)** Communities and social organizations have incremented their resilience in the CCA and hydro climatic disaster risk management framework.

Binational effort to coordinate actions on both Uruguay river's margins will be fostered by the project as well as best practices exchange, existing mechanisms and tools identification and the development of new communities based adaptation measures that can be implemented in both sides of the river.

This experience can become highly useful in other shared basins such as the low La Plata river basin. Also, at least two workshops for best experiences exchange and the development of an exchange protocol are envisaged. This will be the success indicator for the project at its completion work.



*Photo 9: Consultation process with civil society, December, 2017 (Concepción del Uruguay City)  
(Project Team Photography)*

**Output 12.** Social vulnerability monitoring and assessment tools have been developed with a human rights, gender and generations approach.<sup>2</sup>

These tools are essential to assess social regional context and decision making and to enable the project activities' results monitoring. Methodological criteria should be developed for the region in order to compare and combine the resulting information in the Project's different implementation locations.

This methodologies will allow to identify social vulnerability aspects that should be analyzed for each city and monitoring how the adaptation measures contribute to vulnerability reduction and resilience building

The incorporation of the generational and gender approach in the instruments of analysis and monitoring of social vulnerability, so that they can be used within the framework of public policies of both countries. These approaches are potentially complementary to the extent that together they will contribute to improving sustainable human development; for coexistence, for integration, for equity, for reparation, and for the full validity, application and enforceability of a rights-based, integral and universal approach that respects and affirms diversities.

In this case, its incorporation aims at the analysis starting from its actors, for example, the existence of diverse youth, (either by cultural, economic, social or even political conditions and situations), that promote the recognition and evaluation of the youthful worlds for the realization of private and collective life projects, and their subsequent empowerment in all aspects that have to do with their particular and collective development (youth), as well as their country with a future horizon.

Adopt a generational approach, incorporating the social relationships that are established within each generation, as well as the relationships that are established with other generations. It will serve to consider contexts (historical, social, cultural, political or economic), environments, places and spaces, which reveal situations and conditions of advantage or disadvantage, of merit or reward, of exclusion or self-exclusion, of risk or protection, of guarantee of rights or of violation thereof.

<sup>2</sup> Is understood by "generational approach", the one that "... points to the analysis in time and space of intragenerational and intergenerational relations, in determined historical, social, economic, political and cultural contexts, taking into account the life cycles, roles, actions and symbolic imaginary that the person establishes with its surroundings, society and its institutions".



In this sense, it is considered that social analysis cannot be disconnected from the sectors from which it comes and from its connection to specific territories; Thus, the analysis can be disaggregated according to the ethnic-racial origin, socio-economic stratum and geographic circumscription, improving its effectiveness, since it would allow to identify inequities or common situations in the allocation of resources, program development, social intervention, among others.

Social vulnerability monitoring and analysis instruments have been developed with a human, gender and generation's rights approach", vulnerable communities will benefit from the development of social policies that aim for resilience building in the most affected communities, with a human, gender and generations rights approach. Besides the activities proposed in this Project, these social policies will integrate vulnerable communities to urban life and build resilience among them in order to achieve better and equitable opportunities for their development, livelihood and adaptation.

**Activity 12.1** Social vulnerability monitoring and assessment tools development for each country integrating a human rights, gender and generations approach.

**Activity 12.2** Social vulnerability monitoring and assessment in the Project's selected cities, based on the instrument developed in Activity 12.1. In this way, it is expected to implement such tool and make the required adjustments for its optimization.

**Activity 12.3** Development of a document with the methodology and results of the suggested tools, as well as the common or distinctive aspects and characteristics that arise from its implementation.

**Output 12 inputs and budget:** Technical consultancies, technical and validation workshops, training sessions for methodology implementation USD 200.000.-

**Output 13.** Social risk perception assessments have been implemented for resilience building.

In order to achieve a cultural change in society that incorporates CCA, it is necessary to develop social risk perception analysis methodologies. These will be designed in such way that enables to become familiar with the communities ideas, experiences and assessments and to identify in which way risks are understood, built and reproduced. This perception should be considered in the risk prevention processes.

Through the social risk perception activities included in Output 13, different aspects involved in the risk perception will be assessed as a base line for designing risk reduction collective and individual strategies. This will benefit vulnerable communities particularly, since it will provide tailored risk reduction measures in order to reduce their vulnerable conditions.

**Activity 13.1** Development of a methodology for social risk perception assessment.

Methodologies that allow to become acquainted with the social risk perception levels regarding potential threats and that assess the existing vulnerable conditions will be selected and developed. Participative strategies will strengthen capacities and increase resilience in order to reduce and prevent disasters negative consequences.

**Activity 13.2** Social risk perception analysis, estimation and/or identification in each countries' cities.

Implementation of methodologies in the field. Through the most adequate methodology, different aspects involved in the risk perception will be assessed; ideas, previous knowledge, experiences, priorities and attitudes will be explored that account for how communities socially understand and build risks as a base line for designing risk reduction collective and individual strategies.

**Activity 13.3** Development of a methodological and results document for each country.

Searching, selecting and adjusting methodologies to analyse social risk perception will lead to its further implementation in the field. As a result, a major interest analysis to understand not only social risk perception in a regional scale, but also similarities, differences and distinctive characteristics of each countries communities. With this information, a document will be developed with common results on both sides of the river.

**Output 13 inputs and budget:** Consultancies, workshops, field visits, focal groups and interviews. USD 200.000.-

**Output 14.** Support and labour reconversion strategies were promoted for the vulnerable population.

Labour reconversion strategies for people inhabiting high vulnerability areas and relocated houses is envisage for vulnerability reduction. An assessment will be carried out on families 'productive activities and capacities for the development of new entrepreneurship according to their potentialities. This strategy will be based on locating productive activities separately from vulnerable areas, improvement of such activity by professional training and labour formalization (i.e. regulation of waste classifying and commercialization). Stable and sustainable income generation will be fostered for reducing their vulnerable and exclusion conditions. Social follow up and subsidies will be sustained in time.

The activities considered in Output 14 "Support and labor reconversion strategies were promoted for the vulnerable population" will also be a direct social benefit for vulnerable communities since they will provide adapted and resilient opportunities for new entrepreneurship according to their potentialities and sustainable income sources in order to reduce their vulnerability and enhance their quality of life.

**Activity 14.1** Labour reconversion strategies and resettled families productive activities improvement. Paysandú, Uruguay.

Floods not only affect housing conditions of vulnerable families, but also productive and livelihood activities held on the locations (breeding, brick making, waste classification and commercialization). These activities' reconversion is crucial for relocated families recovery, vulnerability reduction and resilience building.

The project aims to enhance resettlement policies currently performed in several flood risk areas that are occupied by vulnerable poor families. These families typically have very little training, with no formal employment and usually perform informal activities to secure a minimum income, one of the most usual activities is informal waste classification within their own houses. When families are resettled, new job opportunities and higher income activities are expected, so to improve their livinghoods in an integrated approach, not only to have a new non-floodable house but also new alternatives in terms of jobs and income in order for those families to be encouraged to stay in their new safe houses and not to be tempted to come back to occupy floodplains looking for their previous

income activities. The general approach to lower flood risk when dealing with highly vulnerable communities is to improve their capacities in a holistic way, since much of the time the families are located in flood prone areas due to their low income and possible work activities performed in the floodplains.

**Activity 14.2** Socio occupational training and labour reconversion projects' development. Entre Ríos, Argentina.

Entre Ríos Ministry of Social Development has implemented the "Common House Keepers" project, which is inspired in Pope Francis Laudato encyclical, in order to integrate youngsters with psychosocial vulnerability through training and dignifying job opportunities regarding environmental caring activities.

This activity consists on an extension of an ongoing programme led by the Ministry of Social Development of Entre Ríos province, whose beneficiaries are people that present high socioeconomic vulnerability. In the Project's framework, this programme will focus on vulnerable people that have undertaken relocation processes, aiming to enhance their living conditions in their new locations, avoiding their dependence on the river's resources (fishing, brick making, straw weaving, selling regional articles, providing services in touristic areas) that have to be suspended during overflows.

The activity is orientated to tutoring the beneficiaries (approximately 100) in the development of sustainable occupational projects by developing and capitalizing knowledge, capacities and skills that will allow them to increase their income and improve their quality of life.

The activity includes training and socio occupational activities for a period of 12 months. During this period, beneficiaries take part in four training sessions per week of 3 hour duration (48 hours monthly approximately). These hours are destined to training on crafts, jobs, productive projects development and issues related to socio environmental and community development. This scheme is complemented by a monthly economic incentive (approximately AR\$5.000) that the beneficiaries receive by participating on the training sessions during 12 consecutive months. It is to stand out that this economic incentive is proportionate to the person's assistance to training sessions and activities. Also, the programme includes the provision of the necessary tools for the implementation of the productive projects that are developed during the programme.

After the 12 month period, each beneficiary develops the resulting productive or occupational project with the necessary tools for its execution. Also, the programme promotes the commercialization networks enhancement that potentiate the results through social and regional local economy markets.

**Output 14 budget:** USD 400.000.-

**Output 15.** Social networks have been strengthened by exchanging best practices on CCA, and local risk management strategies.

Knowledge management as well as experiences and lessons learnt exchange will contribute to achieve more effective and sustainable results and a more efficient allocation of resources. It will also promote criteria standardization and the construction of a regional approach. Expected outputs can be very valuable for other basins with similar problems and will especially contribute to La Plata river basin's strengthening.

**Activity 15.1:** Local, national and regional networks have been strengthened by knowledge and awareness acquisition regarding vulnerable coastal cities, ecosystems and NPA's role in CCA.

Aiming to promote communities and social organizations participation in spaces that contribute to improving governance and actions sustainability, the strengthening of participative spaces including Project's contents into their working fields is envisaged (CSOs, NGOs, Business chambers, Universities, Farrapos Advisory Commission, Argentina's Private Protected Areas Network, among other stakeholders).

In this sense, different exchange instances and methodologies will be developed, such as publications, workshops, digital platforms, among others. These will contribute and promote Knowledge Management, Lessons Learnt and Best Practices exchange, as well as participation, capacities building and awareness raising.

**Output 15 budget:** USD 300.000.-

**Output 16.** Communication, education and dissemination strategies have been implemented for vulnerability reduction.

For resilience building within communities, in the CCA and disaster risk management framework, it is utmost important for communities to become familiar with their territories, their potentials and restrictions, that they understand the risks they are exposed to, exacerbated by

□ consequences. Access to information and knowledge is essential to know the risks, face them and participate in the vulnerability reduction processes.

Communication, education and dissemination strategies envisaged in Output 16 will also represent benefits for vulnerable communities since they create awareness regarding potential risks, their management and reduction instruments as well as possible solutions and adaptation measures reducing their vulnerability conditions.

From a broader point of view, the development of the cities and works planning instruments, considering future climate scenarios will significantly contribute to improve the populations' life quality and their socio territorial integration. These activities include land management instruments, sectorial plans, vacant land and ecosystem services recovery, among others.

**Activity 16.1** Formal and non formal education experiences development for a sub national CC approach

Enablers, teachers and educator's training will be destined towards complex issues such as CCA and integrated disaster risk management on different levels and educational fields. In order to achieve this goal, the development of different pedagogic and didactic strategies, including educational and dissemination materials with trainees is envisaged. This activity is crucial for generating awareness in different areas and age groups (teachers, children, youngsters, students, professionals, community referents, among others).

**Activity 16.2** Communication campaign implementation for local communities to CC effects, adaptation importance and EWS awareness raising.

Access to relevant public information and communication for local communities will be a transversal and permanent aspect during the Project's implementation, besides being a particular activity itself. Communication campaigns will be plans for each country, according to the target public, their perceptions and media consuming habits in order to suit them to the general purposes CCA and disaster risk reduction awareness raising), and the specific objectives set by each country or community,

**Activity 16.3** Successful experiences dissemination regarding social vulnerability reduction.

Social vulnerability reduction best practices will be identified and gathered for their dissemination by means of different graphic and digital supports in order to promote the implemented strategies' ownership within communities. This will develop a positive image towards communities, reinforcing their identity and sense of belonging in the local context.

#### **Activity 16.4** Field missions and experiences exchange

These aspects constitute key tools and motivate communities and socialize CC understanding. These will be programmed using collective regional spaces and at least three best practices exchange workshops (one each year) in cities yet to be selected.

#### **Activity 16.5** Communication and dissemination strategies and actions promoting ecosystems and NPA relevance regarding resilience for CC.

In order to strengthen the cultural change that implies the incorporation CCA and ecosystem's role in such adaptation, the development and dissemination of publications, videos and other contents (physical, web, communication media) are envisaged, especially within NPAs (signage, trails, interpretation and information centres). Also lectures, open workshops, etc focused on key stakeholders.

#### **Activity 16.6** Strengthening for the development of methodological guides on project communication and management that are implemented as part of CCA strategies. Río Negro Department, Uruguay.

**Output 16 inputs and budget:** sixty workshops, four consultants with experience on CC and disaster risk management for the envisaged activities' implementation. One consultant for dissemination methodological guide and material development. USD 300.000.-

## **B. Innovative solutions to climate change adaptation.**

57. The envisaged innovative solutions contemplate the following approaches:

58. Regional approach considering the lower Uruguay river's basin territory and its transboundary condition, as a critical element for the achievement of sustainable solutions as opposed to local disseminated actions.

59. A sustainable and resilient city conception, that integrates urban infrastructure based on constructions and ecosystems, contemplates social, economic and cultural diversity in its design and actively incorporates citizen participation.

60. The government's policies and actions regarding human settlements, habitat and housing is based on a rights approach that integrates and prioritizes both constitutionally and legally consolidated rights as well as those denominated as "new agenda rights". This new agenda considers, among other aspects, gender, intergenerational relations, disability, sexual and cultural diversity dimensions. It is also a government's priority, the inclusion of diffuse rights into the public agenda and governments actions regarding urban, housing and habitat development, health and healthy environment, suitable and accessible potable water and sanitation. Therefore this initiative contemplates the effective incorporation of rights into public policies, particularly

housing, habitat and urban development and the construction of institutionalism is encouraged according with such definitions.

61. The risk comprehensive management, that considers severe climate events as a priority and management instruments based on EWS and prevention.
62. Ecosystems based adaptation, considering their conservations and/or restoration importance in order to reduce CC impacts and preserve ecosystemic services and benefits.
63. Communities based adaptation, considering local capacities and participative strategies' enhancement for social resilience building, with a human rights, gender and generations approach.
64. 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, it was considered as an innovative adaptation strategy that could be strengthened by additional funding and also be use as a reference for other countries with similar urban flood risks. Under this plan, the resettlement of families with poverty conditions that were initially settled in flood prone areas was considered, based on three fundamental components: socio territorial integration, generation the opportunity to access a decent house in secure urban areas with complete services supply; access to Social Protection System promotion; fostering their integration into health, education and training for a greater occupational insertion and income improvement among others; and the recovery of vacant land for collective non residential usessuch as public parks after relocations were completed.  
( [http://unfccc.int/secretariat/momentum\\_for\\_change/items/8692.php](http://unfccc.int/secretariat/momentum_for_change/items/8692.php) )

## **C. Economic, social and environmental benefits of the project**

65. Social benefits: The development of the cities and its planning instruments, considering future climate scenarios will significantly contribute to improve the populations' life quality and their socio territorial integration. Examples of this are the urban infrastructure works for reduction of the overflows impacts and the recovery of vacant land as a result of relocations that will generate new public spaces for the cities.
66. Especially for the actions included in components 2 and 3, during the field mission (December 4-8, 2017), a survey was conducted to identify the profile of the vulnerable groups of each of the target locations. To do this, interviews were conducted randomly with inhabitants of the target areas, and with key stakeholders. Identifying the vulnerable communities of each of the locations, the activities of these components were agreed upon, in order to contribute to cities' resilience and reduce the vulnerability conditions of the population affected by climate change. Both through the construction of sustainable infrastructure adapted to the adverse effects of CC, and of adaptation actions based on the needs of communities and ecosystems, vulnerable communities are the target group of the activities and products proposed to achieve the expected results. And as we have mentioned, the activities were elaborated prioritizing the



rights, gender and generational approach. On the other hand, the strengthening of institutions and the consideration of the CC in territorial policies, plans and programs, will have an effect on vulnerable communities indirectly, but with the objective of incorporating mechanisms and instruments that allow facing the effects of climate variability also reduce the vulnerability conditions of these groups.

67. In the case of Uruguay, the whole adaptation approach for flood risk urban environment comes first from the definition of the flood risk map, where high risk and mid risk areas are determined and in this regard socio-economic conditions of the population play an important part of this determination. In this regard, the project relates to three areas identified in flood risk maps:
  - Enhancing the resettlement strategies of the national and subnational government towards the most vulnerable families in high risk flood prone areas by supporting resignification actions, labor training, and provision of new secure land with adapted services.
  - Enhancing the adaptation of mid risk housing towards middle vulnerability population.
  - Enhancing the resignification of flood prone areas with recreational parks towards the whole population of the city, and also by preventing high vulnerable communities to settle in flood prone areas.
68. Social vulnerability monitoring regarding climatic events will contribute to the development of social policies that aim for resilience building in the most affected communities, with a human rights, gender and generations approach.
69. Also, relocated communities will have new integration opportunities within the cities, access to new decent housing and public services and labour reconversion through training and the development of new ventures that enhance their quality life.
70. Financial opportunities (revolving funds, insurances) offered by the Project, will enable the mid risk flooding affected population to improve their houses.
71. Adaptation measures based on communities, that contemplate education, communications and awareness strategies, as well as existing social networks strengthening, will contribute to promote a more resilient and integrated population. This means that communities will be familiar with climatic threats, prevention strategies and EWS regarding new severe climatic events.
72. Economic benefits: The implementation of financial mechanisms for housing improvements, as well as labour reconversion opportunities for relocated communities represent direct economic benefits. As the same time, the implementation of adapted infrastructure generates indirect economic benefits avoiding costs from emergency response regarding extreme events. The enhancement of improved houses, represent additional economic benefits for both owner and the neighbourhood. Also resignified waterfront areas can bring more economic benefits to the city in terms of tourism and coastal recreational activities.
73. Environmental benefits: The basin based regional approach and ecosystem based adaptation measures constitute the most significant environmental aspects of the Project. NPA strengthening and connectivity, ecosystemic services and benefits mapping, 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 vacant land recovery that will be transformed into natural parks or buffer areas for water excess and environmental services promotion.

74. Impact mitigation and compliance with the law: The Project will comply with all the applicable local and national regulations regarding Environmental and Social Screening, Assessments and Monitoring including participation and consultation and access to public information requirements. It will also comply with CAF and AF Environmental and Social Policies and an Environmental and Social management instrument will be developed for the whole Project's implementation and administration. Synergies considerations and regional approach are critical regarding these aspects. A screening of risk analysis regarding the AF Principles was undertaken (See section G) where no significant risk were identified and prevention and mitigation measures were described. An exhaustive risk analysis will be developed for each AF principle during the Full Proposal development with particular prevention and mitigation measures for each Principle.

## **D. Cost-effectiveness of the proposed project**

75. The envisaged activities result cost-effective under the following considerations:
76. Strengthening National and Sub-National capacities through the development of planning and management instruments with a CC approach will enable more effective and efficient actions. The articulation of instruments such as EWS and regional risk management plans between countries contribute to a comprehensive vision of the problem providing more effective and sustainable solutions and measures, avoiding the need to review and adjust them at national and/or local level.
77. Moreover, maintaining an ongoing dialogue between countries and exchanging best practices and successful experiences, will favour replicating positive implemented experiences. Joint work among the different involved stakeholders from each country will prevent duplicating efforts and the use of resources, enhancing possible synergies.
78. Re-significating, vacant land from relocations not only contributes to the provision of new public spaces for the population, but also prevents re settling and the need of undertaking future relocations if floods affected newly settled vulnerable groups. With these actions, avoiding potential emergency response costs will be possible since the affected community won't occupied flood prone areas. On the other hand, new settlements with resilient infrastructure will
79. increase their sustainability and reduce further negative effects for their inhabitants, providing them with better life conditions and opportunities, making them more resilient to climate change.
80. Supporting measures, such as promoting new working skills in the affected communities, reinforce relocations sustainability and communities capacity to improve their lifestyles and earnings, building resilience against extreme events.
81. Ecosystem based adaptation measures, such as coast restoration, have proved to be of lower monetary investment and much more effective by enhancing and recovering ecosystemic services and its benefits. This kind of measures also increases community's awareness about

climate change reinforcing sustainability. The cross-border approach significantly contributes to increase the effectiveness and efficiency of the proposed measures.

82. A capacity building and knowledge management strategy increases the community capacities promoting resilience and empowerment. Promoting a unified vision and strategy at the regional level promotes more efficient and sustainable measures in the entire area affected by CC, potentially achieving economies of scale when implementing such measures.
83. A detailed cost-effectiveness analysis will be undertaken during the Full Proposal elaboration.

## **E. Describe how the project is consistent with national or sub-national sustainable development strategies**

84. The Project will be fully aligned and contributes to Argentina and Uruguay's objectives and priorities regarding the countries' policies and plans.
85. As previously mentioned, Uruguay has constituted a National Policy on Climate Change until 2050 and has presented, on November 2017, its first National Determined Contribution (NDC) regarding Paris Agreement. The Project's contribution to the referred policy's different dimensions is to be stressed. Regarding social dimension it considers: promotion of the populations' adaptation and resilience capacity promotion regarding CC and climatic variability emphasizing on social and climate most vulnerable groups; disaster risk management strengthening in local, departmental and national levels by means of different institutions and community coordination, articulating legal and tax instruments and the promotion of cities, communities, human settlements and sustainable and resilient infrastructure regarding CC. Considering the environmental dimension the following stand up: natural ecosystems' conservation, recovery and restoration and ecosystemic services and benefits provision based on adaptive management; vulnerability reduction in face of CC impacts on coasts and riversides by means of ecosystem based adaptation actions that minimize losses and damages.
86. Considering Uruguay's first NDC, the Project will foster a number of priorities and adaptation measures towards CC that are included in it. The most relevant are: re-signification of floodable zones by the assignation of new uses; at least eight floodable cities will count with a floods EWS; adaptation measures promotion in at least 30% of the cities with over 5.000 people; at least seven departments will count with regional, departmental or municipal local adaptation plans, at least six NPA that include CC in their management plans; and at least 20% of the Uruguay river, La Plata river and Atlantic Ocean's coast has an adaptive management with priority of most vulnerable sections.
87. Sustainable territorial planning is a priority for Uruguay's government, counting since 2008 with a Land Planning and Sustainable Development Act. This law promotes a comprehensive approach of planning and enables, among other aspects, to respond to CC effects, being local land management plans one of its instruments. Therefore, it can be affirmed that the present Project is consistent with this policy, since it expects these plans to consider CC.

88. Another Project's relevant aspect is related to climatic risk management and EWS that is considered in Uruguay's policy on this matter. On year 2009 the National Emergency System was established by law, in order to protect people, significant assets and the environment in face of disaster situations. In this framework, an EWS has been developed for a number of cities, especially those vulnerable to floods and protocols have been developed for the comprehensive climate risk management's different stages.
89. The Project is also aligned with national policy on biodiversity, considering the Law that creates, in year 2000, the National Protected Areas System which provides a fundamental tool for NPA's planning and management. Also, its regulating Decree incorporates their management plans enabling the incorporation of CCA elements.
90. Regarding water resources, Uruguay has a Water National Policy approved in 2009. It establishes that water resource management will aim for their sustainable utilization and will contemplate climate variability and extreme events situations in order to mitigate negative impacts, especially on populations. Also, the National Water Plan from year 2017, incorporates comprehensive water management instruments (basins, aquifers, urban waters) in which climatic risk approach is fundamental.
91. Uruguay was also recently awarded (January 2018) by the Green Climate Fund Readiness Programme a support to develop a National Adaptation Plan on Cities and Infrastructure that will also catalyse previous actions and experiences into a new systemic approach to CCA in cities, being the Uruguay river flood prone cities some of the prioritized areas for such NAP.
92. Considering Argentina's NDC, CCA is its main priority, taking into account the negative effects that have already affected the territory. In this context, Argentina includes in its NDC adaptation aspects, according to articles 7.10 and 7.11 of Paris Agreement. Within the Climate Change National Cabinet, the development process for the National Adaptation Plan (NAP) has been started, which will respond to identified priorities by the different sectors, jurisdictions (through COFEMA and municipal representatives) and civil society, academy and private sector relevant stakeholders. The NAP, which will have sub national and sectorial chapters, will promote the identification of adaptation priorities at national level, in order to generate an institutional and concept framework that will enable the design and implementation of local adaptation plans by other stakeholders. It is to remark that Argentina is undertaking to adaptation projects for the livestock sector with AF funding (a total of USD 9.936.817). These projects fund concrete adaptation measures in highly vulnerable communities: one on the country's Nor east for family agriculture adaptation and resilience building, and the other in Buenos Aires' Southwest for climatic resilience and sustainable land management.
93. Federal Plan for Flood Control is being implemented by the Ministry of Public Works and partially funded by de Hydrological Fund for the reduction of flood's effects and the development of water infrastructure. The proposed activities will foster this Federal Plan and will complement it with lessons learnt, pilot experiences and best practices.
94. National Plan for Disaster Risk Reduction form SINAGIR has been considered and is supported by the Project.

95. Regarding RAMSAR Convention on Wetlands, to which Argentina adheres by laws N°23.919 and N°25.335, the Strategy for La Plata Basin Wetland Conservation and Sustainable Use will be supported by the adaptation initiatives based on ecosystems included in the Project. Technical cooperation among basins will be enhanced by the activities of knowledge management, lessons learnt and information a best practices exchange.
96. Additionally, the following local projects, policies and plans will be supported and capitalized, among others:
  - Local Plan for Land Management and Sustainable Development in Paysandú and its micro region,
  - Local Plan for Land Management and Sustainable Development in Salto and its micro region
  - Fray Bentos and influence area Local Plan,
  - Urban Water Plan for Salto city,
  - Entre Ríos Environmental Diagnose, Territorial Strategic Plan,
  - Development Plan for Concordia,
  - Strategic Plan for Concepción del Uruguay,
  - Environmental Urban Development Plan for Colón,
  - Entre Ríos Provincial Strategy on low carbon and climate change resilient development.

## **F. Describe how the project meets relevant national technical standards**

97. The Project will comply with all the applicable local and national regulations regarding Environmental and Social Screening, Assessments and Monitoring including participation and consultation and access to public information requirements. It will also comply with CAF and AF Environmental and Social Policies and an Environmental and Social management instrument will be developed for the whole Project's implementation and administration. The Project will also consider national and local laws regarding technical standards, procurement, NPA, land management, construction codes, among others.
98. Relevant National legislation and regulations is presented:

### **For Argentina:**

99. Law 25.675: Environmental National Policy. Environment General Law
100. Minimum standards National Law for a sustainable and adequate environmental management, biological diversity preservation and protection and the implementation of sustainable development (Art 1°).
101. 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)

102. All construction or activity developed in the National territory, which is feasible of affecting significantly the environment or any of its components, or the communities' health will undergo an environmental impact assessment before its implementation. (Art 11)
103. Procedure starts with the presentation of an environmental affidavit stating if the construction or activity will have any effect on the environment. The competent authorities will state the need of and environmental impact assessment (EIA) which requirements will be established in a separate law for each jurisdiction. When required, an EIA will be developed and environmental impact statement will be issued approving or disapproving such construction or activity.(Art 12).
104. Authorities will be responsible for the diffusion of the environmental conditions and the effects that ongoing or envisaged anthropogenic activities could have on the environment. ((Art 18) Authorities should institutionalize consulting and audiences procedures as mandatory requirements for the approval of activities that could cause significant negative effects on the environment. Participants opinion or objections will not be binding (...) (Art. 21)
105. Decree 4977 regulates the above mentioned law establishing activities categorization, minimum requirements for EIA, Environmental Management Plans, Environmental Audits, community and stakeholder's participation among others.
106. Entre Rios subscribes to the above mentioned law by Resolution 038/10 and recognizing Municipalities competence regarding territorial planning and environmental certifications.
107. Law 25831: Access to public information:
108. This law establishes minimum standards and procedures for environmental protection in order to guarantee the right to access environmental public information.
109. Law 25688: Environmental regime for water management:
110. Establishes minimum requirements for water preservation and rational use. This law will be considered in the design and implementation of public services and coastal defences and their corresponding EIAs.
111. Law 25916: Urban Waste Management:
112. Establishes minimum standards for environmental protection regarding urban waste management. Entre Ríos Province subscribes and establishes its Urban Waste Management system by Law 10311.
113. Law 24051 Hazardous Waste Management:
114. Sets minimum requirements for Hazardous Waste Management including its generation, manipulation, transport and final disposure. Entre Rios subscribes to the national regulations by Law 8880. Note that no hazardous waste significant generation or manipulation is envisages for the Project. Nevertheless, some construction activities may lead to the generation of a minimum amount of non domestic waste. The corresponding EIA will state the guidelines for each particular case regarding these regulations.



115. Law 22.351 – National Parks, Natural Monuments and National Reserves

**For Uruguay:**

- 116. General Law for Environment Protection (Nº 17.283, December 28th 2000): Establishes the environmental policy's principles and environmental managements instruments (EIA, SNAP, among others).
- 117. National Policy on Climate Change to 2050 (November 3rd 2017):
- 118. Its goal is to promote adaptation and mitigation in Uruguay in face of Climate Change, contributing to the countries sustainable development.
- 119. Natural Protected Areas National System creation and management law (Nº17.234 February 22nd 2000), and its Regulating Decree (Nº52 from 2005)
- 120. National Water Policy Law (Nº 18.610 October 2nd 2009):
- 121. It establishes that all population has right to access potable water and sanitation. Also, it establishes guidelines and instruments for water resources management, conservation and protection. On Article 8, it states that, for bi national water resources sustainable management coordination, technical cooperation, and consumers' participation during all stages of planning, management and control should be fostered.
- 122. Land Planning and Sustainable Development Law (Nº18.308 June 18th 2008):
- 123. Sets the general regulating framework for land management and sustainable development, defines planning, participation and acting competences and instruments. Orientates land management towards the achievement of national and general interests. Its regulating Decree 221/2009 sets that all land management should integrate the environmental dimensions through an Environmental Strategic Assessment.
- 124. National Emergency System Law (Nº 18.621 October 25th 2009):
- 125. Creates an National Emergency System which goal is to protect people, significant assets and environment in face of the eventual or real distaste situation through the coordination of the State with the adequate use of public and private available resources, in order to foster the national sustainable development.
- 126. Law on decentralization and citizen participation; (Nº 19.272 September 18th 2014): Sets Government's third level stating that all every population over 2.000 people will constitute a Municipality and its territorial circumscription should conform a unity, with social and cultural personality, with common interests that justify the existence of representative political structures that enable citizen participation.
- 127. Environment Law (Nº16.466 January 19th, 1994):

128. States the Environmental Impact Assessment and Environmental Authorizations regime. Regulating Decree 349/2005
129. Law on Right to Public information Access (N°18.381 October 17th, 2008):
130. Promotes administrative functions' transparency in all public organisms and warrants the fundamental right of people to Access public information.
131. Natural Protected Areas National System Law 17.234 from 2000 and modifications:
132. Set the framework for the development and management of the Natural Protected Areas National System (SNAP).

## **G. Describe how the project complies with the Environmental and Social Policy of the Adaptation Fund.**

***Briefly describe in the space below how the Project mainstreams the Principles 1:***

### ***Compliance with the Law***

133. The project integrates compliance with the Laws in both countries. Both countries have several laws, regulations and specific procedures to manage environmental and social projects like this one.
134. At the local level, both countries have a municipal government with a set of competences established by law, such as development planning, management and control of land use, public sanitation services, among others related to mobility, public transport, permits of construction and community development. The project document supports all local regulations related to the specific areas of this project.
135. The Project is articulated through compliance with the different regulations as described in Chapter II. F.

#### **Argentina**

- Law 25.675: National Environmental Policy. General Law of the Environment
- Law 25831: Access to public information
- Law 25688: Regime of Environmental Management of Waters
- Law 25916: Urban Solid Waste Management
- Law 24051 Hazardous Waste Management

#### **Uruguay**

- General Law for the Protection of the Environment (N° 17.283 del 28 de December del 2000):

- National Climate Change Policy to 2050 (3 de November de 2017): Its objective is to promote adaptation and mitigation in Uruguay to the challenge of climate change, contributing to the country's sustainable development.
- Law for the creation and management of the National System of Protected Natural Areas (Nº17.234 of 22 of February de 2000), and its Regulatory Decree (Nº52 de 2005).
- Law on National Water Policy (Nº 18.610 del 2 de October de 2009):
- Law on Territorial Planning and Sustainable Development (Nº18.308 del 18 de June de 2008):
- Law for the creation of the National Emergency System (Nº 18.621 del 25 de October de 2009):
- Law on decentralization and citizen participation (Nº 19.272 del 18 de September de 2014):
- Environment Law (Nº16.466 del 19 de January de 1994):
- Law on the right of access to public information (Nº18.381 del 17 de October de 2008):

Finally, CAF as implementing entity will mainstream the compliance with all the laws. The project has an organization structure with a Project Board and a Project Unit responsible for making management decisions and monitor the compliance with all current regulations.

***Briefly describe in the space below how the Project mainstreams the Principle 2:***

***Access and equity***

The project is designed and implemented in a way that does not impede but rather promote the access of any group to essential services and basic rights.

For the design of the Project during the Pre Concept phase, a consultation process was carried out at the sub national level with the local authorities to evaluate what the existing needs in the region communities were. Then in the process of formulating the note of agreement a consultation process was carried out through informative workshops with the local communities both those directly benefited and those who could have co-benefits of the project. This ensured that the design of the project will not discriminate in any way the communities.

Likewise, the project states that it will design in its Full Proposal phase the communication mechanisms between the project and the communities. This is reflected above all in component 4 (Priority measures to increase social resilience) where it works directly with the community and social organizations where social vulnerability monitoring and analysis instruments are developed with a human rights, gender and generations perspective.

Methodologies of analysis, estimation or identification of the social perception of risk for the construction of resilience will be implemented, support and reconversion strategies will be promoted for the vulnerable population, social networks will be strengthened through the exchange of ACC strategies and experiences. local risk management and communication, education and dissemination strategies will be implemented to reduce vulnerability.

***Briefly describe in the space below how the Project mainstreams the Principle 3:***

***Marginalized and vulnerable groups***

The Project has a relevant participative approach and incorporates specific actions to involve marginalized and vulnerable groups. During the design of the Project, a stakeholder's analysis was undertaken in order to map their respective socio economic conditions in Concepción del Uruguay, Paysandú, Colón, Concordia and Salto (Annex 5).

***Briefly describe in the space below how the Project mainstreams the Principle 4:  
Human rights***

Both countries have ratified the core international human rights treaties. The Human Development Report (UNDP, 2016) show Uruguay in ranking 54/188 qualified as High Human Development and Argentina in ranking 45/188 qualified as Very High Human Development. Human development is all about human freedoms: freedom to realize the full potential of every human life, not just of a few, nor of most, but of all lives. This project would help with these realizations, even though the project are going to be develop in poverty areas with a lot of needs, the principle of universalism of the human rights will be translation into practice in the specific subjects, such as: adaptation measures, reduce vulnerability, reduce the risks of future disasters and help the people of this neighbourhoods to have voice and autonomy and also to be prepared for future disasters among others.

The project will mainstream a human rights-based approach, by ensuring the compliance with the realization of human rights, as established in the Universal Declaration, as well as,

the other international instruments related with human rights. The project would contribute the development of the capacities of the “duty bearers” to fulfil his duties and with the “rights holders” to claim their rights.

Promotion of human rights in the project will be achieved by creating awareness among all involved stakeholders and implementing entities in the project operations, including design, execution, monitoring, and evaluation, about the Universal Declaration of Human Rights as an overarching principle in the implementation.

***Briefly describe in the space below how the Project mainstreams the Principle 5:  
Gender equity and women´s empowerment***

The gender approaches taken in the presented proposal are substantiated by international and national legislation.

The Project aims to strengthen gender equity since women and men have different capacities and vulnerabilities. In this sense, the Project will be an opportunity to increase women and men´s vulnerability knowledge for assessing and analyzing if there is a significantly different risk because of gender aspects that allows to find concrete answers that support the breach reduction.

***Briefly describe in the space below how the Project is likely to improve the Principle 6:  
Core labour rights***

Both countries have ratified the eight core labour conventions, and in general face similar challenges like child labour and discrimination in respect to employment and occupation.

The Project mainstreams core labour rights in all the actions and at different levels. Argentina and Uruguay have mechanisms and laws related to labour rights. During the implementation, this Project will find the best mechanisms to mainstream this principle. CAF will act as an implementing entity. In this case, all the contracts hired will have to consider CAF's regulations. CAF follows strictly core labour conventions, avoiding child labour and any kind of discrimination.

The constructions mitigation measures will strictly follow the general conditions for contracts of civil works as well as the applicable labour legislation of each country. Also and specific output

and activities have been put in place regarding job opportunities for vulnerable communities, in this regard an effort will be made to enhance capacities of working men and women in vulnerable communities to move to formal and less vulnerable livelihoods.

***Briefly describe in the space below how the Project considers the Principle 7:  
Indigenous peoples***

In this Project, there are no identified Indigenous communities present.

***Briefly describe in the space below how the Project considers the Principle 8:  
Involuntary resettlement***

The Concept Note clearly indicates that all resettlement support processes are community based and that there is not going to be any type of involuntary resettlement to be carried

out and/or be supported by the Project.

***Briefly describe in the space below how the Project considers the Principle 9:  
Protection of natural habitats***

There are numerous Natural Protected Areas (national, local and private) in the area of Project implementation. They present different degrees of progress in their management and conservation, institutional agreements, projects and initiatives.

Pilot adaptation programs will be designed for their implementation in order to promote a useful adaptation methodology in areas with ecosystemic relevance, especially in Natural Protected Areas (NPAs) in order to promote the conservation of biodiversity in the context of threats climatic. These programs should consider the mapping and evaluation of environmental services in such a way that the relationship between ecosystems and human activities contributes to the reduction of climate risks in the community and economic spheres.

Exchange activities will take place between the National Parks of El Palmar (Argentina) and Esteros de Farrapos and Islas del río Uruguay (Uruguay) and the intention of a formal agreement between the National Parks Administration (APN) of Argentina and the MVOTMA-SNAP (System of Protected Areas of MVOTMA) of Uruguay.

Works will be identified, designed and executed to adapt vulnerable infrastructure (for tourism, livestock and beekeeping) in protected areas. Evaluation and adjustment of executed works.

In this sense, the project will work in an articulated manner in the improvement, conservation and promotion of the adaptation based on ecosystems as a measure of primordial adaptation for the development of the region.

***Briefly describe in the space below how the Project considers the Principle 10:  
Conservation of biological diversity***

Both countries where intervention will be undertaken are Parties to the Convention on Biological Diversity and have National Biodiversity Strategies.

The project will consider conserving biological diversity during the implementation of ecosystem based adaptation measures through fostering the adoption of native plant species. This will be

promoted for the component 2 and 3 where re signification of spaces as lineal parks and conservation of natural habitats will be developed.

***Briefly describe in the space below how the Project considers the Principle 11:  
Climate Change***

Both countries have ratified the Convention, the Kyoto Protocol and the Paris Agreement. Argentina and Uruguay have presented their First Nationally Determined Contributions (NDCs). The Project will manage the total amount of greenhouse gases emitted from the project implementation by undertaking rapid greenhouse gas emissions calculation using

internationally recognized methodologies.

The process of construction of re signification spaces will not exceed the suggested limits of CO<sub>2</sub> taking into account that they are the construction of green spaces with flood capacity and with the objective of being recreational areas, and may even work as carbon sinks. In component 2, where re signification of vacant spaces will be performed, pollution levels could be generated by vehicle displacements for construction materials that will be local or have a very low to minimal carbon footprint.

***Briefly describe in the space below how the Project considers the Principle 12:  
Pollution prevention and resource efficiency***

The Project will not generate greater pollution taking into account that they are workshops, consultancies for the generation of documents and the conservation and restoration of protected areas. In component 2, where some type of pollutant could be generated, it would be the waste of the construction works of the parks and resettlement areas.

***Briefly describe in the space below how the Project considers the Principle 13:  
Public health***

In general, the submitted proposal does not hold an implication of negative impacts on public health. The release of pollutants produced during the transport of material will be kept minimum and water or soil contamination as well is not expected to occur for this type of infrastructure construction; the other outputs and activities would not affect public health.

However, since community health and safety can be directly affected by noise, vibration, dust creation, traffic, emissions and air quality, implementing bodies will be informed of such impacts from construction work and try to minimize the impact on public health during the process.

To minimize disturbances on the public during building construction, not only the process of transport (i.e. building material delivery and other goods and services) will be managed but particular attention will be placed on the safety and health of workers along with communities residing around the construction site.

***Briefly describe in the space below how the Project considers the Principle 14:  
Physical and Cultural Heritage***

In both countries where the Project will be carried out, there are sites with historical, cultural, artistic, traditional or religious values that may be affected by the increase in coastal erosion.

In both National Parks, a work of exchange, joint learning and construction between the teams and actors of both locations is proposed. Advance in the development of a bi national park, as a biological ecosystem corridor, from a regional scale, and at the local level. New measures

aimed at revegetation and management of invasive alien species. It is also proposed to work on adaptation measures in a coordinated manner, through the development of maps, atlases, censuses, baselines, integrating a more urban rural interface in an integral format. Also try to protect the Jesuit Ruins that are inside El Palmar National Park and that are in danger of collapse due to the erosion of the coastal zone, such as the areas of Nuevo Berlín and Farrapos.

In this sense, the Project will seek the conservation of historical sites of high cultural and tourist value of both countries through the implementation of ecosystem adaptation measures under component 3.

***Briefly describe in the space below how the Project considers the Principle 15:***

***Lands and Soil Conservation***

The increase in average annual precipitation and extreme rainfall has generated a series of changes in the hydrological system of the basin, due to the decrease in the capacity of infiltration and storage of water in the soil system, the decrease in volume stored in the underground layers by erosion and compaction, as a result of urbanization, inadequate practices in agriculture, afforestation with exotic species and deforestation of the natural forest. As a result, there is an increase in coastal erosion at times of maximum precipitation and an increase in droughts at times of low rainfall.

One of the cities with the greatest erosion problems is Concordia. For the above, it will seek to generate protection against the erosion of the coast and several repairs in the water treatment plant in the city of Concordia, Argentina. In this sense, the project, in contrast to generating a negative impact, will work on the conservation of the margins with measures of ecosystem adaptation mainly.

## **H. Describe if there is duplication of project with other funding sources**

136. There is no duplication with projects with other funding sources. On the contrary, the proposed actions and measures complement the efforts that both countries are undertaking, especially those regarding land management plans strengthening, resettlement programs and existing EWS institutionalization.
137. Argentina has been working on the disaster risk management promotion through interinstitutional initiatives such as the current Risk Management Work Commission formed by specialist 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 a suitable articulation among the System's members for the effects of contributing to natural disaster related emergencies prevention.
138. On 2016, Inter American Development Bank (IADB) approved the Emergency Program for an Immediate Response to the Flooding in Argentina (AR-L1245) in order to support the transition process of the affected people towards the recovery of their social and economic regular activities, through the rehabilitation of road and water infrastructure regarding flood protection, public use buildings such as damaged schools and evacuation centres. Also, it expects to contribute with the basic services re establishment such as water and electric



energy in the affected areas, and finally cooperate with the remediation of areas that are susceptible of potentiating vectors' effects.

## Uruguay

139. In Uruguay, the Climate Change National Policy in force since 2017, frames the guidelines for sectorial policies regarding adaptation, such as water resources, land planning, housing and biodiversity. Currently, the country is developing a National Adaptation Plan for Cities and Infrastructure (NAP Cities) supported by the Green Climate Fund (GCF) Readiness Programme, which focuses on identifying vulnerabilities and actions in urban areas and infrastructures throughout the country.
140. On the other hand, since 2005 the Housing and Habitat Policy has been consolidated as a State policy, with leading five-year plans. The Housing Five-year Plan 2015-2019 establishes the consolidation of the Land Policy that generates sustainable conditions for the Housing and Habitat Plan as a particular priority. Additionally, another priority is to continue with the efforts to revert the problem of precarious housing from a "right to the city" point of view, and working in a intersectoral environment. In this way, MVOTMA and sub-national governments developed housing plans for the relocation of those communities living in floodable areas. These actions are executed with national funds and are complemented with IADB funding through the Planning and Budget Office from the Republic's Presidency.
141. Regarding risk disaster management, since 2015, the SINAE, through the Euroclima Program funded by various agencies, has started to develop a Disaster Risk Management Plan based in the Regional Plans.
142. Also, since the approval of the Water National Policy, a Water Plan has been developed 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 vulnerable cities regarding floods.
143. From the ecosystems point of view, the following interventions are taking place:
144. "Landscapes and National protected Areas System" project from MVOTMA with funding from UNDP and GEF, that include a pilot site that surrounds Montes de Queguay, Esteros de Farrapos e Islas del Uruguay and Esteros y Algarrobales del río Uruguay NPAs.
145. Also, the "Protected areas and surroundings value chains and governance" project, also by MVOTMA, along with UNDP and the French Fund for Global Environment (FFEM) and the "Biological corridor in Uruguay's west littoral" by CEADU with the European Union. None of these projects represent duplication, but opportunities for synergies.

## **I. Describe the learning and knowledge management component**

146. The Project understands that a regional approach is crucial for facing the CC effects and for implementing sustainable and resilient adaptation measures facing the changes in the
147. hydrological regime of a share driver. Government authorities, institutions and organizations, as well as civil society, community based organizations and educational institutions play different and important roles in the identifications, design and implementation of such measures.
148. In this sense, information, best practices, lessons learnt Exchange and integrations as well as knowledge management are key tools that promote participation and ownership, innovation and efficient allocation of resources and efforts.
149. Regarding disaster risk management, workshops and training for local and regional governments are envisaged, addressing positive experiences on land management, strategies for the development of sectorial plans regarding risk management and EWS, among others. These workshops and trainings will constitute learning and knowledge exchange spaces in order to gather information, unify criteria and set regional strategies. Training for officers, legislators, communication media and communicators, among others, to strengthen technical capacities and create regional knowledge. Validation workshops will contribute with first hand substantial information.
150. Plans, protocols and maps that include CC perspective will form part of resulting documents: land management and sectorial plans, disaster risk management plans, EWS, protocols, ecosystemic services and benefits maps, risk and vulnerability maps, damage and loss assessment methodologies, among others.
151. Regarding vulnerability reduction and resilience building, various workshops will be developed for local and regional governments, community organizations, educational institutions, among others. These workshops seek to generate knowledge, exchange adaptation experiences (financial, normative) and sustainable and resilient infrastructure (urban and housing), vulnerability reduction strategies and the design of pilot programs and projects.
152. Documentation, organization, standardizations and systematization of 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 established in order to sustain this exchange in time, and to update such information and knowledge. Awareness, communication and dissemination plans and actions will be focused in local communities (formal and non formal education, publications, field missions).
153. As complement of these tools, information Exchange and dissemination among other basins and complementary projects will be encouraged.

## **J. Describe the consultative process**

154. During the Field Mission and the project validation workshops (December 4-8, 2017), officials of the CAF team, of the MAYDS, of the MVOTMA, of the Province of Entre Ríos, of the cities of Concepción del Uruguay, Paysandú, Colón, Concordia, Salto, Río Negro, San Javier, representatives of social organizations, private organizations, neighbors, and the consultant in charge of the formulation of the Project participated. In addition, a specialist participated in the survey to identify the profile of vulnerable groups in each of the participating locations. To this end, interviews were conducted with inhabitants randomly selected from the intervention areas, participants of the validation workshops (representatives of NGOs, businessmen, merchants, housewives, etc.), and interviews were held with key stakeholders.
155. 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 that all of them be documented in order to be considered in the design of the project draft. In ANNEX 5, the second consultation process has been systematized, which complements the first consultation instance held in July 2017 (ANNEX 4). In each city, working meetings were held with authorities and representatives of the Municipality in the morning, followed by a field visit of the areas and in the afternoon a Workshop was held with the community.
156. The following paragraphs summarize the information included in these three annexes:  
Annex 4: “Systematization of the Consulting Process. July 2017”; Annex 5: “Systematization of the Consulting Process. December 2017” and Annex 8 “Stakeholder Mapping and Socio Economic assessment of cities, gender and vulnerable groups”
157. Regarding the stakeholders map development, the material forwarded by the different involved jurisdictional levels regarding each output was reviewed, on-site. Skype and telephone interviews were held with over 50 key stakeholders from civil society and the different levels of involved governments in both countries as well as the private sector. The map’s objective is to recognize the stakeholders’ main roles regarding the Project, and to identify possible actions that social and institutional stakeholders could undertake, outlining a network of interinstitutional partnerships regarding the intervention proposal. The stakeholders map defines the role - mission that each organization plays regarding the Project; competences- concrete actions that the stakeholder is responsible for; authority -the level and formality of the stakeholders influence I; their positioning –the stakeholders attitude towards the Project, that can be in favour, neutral or against; and the type of expectation regarding the Project – high, medium or low.
158. The workshops held during the development of the Pre Concept Note were:

- two workshops ,on July 17th and 24th, with the participation of Argentinean and Uruguayan authorities, and
- two workshops in vulnerable cities of the Uruguay river with the participation of national, departmental, provincial and local authorities; one in Concordia (Argentina) and one in Paysandú (Uruguay) (see [Annex 4](#)). Participants from Argentina were representatives of the cities of Gualeguaychú, Concordia, San José, Liebeg and Concepción del Uruguay, and Uruguayan participants were from Artigas, Salto, Paysandú and Río Negro Departments.
- 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 .

159. For the Concept Note development, the Project promoted different participating spaces for public institutions, academy and social organizations. A field mission was undertaken between December 4<sup>th</sup> and 8<sup>th</sup> with the participation of CAF, MAYDS, 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, neighbours, the consultants in charge of the Concept Note development and of 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.
160. Consultation/ validation workshops (see [Annex 5](#)) were developed with the following objectives: i) validating with vulnerable groups and stakeholders/beneficiaries the Project's proposals; ii) documenting and attending vulnerable groups opinions according to AF requirements; iii) validating new proposals from the beneficiaries and iv) generating opinion and validation spaces with beneficiaries, key stakeholders and vulnerable groups.
161. During the sessions, the Project's logical framework summary was provided to the attendees, the AF funding scheme and the activities to be developed were explained. During the group work, an observer recorded concerns and commentaries from the participants. In the plenary session, each group exposed and documented their exchanges. Finally, next steps were explained and the event's closure was carried out.
162. Also, meetings with technical teams and field visits were undertaken in locations where interventions are envisaged (listed below). Requirements were recorded and the proposals were reviewed jointly with officers and technicians in charge.
- Cantera 25 de Mayo neighbourhood, Concepción del Uruguay (with previous visit to South Defence5)
  - Unión Portuaria, Ledesma y Paysandú neighbourhoods
  - El Palmar National Park, Colón
  - Water treatment plant and eroded adjacent coast, Concordia
  - Muelle Negro and linear area Sauzal stream, Salto

163. For Argentina, the activities conducted by GNCC will become key tools to incorporate key stakeholders throughout the Project. The process not only contemplates national agencies and ministries, but also includes subnational governments, communities, private sector and CSO among others. COFEMA and the Federal Water Council (COHIFE) work in a similar way, including representatives from each province. The Project will capitalize the described mechanisms, as well as other institutional arrangements in order to achieve stakeholders participation and commitment.
164. Between 2016 and 2017, there have been several meetings with local governments and key stakeholders to develop specific proposals for each locality and provide evidence of this participative process in order to prepare materials that were used in support to the development of the Concept Note.
165. Numerous bi national proposals are being developed, regarding risk and protected areas management. There are also different tools and partnerships from MERCOSUR and Mercociudades that contribute to undertake joint interventions for the Basin.
166. This South Defense is completed and similar to the North Defense, under construction. Parks, boardwalks, equipment and lighting allocated in these vacant lands were visualized that work as reservoirs during strong rains.
167. Furthermore, a Community Relations Plan will be developed that includes a Key Stakeholders Participation Plan, Complaint Mechanisms and Consultation Processes. It will be enriched from the actions above described and will address the following aspects:
- Previous consultation
  - Stakeholders mapping
  - Key stakeholders identification
  - Dissemination of the following Projects aspects: detailed Project's description, list and explanation for each probable impact; prevention, minimizing, mitigation and compensating measures for those impacts;
  - Monitoring and Complaint and Claiming Plan, establishing a mechanism so any person that feels harmed can inform the responsible person.

## **K. Provide justification for funding requested**

168. The 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 the development of 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 of policy design and implementation and strategies development for facing climate change. 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 these best practices outreach.
169. On the other side, the Project will generate dissemination and assessment actions for society allocating relatively reduced funds, but still have a wide outreach and a positive and

synergic effect on capacities for greater resilience. Adaptation Fund's support, will enable the implementation of a strategy integrated and suitable to the regions specific conditions, that

170. covers from policy planning to specific actions implementation, their monitoring and assessment, and the corresponding articulation with other nationally implemented actions. As a parallel result, this project will allow to generate knowledge and strengthen capacities of the target populations.
171. In particular, AF funds will be allocated into the four Project's strategic components: i)
172. Territorial adaptation and flood risk management policies, plans and instruments, ii) Priority measures for floodable cities' resilience increment, iii) Priority measures for adaptive conservation of vulnerable coastal ecosystems and iv) Priority measures for increasing social resilience.
173. The complete proposal will look into the description of the base line, as well as the additionality regarding the Project's implementation.

#### **Component 1: Territorial adaptation and flood risk management policies, plans and instruments**

##### ☐ Baseline (without Project):

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, lack of a relevant integration of future CC scenarios.

The region also lacks of unified and coordinated EWS and Disaster Risk Management instruments that include CC perspective.

Relevant local and regional institutions related to these areas (land management, services, legislation, among others) also present different capacities and knowledge regarding risk management and CCA. There are no common criteria, parameters or systems in the region for flood related impact, damage and loss assessment, especially on urban areas. the development and improvement of Disaster Risk Management instruments and EWS are fundamental for preventing and mitigating the negative social, economic and environmental effects from CC, particularly regarding floods.

No significant negative impacts were identified during the Concept Note development. Most possible negative impacts may derive from construction works and are related to: noise and dust generation during construction, waste and effluent generation, traffic and circulation interference, among others. In this sense, each construction work within the Project's framework will undergo an Environmental and Social Impact Assessment including Monitoring, Impacts Prevention and Mitigation, Waste Management and Contingencies Plans in accordance to local regulations and considering both AF and CAF Environmental and Social Policies. Also, an Environmental and Social management instrument will be developed for the whole Project's implementation and administration.

Regarding ESP Principles such as "Access and Equity", "Marginalized and Vulnerable Groups", "Gender Equity and Women's Empowerment", the Project was designed with a significant participation and inclusion approach. Several participation and validation instances have and will be undertaken. Also, a stakeholder's map and a socio-economic assessment has been developed in order to identify all vulnerable and marginalized people and include this aspect during the activities design, as described above (see social benefits section).

Regarding gender considerations, data will be discriminated regarding all consultative and participative instances. Also, gender approach will be considered in the communication, diffusion and awareness raising design as well as in the activities regarding labour reconversion, social risk perception, among others.

The Concept Note states that the project is not going to directly perform any resettlement of high flood risk communities, but the activities proposed in this Project will support previously resettled communities or ongoing resettlements in processes led and funded by both governments. These activities include securing public services and infrastructure for new resettlements, social vulnerability monitoring and social risk perception, recovery of vacant flood prone areas for preventing new informal occupation that may lead to further resettlements, for public use and as buffer zones, labour reconversion solutions for previously resettled people, communication, education and dissemination strategies, among others.

☐ With AF funding (with Project)

Territorial and NPA planning and management plans as well as sectorial plans, will be reviewed and updated including CC and future scenarios perspective. They will be conferred a shared regional approach through knowledge and experiences exchange.

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 training will be implemented in order to generate capacities within the institutions to develop resilient and sustainable adaptation measures and regional solutions. Shared methodological guides will be developed for impact, damages and losses estimation and assessment, envisaging the possibility together and systematize the information regionally.

**Component 2 – Priority measures for increasing floodable cities’ resilience:**

☐ Baseline (without Project):

An important portion of the land where the communities relocated as an effect of the floods use to inhabit remains vacant, leading therefore to potential informal relocation processes. Also, some cities present flood prone land very close to urban centres, which can be attractive for spontaneous or new informal settlements if alternative uses are not promoted.

Urban infrastructure (roads, services, etc.) is not adapted to new or future CC scenarios, making it mostly ineffective. Vulnerable communities do not have access to such services, which increases their vulnerability to extreme events. They have also more exposure to pollution and unhealthy conditions.

☐ With AF funding (with Project)

The planned recovery of vacant land, not only will avoid informal occupation or re-occupation of high flood risk areas but will also provide citizens with new public spaces and the recovery of ecosystemic services that will contribute to CCA. The implementation of adapted infrastructure will ensure its availability and services access for the population. It will also reduce compensation and recuperation expenses for local governments.

Financial adaptation measures will significantly reduce the vulnerability of the cities, increasing the resilience of local communities.

**Component 3 – Priority measures for adaptive conservation of vulnerable coastal ecosystems:**



☐ **Baseline (no Project):**

Currently, ecosystemic services, benefits and connectivity are not fully known nor are taken into account regarding CCA and peoples quality of life. Often, this leads to the adoption of inefficient or counterproductive measures that can exacerbate CCs effects or reduce the ecosystemic services (water regulation, coastal defence, etc.) and its resilience.

Productive activities, as well as infrastructure implementation has sometimes severely affected ecosystems, reducing their services and benefits towards CC.

☐ **With AF funding (with Project)**

The identification and mapping of ecosystemic services and benefits will significantly contribute in land planning and management, risk reduction and management, resilience building and people's quality of life.

Additionally, the identification and assessment of non climatic drivers (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 for increasing social resilience:**

☐ **Baseline (without Project):**

Currently, local governments lack collected, documented and systematized information on the communities' vulnerability conditions in order to identify priority and effective measures for its reduction.

Affected and relocated communities, families and institutions' vulnerability has increased and their resilience has decreased due to the impact on their economic and livelihood activities.

☐ **With AF funding (with Project)**

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 learnt for future replications.

Labour reconversion measures will reduce the communities' economic vulnerability and will increase the affected people and institutions resilience.

The communication and dissemination strategy will be based on the perception of risks related to CC, raise awareness on the importance of CCA, of preventive and mitigating measures. It will prioritize increasing communities ability to face CC effects and reducing their vulnerability.

## **L. Sustainability of the project outcomes**

174. The Project is aligned with national and subnacional 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 feed back new strategic lines regarding those policies locally and nationally. Long term planning instruments that consider CC and future scenarios will be prioritized, contributing to the Project's sustainability.

175. Additionally, the incorporation of 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 CC field and flood management.
176. In this sense, the Project is based in national and local authorities responsible for local development and CCA. Local governments constitute key stakeholders for the Project's activities' implementations, but also regional governments, national organisms, academic institutions and CSO will be included. Institutional coordination is envisaged, and the creation of networks that will maintain the Project in the institutional agendas.
177. Regarding concrete actions, ecosystemic based adaptation measures are considered as the most resilient and, therefore, sustainable, as well as adapted infrastructure. Likewise, NPA strengthening is included in processes that already have budget allocation and maintenance staff, as well as community support which grant these solutions sustainability beyond AF's funding.
178. Financial measures such as revolving funds, insurances, labour reconversion, will contribute to the economic sustainability of ACC, especially in the mid and high risk areas of the vulnerable cities. Particularly, the revolving fund which is designed for assisting the flood affected communities, for housing and productive infrastructure adaptation, will be available for other affected people, with the subsidy return on behalf of the beneficiaries.
179. Finally, the communication strategy and plan, along with education related activities, will also contribute to results sustainability since they increase information, knowledge and awareness on CC, risk reduction, and resilience building. This strategy will also be designed with a gender approach in order to ensure women's access to relevant information.

**M. Provide an overview of the environmental and social impacts and risks identified as being relevant to the project / programme.**

130. A preliminary analysis on the Project's impacts and risks regarding AF's Environmental and Social Principles is presented bellow. A detailed impact assessment and mitigation plan will be developed during the Full Proposal development. (See Annex 6 for complementary information)

Checklist of environmental and social principles	No further assessment required for compliance	Potential impacts and risks – further assessment and management required for compliance
<i>Compliance with the Law</i>		<p>This is a main principle which applies to all projects.</p> <p>Some interventions included in components 2 and 3 may require specific environmental administrative authorizations. For example:</p> <p>Output 7. Vulnerable vacant land from resettlements has been recovered and re signified to prevent informal re occupation and Output 8. Technical assistance and sustainable urban and public services infrastructure have been implemented in new resettlements on secure land.</p> <p>For this, it is important that in phase of developing the full proposal the activities that need them start the processing of the permits, registries, licences, etc.</p>
<i>Access and Equity</i>		<p>As it is not defined the mechanism of identification of the beneficiaries in the concept phase during the full proposal development there should be a mechanism to define this.</p>

Checklist of environmental and social principles	No further assessment required for compliance	Potential impacts and risks – further assessment and management required for compliance
		For example Output 14. Assistance and labour reconversion strategies have been promoted for vulnerable population needs to present the mechanism of access to beneficiaries.
<i>Marginalized and Vulnerable Groups</i>	Vulnerable groups of the Project's implementation area are identified. Projects actions (vacant land re signification and labour reconversion) are designed in order to benefit such groups.	
<i>Human Rights</i>		This is a main principle which applies to all projects.  Eventhough both countries have signed the human Rights Declaration, thereis no protocol that implies how this will be monitor with the diferetrn operational contractors. This has to be defined in the ESMP during the full proposal design.
<i>Gender Equity and Women's Empowerment</i>	The Project seeks to strengthen gender equity since women and men have different capacities and vulnerabilities. The Project will be an opportunity to improve knowledge regarding men and women's vulnerability in order to assess if there are significantly risk differences related to gender issues and find concrete solutions that support the breach reduction.  During the concept note development the project focused that both women and men 1) have equal opportunities to participate as per the AF gender policy; 2) receive comparable social and economic benefits; and 3) do not suffer disproportionate adverse effects during the development process.	

Checklist of environmental and social principles	No further assessment required for compliance	Potential impacts and risks – further assessment and management required for compliance
<i>Core Labour Rights</i>		<p>This is a main principle which applies to all projects.</p> <p>Some interventions included in components 2 and 3 may require specific operational contractors that have to comply with the International Labour Organization (ILO).</p> <p>For this reason during the concept note formulation the ESMP has not been developed and shall be done during the Full Proposal phase.</p>
<i>Indigenous Peoples</i>	In the area of influence there are no indigenous people. For this reason. No risks or adverse impacts is envisaged.	
<i>Involuntary Resettlement</i>	<p>The Project does not include activities that may lead to involuntary resettlements.</p> <p>None of the activities presented will or have a risk of resettlement.</p> <p>Resettlement policies in relation to flood risks in the rio Uruguay region in the last couple of decades have involved social participation and community base approaches, in the hypothetical case that an involuntary relocation risk takes place in relation to the Project, there are a group of existing mechanisms and procedures that apply in order to avoid it.</p> <p>Governments of Uruguay and Argentina have developed a very social mechanism for the needed resettlements.</p>	
<i>Protection of Natural</i>		Project's objectives include ecosystem and NPA

Checklist of environmental and social principles	No further assessment required for compliance	Potential impacts and risks – further assessment and management required for compliance
<i>Habitats</i>		<p>strengthening and vulnerability reduction. El Palmar and Esteros de Farrapos National Parks are included among other protected areas.</p> <p>The Projects activities within protected areas should consider specific regulations and should be evaluated by competent authorities.</p> <p>Output 10. Ecosystemic services and co benefits have been identified and assessed, including CCA and Uruguay river's ecosystems connectivity and Output 11. New ecosystem-based adaptation measures have been designed and implemented are related directly with this principle.</p> <p>However, as at the moment of the Concept Note, the areas of the intervention where not defined, it is not clear of possibility of risk.</p>
<i>Conservation of Biological Diversity</i>		<p>The Project's interventions will consider ecosystemic approaches in the NPA and land management plans, as well as new adaptation strategies bases on ecosystems.</p> <p>Output 10. Ecosystemic services and co benefits have been identified and assessed, including CCA and Uruguay river's ecosystems connectivity and Output 11. New ecosystem-based adaptation measures have been designed and implemented are related directly with this principle.</p> <p>However, as at the moment of the Concept Note, the possible species of the intervention where not defined, it is</p>

Checklist of environmental and social principles	No further assessment required for compliance	Potential impacts and risks – further assessment and management required for compliance
		not clear of possibility of risk.
<i>Climate Change</i>		<p>The project belongs to the “building materials” sector mentioned in the Guidance document for which a greenhouse gasses emission calculation is required.</p> <p>As at the moment of the Concept Note, the possible species of the intervention where not defined, it is not clear of possibility of risk.</p>
<i>Pollution Prevention and Resource Efficiency</i>		<p>Risk of designing and implementing the project in a way that does not meets applicable international standards for maximizing energy efficiency and minimizing material resource use, the production of wastes, and the release of pollutants.</p> <p>As at the moment of the Concept Note, the possible species of the intervention where not defined, it is not clear of possibility of risk.</p>
<i>Public Health</i>		As there are not defined the activities or designs of the project, the screening of public health was not able to be done.
<i>Physical and Cultural Heritage</i>		<p>Risk of a project designed and implemented in a way that may cause damage or harm any cultural sites.</p> <p>The project will try to protect cultural sites that are in danger because of the river erosion caused by the increment of the river level and inundations. However, as at the moment of</p>



Checklist of environmental and social principles	No further assessment required for compliance	Potential impacts and risks – further assessment and management required for compliance
		the concept design was not clear the detail and type of measure that is going to be used, at this stage this causes risk to the principle.
<i>Lands and Soil Conservation</i>	<p>The Project has been design to strengthen this kind of soil, with envisaged activities for preventing erosion progress in the coast of Uruguay river.</p> <p>The Project itself has the potential to reduce the risk of landslides caused by fragile soils in the river.</p> <p>The Project per se, aims to reduce the risk of soil erosion in Uruguay's river by implementing green infrastructure.</p> <p>The Project will comply with the regulations and requirements to avoid any type of problem related to the construction of gabions if needed.</p>	

131. As a result of this analysis, minor risks and environmental and social impacts have been identified. Principle 1, Compliance with the Law will require close follow up during the Project's implementation. In this sense it is classified as category C according to the established ESP. (See Annex 7)

## PART III: IMPLEMENTATION ARRANGEMENTS

### A. Arrangements for project that has been considered.

#### I- Organizations involved in the Project:

##### i) Regional/Bi national Level:

- ☐ Project's Bi-National steering Committee (BNC)
- ☐ Salto Grande Mixed Technical Commission (CTMSG)
- ☐ Uruguay river Administrative Commission (CARU)\*

\*Regarding CARU's role in the Projects implementation, contact has been made among both Ministries and CARU's respective national delegations. Also, CARU members have participated in the consultation workshops. Nevertheless, CARU's specific role has not been determined formally at this stage, which will be formally addressed in a formal joint decision between CARU and the Projects proponents for the Full Proposal. One of the considered roles is clearly related to the hydrological models aspects. The Project has been forwarded to CARU by note 245/17 and has been presented to the water sub commission on Report N°9 with the instruction to contact the Project's responsible in order to deliver contributions to the Project.

##### ii) National Level:

- ☐ Argentina's Ministry of Environment and Sustainable Development (MAyDS).
- ☐ Uruguay's Ministry of Housing, Land Planning and Environment (MVOTMA).

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

\*\*Argentina's Ministry of Foreign Affairs and Cult, General Directorate for the Environment, and Uruguay's Ministry of Foreign Affairs, Environment Direction, could be included in the Project's governance model, this definition will be clearly identified in the Full Proposal.

##### iii) Sub national Level: Provincial/Departmental and Municipal

- ☐ For Uruguay:  
Departmental governments of Artigas, Salto, Paysandú and Río Negro.

□ For Argentina:

Provincial Government of Entre Ríos.

Municipal (local) Governments of Colón, Concordia, Gualeguaychú, Federación, Islas del Ibicuy and Concepción del Uruguay.

## **II- Expected Coordination Guide/System**

A Bi-National steering Committee (BNC) will be established for the Project, with executive nature constituted by one (1) representative from the Argentinean Government through the MAYDS, one (1) representative from the Uruguayan Government through the (MVOTMA), and one (1) representative of CAF.

\*\* Argentina's Ministry of Foreign Affairs and Cult, General Directorate for the Environment, and Uruguay's Ministry of Foreign Affairs, Environment Direction, could also join the BNC.

The BNC will be maximum authority of the Project, where decisions are taken by consensus and annual operative plans, procurement plans, etc. will be approved by consensus.

The BNC will invite representatives of National Executing Units and from the Regional Office, who will have the roll of informing to the members of the CDB on the advances and proposals regarding the Project's activities.

## **III- Operative Structure:**

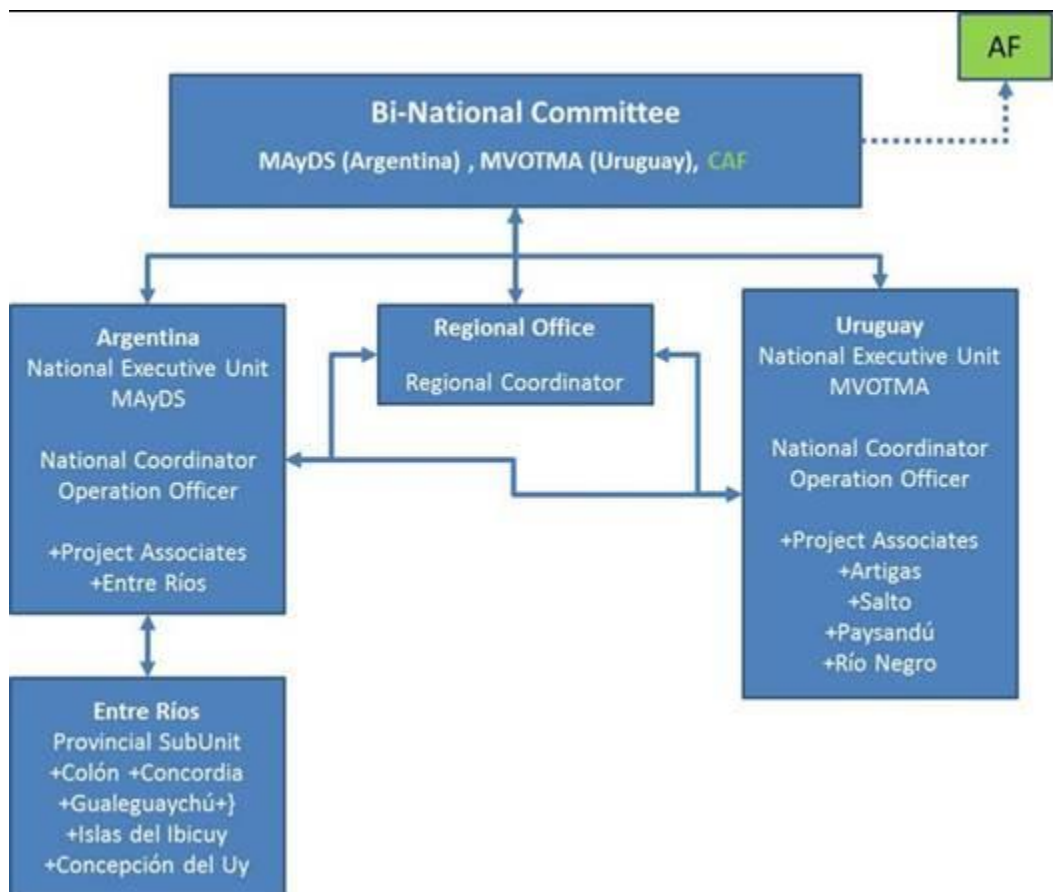
A Regional Office (RO) will be constituted for the implementation of binational Project's outputs and activities. It will submit the annual plans for the bi national outputs to the BNC for its approval. The RO will be directed by a Regional Coordinator who should interact with CAF and will articulate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

Both MVOTMA and MAYDS will create a national executive unit (NEU) within their structure.

Each NEU's coordination will be under a National Coordinator (one for Uruguay and one for Argentina) that will report to the BNC and that will coordinate with the Regional Coordinator. 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's coordination will be supported a National Operational Officer (one for Uruguay and one for Argentina) that will report to the National Coordinator and will interact with CAF for execution and administrative matters, and both National Operational Officers will be selected by the BNC.

CAF will receive the funds through their Special Funds Direction (DAFE). Each country will receive their funds through each CAF's country office who will determine the disbursement mechanisms.



**B. Describe the measures for financial and project / programme risk management.**

Identified risks	Type	Risk appraisal	Mitigation measures
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Identified risks	Type	Risk appraisal	Mitigation measures
Changes in national and/or departmental governments may lead to lack of support of the Project's activities.	Political	Low	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 CC issues in the GNCC and SNRCC's framework, in which national and subnational governments are represented.
Lack of compromise on behalf of local communities may lead in the intervention's failure.	Social	Low	The Community Relations Plan will be developed during the introduction phase, but it is known that governments have been continuously working with affected groups since floods are their main concern. Community stakeholders have been consulted from the first stages, including them in the Project's implementation.
Insufficient financial resources to implement Project's activities.	Financial	Low	A detailed budget will be developed during the Full Proposal preparation. Project's implementation will be supervised in order to identify promptly financial breaches.

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

132. This section will be developed during the Full Proposal preparation.

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

133. Project's M&E Plan will be undertaken according to CAF's standard requirements, as agreed with the AF. A preliminary guideline is listed below. Annual Progress Reports will be developed with the inclusion of the AF's Results Tracker.

134. Independent midterm and terminal assessments will be developed in order to assess the Project's progress and lessons learnt.

135. M&E Plan's budget will be developed during the Full Proposal preparation

Type of M&E activity	Responsible parties	Budget USD (does not include Project team)	Frequency
Project's direct monitoring and quality verification including progress and financial reports, revisions, technical assistance and risk management	<ul style="list-style-type: none"> <li>National Regional Coordinators</li> <li>BNC</li> <li>CAF</li> </ul>	Team's support costs were included in the Project's execution	Quarterly, biannual and annual as required
Assessments (Independent, midterm and terminal)	<ul style="list-style-type: none"> <li>National Regional Coordinators</li> <li>CAF</li> <li>BNC</li> <li>Independent consultants.</li> </ul>	50.000	Midterm and terminal
Audit	<ul style="list-style-type: none"> <li>National Regional Coordinators</li> <li>BNC</li> <li>CAF</li> </ul>	40.000	Annual at year's end

Type of M&E activity	Responsible parties	Budget USD (does not include Project team)	Frequency
Induction meeting, field missions, CDB meetings	<ul style="list-style-type: none"> <li>• National and Regional Coordinators</li> <li>• BNC</li> <li>• CAF</li> </ul>	50.000	Induction meetings within the first two months and bi annual. Other meetings and field missions when required



**D. Include a results framework for the project / programme proposal, including milestones, targets and indicators.**

136. This section will be developed during Full Proposal preparation

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

Project Objective(s) <sup>3</sup>	Project Objective Indicator(s)	Fund Outcome	Fund Outcome Indicator	Grant Amount (USD)
<p>GENERAL OBJECTIVE:</p> <p>Build resilience in coastal vulnerable cities and ecosystems of the Uruguay river by the development of instruments, tools and experiences for adaptation planning and implementation as well as managing climate change and variability impacts and risks.</p>	Will be developed for Full Proposal	1: Exposure to climate risks reduced		

<sup>3</sup> The AF used OECD/DAC terminology for its results framework. Project proponents may use different terminology but the overall principle should still apply

Project Objective(s) <sup>3</sup>	Project Objective Indicator(s)	Fund Outcome	Fund Outcome Indicator	Grant Amount (USD)
<p><b>SPECIFIC OBJECTIVES</b></p> <p>1. To reduce vulnerability conditions and contribute to build CC and variability resilience in vulnerable coastal communities and ecosystems from Uruguay river, including adaptation measures based on communities and ecosystems, while focusing on human rights, gender and generations.</p>	Will be developed for Full Proposal	<p><b>1:</b> Exposure to climate risks reduced</p> <p><b>3:</b> Strengthening of CCA awareness, ownership and local climatic risk reduction</p> <p><b>4:</b> Increase of adaptation capacities of relevant basic public services and infrastructure</p> <p><b>5:</b> Increase in the ecosystems resilience regarding CC response and variability induced stress</p>	<p>1. Relevant information regarding threats and risks was developed and disseminated among stakeholders in due time</p> <p>3.1. Percentage of informed population on adverse CC impact forecast and adequate response measures</p> <p>4.1. Adapted infrastructure</p> <p>5. Strengthened or conserved environmental services and natural resources regarding CC and climatic variability</p>	
<p>2. Promote institutional strengthening by the inclusion of CC mid and long term future scenarios in land management public policies, plans and programs for the vulnerable cities and ecosystems</p>	Will be developed for Full Proposal	<p><b>2:</b> Strengthened institutional capacities for CC risk reduction regarding damages and losses</p> <p><b>7:</b> Improved regulations and policies to promote and strengthen resilience measures</p>	<p>2. Increase of the governments' officers capacities to respond and mitigate climatic extreme events impacts.</p> <p>7. CC priorities have been included into the national development strategies</p>	
<p>3. Promote an integrated</p>	Will be developed for Full Proposal	<p><b>2:</b> Strengthened institutional capacities for CC risk</p>	<p>2. Increase of the governments' officers</p>	

Project Objective(s) <sup>3</sup>	Project Objective Indicator(s)	Fund Outcome	Fund Outcome Indicator	Grant Amount (USD)
climatic risk management in the Project's cities and ecosystems fostering the implementation of EWS.		reduction regarding damages and losses	capacities to respond and mitigate climatic extreme events impacts.	
4. Reduce cities vulnerability by implementing sustainable adapted infrastructure	Will be developed for Full Proposal	4. Increase of adaptation capacities of relevant basic public services and infrastructure	4.1. Adapted infrastructure	
5. Promote CCA through exchanges in urban, ecosystemic and socio cultural best practices and experiences and knowledge management.	Will be developed for Full Proposal	3: Strengthening of CCA awareness, ownership and local climatic risk reduction	3.2 Percentage of population implementing appropriate adaptation responses	

**F. Include a detailed budget with budget notes, broken down by country as applicable, a budget on the Implementing Entity management fee use, and an explanation and a breakdown of the execution costs.**

137. This section will be developed during Full Proposal preparation

**G. Include a disbursement schedule with time-bound milestones.**


138. This section will be developed during Full Proposal preparation

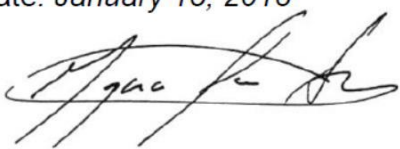
**PART IV: ENDORSEMENT BY GOVERNMENTS AND CERTIFICATION BY THE IMPLEMENTING ENTITY**

**A. Record of endorsement on behalf of the government<sup>7</sup>**

*Provide the name and position of the government official and indicate date of endorsement for each country participating in the proposed project / programme. Add more lines as necessary. The endorsement letters should be attached as an annex to the project/programme proposal. Please attach the endorsement letters with this template; add as many participating governments if a regional project/programme:*

*Endorsement by Ministry of Environment and Sustainable Development - Argentina*  
*Endorsement by Ministry of Housing, Land Planning and Environment - Uruguay*

  Lucas Di Pietro Paolo Adaptation to Climate Change Director Ministry of Environment and Sustainable Development - Argentina	Date January 15, 2018
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Ignacio Lorenzo Director of Climate Change Ministry of Housing, Land Planning and Environment Uruguay	Date: January 15, 2018 
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<sup>6</sup>. 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.

## B. Implementing Entity Certification

*Provide the name and signature of the Implementing Entity Coordinator and the date of signature. Provide also the project/programme contact person's name, telephone number and email address*

I certify that the "**Regional Project Climate change adaptation in vulnerable coastal cities and ecosystems of the Uruguay River (Argentina and Oriental Republic of Uruguay)**" proposal has been prepared in accordance with guidelines provided by the Adaptation Fund Board, and prevailing National Development and Adaptation Plans of Argentina and the Oriental Republic of Uruguay 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.



*Ligia Castro de Doens*  
Implementing Entity Coordinator

Date: *January 15 2018*

Tel. and email: +5717449444  
lcastro@caf.com

Project Contact Person: Carolina Cortés

Tel. And Email: +59323988437 – acortes@caf.com

## **ANNEXES:**

- ☐ Annex 1:Acronyms and abbreviations
- ☐ Annex 2:Consulted bibliography
- ☐ Annex 3:Maps
- ☐ Annex 4:Systematization of the consultation process July 2017
- ☐ Annex 5:Systematization of the consultation process December 2017
- ☐ Annex 6:Social and Environmental Risks Screening and Risk Identification
- ☐ Annex 7: Screening matrix to verify compliance with the Adaptation Fund's Environmental and Social Policy
- ☐ Annex 8:Stakeholder Mapping and Socio-Economic assessment of cities, Gender and vulnerable groups
- ☐ Annex 9:Request for Project Formulation



## ADAPTATION FUND

### REGIONAL PROJECT/PROGRAMME PROPOSAL

#### PART I: PROJECT/PROGRAMME INFORMATION

##### **Climate change adaptation in vulnerable coastal cities and ecosystems of the Uruguay River.**

Countries: Argentina Republic and Oriental Republic of Uruguay  
Thematic Focal Area1: Disaster risk reduction and early warning systems  
Type of Implementing Entity: Regional Implementing Entity (RIE)  
Implementing Entity: CAF – Corporación Andina de Fomento (Latin American Development Bank)  
Executing Entities: Ministry of Environment and Sustainable Development of Argentina and Ministry of Housing, Land Planning and Environment of Uruguay.

Amount of Financing Requested: 13.999.996 USD (in U.S Dollars Equivalent)



## Project / Programme Background and Context:

### 1.1. Problem to be addressed – regional perspective

1. The Project's implementation is focused on the lower Uruguay river's littoral area, specifically in the vulnerable coastal cities and ecosystems in both Argentinean and Uruguayan territories. The lower Uruguay river's littoral plays a main role being a structuring element for territorial balance since most cities and port-cities are located in it, with border bridges between the two countries (Fray Bentos – Gualeguaychú; Paysandú – Colón; and Salto – Concordia). The basin of the Uruguay river occupies part of Argentina, Uruguay and Brazil, with a total area of approximately 339.000 Km<sup>2</sup> and an average flow rate of 4.500 m<sup>3</sup> s<sup>-1</sup>. It's origin is located in Serra do Mar (Brazil), and runs for 1.800 Km until it reaches Río de la Plata. A 32% of its course flows through Brazilian territory, 38% forms the Brazil-Argentina boundary and a 30% forms the Argentina-Uruguay boundary.
2. The Project's area topography is characterized by a homogeneous landform without high elevations, creating meandric waterways, making it highly vulnerable to floods as one of its main hydro-climatic threats, which has been exacerbated by the effects of climate change (CC). (See additional maps on [Annex 3](#)).

<sup>1</sup> Thematic areas are: Food security; Disaster risk reduction and early warning systems; Transboundary water management; Innovation in adaptation finance.

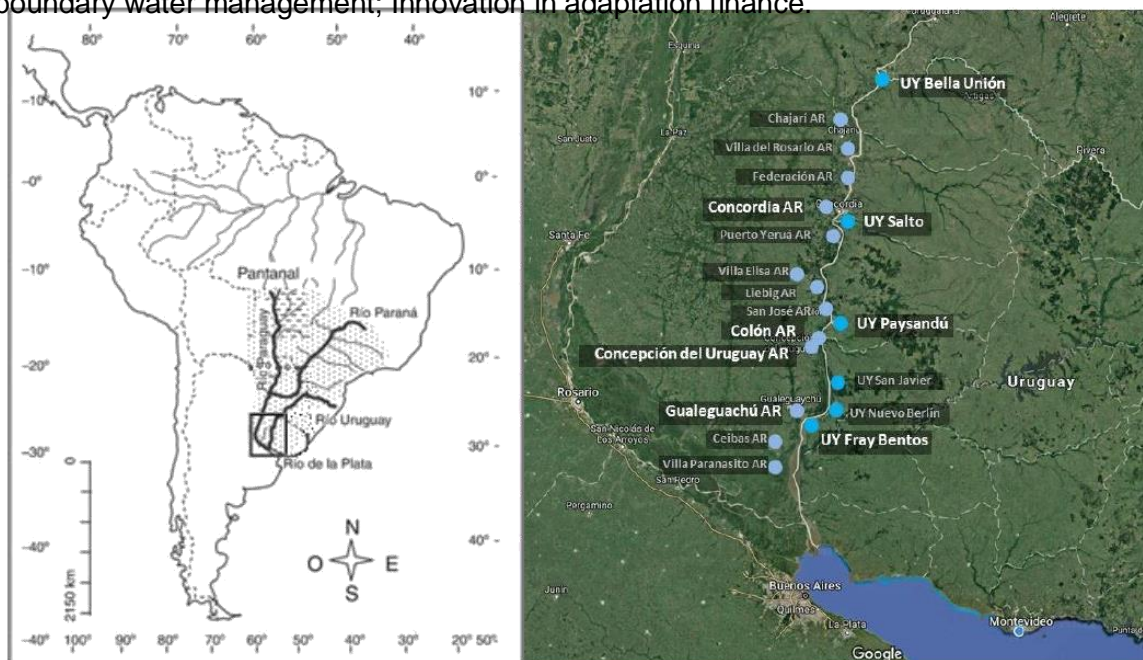


Figure 1. La Plata Basin and lower Uruguay river sub basin (Modified from Arzamendia 2015). Detail of vulnerable cities on both margins of the Uruguay river (Adapted from LANDSAT image-Copernicus 2017; -SIU NOAA, US Navy NGA-GEBCO).

3. On its middle course, the binational Hydroelectric Power Plant “Salto Grande” is located approximately 15 km North from Salto (Uruguay) and Concordia (Argentina) cities. This artificial dam is crucial for retaining water for power generation and also serves as regulating its flow in order to reduce the effects of high peak floods. The riverside constitutes a territorial structuring backbone in both margins which is valued from its socio economic, cultural, recreational and landscape point of view.
4. The Uruguay river and its littoral represents a ecological corridor that flows and connects both countries and it is also a natural entry for Argentina and Brazil’s tropical species (Misiones’ rainforest and Mata Atlántica respectively) to more temperate zones in the lower Uruguay’s basin. These characteristics (biodiversity, riparian forests and wetlands) make it of relevance for national and regional conservation. In the Argentinean side, the National Parks Administration (APN) has two Natural Protected Areas (NPA): El Palmar and Predelta National Parks with over 10.000 hectares of biodiversity conservation. On the other side, Uruguay has the Esteros de Farrapos Islas del Uruguay National Park and Algarrobales of the Uruguay río NPA with a total of 18.000 hectares. Both El Palmar and Esteros de Farrapos e Islas del Uruguay are part of RAMSAR convention for being wetlands of global relevance.
5. Due to the pressure on riparian forests in both Uruguay river’s margins, erosive processes are detected in different coastal areas as well as significant floods during extreme precipitations in the lower and upper river. In this context, the need of implementing restoration and adaptation measures based on ecosystems becomes fundamental in order to ensure buffering areas for floods regulation, natural and cultural resources provision and ecosystemic services.
6. The Region’s climate is temperate and wet while the lower Uruguay basin is located in areas with 2000 mm annual precipitations, with monthly average variations between 70 mm to 132 mm in Winter and Spring, provoking overflows with thirty to sixty days delays. Upstream of the Project’s area, the river presents numerous rapids, waterfalls and cliffs. South America’s tropical and subtropical areas are characterized by the South American Monsoon, a seasonal atmospheric circulating system in South America and adjacent oceans, that is conditioned by seasonal solar radiation that has a marked influence in the La Plata basin hydro-climatic regime, being that the well-defined annual rainfall cycle is one of its main characteristics, with reports of higher values during Summer and lower values during Winter.

*Table 1. Results for regional climate model ETA (10 Km) for future scenarios (compared to period 1961-1990). Results present a raise in temperature and precipitations for lower Uruguay river basin. Source: CIC*

Macro  Basin	Precipitation s			Temperature		
	Periods					
	2011-2040	2041-2070	2071-2100	2011-2040	2041-2070	2071-2100
Upper Paraguay	Decreases all year	Decreases DJF	Decreases DJF	Increases all year>2°C	Increases all	Increases all year>3°C

				DJF>3,5°C	year>3°C	DJF>4°C
<b>Lower Paraguay</b>	Decreases SOM-DEF	increases MAM	Increases MAM-SON	Increases all year>2°C	Increases all year>2,5 °C	Increases all year>2,5 °C
<b>Upper Paraná</b>	Decreases all year	Decreases DJF	Increases MAM-JJA- SON	Increases all year>2°C	Increases all year>2°C	Increases all year>2,5 °C
<b>Lower Paraná</b>	Increases MAM-DJF	Increases MAM-DJF	Increases MAM-DJF	Increases all year>2°C	Increases all year>2°C	Increases all year>2,5 °C
<b>Upper Uruguay</b>	Increases MAM-SON	Increases MAM-JJA- SON	Increases all year	Increases all year>2°C	Increases all year>2,5 °C	Increases all year>2,5 °C
<b>Lower Uruguay</b>	increases DJF	Increases JJA-DJF	Increases MAM-DJF	Increases all year>1°C	Increases all year>2°C	Increases all year>2,5 °C
<b>La Plata river</b>	Increases DJF	increases DJF	Increases MAM-DJF	Increases all year>1°C	Increases all year>2°C	Increases all year>2,5°C

7. Since the 70s, there has been an increase of mean annual precipitations in the project's area, which, on one hand expanded the agricultural frontier West of the perispheric traditional wet area, and on the other hand, gave place to permanent or transitory floods of a significant amount of productive fields as well as populated urban areas. There has also been a considerable increase of the rivers' flow rate, and even if this led to benefits for the hydroelectric sector, it also generated a greater frequency of floods and important socio economic disruptions. There has been also a considerable increase in the extreme precipitations rate in the region that was exacerbated during the 90s and has caused significant damages from floods, destructive winds and hail associated to these events. Additionally, the basin's hydrological system has been modified due to the reduction of infiltrating and water storage capacity in the soil system, a reduction of the volume of water stored in the underground layers due to erosion and compression due to urbanization, inadequate farming practices, afforestation with exotic species and deforestation of the natural vegetation causing an increase of floods during maximum precipitations and an increase of droughts during scarce precipitations. The integration of these factors leads to recurrent disasters caused by floods in the last decades, with an average rate of one or two per year.

8. The projected scenarios for climate change (CC) for this region are available in Argentina's Third National Communication on Climate Change (TCNCC Argentina, 2015<sup>2</sup>) and in Argentina's Climate Change Risk Maps National System (SIMARCC – <http://simarcc.ambiente.gob.ar>). Projections foresee a tendency to greater extreme precipitations, which could generate an increase in the overflows and floods rate and, by this, non planned migrations and resettlements, impacts on basic services and ecosystemic services, internal connectivity, access to health and education services, an increase in health risks caused by vectors and contamination, impacts on primary economic activities in peri-urban areas and touristic activity among others. Probable changes projected for period 2020-2040 by the Argentinean Sea and Atmosphere Investigation Centre (CIMA) with a high resolution climatic model and with results from various global climatic models, estimate that the high rate of extreme precipitations and floods in the current affected areas will continue with the corresponding negative impacts (physical, economic, social and environmental). In the TCNCC Argentina 2015, the increase of mean annual precipitations for the whole country (and especially in the Northeast and the perispheric area of the traditional wet region) as well as the increase of extreme precipitations in most of the East and Centre of the country are identified as priorities for the design and implementation of adaptation measures.
9. According to the studies developed for the Fourth National Climate Change Communication of Uruguay (CCNCC, Uruguay) based on most suitable global climatic models (CMIP5; IPCC 2013) and forced by RCP socio economic scenarios and the generation of climatic models AR5 (IPCC 2013), it is observed for Uruguayan territory for historic periods 1979-2005 and 2001-2014 that:
  - a. the evolution of the mean annual surface temperature has a similar behaviour until 2030 (+0.5°C) for both scenarios (RECP 4.5; RCP8.5), while for 2050 raises of +1.0°C have been estimated under RCP4.5 scenario and of +1.5°C under RCP8.5 scenario.
  - b. Regarding the evolution of mean annual precipitation in the country the study indicates that there will be light increases under RCP4.5 scenario with raises of +0.10 to 0.14 mm day<sup>-1</sup> for 2030 and of +0.15 to +0.20 mm day<sup>-1</sup> under RCP8.5 scenario for 2050.

<sup>2</sup> The Country Report for Argentina about the TCN CC to the UNFCCC (2015; 26). <http://unfccc.int/resource/docs/natc/argnc3s.pdf>.

10. "El Niño – South Oscillation" (ENOS), is a cyclic meteorological phenomena which is characterized by an increase in the sea temperature in the Equatorial Pacific and an inversion of the atmospheric circulation over the ocean. When these raises and variations exceed certain thresholds, El Niño activates its cycle, which can last over one year and expand its effects over a significant geographical spectrum, altering regional climatic regimes and causing regional floods, droughts and great rural fires. An ENOS event strength is characterized by two indexes: South Oscillation Index (SOI), which actual value is of -20 (as lower, as stronger); and the El Niño Oceanic Index (NOI), which value for December 2015-February 2016 quarter is of 2.2. In order to compare, in the last ENOS events, the NOI values for the same quarter of 1982/3 and 1997/8 were of 2.1 and 1.6 for 1991/2.

11. Projections indicate that there will be a decrease in the amount of days with frost, a significant amount of warm nights, an increase in the length of hot waves and an increase in the precipitation's intensity. The extreme events (rains, intense winds, storms, hail, etc.) will continue to become more frequent. According to global predictions, it is also expected for these events to become more frequent and intense with time.
12. Beyond Argentina and Uruguay's climate change projections developed in their National Communications and the climate change projections developed for the La Plata Basin, all of these already included in the Concept Note, other relevant studies confirm that future climate change projections increase flood risks in the Uruguay river due to larger mean and extreme flows because of higher rainfall means and extreme events: ECLAC with support from UKAID, AECID, EU, German and Danish cooperation, and IADB (Barros, Vicente "Hidrological scenarios of mean flows in the Uruguay river and the Paraná river", ECLAC 2013.) developed river flow climate change scenarios for the Uruguay river using PRECIS climate projections for temperature and rain. The flow scenarios indicated flow increases from 33% at the B2 emission scenario in 2016-2026 year period to 57% increase in the A2 emission scenario for the 2091-2100 year period in relation to the 1990-1999 year period. Another research performed by Inés A. Camilloni, Ramiro I. Saurral & Natalia B. Montroull in 2013 on "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) included the projections on the decadal frequency of daily events with water level above the evacuation threshold at Paso de los Libres for the B2 and A2 emission scenarios according to the VIC model forced with the unbiased PRECIS climate model outputs. The VIC model included the following Regional Climate Models: 1. RCM PRECIS INPE/CPTEC (Brazil), boundary: HadAM3P (B2, A2); 2. RCM PROMES Universidad de Castilla-La Mancha (Spain), boundary: HadCM3 (A1B); 3. RCM RCA Swedish Meteorological and Hydrological Institute (Sweden), boundary: ECHAM5 (A1B) 4. RCM RegCM3 Universidade de São Paulo (Brazil), boundary: HadAM3 (A1B); 5. RCM LMDZ Institut Pierre-Simon Laplace (France), boundary: LMDZ global (A1B). These hydrologic scenarios of the Uruguay River show an increase in the frequency of flooding events that by 2091–2100 almost double those of the reference period (1990–1999). Likewise, for some decades, floods are more frequent under the low emission scenario (B2) (2026–2035, 2046– 2055 and 2091–2100) than for the highest one (A2).

## **1.2. Problems to be addressed – local perspective**

13. In both countries, 90% of the population lives in populated areas, and the main cities have a littoral location. Usually these lowlands are inhabited by highly vulnerable populations, with low income, poor housing conditions and scarce access to basic services. Floods negative effects have been, in most cases, exacerbated in addition the complex social conditions by the inadequacy of infrastructure and the built environment to new climatic conditions.
14. Floods originated by river overflows are one of the most pressing problems in littoral cities. They are related to the Uruguay river's own hydrodynamic as well as to socio territorial aspects that relate to the existing vulnerability and exposure levels, enhancing the events' severity.

15. Since severe storms and floods became more frequent, with greater effects on people, infrastructure damages and economic losses; it is utmost important to organize and orientate the adaptation process locally and regionally through policies and plans that consider CC perspectives and communities' and ecosystems' vulnerability. Floods cause great disturbances in regional economies and in the socio cultural development of the affected cities. In this sense, it is relevant to strengthen disaster risk management focussing on prevention and early warning, the adaptation of housing and urban infrastructure with sustainable characteristics and resilient to the new climatic circumstances.
16. During the last decades, Latin America has undertaken a progressive urbanization process and an acceleration of migration which have determined a significant increase in urban and peri urban population living in marginal areas. Concurrently, greater mobility between countries and regions facilitated an increase in the sanitary events incidence among vulnerable populations, especially of climate change and variability associated diseases. Example of this are vector-transmitted diseases (dengue, chikungunya, zika and yellow fever) due to an increase in the distribution areas and favourable habitats for insect populations' development related to changes in the temperature, relative humidity and precipitations in the region.
17. Moreover Natural Protected Areas (NPA) and their biodiversity, face numerous climate change associated problems. Main impacts are caused by habitats loss (especially in riverine coastal areas), changes in specific climate conditions required by species, poor connectivity of natural areas due to productive development, exotic species invasion and the effects of extreme climatic events. Therefore, NPA's management under a CC scenario faces important challenges, such as institutional capacities development, habitats fragmentation reduction and big scale connectivity maximization, promotion and management of buffering zones among these areas and fostering stakeholders' equitable participation in their management.

### **1.3. Social, economic and environmental context**

18. In both countries, a high percentage of the population inhabit populated locations, especially those with littoral locations. Even if most of these cities were founded in lower risk high areas, further expansions have frequently occupied littoral areas and low lands. Most of these lands have been occupied by highly vulnerable communities. Damages from intense precipitations and floods by river's overflows have been exacerbated by inadequacy of infrastructure and the built environment to the new climatic conditions.
19. The Project's area is particularly sensitive to extreme events such as droughts, floods, hot and cold waves, strong winds, hail, strong rains and severe storms. ENOS raises the higher magnitude precipitations probability to those recorded historically for the same period in the region.
20. In Uruguay, ENOS can be particularly noticed on the country's North and Norwest. Especially during Spring and Autumn, ENOS increases the probability that rains become of higher magnitude regarding historic data for the same period. In Argentina, ENOS starts on September and ends on the following year's midterm, provoking extraordinary overflows of La Plata basin's rivers. This fact

leads to regional long term floods with significant social, economic impacts, especially in provinces like Formosa, Chaco, Santa Fe, Buenos Aires, Misiones, Corrientes y Entre Ríos, where more than 90% of the population lives and more than a 70% of the county's GDP is generated.

21. Climate related disasters have taken a big toll in both Argentina and Uruguay. During 1970-2015 Argentina was affected by 97 mayor disasters (EM-DAT, 2016), being 93% of them of hydro climatic origin (floods and landslides caused by strong rains), affecting 14 million people and causing US\$ 10 million losses. In Uruguay, hydro-meteorological events represent 73% of the National Emergency System's (SINAE) actions. Littoral floods are the most frequent affecting more than 65.000 people that had to be evacuated during the last 10 years.
22. The vulnerability of the population to Uruguay river's coastal cities have increased and their current socio economic conditions with visible impacts on housing and urban infrastructure are clear evidence. Between November 2009 and February 2010, the region was severely affected by El Niño phenomenon (ENOS), leading to considerable floods such as in November-December 2009 which impacted Uruguay river's basin and affected Uruguay's North and littoral areas, especially Artigas, Salto and Paysandú cities. During Summer 2014 (January-February), rainfall exceeded monthly averages on a 150-350%, activating an emergency situation regarding social and sanitary conditions as well as agriculture and roads which lead to the allocation of 1% of public expenditure to face the emergency in order to start up an agricultural emergency fund, road repairing and other economic measures for different affected sectors.

In Annex maps is presented estimated number of people, homes and houses affected by floods

23. On 2015, between 5 and 15 % of Artigas, Paysandú and Salto's population (approximately 23.000 people) had to be evacuated due to the river's overflow floods. This situation also required human and economic resources to attend the emergency and early recovery. On 2016, floods left thousands of displaced people in departments such as Paysandú, and during 2017 more than 4.292 people were displaced for the Uruguay river's littoral.
24. During 1960-2010, precipitations increased in almost all the Argentinean territory, with inter annual and inter decade variations. Greater raises were recorded for the country's East with a 200 mm increment in some areas. Between December 2015 and April 2016, 8.340 people were affected by rains and storms and 19.840 were affected by floods from river overflows.
25. Extreme precipitations have caused recurrent floods in the upper and lower Uruguay river. In addition, erosive processes in its margins due to the pressure held on riparian vegetation (deforestation, agriculture, and urbanization) increase the regional ecosystem's vulnerability.
26. During the last decade Uruguay developed a robust nationwide process to prepare flood risk maps in flood prone cities, this process is led by the National Water Directorate (DINAGUA) of the Ministry of Housing, Land Planning and Environment, these maps are prepared working in coordination with Departmental Governments. These flood risk maps follow a specific methodology that includes observed flood recurrence levels (for example using the 100 year period to define high risk threats) and also socio-economic data in relation to vulnerabilities, some maps also include quality of housing data. The flood risks maps are included into local land planning process to provide basis for land management strategies. The flood risk maps are based on hydrological threats information that includes: historical flow and rain series that are statistically

adjusted and that consider historical registries of extreme flood events. Current flood risk maps in Uruguay DO NOT consider climate change scenarios, since there are no specific climate change river flow and level scenarios performed at urban scale yet in Uruguay, however these flood risk maps do include methodological updating mechanisms that allow for adjustments to include new hydrological information and land use changes.

#### **1.4. Long term adaptation actions in the public policy framework**

27. Both national governments and the subnational government of the area consider necessary to present a regional Project to the Adaptation Fund (AF) that focuses on the lower Uruguay river and its influence area. Uruguay river played a significant role in both countries' development and the increase of precipitations have lead to social and land management problems that need to be supported by adaptation measures that increase the resilience of the vulnerable coastal urban areas and ecosystems from a regional perspective and in front of a rising vulnerability to CC effects scenarios.
28. Considering their riverside location, their population's characteristics and existing precedents, the following vulnerable cities and ecosystems are considered as priorities for this Project since they present high flood risks and require effective and sustainable solutions in order to increase their resilience and adaptation capacity to face CC:

##### *In Oriental Republic of Uruguay:*

- a) Bella Unión and Rincón de Franquía National Protected Area, Artigas Department (with a 18.406 population in 2011);
- b) Salto, Salto Department (with a 104.028 population in 2011);
- c) Paysandú, Paysandú Department (with a 76.429 population in 2011);
- d) San Javier and Nuevo Berlín (with a 26.283 population in 2011), and Esteros de Farrapos e Islas del Uruguay National Protected Area, Rio Negro Department.
- e) Fray Bentos, Rio Negro Department (with a 24.406 population in 2017).

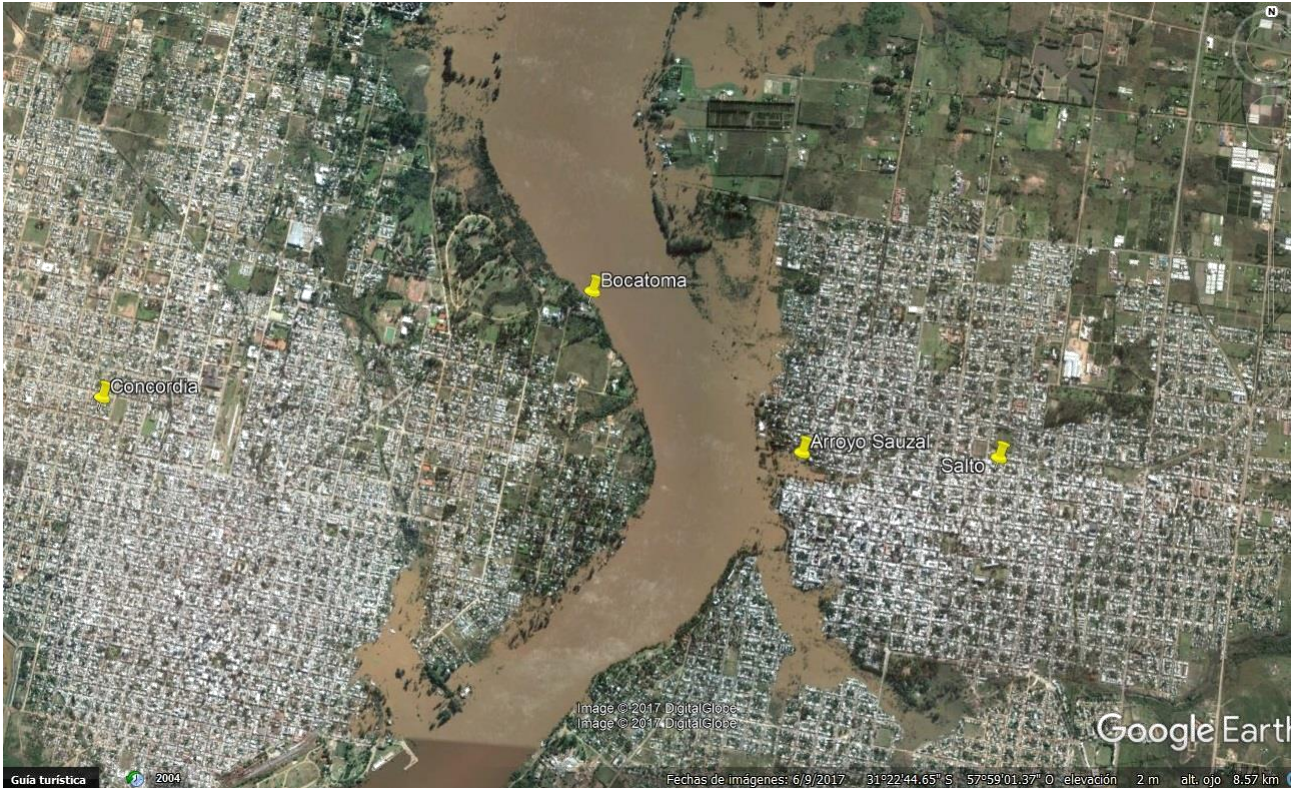
##### *In Argentinean Republic:*

- f) Concordia (with a 152.282 population in 2010);
- g) Colón (with a 24.835 population in 2010),
- h) Concepción del Uruguay (with a 82.729 population in 2010),
- i) Gualaguaychú (with a 102.421 population in 2010);
- j) San José (with a 18.178 population in 2010),
- k) Federación (with a 17.547 population in 2010)
- l) Ibicuy (with a 4900 population in 2010)
- m) Villa Paranacito (with a 4210 population in 2010)
- n) El Palmar National Park, all in Entre Ríos Province.

29. National Protected Area of Rincón de Franquía in Uruguay, forms part of the National Protected Areas System (SNAP) since 2013. It is located in the Norwest border of Artigas department, in the Uruguay and Cuareim rivers confluence, North of Bella Union with a 12.200 population, being the second most populated city in Artigas Department, considering perispheric neighbourhoods and populated centres the population raises to 18.406 people.



30. Through an environmental assessment in Concordia city, the deterioration of services infrastructure (sewage, potable water, among others), as well as a critical relationship between urban and natural areas due to an inadequate waste management have been determined along with the careless management of streams, Uruguay river's riverside, coastal erosion processes and the challenges for evacuating water excess. In this framework coastal protection measures are proposed where the water intake and water treatment plant for the whole city are located (152.282 people in 2010). There is a permanent severe erosion process in this area which is exacerbated with every Uruguay river's overflow.



*Photo 1: Concordia (Argentina) – Bocatoma's City Affected (Water Input for City Affected) – Salto (Uruguay) Urban pattern modified by floods in Arroyo Sauzal in Salto City. September 2017 (Google Earth)*





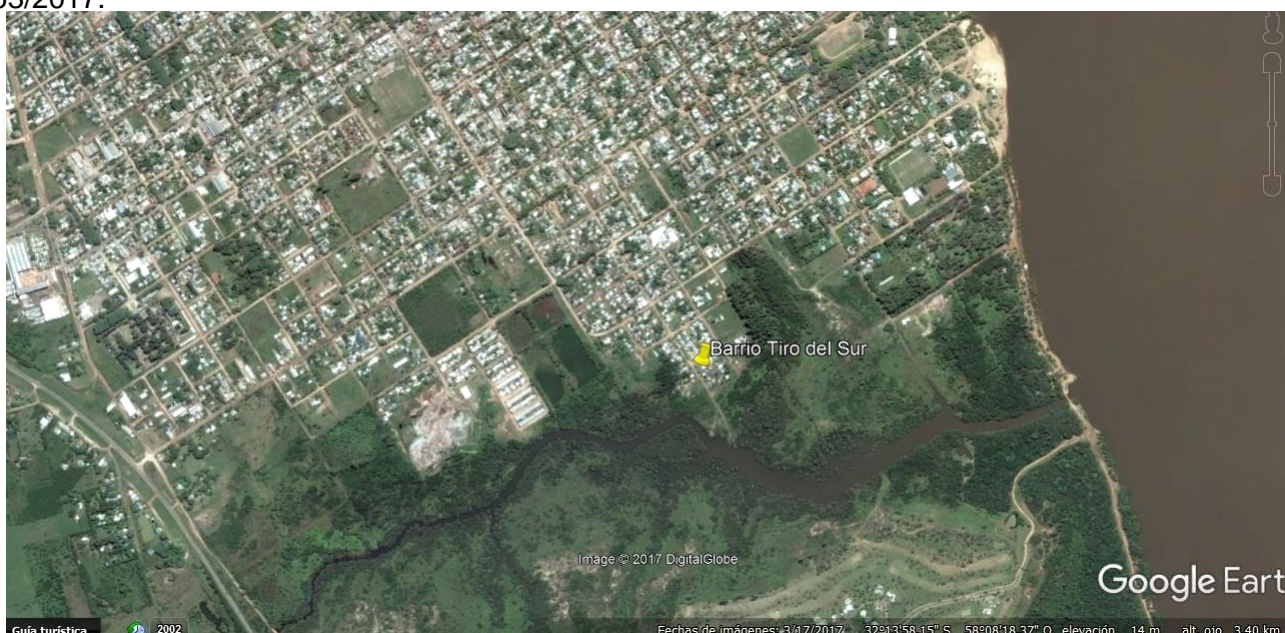
Photo 2: Concordia (Argentina) – Bocatoma's City Affected (Water Input for City Affected). Uruguay River Eroded. Visit December 2017. (Project Team Photography)

31. For Salto city, the implementation of the “Urban Water Plan for Salto” and the development of a city’s risk map are envisaged. Also, the improvement and resignification of the floodable river side by the implementation of “Sauzal Linear Park” is considered, creating a new recreational space for the community and preventing new informal occupation.



Photo 3: Salto (Uruguay) – Red line shows inundation level). Visit December 2017. (Project Team Photography)

32. In Paysandú, a portion of the population is occupying irregular settlements. The river level for Paysandú is 9.10 m, that means more than three meters from the security height of 5,5 m. The selected locations for adaptation measures implementation are Union Portuaria and Barrio Ledesma settlements, both characterized by a great social vulnerability population, with families that have settled in these areas a long time ago. The resignification of both neighbourhoods relocation locations is envisaged, were a housing plan is in course and relocation stages in relocations zones. Also, the development of a revolving fund to adapt mid risk housing in the Port area and the implementation of measures in the urban stream of “Curtiembre Wetlands” and the mouth of the Sacra stream.
33. Regarding Colón city, the proposed activities include resignifying vacant areas in order to transform them into recreational, tourism and environmental education spaces, among others establishing a buffer area for water storage associated to a protected area (Artaláz stream, San José neighbourhood and riverside paths) which is annexed to the Municipal Ecologic Reserve Parque Río de los Pájaros, launched by civil society and formalized by Municipal Ordinance 53/2017.



*Photo 4: City of Colón (Argentina) – Tiro sur Neighborhood impacted by flooding. (Google Earth)*

34. El Palmar National Park is located in Entre Ríos province's Centre-East, with an 8.500 hectares surface, where an association of Yatay palms and grassland are predominant. The protected area belongs to the Espinal eco-region, with some typical communities and species from Pampean grasslands and Paraná forest. It was declared a RAMSAR site on 2011.
35. Esteros de Farrapos e Islas del río Uruguay National Protected Area constitutes a system of fluvial wetlands, islands and islets that flood temporary or permanently due to the Uruguay river's overflows. It has an extension of 17.000 hectares and was declared as part of RAMSAR

convention in 2004. Nuevo Berlin settlement is in its South border and San Javier settlement is in its North border.

36. Exchange and joint learning activities have been developed between both the El Palmar National Park and the Esteros de Farrapos e Islas del río Uruguay National Protected Area's staff and relevant stakeholders. Progress on the development of a Binational Park as a biological ecosystem corridor from a regional and local scale is considered as well as rethinking measures that tend to native revegetation and exotic species management. Work is being coordinated on adaptive measures, including the development of different census, base line data and maps integrating both rural and urban areas in a comprehensive manner. Also the protection of Jesuit Ruins located in El Palmar National Park has been identified as an strategic measure in order to prevent further damage and collapse risks due to coastal erosion.
37. For San Javier and Nuevo Berlín settlements the design and implementation of a management and use strategy for the catchment basin to Esteros de Farrapos and these towns is proposed. Such strategy supposes an adaptation measure for intensive and extensive productive
38. activities in the area (afforestation, dry farming, milk parlours, bee keeping and fishing) and their associated lifestyles. This will also contribute to solving environmental conflicts such as the MEVIR housing project's biological oxidation lagoons in Nuevo Berlín and San Javier that are located in floodable areas. Recovery and protection measures (design and implementation) are proposed for the coast, including coastal ecosystems and existing archaeological sites in Esteros de Farrapos, Nuevo Berlin and San Javier.
39. The adaptation of both accesses to San Javier is critical since they remain unusable during Uruguay's river and tributaries' overflows, as well as the design and implementation of storm drainage and public spaces for low areas in the future growth sections of the city.
40. For Concepción del Uruguay the intervention of El Gato stream's mouth into El Molino stream was identified within the Uruguay river flood plain in order to prevent future settlements and to enhance storage and drainage functions of an extensive urban area. This will take place once the North Defence, now in construction, is finished and includes Cantera 25 de Mayo and San Isidro neighbourhoods among others. This area is located close to the town's civic centre (almost 9 blocks away) where neglected neighbourhoods have settled without access to basic public services such as drinking water and sewage and that are affected with overflows of over 5,5 meters (being the borders of El Gato stream the first to be evacuated during these events).





Photo 5: Colón (Argentina) – Red line shows inundation level). Visit December 2017. (Project Team Photography)

41. Fray Bentos, the capital city of Rio Negro department has also been selected for this Project. It is located on the Uruguay river's East margin, has an strategic port and is connected to Entre
42. Ríos province in Argentina by the Libertador General San Martín bi national bridge, it has a population of 24.406. The city has an internal stream, that is tributary to the Uruguay river and is often flooded in relation to macrodreinage flows.
43. Gualeguaychú is the head city of Gualeguaychú Department and has a 7.086 m2 surface. It is located Southeast of Entre Ríos province and has an area of extensive beaches on the Gualeguaychú and Uruguay rivers, South of the city. It has an 83.116 population (2010) and it is included in the global activities of the Project. In this city, coastal neighbourhoods and those located near the port suffer the greater impacts, even though losses and damages exceed these areas due to the affectation on the touristic sector during overflow periods.
44. San José is located very near from Colón, and is exposed to the same phenomena, but suffers from lighter effects. Uruguay River Administrative Commission (CARU) has declared high contamination indexes for the river in this area, due to the lack of sewage treatment plants, and the use of agrochemicals from the farming sector.

45. In these coastal towns, and in some smaller ones such as Federación and Islas del Ibicuy, actions from different components and products will be developed, such as land management plans, risk management with a CC perspective, damage and loss assessment, early warning system (EWS), vulnerability analysis and reduction and social risk perception identification for resilience construction, as well as communication and education activities.
46. In the overall framework, the Project aims to promote the Nationally Determined Contributions (NDC) and the Adaptation Communications presented by Argentina and Uruguay under the Paris Agreement, especially those regarding actions and capacities strengthening to face CC impacts and increase resilience regionally and locally.
47. Uruguay's interest on mainstreaming CC into public policies has been made evident through different institutional measures and capacity building for public managing and decision making. Particularly on 1994 the Climate Change Unit was created, now Climate Change Division, within the Ministry of Housing, Land Planning and Environment (MVOTMA) that has operative and executive functions regarding CC. On 2000, through the General Environment Protection Act number 17.283, MVOTMA was designated as the competent national authority for the's domestic implementation of the United National Framework Convention on Climate Change (the Convention). Another significant milestone in the institutional development and strengthening was the creation of the National Climate Change and Variability Response System (SNRCC) by Executive Decree number 238 in 2009, for coordinating and planning the public and private actions necessary for CC risk prevention, mitigation and adaptation. It is the SNRCC who develops the National Climate Change Response Plan which was published on January 2010 and the Climate Change National Policy during 2016. SNRCC has two different working areas: the Coordination Group and the Advisory Commission. The Coordination Group is chaired by the MVOTMA, and vice-presidencies are in charge of the Ministry of Livestock, Agriculture and Fisheries and the Planning and Budget Office. The Coordination Group is also conformed by the Ministry of Industry, Energy and Mining, the Ministry of Foreign Affairs, the Ministry of Public Health, the Ministry of Tourism, the Ministry of National Defence, the Ministry of Economy and Finance, the Congress of Mayors and the National Emergency System. Also the Ministry of Social Development, the Ministry of Education and Culture, the Ministry of Transport and Public Works, the Uruguayan International Cooperation Agency and the Uruguayan Meteorology Institute have previously participated or participate as guests of the Coordination Group. The Advisory Commission is organized in working groups formed by technicians of the Coordination Group organisms as well academics and representatives of the private sector and the organized civil society. More recently, in 2015, Law 19.355 by its Article 33, created the Presidency's National Environment, Water and Climate Change Secretariat (SNAACC) and in 2016 by Executive Decree 172, such Secretary was regulated and the National Environmental System (SNA) was created to strengthen, articulate and coordinate Uruguay's public policies in order to protect the ecosystem's services and assets and increase climate change adaptation (CCA) among others. The SNA gathers the Environmental National Cabinet representatives (also created by Executive decree 172), the SNAACC, the water public agency – Obras Sanitarias del Estado –, the Uruguayan Meteorological Institute, the SNRCC and the National Emergency System. The Environment National Cabinet is formed by the President of the Republic and the Ministers of MVOTMA; of Livestock, Agriculture and Fisheries; Energy and Mining; National Defence; Public Health and Economy and Finance.

48. From the conservation perspective, by the Act number 17.234 from 2000 Uruguay created the National Protected Areas System (SNAP), with the objective to unify planning and management criteria for protected areas, under determined categories, with a unique regulation that states planning guidelines. Its specific objectives are the biological diversity and ecosystems protection (...), natural habitats protection, (...), especially those indispensable for the survival of endangered species, preserve singular samples of natural and cultural landscapes, among others. Besides, Uruguay has assumed multiple compromises regarding biodiversity conservation and ecosystem protection being a State Party to the Biological Diversity Convention (BDC) subscribed on 1992 and ratified by Act number 16.048 in 1993. On the other hand, the Land Management and Sustainable Development Act number 16.048 of 2008 established a general regulation framework for land management and sustainable development which includes the identification of risk zones in human settlements, the management instruments and procedures to design and adopt territorial plans and programs as well as projects with territorial incidence. This Act states that land planning instruments should orientate future urban development towards non floodable areas, identified by the pertinent state organisms in water management. Also, the Act number 18.610 on National Water Policy defines priorities regarding the comprehensive water management with a hydrographical basin approach and contemplates the definition of plans and programs for floodable zones. Finally, in 2009 the National Emergency System was created with permanent nature for the people, significant assets and environment's protection before the probability or occurrence of disasters, by means of the State's joint coordination with the appropriate use of public and private available resources, in order to foster national sustainable development.
49. On the other hand, Argentina Republic has ratified the Convention by Act number 24.295 on June 1994. Later, it ratified Kyoto Protocol by Act number 25.438 in 2001. Argentina's Ministry of Environment and Sustainable Development (MAyDS) was designated as enforcement authority of this Act by Presidential Decree 2213/2002. In the other hand, in 2016, by Decree 891 the National Cabinet of Climate Change (GNCC) was created within MAyDS in order to articulate CC policies and create awareness on its relevance within society. The Cabinet is chaired and coordinated by the Cabinet of Ministries which is integrated by 17 Ministries (Energy, Transport, Agro industry, Environment, among others). Provinces are represented through the Federal Council for the Environment (COFEMA), considering that natural resources belong to their jurisdiction. Each government organism, through its higher authority, has designated a head member (no lower than National Director) and an alternate, who represent their respective agendas (national and provincial) in the Committee meetings. On the other hand, Argentina recently in 2017, created the National System for Comprehensive Risk Management (SINAGIR) to strengthen and optimize the actions for risk reduction, crisis management and reconstruction. The system's consolidation will contribute to the Project's achievements sustainability in the country.
50. In this context, the Project will pursue the different related institutions and organizations participation, including those public, private, academic and from the civil society, through interinstitutional and inter sectorial spaces for both countries.

## **1.5. Project / Programme Objectives:**

### **General Objective:**

51. The Project aims to build resilience in the vulnerable coastal cities and ecosystems of the Uruguay river, both in Argentinean and Uruguayan territories, by developing instruments, tools and experiences for adaptation planning and implementation as well as managing climate change and variability impacts and risks.

### **Specific Objectives:**

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



## 1.6. Project Components, Outcomes, Outputs And Budget

Project's components	Expected Outcomes	Expected Outputs	Output Budget	Component Budget
<b>1. Territorial adaptation and flood risk management policies, plans and instruments</b>	i) National and sub national governments have been strengthened by tools developed, experiences exchanged and CC inclusion in their planning and management instruments.	1. Land management plans, Protected areas management plans and housing and water programs, in revision or in progress, include the CC perspective.	USD 900.000	<b>USD 2.000.000</b>
		2. Methodological guides have been designed for impact, damages and losses assessment.	USD 100.000	
		3. Project's adaptation results have been included in the monitoring mechanisms of the Adaptation Communications and National Determined Contributions for Argentina and Uruguay.	USD 100.000	
		4. Strategies and best practices regarding adaptation, risk management, land planning, territorial police, housing infrastructure adaptation and vacant land recovery have been shared binationally.	USD 100.000	
	ii) Risk management sub national strategies have been strengthened and flood's early warning systems (EWS) have been developed in a coordinated manner.	5. A flood's EWS has been consolidated.	USD 200.000	
		6. Update and implementation of Regional Disaster Risk Management Plans have been supported including CC perspective.	USD 600.000	
<b>2. Priority measures to increase flood prone cities' resilience.</b>	Resilience in coastal cities has been increased by the implementation of structural and	7. Vulnerable vacant land from resettlements has been recovered and re signified to prevent informal re occupation.	USD 5.000.000	<b>USD 6.000.000</b>

Project's components	Expected Outcomes	Expected Outputs	Output Budget	Component Budget
	non structural adaptation measures.	8. Technical assistance and sustainable urban and public services infrastructure have been implemented in new resettlements on secure land.	USD 500.000	
		9. Solutions have been design and financial mechanisms have been implemented to promote CCA in mid risk housing and commercial buildings.	USD 500.000	
<b>3. Priority measures for adaptive conservation of vulnerable coastal ecosystems.</b>	iv) Adaptive conservation measures have been implemented in vulnerable ecosystems on both margins of the Uruguay river including their ecosystemic services identification and assessment.	10. Ecosystemic services and co benefits have been identified and assessed, including CCA and Uruguay river's ecosystems connectivity.	USD 500.000	<b>USD 3.062.000</b>
		11. New ecosystem-based adaptation measures have been designed and implemented.	USD 2.562.000	
<b>4. Priority measures for increasing social resilience.</b>	v) Communities and social organizations have incremented their resilience based on CCA and on hydro climatic disaster risk management framework	12. Social vulnerability monitoring and assessment tools have been developed with a human rights, gender and generations approach.	USD 200.000	<b>USD 1.400.000</b>
		13. Social risk perception assessments, have been implemented for resilience building.	USD 200.000	
		14. Assistance and labour reconversion strategies have been promoted for vulnerable population.	USD 400.000	
		15. Social networks have been strengthened by exchanging best practices on CCA, and local risk management strategies	USD 300.000	
		16. Communication, education and dissemination strategies have been implemented for vulnerability reduction.	USD 300.000	

5. Project/Programme Execution cost (A)	USD	500.959
6. Total Project/Programme Cost (B)	USD	12.462.000
7. Project/Programme Cycle Management Fee charged by the Implementing Entity (8% * (A+B))	USD	1.037.037
<b>Amount of Financing Requested</b>	<b>USD</b>	<b>13.999.996</b>

### 1.7. Projected Calendar:

Milestones	Expected Dates
Start of Project/Programme Implementation	March 2019
Mid-term Review (if planned)	September 2021
Project/Programme Closing	February 2024
Terminal Evaluation	December 2023

## II: PART PROJECT / PROGRAMME JUSTIFICATION

### A. Project Components.3

#### COMPONENT 1: Territorial adaptation and flood risk management policies, plans and instruments

The Project's implementation area is the lower Uruguay river's littoral, focusing on vulnerable coastal cities and ecosystems, especially regarding floods, both on Argentinean and Uruguayan sides. A high percentage of the population inhabits coastal cities where most vulnerable socio economic communities occupy high flood risk areas and face intensification of extreme events due to CC. National and sub national governments have achieved some progress in including CC perspective and climate scenarios. It is imperative to orientate adaptation processes in the Uruguay river basin by strengthening public policies and planning instruments considering CC, in cities, communities and ecosystems, as well as in the integrated risk management and early warning systems.

**Outcome i)** National and sub national governments have been strengthened by tools developed, experiences exchanged and CC inclusion in their planning and management instruments.

**Output 1.** Land management plans, protected areas management plans and housing and water programs, in revision or in progress, include the CC perspective.

Public policies instruments will be reviewed and updated for the inclusion of CC perspective and integrated risk management in the Uruguay river lower basin, involving local governments and key stakeholders. The unification of criteria integrating CCA and climatic risk management perspective in land planning will be achieved by means of training and consultancy. In parallel, training for public managers and members of local legislative areas on analyzing, modifying, observing, authorizing or rejecting planning instruments, is envisaged.

**Activity 1.1:** Analysis, review and update of the different public policy instruments on a territorial scale (protected areas, housing, water, health, risks, etc.) incorporating CC perspective and integrated disaster risk management for the implementation of adaptation measures in the basin by generating technical working groups.

**Activity 1.2.** Workshops for subnational and provincial governments focusing on analysis, review and update of different land management and coastal ecosystems administration instruments.

**Activity 1.3.** Training workshops for local legislative officials integrating CCA and risk management concepts into land management plans.

**Activity 1.4.** Workshops with community participation, focused on the development, revision and/or validation of the local and sectorial plans in order to incorporate strategies to build resilience considering climate scenarios

***Output 1 inputs and budget:*** 20 technical meetings and 20 participative workshops, 10 technical documents developed and approved, four climate change specialists consultants in climate change, land planning, risk and environment managing for sub national technical assistance. USD.900.000.

**Output 2.** Methodological guides have been designed for impact, damages and losses assessment.

This tool will enable economic, social and environmental impact identification and assessment regarding severe climate events in the project's locations. This will contribute to identifying priority adaptation actions for improving risk management in its different stages, and to increment socio ecosystem resilience.

**Activity 2.1** Precedents, experiences and documents analysis for designing a methodology for gathering and systemizing data and information regarding impacts, damages and losses as consequences of severe climate phenomena, for their report, evaluation and adaptation actions prioritization.

**Activity 2.2** Development of a methodological guide based on the analysis performed in Activity 2.1, for severe climate impacts report and evaluation and for prioritizing adaptation actions in both margins of the Uruguay river.

**Activity 2.3** Regional workshop for validating the methodological guide and indicators definition, required for its effective implementation in the project's communities.

**Activity 2.4** Subnational training workshops on methodological guide's implementation for local authorities and technicians.

**Output 2 inputs and budget:** One consultancy for methodological guide design and development, one regional workshop and four sub national training workshops. USD 100.000.-

**Output 3.** Project's adaptation results have been included in the monitoring mechanisms of the Adaptation Communications and National Determined Contributions (NDC) for Argentina and Uruguay.

**Activity 3.1** Adaptation indicators development, for the project's activities regarding NDC and Adaptation Communication.

**Activity 3.2** Indicators' monitoring and report of the project's activities in both countries.

**Output 3 inputs and budget:** One binational consultancy for monitoring and follow-up. USD 100.000 .-

**Output 4.** Strategies and best practices regarding adaptation, risk management, land planning, territorial police, housing infrastructure adaptation and vacant land recovery have been shared binationally.

Binational exchange will focus on CCA capacities, resilience building and vulnerability reduction for local governments and communities. This represents an opportunity to install a coordinated approach through training and exchange spaces for knowledge, best practice experiences and lessons learnt regarding management and planning.

These exchange spaces will be implemented at local level with binational representation, including government, civil society's organizations (CSO) and local key stakeholders. Regional and bi national exchange will be fostered reinforcing existing networks. Knowledge management and exchange are useful tools to promote participation and ownership as well as innovation an efficient use of resources.

**Activity 4.1** Bi national workshops for sharing best practices experiences, lessons learnt regarding planning instruments, health protocols, housing infrastructure, risk management, territorial police, among others.

**Activity 4.2** Consultancy for protocols design and bi national scope plans focused on Health and Climate Change.

**Output 4 inputs and budget:** Three bi national workshops, two technical consultancies. USD. 100.000.-

**Outcome ii)** Risk management sub national strategies have been strengthened and flood's early warning systems (EWS) have been developed in a coordinated manner.

Identification, assessment and georeferencing of climate change risks focused on floods, combined with the development of hydrological models and risk maps will enable planning tools and risk management improvement in both countries.

In this sense, Argentina and Uruguay have developed initial flood risk maps that involve some of the cities considered for this project. This represents a key input for the improvement and strengthening of the EWS implementation in both sides of the Uruguay river.

**Output 5.** A flood's EWS has been consolidated.

Information communication and exchange among intervening institutions from both countries is a key tool for an effective EWS that contributes to flood risk forecasting and management actions planning before and during extreme events, minimizing social, economic and environmental damages.

In present time there is a system for monitoring and forecasting flows and river levels in cities involved in the project; the system is operated by the Salto Grande Dam. The system is feed by hydrometeorologic stations located in the basin, precipitation forecasts and other meteorological variables. The technical team of the Dam present a daily report, that includes the forecast of the Dam operation and the forecast of river levels in nearby cities. This system provided reliable information with a few days in advance. If a flood is expected, the Dam technical team communicates directly to the National Emergency System of Uruguay and to each of the Departmental Emergency Coordination Centres of the cities in risk.

This system has allowed to evacuate in a timely manner the population at risk during the last years. Recently the Salto Grande Dam has included in its webpage the level forecast and in 2017 the Dam has developed a mobile phone application to communicate directly to the population the level forecast.

Link to the daily report:

<https://www.saltogrande.org/docs/hidrologia/Comunicado.pdf?1518302051>

Even though the forecast system could be improved in terms of data and computing, the most important improvement needed for the EWS as a whole is the preparation phase and the communication strategy to the local population. The project aims at improving the response information, by including **a geographic information model that can present at real time the current and potential affected area and that can estimate probable evacuated population numbers and key infrastructure under high risk.** (In the cities of Durazno in the Río Negro river and Artigas in the Cuareim river, there is a similar EWS approach currently under full scale development).

**Activity 5.1** Bi national workshop for existing information, resources and involved institutions identification for EWS implementation.

**Activity 5.2** Strengthening and further development of existing climate services on both countries and regional collaboration for flood EWS improvement.

***Output 5 inputs and budget:*** Two workshops and consultancy for EWS design and implementation through climate services strengthening. USD 200.000.-<sup>4</sup>

**Output 6.** Update and implementation of regional Disaster Risk Management Plans have been encouraged including climate change perspective.

Regional disaster risk management plans are crucial for minimizing the events social, environmental and economic impacts. The identification of the current situation and priorities for integrated risk management participative planning on territory with a prospective approach, will enable the implementation of more efficient and effective measures.

**Activity 6.1** One consultancy for reviewing and/or developing regional disaster risk management plans incorporating CCA in both countries.

**Activity 6.2** Local climate disaster risk management instruments development and implementation, focusing on urban floods, and implementation of CCA key actions.

**Activity 6.3** Training on plans' implementation for managers and other local stakeholders, including organizations, communication media and professionals.

**Activity 6.4** Binational workshops for sub national organizations and governments involved on regional flood risk management plans implementation.

**Output 6 inputs and budget:** 20 workshops, four technical consultancies specialized on disaster risk management and two technical consultancies regarding disaster risk communication. USD 600.000.

## **COMPONENT 2. Priority measures to increase flood prone cities' resilience.**

Selected cities in the Project add up to over 655.000 inhabitants, where some cities up to 15-20% of its population are in located in flood risk areas. These areas that are frequently affected by floods are flood plains usually occupied by highly socio economically vulnerable communities as well as mid risk consolidated urban area.

The challenge of increasing resilience regarding climate change impacts requires comprehensive adaptation measures (urban, environmental, social, economical and financial), that involve city and urban infrastructure design, encompassing resettlement processes, vacant land and green spaces re signification, as well as technical and financial assistance to strengthen public policies that are being implemented.

**Outcome iii).** Resilience in coastal cities has been increased by structural and non structural adaptation measures implementation.



*Photo 6: Urban pattern modified by floods in Salto City, September 2017 (Google Earth)*

**Output 7.** Vulnerable vacant land from resettlements has been recovered and re signified to prevent informal re occupation.

Floodable areas that have been informally occupied by vulnerable communities can be re signified as ecosystem conservation, recreation areas, among others, generating added value to the city's river sides and preventing new informal occupation. In this sense, participative spaces will be promoted for the activities' ownership by the community. Also, infrastructure operations will be based in the local governments design with CSO's participation and support.

Activities 7.1, 7.2 and 7.3 relates to the "resignification" of flood prone vacant urban land, whereas 7.1 and 7.2 are from previously occupied land, where houses have being (or are currently being) resettled into secure land and 7.3 which was not previously occupied. All these areas might be occupied again by poorer families (as other similar cases where seen in the past), since they are very close to the city centre and its services and in close relation to jobs opportunities or other living hoods around the river. In this regard, a key strategy to avoid new occupations in these vacant lands, which will increase again the level of flood risk of the city and the number of vulnerable families living in flood prone areas, is to establish new activities in the vacant land that are flood compatible, such as recreational parks or other related services. These activities will prevail the land to be occupied maintaining a lower flood risk in the city and also will improve the riverside landscape as well as the riverside ecosystem, as well as to bring the city new high quality public spaces and green areas for the citizens

**Activity 7.1** Union Portuaria, Ledesma and Paysandú's urban border resignification. Paysandú, Uruguay.

A linear park project will be designed to promote a degraded urban area's re-zoning, to contribute to its resignification from the social dimension and to contribute to an integration process with the consolidated city. Paysandú's subnational government is relocating 161 people whose houses are under the security height, not only based on the housing situation but also because of their fragile income sources. Through territorial inspectorate, a territorial control initiative in Paysandú since 2016, vacant land has been kept from reoccupation once their inhabitants have been relocated. In this context, a positive transformation of vacant land is proposed, through its enhancement as cohabitation space and promotion of citizen control. Through the intervention in these spaces and the improvement of the river's border to generate new collective spaces, previous occupants will continue to live in close areas but which are safer in terms of flood risks after the resettlement process.

**Activity 7.2.** Resignification and refurbishment of flood prone vacant land after resettlements in Salto, Uruguay.



Subnational government of Salto has implemented a resettlement process of those families regularly affected by floods in the Salto's Housing Demand Plan. This plan promotes social inclusion processes from an environment and housing comprehensive conception, strengthening collective and interinstitutional management process. Vulnerable families' resettlement is carried out by participative consulting processes. In this context, the need to avoid reoccupation of flood prone vacant land by new families is raised. For this purpose a resignification plan has been developed for these spaces. Currently, such plan is being implemented and assistance will be provided for the resignification of vacant land for public use with floods compatible activities with participation of private stakeholders such as sport clubs and other CSO activities, to give in "cession of use" regime the use of the land and generate recreational and leisure activities and prevent reoccupation.

**Activity 7.3.** Adaptation approach in the treatment of Sauzal stream's mouth. Salto, Uruguay.

Sauzal stream flows into the Uruguay river, the greater gathering point in the North Riverfront (Costanera Norte). The Sauzal stream's river side refurbishment is proposed for the implementation of a linear park for recreational use, enhancing its environmental and landscape attributes, protect the natural green spaces and solve hydraulic problems that exacerbate floods by the Uruguay river's overflows. Public spaces will be reconditioned in order to support future floods and its territorial planning will be designed including adaptation measures for floods and their impacts.

**Activity 7.4** Sustainable hydrologic management in Laureles Stream. Fray Bentos, Uruguay.

Since de 50's Laureles stream coasts (Uruguay river's affluent) have been occupied by low and mid-low income population. That situation created a degraded urban border that suffers macro drainage related floods. The Fray Bentos and Influence Area Local Plan has aimed to change this unplanned growth and spontaneous residential uses, to orientate a sustainable urban development with planned urbanizations, with complete infrastructure, services and public spaces where Laureles stream has an essential role in a city that contemplates climate change impacts with a prospective view. The mid basin urban area, due to its progressive expansion during the last years, is characterized by a growing sealing surface and an inadequate drainage network for the current situation. The great soil sealing from urbanizations leads to a lower infiltration of rainfall and thus, a greater volume of direct runoff. Additionally, extreme events related to CC, with significant water volumes in short periods of time, contribute to exacerbate this situation. In this way, the main course and surroundings are affected by floods during intense precipitations. River overflows that affect housing were registered (i.e. April 2016 floods) and families had to be evacuated.

On the other hand, in the short term, various housing projects will be implemented, which implies the sealing of an extensive surface and the construction of new storm drainage infrastructure. As a consequence, an important increase of the water flowing into the stream in a shorter period of time is to be expected. Such increase will make these effects more frequent and will affect greater spaces.

In order for the Laureles Stream to lower flood risk in surrounding housing areas, the stream must adequately carry extreme macrodrainage flows, from extreme short term rainfall. In this regard the health of the margins needs to be improved by restoration of native vegetation of the margins and floodplains, cleaning away informal waste disposals, improvement of drainage infrastructure that reaches the stream, at to actively prevent possible erosion sites. The general improvement of the natural conditions of the stream and its margin and floodplains will increase the capacity of the stream to absorb higher flows during extreme rain events

**Activity 7.5** Los Pinos coastal zone restoration and protection. Bella Unión- Artigas, Uruguay.

Los Pinos coastal zone is located 5 Km from Bella Unión and is the only recreational coastal zone in the Artigas department. A Uruguay riverside avenue was recently built that communicates the city with Los Pinos. Such construction increased the value of the area enabling a greater influx of people from Bella Unión, but also erosion was increased during recent floods that reached extraordinary heights. In the last 20 years, 60 m of riverbanks were lost. Artigas government has an hydraulic study where impacts from Uruguay river's currents are assessed, as a base for a further comprehensive study that includes hydraulic, environmental and social analysis and CC scenarios that leads to an executive project of midterm implementation.

The proposed action for the Los Pinos coastal zone is the restoration of native vegetation in the Uruguay river margin where higher risks of erosion has being identified. Also the project will assist the inclusion of a climate change projection into the current hydraulic study to improve the relevance of its conclusions in relation to local adaptation strategies!

#### **Activity 7.6** Artalaz stream protection and re signification. Colón, Argentina.

Wetland's recovery as a recreative, sports and touristic space that also serves as water excess storage from rains and overflows. This area is characterized by low floodable zones within the stream's flood plain where residential uses have spontaneously expanded. Currently they constitute consolidated neighbourhoods of medium density, basic and precarious infrastructure, lack of quality public spaces and muddy streets that make access difficult during rainy seasons. The relocation of those houses under 10,5m in reference to Colón port is envisages for year 2018. The whole area has a 20 hectare surface over the river's south margin. Its limits are Piamonte Av and "Río de los Pájaros" NPA on the East where the stream flows into the Uruguay river.

#### **Activity 7.7** Vacant land between North Defence and Cantera 25 de Mayo neighbourhood recovery and re signification. Concepción del Uruguay, Argentina.

North Defence is currently under construction. It is located in the city's North where El Gato and El Molino streams flow into de Uruguay river, within its flood plain. It is regularly affected by the Uruguay river's overflows and by intense rainfall in the basin. The reason for this is that the stream is the natural drainage of an extensive urban area, including Cantera 25 de Mayo and San Isidro neighbourhoods.

The Defence building, which mitigates flood risk due to the river's overflow, will alleviate the storm water through a bomb. This should be completed with the area's recovery in order to generate an urban suture, emphasizing on public use with the incorporation of recreational activities and sports for the whole community (close neighbourhoods and the rest of the city). As an adaptation measure, a 25 hectares area will be conserved as an water excess storage as well as re signifying an extensive area as an urban green heart close to the city's centre and avoiding further occupation.

**Output 7 budget:** USD 5.000.000.-

**Output 8.** Technical assistance and sustainable urban and public services infrastructure has been implemented in new resettlements on secure land

Adapted and resilient urban infrastructures are essential to consolidate relocation processes and to define a long term effective solution. Potable water and sewage services, urban waste management, among others, that consider climate change and future scenarios will significantly reduce the

relocated communities' vulnerability and improve their life quality. Previous experiences in the region will be considered and pilot projects will be implemented.

The activities under Output 8 implies the provision of urban and public services adapted and resilient infrastructure on neighborhoods where vulnerable people have been previously resettled or are currently being resettled (by processes led and funded by the governments) from flood prone areas. This will guarantee their provision during extreme events as they will be designed considering CC actual and future scenarios, considerably reducing the communities' vulnerability and building resilience as well as enhancing their life quality.

**Activity 8.1** Adapted and sustainable urban infrastructure design and implementation on secure land for resettlements. Salto and Paysandú, Uruguay.

The availability of secure land with basic urban services is a bottleneck for resettlement plans. The Project will contribute to generate secure urban land for resettlements, as well as for the design and implementation of infrastructure which is compatible with climate conditions.

Currently flood risk resettlement housing plans are being supported both by the Ministry of Housing, Land Planning and Environment and the Departmental Government. The usual approach to resettlements is that the national government finance the new houses, mainly by grants to their new owners or by soft loans, and the Departmental Government provides the urban land for the new houses with complete public services including electricity, drinking water and sanitation, among other services such as schools, public transport, etc. However in many cases there is not enough new secure urban land ready to receive families from resettlement programmes, mainly because of the lack of services, especially sanitation and drainage. This activity aims at providing new sustainable services to secure land in order to speed up resettlements process of flood risk vulnerable communities. These services such as sanitation and drainage will be developed under innovative green infrastructure design, that is expected to be more cost-effective and with greater resilience to extreme climate events.

**Activity 8.2** Protection against coastal erosion and repairs for the water treatment plant. Concordia, Argentina.

This intervention will enable to approach a problem originated in the last 25 years over the Uruguay river's coast, upstream and downstream of Concordia's water treatment plant. This plant supplies all the city's population (200.000 people) jointly with perispheric perforation in the more remote areas.

Protection against coastal erosion and repairs for the water treatment plant. Concordia, Argentina.

According to general projections regarding climate tendencies and the intensification of hydrological and meteorological extreme events, erosive processes will continue to exacerbate. Based on these scenarios, this activity proposes to protect the coastal zone where the water intake of Concordia's and surroundings treatment plant is located as an adaptation measure aiming to guarantee this basic service for the city. This area is affected by erosive processes on every river's overflow, and also, part of the pumping equipment remains under water, which obstructs its access for operation and repairs.

This activity envisages different solutions based on the different characteristics of each delimited area, including various reparations for the water intake building in order to guarantee its stability and operation, especially during overflows.

In summary, the following technical solutions are proposed<sup>1</sup>:

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<sup>1</sup> Repairs for the water intake have been projected by the Concordia's water entity and the coastal protection project has been based on an extensive work developed in the Facultad Regional Concordia of the National Technological University, with municipal technical staff's supervision. It is available in the following link: <http://ria.utn.edu.ar/handle/123456789/1052>

- a) The construction of lateral walls, since the actual masonry walls (North side) present cracks. New walls attached to the original ones will be built out of ferroconcrete with their corresponding reinforcements.
  - b) Implementation of an access for machinery to the water intake. Since the actual access is not paved and presents a significant gradient the access for machinery is difficult when maintenance is required. This new access will be approximately 45 meters long and 3 meters wide and will facilitate access to the water intake assuring provision of the service during overflows which are becoming more frequent.
  - c) Elevated access to the pumping system for maintenance and repairs during river overflows.
- Coastal protection for the adjacent area of the water intake.

**Activity 8.3** Lavardén and San Pantaleón neighbourhoods storm drainage remediation. Concordia, Argentina.

Remediation of the storm drainage in these cities area that is receiving important neighbourhoods of social interest. This area is characterized by the presence of pronounced depressions in the inner parts of blocks becoming inhabitable, wasting land in a residential area of town. The proposal consists in the implementation of a superficial system, in order to ensure the flow of storm water into the main ducts that compose the underground system.

**Product 8 budget:** USD500.000.-

**Output 9.** Solutions have been designed and financial mechanisms have been implemented to promote CCA in mid risk housing and commercial buildings.

Flood's social, psychological and economic effects have regularly impacted on these vulnerable communities for decades, making their recovery very difficult. These instruments will support these families with sustainable solutions in order to adapt their housing conditions in mid risk areas, which are not subject to relocation plans. The experiences and best practices exchange in a regional level will contribute to achieve effective solutions and the society's ownership.

Solutions have been designed and financial mechanisms implemented to promote CCA in mid risk housing and commercial establishments" will provide direct benefits to vulnerable communities since they will have the opportunity to improve and adapt their housing conditions that have been affected periodically by floods, receiving economic support as well as technical assistance. This will enhance their life quality and healthiness conditions. Regarding touristic and commercial establishments, these activities will not only improve and adapt the establishment's conditions regarding flood damages but will also guarantee income sources for the owners and employees, assuring the sustainability of the touristic sector

**Activity 9.1** \_Revolving fund for mid risk housing. Paysandú and Salto, Uruguay.

Revolving fund creation for housing and commercial constructions affected by less recurrent floods in mid risk areas. A micro credit scheme is envisaged with no interests and technical assistance from subnational governments for constructive adaptation actions regarding electrical and sanitary facilities, mezzanine, among others which are included in the local plans.

In Paysandú and Salto there is an estimation of around 4000 houses located in mid risk areas, most of these houses have good construction materials and families usually have higher income. Under government policies the families living in this mid risk areas are usually not entitled to resettlement policies, however a more cost-effective approach can be taken into account in relation to the adaptation of these houses to floods, such adaptation could include minor construction adjustments in key elements, these adjustments could cost approximately from 5000 to 15000 USD. Eventhough the actual budget for the activity has not being defined at the concept note stage, it is envisaged that the initial revolving fund could reach around 2% of mid risk houses as a pilot programme to test the policy approach. Also to note is that at concept note stage the main source of funding for the revolving fund is the initial grant by the AF, however other sources may be identified at a later stage once the programme is in place, and that initial results can be measured. One of the main non-financial costs is the provision of technical assistance from architects and other technicians, such as plumbing and electricity, in this regard the Departmental Governments have professionals and technicians in place to support such assistance. As a pilot experience financed jointly with Departmental Municipalities, the Fund is sufficient to evaluate and define if this adaptation measure can be effectively applied in the flood zone of cities that have a varied socio-economic composition and therefore require differentiated instruments.

**Activity 9.2** Design of a flood insurance for coastal commercial and touristic establishments.  
Entre Ríos, Argentina.

In most coastal towns of the Uruguay river involved in this Project, main income sources are related to tourism. Significant amount of commercial, gastronomic and hotel establishments, among others, are located in coastal or low areas, precisely for their proximity to the river and it recreational, social, cultural, environmental, view and touristic benefits.

In these areas, the overflows that extend during long vacational periods, cause devastating effects due to damages and losses of income sources related to the partial or total interruption of the economic activities. In this sense, it is utmost important to generate risk transference financial measures such as insurances, that tend to protect the entrepreneurship's income and local associated economies.

In the Project's framework, a feasibility assessment will be undertaken and a customized insurance will be designed according to the criteria and parameters that are defined in the Project's context.

**Output 9 inputs and budget:** Technical consultancies for the revolving fund and insurance design. Initial funding for revolving fund. USD 500.000.-

### **COMPONENT 3. Priority measures for adaptative conservation of vulnerable coastal ecosystems.**

Uruguay river's natural ecosystems have a significant value for their biological diversity and their role in benefits and ecosystemic services supply, especially those regarding river's dynamic regulation contributing to a dynamic balance (buffer zones, water purification, floods and temperature regulation, erosion prevention, among others). These ecosystems are affected by severe climatic events, jeopardizing the river's natural dynamic, biodiversity and environmental services supply. In paralel, these impacts are increased by the growing coast urbanization, river side settlements, incorporating new threats related to pollution processes and water quality loss.

Adaptation strategies based on ecosystems are suggested, which include mapping of ecosystemic services, restoration of significant ecosystems and river's natural dynamic through coastal recovery, environmental services protection and measures to reduce health related issues in towns.

**Outcome iv)** Adaptive conservation measures have been implemented in vulnerable ecosystems on both margins of the Uruguay river including their ecosystemic services identification and assessment.

Uruguay river's coast has been severely affected by anthropogenic activities (deforestation, infrastructure installation, soil compaction and urbanization) for decades, altering its natural dynamic and balance leading to erosive and degradation processes that have been deepened by the extreme events and their social, environmental and economic effects.

Adaptation pilot programmes will be designed for their implementation aiming to promote a useful adaptation methodology in areas with ecosystemic relevanceto enhance biodiversity conservation in the climatic threats context. These programs should contemplate environmental services mapping and assessment in a way that the link between ecosystems and human activities contribute to climate risk reduction in the community and economic spheres.

Numerous NPA (national, local, private) are located in the Project's implementation area with different progress in their management, conservation, institutional agreements, projects and initiatives.

There are exchange activities between El Palmar National Park (Argentina) and Esteros de Farrapos e Islas del Uruguay Protected Area (Uruguay) and the intention of a formal agreement between Argentina's National Parks Administration (APN) and MVOTMA – SNAP from Uruguay.



*Photo 8: El Palmar National Park, December 2017. (Project Team Photography)*

**Output 10.** Ecosystemic services and co benefits have been identified and assessed, including CCA and Uruguay river's ecosystems connectivity.

Identification and mapping of these characteristics will significantly contribute in territorial planning and management, risk reduction and management, resilience building and the improvement of sanitary and health conditions. Ecosystem based solutions are known for being sustainable and efficient.

Climate change and variability alter ecosystems and species distribution which require consideration in the NPA management plans and other biodiversity conservation measures.

Healthy coastal ecosystems support CCA, with favourable consequences for population, infrastructure and vulnerable activities in the river's margins. It is necessary to identify, assess and promote ecosystemic services supply in the NPA's management plans and other biodiversity conservation measures.

**Activity 10.1:** Ecosystemic services and benefits identification, their mapping and assessment regarding their contribution to CCA and connectivity in Argentina and Uruguay.

The envisaged activities include: information compilation, analysis and systematization; analysis for ecosystemic services and benefits' identification and assessment and their incorporation into an information system; baseline and terminal measurement.

The main geographic scope of ecosystem services is in relation to the Estero de Farrapos e Islas del Río Uruguay National Protected Area and El Palmar National Park, however depending on which ecosystemic service is being mapped the geographical scope may change accordingly to better reflect the geographical interrelation between conservation and restoration sites and the sites where the service is provided, also some mapping insights on ecosystem services will be included in relation to some of the urban areas addressed in the project.

In general terms the project takes into account those ecosystem services that relate to the protected areas in both margins of the Uruguay river, as well as those natural surroundings around the urban areas that will be addressed in the project. In particular ecosystem-based adaptation actions will be taken into account in the selected urban centres, riparian ecosystem linked to these urban sites, and selected protected areas in both margins of the Uruguay river, in particular El Palmar National Park and Estero de los Farrapos e Islas del Río Uruguay protected area.

The main ecosystem services provided by riverside ecosystem of the Uruguay river are: hydrological regulation, sedimentation dynamics processes, nutrient retain and release cycles, habitat for biodiversity, trophic chains, among others. In this regard, there is huge importance in the intervention to reverse erosive processes, to promote native revegetation and the control of the expansion of exotic species.

Ecosystemic services taken into account:

- Hydrological regulation: healthy riverside ecosystems reduce the impact of river floods, by flooding areas of low human activities, as well as they reduce the impact of drought by providing water and humidity to the surrounding drier ecosystems. This service is key in terms on climate change, where there could be exacerbated variability and more frequent extreme events of both floods and droughts.

- Habitat for biodiversity: ecosystems support key functions in the productive processes, including pollinizing species that play an important role in the surrounding crops. Moreover, in the context of climate change, including the increase of mean temperature and rainfall, as well as increase climate variability and the frequency and intensity of extreme events, it is expected that species distribution change as well. To work upon healthy ecosystem connectivity becomes crucial to allow for species to better adapt and to be more resilient to climate change.

- Reduction of coastal erosion and sedimentation process dynamics: increased climate variability becomes a basis for the increase of erosion capacity of the river. This higher coastal erosive process also includes a modification of the sedimentation process. If riversides can count on robust and healthy ecosystems, this ecosystems can reduce the erosive effects.

- Nutrient cycles and trophic chain: robust and healthy ecosystems are key to ensure adequate nutrient cycles and trophic chains that are basic for relevant productive processes in the project area, among them fish availability and fisheries.

-Recreational touristic spaces, in relation to enjoy and education of local population and visitants: Uruguay river ecosystems, especially those in the protected areas, have an special significance in order to support better living conditions for the local population, including children and women and the poor. Riparian ecosystems and their biodiversity have become one of the attractions for recreation, education and tourism at present time and more is expected in the future. In this context ecosystem conservation becomes a key strategy in order for ecosystems to become more resilient towards a more threatening future in terms of climate but also with higher use.

**Output 10 inputs and budget:** Technical consultancies. Equipment procurement for field and informatics surveys. Software and high resolution images procurement. Workshops and meetings. USD 500.000.-

**Output 11.** New CCA ecosystem-based measures have been implemented.

The identification and assessment of impacts such as erosion and drainage problems, and the provision of sustainable solutions to recover ecosystemic services and to facilitate ecosystem restoration in coastal zones reduce flood risks and its negative effects. Also, it constitutes valuable information for planning and management policies and the development of regulations.

**Activity 11.1** Necessary adapted infrastructure for increasing resilience within NPA, for activities such as tourism, livestock breeding and dairy farms, fisheries and apiculture in Argentina and Uruguay.

Within the Esteros de los Farrapos e Islas del Río Uruguay Protected Area several low impact production activities are held, most of these activities rely on infrastructure such as boardwalks for tourism, wiring for cattle breeding, or bee squares for apiculture. These activities and infrastructures could be at flood risk depending on their specific location and the type of materials or technical design criteria. The project aims at identify such vulnerable infrastructures and where possible will suggest and support its adaptation, whereas a relocation into higher zones, or to improve its materials or design standards in order to decrease the level of risk of such activities in relation to floods.

In terms of tourism: a redesign of the walking trails and support infrastructure in terms of climate change. This trails go through flood prone areas, in this regard the project will support the adaptation of trails, observation decks, walkways and shelters, as well as the modalities of their use in order to lower the risk of both the infrastructure and the visitants.

In terms of apiculture: apiculture is being developed in flood prone riverside areas and specific islands in the protected area, this activity requires adapted infrastructure when flood arises so as to quickly move hives and other supporting materials through water. The project will support in improving the infrastructure and other equipment, as well as to increase the knowledge and capacities of the beekeepers to cope with flood, including by developing protocols based on EWS.

In terms of livestock breeding: livestock smallholders are frequent in the Estero de los Farrapos area integrating production with ecosystem conservation. The project will aim at supporting the smallholders to improve their management skills based on EWS when flood events happens, as well as to provide them with adequate equipment for improved cattle management during these episodes.

**Activity 11.2** Design and implementation of a sustainable use and management strategy for Esteros de Farrapos area and its relationship with Nuevo Berlín and San Javier. Rio Negro, Uruguay.

The actions under this Acitiviyall speak to the relationship between Nuevo Berlin and San Javier cities with the Estero de los Farrapos and Islas del Río Uruguay Protected Area, where there is an intimate relationship between the ecosystem of the Protected Area with its adaptation related services to the urban environment.



The strategy will enable to solve environmental conflicts such as the MEVIR housing project's biological oxidation lagoons in Nuevo Berlín and San Javier that are located in flood prone areas. Design and implementation of recovery and protection measures (are proposed for the levee, paleo coast, including beach ecosystems and existing archaeological sites in Esteros de Farrapos, Nuevo Berlin and San Javier. Building an additional stretch of Nuevo Berlin's riverside boardwalk<sup>1</sup> and definition of public spaces on Santa Rosa beach<sup>2</sup>. Adaptation actions for houses located on San Javier's north east urban border<sup>3</sup>, adjacent to Esteros de Farrapos. regarding the last three actions of the activity:

1.Nuevo Berlin's riverside boardwalk requires an expansion at a high level in order to be usable upon higher river levels, an adequate boardwalk will also help the conservation of the riverside ecosystem, and a healthy riverside ecosystem will also provide for less erosion and the a better protection for the boardwalk itself.

2.Santa Rosa beach in Nuevo Berlin is very delicate in terms of its riverside conformation, including its surrounding vegetation, which prevents erosion. The definition of usable public spaces will help the conservation of the most delicate areas in order to prevent erosion during high level floods.

3.In the connecting area between north west San Javier with Estero de los Farrapos Protected Area there are few houses in a high frequency flood prone area, adaptation actions will be explored in relation to the ecosystem conservation or other adaptation actions in order to decrease the flood risk.

**Activity 11.3** Implementation of pilot adaptation measures based on ecosystems on Rincón de Franquías NPA, Uruguay.

Identification of the most flooded vulnerable zones and the design and implementation of pilot conservation and ecosystem based adaptation measures, such as revegetation with native species.

**Activity 11.4** Coastal protection for the conservation of the river side forest surrounding the water intake. Concordia, Argentina

As mentioned on Activity 8.2, the protection of the coastal area near the water intake of the treatment plant includes activities that aim to stop the erosive processes that affect the riverside forest located in the right margin of the Uruguay river. This area, besides hosting valuable native species, acts as a buffer zone against the variations of the river's height, and its protection is critical for increasing the water intakes' sustainability and the progressive loss of soil during overflows.

**Activity 11.5** Restoration of selected vulnerable coastal ecosystems, through the integration of exotic species control and through revegetation with native species. Argentina and Uruguay.

Restoration activities include joint binational field actions involving public, private and civil society stakeholders with a "learning by doing" approach, in each countries' cities.

Development, implementation and assessment of methodological guidelines for ecosystem restoration. Strengthening of human and institutional (public, private and social) capacities for ecosystem restoration including NPA staff, service agencies and interested neighbours. Development of strategy for post project action's sustainability, and its corresponding document.

**Activity 11.6** Project for Heritage site's protection review, implementation and assessment. El Palmar National Park, Argentina.

Development, implementation and assessment of Public use of a cultural heritage composed of jesuitic rests of the former guarani missions that are placed inside of Parque Nacional el palmar and

are particularly vulnerable to erosion caused by floods . these activities are protection of cultural heritage inside the park will be developed in Argentina, historical ruins Online can be accessed from the national park It is one kilometer away across The construcción on the bank of the Uruguay River , the se ruins, which belonged to an ancient lime facility, unveil the remains of limekilns, an old jetty and some old houses built by the river. experiences, lessons learnt and capacities exchange with Uruguay, key stakeholders and are envisaged as well as linkage actions with similar cultural heritage sites along the Uruguay river basin.

**Product 11 inputs and budget:** USD 2.562.000.-

#### **COMPONENT 4. Priority measures for increasing social resilience.**

Climate change adaptation measures promoted by the government should be oriented to resilience building with approach on human rights, gender and generations. This involves developing comprehensive adaptation measures based on communities, and considere in their design and implementation social, economic and cultural aspects for each community.

Also, is considered the promotion of communities' vulnerability monitoring regarding the project's activities' implementation, as well as knowledge of the risk social perception, implementation of foresting measures for labour reconversion for the most vulnerable communities. Also, the project considered education and communication strategies that contribute to best practices experiences exchange and local empowerment based on local and regional social networks 'strengthening.

**Outcome v)** Communities and social organizations have incremented their resilience in the CCA and hydro climatic disaster risk management framework.

Binational effort to coordinate actions on both Uruguay river's margins will be fostered by the project as well as best practices exchange, existing mechanisms and tools identification and the development of new communities based adaptation measures that can be implemented in both sides of the river.

This experience can become highly useful in other shared basins such as the low La Plata river basin. Also, at least two workshops for best experiences exchange and the development of an exchange protocol are envisaged. This will be the success indicator for the project at its completion work.



*Photo 9: Consultation process with civil society, December, 2017 (Concepción del Uruguay City)  
(Project Team Photography)*

**Output 12.** Social vulnerability monitoring and assessment tools have been developed with a human rights, gender and generations approach.<sup>2</sup>

These tools are essential to assess social regional context and decision making and to enable the project activities' results monitoring. Methodological criteria should be developed for the region in order to compare and combine the resulting information in the Project's different implementation locations.

This methodologies will allow to identify social vulnerability aspects that should be analyzed for each city and monitoring how the adaptation measures contribute to vulnerability reduction and resilience building

The incorporation of the generational and gender approach in the instruments of analysis and monitoring of social vulnerability, so that they can be used within the framework of public policies of both countries. These approaches are potentially complementary to the extent that together they will contribute to improving sustainable human development; for coexistence, for integration, for equity, for reparation, and for the full validity, application and enforceability of a rights-based, integral and universal approach that respects and affirms diversities.

In this case, its incorporation aims at the analysis starting from its actors, for example, the existence of diverse youth, (either by cultural, economic, social or even political conditions and situations), that promote the recognition and evaluation of the youthful worlds for the realization of private and collective life projects, and their subsequent empowerment in all aspects that have to do with their particular and collective development (youth), as well as their country with a future horizon.

Adopt a generational approach, incorporating the social relationships that are established within each generation, as well as the relationships that are established with other generations. It will serve to consider contexts (historical, social, cultural, political or economic), environments, places and spaces, which reveal situations and conditions of advantage or disadvantage, of merit or reward, of exclusion or self-exclusion, of risk or protection, of guarantee of rights or of violation thereof.

<sup>2</sup> Is understood by "generational approach", the one that "... points to the analysis in time and space of intragenerational and intergenerational relations, in determined historical, social, economic, political and cultural contexts, taking into account the life cycles, roles, actions and symbolic imaginary that the person establishes with its surroundings, society and its institutions".

In this sense, it is considered that social analysis cannot be disconnected from the sectors from which it comes and from its connection to specific territories; Thus, the analysis can be disaggregated according to the ethnic-racial origin, socio-economic stratum and geographic circumscription, improving its effectiveness, since it would allow to identify inequities or common situations in the allocation of resources, program development, social intervention, among others.

Social vulnerability monitoring and analysis instruments have been developed with a human, gender and generation's rights approach", vulnerable communities will benefit from the development of social policies that aim for resilience building in the most affected communities, with a human, gender and generations rights approach. Besides the activities proposed in this Project, these social policies will integrate vulnerable communities to urban life and build resilience among them in order to achieve better and equitable opportunities for their development, livelihood and adaptation.

**Activity 12.1** Social vulnerability monitoring and assessment tools development for each country integrating a human rights, gender and generations approach.

**Activity 12.2** Social vulnerability monitoring and assessment in the Project's selected cities, based on the instrument developed in Activity 12.1. In this way, it is expected to implement such tool and make the required adjustments for its optimization.

**Activity 12.3** Development of a document with the methodology and results of the suggested tools, as well as the common or distinctive aspects and characteristics that arise from its implementation.

**Output 12 inputs and budget:** Technical consultancies, technical and validation workshops, training sessions for methodology implementation USD 200.000.-

**Output 13.** Social risk perception assessments have been implemented for resilience building.

In order to achieve a cultural change in society that incorporates CCA, it is necessary to develop social risk perception analysis methodologies. These will be designed in such way that enables to become familiar with the communities ideas, experiences and assessments and to identify in which way risks are understood, built and reproduced. This perception should be considered in the risk prevention processes.

Through the social risk perception activities included in Output 13, different aspects involved in the risk perception will be assessed as a base line for designing risk reduction collective and individual strategies. This will benefit vulnerable communities particularly, since it will provide tailored risk reduction measures in order to reduce their vulnerable conditions.

**Activity 13.1** Development of a methodology for social risk perception assessment.

Methodologies that allow to become acquainted with the social risk perception levels regarding potential threats and that assess the existing vulnerable conditions will be selected and developed. Participative strategies will strengthen capacities and increase resilience in order to reduce and prevent disasters negative consequences.

**Activity 13.2** Social risk perception analysis, estimation and/or identification in each countries' cities.

Implementation of methodologies in the field. Through the most adequate methodology, different aspects involved in the risk perception will be assessed; ideas, previous knowledge, experiences, priorities and attitudes will be explored that account for how communities socially understand and build risks as a base line for designing risk reduction collective and individual strategies.

**Activity 13.3** Development of a methodological and results document for each country.

Searching, selecting and adjusting methodologies to analyse social risk perception will lead to its further implementation in the field. As a result, a major interest analysis to understand not only social risk perception in a regional scale, but also similarities, differences and distinctive characteristics of each countries communities. With this information, a document will be developed with common results on both sides of the river.

**Output 13 inputs and budget:** Consultancies, workshops, field visits, focal groups and interviews. USD 200.000.-

**Output 14.** Support and labour reconversion strategies were promoted for the vulnerable population.

Labour reconversion strategies for people inhabiting high vulnerability areas and relocated houses is envisage for vulnerability reduction. An assessment will be carried out on families 'productive activities and capacities for the development of new entrepreneurship according to their potentialities. This strategy will be based on locating productive activities separately from vulnerable areas, improvement of such activity by professional training and labour formalization (i.e. regulation of waste classifying and commercialization). Stable and sustainable income generation will be fostered for reducing their vulnerable and exclusion conditions. Social follow up and subsidies will be sustained in time.

The activities considered in Output 14 "Support and labor reconversion strategies were promoted for the vulnerable population" will also be a direct social benefit for vulnerable communities since they will provide adapted and resilient opportunities for new entrepreneurship according to their potentialities and sustainable income sources in order to reduce their vulnerability and enhance their quality of life.

**Activity 14.1** Labour reconversion strategies and resettled families productive activities improvement. Paysandú, Uruguay.

Floods not only affect housing conditions of vulnerable families, but also productive and livelihood activities held on the locations (breeding, brick making, waste classification and commercialization). These activities' reconversion is crucial for relocated families recovery, vulnerability reduction and resilience building.

The project aims to enhance resettlement policies currently performed in several flood risk areas that are occupied by vulnerable poor families. These families typically have very little training, with no formal employment and usually perform informal activities to secure a minimum income, one of the most usual activities is informal waste classification within their own houses. When families are resettled, new job opportunities and higher income activities are expected, so to improve their livinghoods in an integrated approach, not only to have a new non-floodable house but also new alternatives in terms of jobs and income in order for those families to be encouraged to stay in their new safe houses and not to be tempted to come back to occupy floodplains looking for their previous

income activities. The general approach to lower flood risk when dealing with highly vulnerable communities is to improve their capacities in a holistic way, since much of the time the families are located in flood prone areas due to their low income and possible work activities performed in the floodplains.

**Activity 14.2** Socio occupational training and labour reconversion projects' development. Entre Ríos, Argentina.

Entre Ríos Ministry of Social Development has implemented the "Common House Keepers" project, which is inspired in Pope Francis Laudato encyclical, in order to integrate youngsters with psychosocial vulnerability through training and dignifying job opportunities regarding environmental caring activities.

This activity consists on an extension of an ongoing programme led by the Ministry of Social Development of Entre Ríos province, whose beneficiaries are people that present high socioeconomic vulnerability. In the Project's framework, this programme will focus on vulnerable people that have undertaken relocation processes, aiming to enhance their living conditions in their new locations, avoiding their dependence on the river's resources (fishing, brick making, straw weaving, selling regional articles, providing services in touristic areas) that have to be suspended during overflows.

The activity is orientated to tutoring the beneficiaries (approximately 100) in the development of sustainable occupational projects by developing and capitalizing knowledge, capacities and skills that will allow them to increase their income and improve their quality of life.

The activity includes training and socio occupational activities for a period of 12 months. During this period, beneficiaries take part in four training sessions per week of 3 hour duration (48 hours monthly approximately). These hours are destined to training on crafts, jobs, productive projects development and issues related to socio environmental and community development. This scheme is complemented by a monthly economic incentive (approximately AR\$5.000) that the beneficiaries receive by participating on the training sessions during 12 consecutive months. It is to stand out that this economic incentive is proportionate to the person's assistance to training sessions and activities. Also, the programme includes the provision of the necessary tools for the implementation of the productive projects that are developed during the programme.

After the 12 month period, each beneficiary develops the resulting productive or occupational project with the necessary tools for its execution. Also, the programme promotes the commercialization networks enhancement that potentiate the results through social and regional local economy markets.

**Output 14 budget:** USD 400.000.-

**Output 15.** Social networks have been strengthened by exchanging best practices on CCA, and local risk management strategies.

Knowledge management as well as experiences and lessons learnt exchange will contribute to achieve more effective and sustainable results and a more efficient allocation of resources. It will also promote criteria standardization and the construction of a regional approach. Expected outputs can be very valuable for other basins with similar problems and will especially contribute to La Plata river basin's strengthening.

**Activity 15.1:** Local, national and regional networks have been strengthened by knowledge and awareness acquisition regarding vulnerable coastal cities, ecosystems and NPA's role in CCA.

Aiming to promote communities and social organizations participation in spaces that contribute to improving governance and actions sustainability, the strengthening of participative spaces including Project's contents into their working fields is envisaged (CSOs, NGOs, Business chambers, Universities, Farrapos Advisory Commission, Argentina's Private Protected Areas Network, among other stakeholders).

In this sense, different exchange instances and methodologies will be developed, such as publications, workshops, digital platforms, among others. These will contribute and promote Knowledge Management, Lessons Learnt and Best Practices exchange, as well as participation, capacities building and awareness raising.

**Output 15 budget:** USD 300.000.-

**Output 16.** Communication, education and dissemination strategies have been implemented for vulnerability reduction.

For resilience building within communities, in the CCA and disaster risk management framework, it is utmost important for communities to become familiar with their territories, their potentials and restrictions, that they understand the risks they are exposed to, exacerbated by

□ consequences. Access to information and knowledge is essential to know the risks, face them and participate in the vulnerability reduction processes.

Communication, education and dissemination strategies envisaged in Output 16 will also represent benefits for vulnerable communities since they create awareness regarding potential risks, their management and reduction instruments as well as possible solutions and adaptation measures reducing their vulnerability conditions.

From a broader point of view, the development of the cities and works planning instruments, considering future climate scenarios will significantly contribute to improve the populations' life quality and their socio territorial integration. These activities include land management instruments, sectorial plans, vacant land and ecosystem services recovery, among others.

**Activity 16.1** Formal and non formal education experiences development for a sub national CC approach

Enablers, teachers and educator's training will be destined towards complex issues such as CCA and integrated disaster risk management on different levels and educational fields. In order to achieve this goal, the development of different pedagogic and didactic strategies, including educational and dissemination materials with trainees is envisaged. This activity is crucial for generating awareness in different areas and age groups (teachers, children, youngsters, students, professionals, community referents, among others).

**Activity 16.2** Communication campaign implementation for local communities to CC effects, adaptation importance and EWS awareness raising.

Access to relevant public information and communication for local communities will be a transversal and permanent aspect during the Project's implementation, besides being a particular activity itself. Communication campaigns will be plans for each country, according to the target public, their perceptions and media consuming habits in order to suit them to the general purposes CCA and disaster risk reduction awareness raising), and the specific objectives set by each country or community,

**Activity 16.3** Successful experiences dissemination regarding social vulnerability reduction.

Social vulnerability reduction best practices will be identified and gathered for their dissemination by means of different graphic and digital supports in order to promote the implemented strategies' ownership within communities. This will develop a positive image towards communities, reinforcing their identity and sense of belonging in the local context.

#### **Activity 16.4** Field missions and experiences exchange

These aspects constitute key tools and motivate communities and socialize CC understanding. These will be programmed using collective regional spaces and at least three best practices exchange workshops (one each year) in cities yet to be selected.

#### **Activity 16.5** Communication and dissemination strategies and actions promoting ecosystems and NPA relevance regarding resilience for CC.

In order to strengthen the cultural change that implies the incorporation CCA and ecosystem's role in such adaptation, the development and dissemination of publications, videos and other contents (physical, web, communication media) are envisaged, especially within NPAs (signage, trails, interpretation and information centres). Also lectures, open workshops, etc focused on key stakeholders.

#### **Activity 16.6** Strengthening for the development of methodological guides on project communication and management that are implemented as part of CCA strategies. Río Negro Department, Uruguay.

**Output 16 inputs and budget:** sixty workshops, four consultants with experience on CC and disaster risk management for the envisaged activities' implementation. One consultant for dissemination methodological guide and material development. USD 300.000.-

## **B. Innovative solutions to climate change adaptation.**

57. The envisaged innovative solutions contemplate the following approaches:

58. Regional approach considering the lower Uruguay river's basin territory and its transboundary condition, as a critical element for the achievement of sustainable solutions as opposed to local disseminated actions.

59. A sustainable and resilient city conception, that integrates urban infrastructure based on constructions and ecosystems, contemplates social, economic and cultural diversity in its design and actively incorporates citizen participation.

60. The government's policies and actions regarding human settlements, habitat and housing is based on a rights approach that integrates and prioritizes both constitutionally and legally consolidated rights as well as those denominated as "new agenda rights". This new agenda considers, among other aspects, gender, intergenerational relations, disability, sexual and cultural diversity dimensions. It is also a government's priority, the inclusion of diffuse rights into the public agenda and governments actions regarding urban, housing and habitat development, health and healthy environment, suitable and accessible potable water and sanitation. Therefore this initiative contemplates the effective incorporation of rights into public policies, particularly



housing, habitat and urban development and the construction of institutionalism is encouraged according with such definitions.

61. The risk comprehensive management, that considers severe climate events as a priority and management instruments based on EWS and prevention.
62. Ecosystems based adaptation, considering their conservations and/or restoration importance in order to reduce CC impacts and preserve ecosystemic services and benefits.
63. Communities based adaptation, considering local capacities and participative strategies' enhancement for social resilience building, with a human rights, gender and generations approach.
64. 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, it was considered as an innovative adaptation strategy that could be strengthened by additional funding and also be use as a reference for other countries with similar urban flood risks. Under this plan, the resettlement of families with poverty conditions that were initially settled in flood prone areas was considered, based on three fundamental components: socio territorial integration, generation the opportunity to access a decent house in secure urban areas with complete services supply; access to Social Protection System promotion; fostering their integration into health, education and training for a greater occupational insertion and income improvement among others; and the recovery of vacant land for collective non residential usessuch as public parks after relocations were completed.  
( [http://unfccc.int/secretariat/momentum\\_for\\_change/items/8692.php](http://unfccc.int/secretariat/momentum_for_change/items/8692.php) )

## **C. Economic, social and environmental benefits of the project**

65. Social benefits: The development of the cities and its planning instruments, considering future climate scenarios will significantly contribute to improve the populations' life quality and their socio territorial integration. Examples of this are the urban infrastructure works for reduction of the overflows impacts and the recovery of vacant land as a result of relocations that will generate new public spaces for the cities.
66. Especially for the actions included in components 2 and 3, during the field mission (December 4-8, 2017), a survey was conducted to identify the profile of the vulnerable groups of each of the target locations. To do this, interviews were conducted randomly with inhabitants of the target areas, and with key stakeholders. Identifying the vulnerable communities of each of the locations, the activities of these components were agreed upon, in order to contribute to cities' resilience and reduce the vulnerability conditions of the population affected by climate change. Both through the construction of sustainable infrastructure adapted to the adverse effects of CC, and of adaptation actions based on the needs of communities and ecosystems, vulnerable communities are the target group of the activities and products proposed to achieve the expected results. And as we have mentioned, the activities were elaborated prioritizing the

rights, gender and generational approach. On the other hand, the strengthening of institutions and the consideration of the CC in territorial policies, plans and programs, will have an effect on vulnerable communities indirectly, but with the objective of incorporating mechanisms and instruments that allow facing the effects of climate variability also reduce the vulnerability conditions of these groups.

67. In the case of Uruguay, the whole adaptation approach for flood risk urban environment comes first from the definition of the flood risk map, where high risk and mid risk areas are determined and in this regard socio-economic conditions of the population play an important part of this determination. In this regard, the project relates to three areas identified in flood risk maps:
  - Enhancing the resettlement strategies of the national and subnational government towards the most vulnerable families in high risk flood prone areas by supporting resignification actions, labor training, and provision of new secure land with adapted services.
  - Enhancing the adaptation of mid risk housing towards middle vulnerability population.
  - Enhancing the resignification of flood prone areas with recreational parks towards the whole population of the city, and also by preventing high vulnerable communities to settle in flood prone areas.
68. Social vulnerability monitoring regarding climatic events will contribute to the development of social policies that aim for resilience building in the most affected communities, with a human rights, gender and generations approach.
69. Also, relocated communities will have new integration opportunities within the cities, access to new decent housing and public services and labour reconversion through training and the development of new ventures that enhance their quality life.
70. Financial opportunities (revolving funds, insurances) offered by the Project, will enable the mid risk flooding affected population to improve their houses.
71. Adaptation measures based on communities, that contemplate education, communications and awareness strategies, as well as existing social networks strengthening, will contribute to promote a more resilient and integrated population. This means that communities will be familiar with climatic threats, prevention strategies and EWS regarding new severe climatic events.
72. Economic benefits: The implementation of financial mechanisms for housing improvements, as well as labour reconversion opportunities for relocated communities represent direct economic benefits. As the same time, the implementation of adapted infrastructure generates indirect economic benefits avoiding costs from emergency response regarding extreme events. The enhancement of improved houses, represent additional economic benefits for both owner and the neighbourhood. Also resignified waterfront areas can bring more economic benefits to the city in terms of tourism and coastal recreational activities.
73. Environmental benefits: The basin based regional approach and ecosystem based adaptation measures constitute the most significant environmental aspects of the Project. NPA strengthening and connectivity, ecosystemic services and benefits mapping, 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 vacant land recovery that will be transformed into natural parks or buffer areas for water excess and environmental services promotion.

74. Impact mitigation and compliance with the law: The Project will comply with all the applicable local and national regulations regarding Environmental and Social Screening, Assessments and Monitoring including participation and consultation and access to public information requirements. It will also comply with CAF and AF Environmental and Social Policies and an Environmental and Social management instrument will be developed for the whole Project's implementation and administration. Synergies considerations and regional approach are critical regarding these aspects. A screening of risk analysis regarding the AF Principles was undertaken (See section G) where no significant risk were identified and prevention and mitigation measures were described. An exhaustive risk analysis will be developed for each AF principle during the Full Proposal development with particular prevention and mitigation measures for each Principle.

## **D. Cost-effectiveness of the proposed project**

75. The envisaged activities result cost-effective under the following considerations:
76. Strengthening National and Sub-National capacities through the development of planning and management instruments with a CC approach will enable more effective and efficient actions. The articulation of instruments such as EWS and regional risk management plans between countries contribute to a comprehensive vision of the problem providing more effective and sustainable solutions and measures, avoiding the need to review and adjust them at national and/or local level.
77. Moreover, maintaining an ongoing dialogue between countries and exchanging best practices and successful experiences, will favour replicating positive implemented experiences. Joint work among the different involved stakeholders from each country will prevent duplicating efforts and the use of resources, enhancing possible synergies.
78. Re-significating, vacant land from relocations not only contributes to the provision of new public spaces for the population, but also prevents re settling and the need of undertaking future relocations if floods affected newly settled vulnerable groups. With these actions, avoiding potential emergency response costs will be possible since the affected community won't occupied flood prone areas. On the other hand, new settlements with resilient infrastructure will
79. increase their sustainability and reduce further negative effects for their inhabitants, providing them with better life conditions and opportunities, making them more resilient to climate change.
80. Supporting measures, such as promoting new working skills in the affected communities, reinforce relocations sustainability and communities capacity to improve their lifestyles and earnings, building resilience against extreme events.
81. Ecosystem based adaptation measures, such as coast restoration, have proved to be of lower monetary investment and much more effective by enhancing and recovering ecosystemic services and its benefits. This kind of measures also increases community's awareness about

climate change reinforcing sustainability. The cross-border approach significantly contributes to increase the effectiveness and efficiency of the proposed measures.

82. A capacity building and knowledge management strategy increases the community capacities promoting resilience and empowerment. Promoting a unified vision and strategy at the regional level promotes more efficient and sustainable measures in the entire area affected by CC, potentially achieving economies of scale when implementing such measures.
83. A detailed cost-effectiveness analysis will be undertaken during the Full Proposal elaboration.

## **E. Describe how the project is consistent with national or sub-national sustainable development strategies**

84. The Project will be fully aligned and contributes to Argentina and Uruguay's objectives and priorities regarding the countries' policies and plans.
85. As previously mentioned, Uruguay has constituted a National Policy on Climate Change until 2050 and has presented, on November 2017, its first National Determined Contribution (NDC) regarding Paris Agreement. The Project's contribution to the referred policy's different dimensions is to be stressed. Regarding social dimension it considers: promotion of the populations' adaptation and resilience capacity promotion regarding CC and climatic variability emphasizing on social and climate most vulnerable groups; disaster risk management strengthening in local, departmental and national levels by means of different institutions and community coordination, articulating legal and tax instruments and the promotion of cities, communities, human settlements and sustainable and resilient infrastructure regarding CC. Considering the environmental dimension the following stand up: natural ecosystems' conservation, recovery and restoration and ecosystemic services and benefits provision based on adaptive management; vulnerability reduction in face of CC impacts on coasts and riversides by means of ecosystem based adaptation actions that minimize losses and damages.
86. Considering Uruguay's first NDC, the Project will foster a number of priorities and adaptation measures towards CC that are included in it. The most relevant are: re-signification of floodable zones by the assignation of new uses; at least eight floodable cities will count with a floods EWS; adaptation measures promotion in at least 30% of the cities with over 5.000 people; at least seven departments will count with regional, departmental or municipal local adaptation plans, at least six NPA that include CC in their management plans; and at least 20% of the Uruguay river, La Plata river and Atlantic Ocean's coast has an adaptive management with priority of most vulnerable sections.
87. Sustainable territorial planning is a priority for Uruguay's government, counting since 2008 with a Land Planning and Sustainable Development Act. This law promotes a comprehensive approach of planning and enables, among other aspects, to respond to CC effects, being local land management plans one of its instruments. Therefore, it can be affirmed that the present Project is consistent with this policy, since it expects these plans to consider CC.

88. Another Project's relevant aspect is related to climatic risk management and EWS that is considered in Uruguay's policy on this matter. On year 2009 the National Emergency System was established by law, in order to protect people, significant assets and the environment in face of disaster situations. In this framework, an EWS has been developed for a number of cities, especially those vulnerable to floods and protocols have been developed for the comprehensive climate risk management's different stages.
89. The Project is also aligned with national policy on biodiversity, considering the Law that creates, in year 2000, the National Protected Areas System which provides a fundamental tool for NPA's planning and management. Also, its regulating Decree incorporates their management plans enabling the incorporation of CCA elements.
90. Regarding water resources, Uruguay has a Water National Policy approved in 2009. It establishes that water resource management will aim for their sustainable utilization and will contemplate climate variability and extreme events situations in order to mitigate negative impacts, especially on populations. Also, the National Water Plan from year 2017, incorporates comprehensive water management instruments (basins, aquifers, urban waters) in which climatic risk approach is fundamental.
91. Uruguay was also recently awarded (January 2018) by the Green Climate Fund Readiness Programme a support to develop a National Adaptation Plan on Cities and Infrastructure that will also catalyse previous actions and experiences into a new systemic approach to CCA in cities, being the Uruguay river flood prone cities some of the prioritized areas for such NAP.
92. Considering Argentina's NDC, CCA is its main priority, taking into account the negative effects that have already affected the territory. In this context, Argentina includes in its NDC adaptation aspects, according to articles 7.10 and 7.11 of Paris Agreement. Within the Climate Change National Cabinet, the development process for the National Adaptation Plan (NAP) has been started, which will respond to identified priorities by the different sectors, jurisdictions (through COFEMA and municipal representatives) and civil society, academy and private sector relevant stakeholders. The NAP, which will have sub national and sectorial chapters, will promote the identification of adaptation priorities at national level, in order to generate an institutional and concept framework that will enable the design and implementation of local adaptation plans by other stakeholders. It is to remark that Argentina is undertaking to adaptation projects for the livestock sector with AF funding (a total of USD 9.936.817). These projects fund concrete adaptation measures in highly vulnerable communities: one on the country's Nor east for family agriculture adaptation and resilience building, and the other in Buenos Aires' Southwest for climatic resilience and sustainable land management.
93. Federal Plan for Flood Control is being implemented by the Ministry of Public Works and partially funded by de Hydrological Fund for the reduction of flood's effects and the development of water infrastructure. The proposed activities will foster this Federal Plan and will complement it with lessons learnt, pilot experiences and best practices.
94. National Plan for Disaster Risk Reduction form SINAGIR has been considered and is supported by the Project.

95. Regarding RAMSAR Convention on Wetlands, to which Argentina adheres by laws N°23.919 and N°25.335, the Strategy for La Plata Basin Wetland Conservation and Sustainable Use will be supported by the adaptation initiatives based on ecosystems included in the Project. Technical cooperation among basins will be enhanced by the activities of knowledge management, lessons learnt and information a best practices exchange.
96. Additionally, the following local projects, policies and plans will be supported and capitalized, among others:
  - Local Plan for Land Management and Sustainable Development in Paysandú and its micro region,
  - Local Plan for Land Management and Sustainable Development in Salto and its micro region
  - Fray Bentos and influence area Local Plan,
  - Urban Water Plan for Salto city,
  - Entre Ríos Environmental Diagnose, Territorial Strategic Plan,
  - Development Plan for Concordia,
  - Strategic Plan for Concepción del Uruguay,
  - Environmental Urban Development Plan for Colón,
  - Entre Ríos Provincial Strategy on low carbon and climate change resilient development.

## **F. Describe how the project meets relevant national technical standards**

97. The Project will comply with all the applicable local and national regulations regarding Environmental and Social Screening, Assessments and Monitoring including participation and consultation and access to public information requirements. It will also comply with CAF and AF Environmental and Social Policies and an Environmental and Social management instrument will be developed for the whole Project's implementation and administration. The Project will also consider national and local laws regarding technical standards, procurement, NPA, land management, construction codes, among others.
98. Relevant National legislation and regulations is presented:

### **For Argentina:**

99. Law 25.675: Environmental National Policy. Environment General Law
100. Minimum standards National Law for a sustainable and adequate environmental management, biological diversity preservation and protection and the implementation of sustainable development (Art 1°).
101. 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)

102. All construction or activity developed in the National territory, which is feasible of affecting significantly the environment or any of its components, or the communities' health will undergo an environmental impact assessment before its implementation. (Art 11)
103. Procedure starts with the presentation of an environmental affidavit stating if the construction or activity will have any effect on the environment. The competent authorities will state the need of and environmental impact assessment (EIA) which requirements will be established in a separate law for each jurisdiction. When required, an EIA will be developed and environmental impact statement will be issued approving or disapproving such construction or activity.(Art 12).
104. Authorities will be responsible for the diffusion of the environmental conditions and the effects that ongoing or envisaged anthropogenic activities could have on the environment. ((Art 18) Authorities should institutionalize consulting and audiences procedures as mandatory requirements for the approval of activities that could cause significant negative effects on the environment. Participants opinion or objections will not be binding (...) (Art. 21)
105. Decree 4977 regulates the above mentioned law establishing activities categorization, minimum requirements for EIA, Environmental Management Plans, Environmental Audits, community and stakeholder's participation among others.
106. Entre Rios subscribes to the above mentioned law by Resolution 038/10 and recognizing Municipalities competence regarding territorial planning and environmental certifications.
107. Law 25831: Access to public information:
108. This law establishes minimum standards and procedures for environmental protection in order to guarantee the right to access environmental public information.
109. Law 25688: Environmental regime for water management:
110. Establishes minimum requirements for water preservation and rational use. This law will be considered in the design and implementation of public services and coastal defences and their corresponding EIAs.
111. Law 25916: Urban Waste Management:
112. Establishes minimum standards for environmental protection regarding urban waste management. Entre Ríos Province subscribes and establishes its Urban Waste Management system by Law 10311.
113. Law 24051 Hazardous Waste Management:
114. Sets minimum requirements for Hazardous Waste Management including its generation, manipulation, transport and final disposure. Entre Rios subscribes to the national regulations by Law 8880. Note that no hazardous waste significant generation or manipulation is envisages for the Project. Nevertheless, some construction activities may lead to the generation of a minimum amount of non domestic waste. The corresponding EIA will state the guidelines for each particular case regarding these regulations.

115. Law 22.351 – National Parks, Natural Monuments and National Reserves

**For Uruguay:**

- 116. General Law for Environment Protection (Nº 17.283, December 28th 2000): Establishes the environmental policy's principles and environmental managements instruments (EIA, SNAP, among others).
- 117. National Policy on Climate Change to 2050 (November 3rd 2017):
- 118. Its goal is to promote adaptation and mitigation in Uruguay in face of Climate Change, contributing to the countries sustainable development.
- 119. Natural Protected Areas National System creation and management law (Nº17.234 February 22nd 2000), and its Regulating Decree (Nº52 from 2005)
- 120. National Water Policy Law (Nº 18.610 October 2nd 2009):
- 121. It establishes that all population has right to access potable water and sanitation. Also, it establishes guidelines and instruments for water resources management, conservation and protection. On Article 8, it states that, for bi national water resources sustainable management coordination, technical cooperation, and consumers' participation during all stages of planning, management and control should be fostered.
- 122. Land Planning and Sustainable Development Law (Nº18.308 June 18th 2008):
- 123. Sets the general regulating framework for land management and sustainable development, defines planning, participation and acting competences and instruments. Orientates land management towards the achievement of national and general interests. Its regulating Decree 221/2009 sets that all land management should integrate the environmental dimensions through an Environmental Strategic Assessment.
- 124. National Emergency System Law (Nº 18.621 October 25th 2009):
- 125. Creates an National Emergency System which goal is to protect people, significant assets and environment in face of the eventual or real distaste situation through the coordination of the State with the adequate use of public and private available resources, in order to foster the national sustainable development.
- 126. Law on decentralization and citizen participation; (Nº 19.272 September 18th 2014): Sets Government's third level stating that all every population over 2.000 people will constitute a Municipality and its territorial circumscription should conform a unity, with social and cultural personality, with common interests that justify the existence of representative political structures that enable citizen participation.
- 127. Environment Law (Nº16.466 January 19th, 1994):



128. States the Environmental Impact Assessment and Environmental Authorizations regime. Regulating Decree 349/2005
129. Law on Right to Public information Access (N°18.381 October 17th, 2008):
130. Promotes administrative functions' transparency in all public organisms and warrants the fundamental right of people to Access public information.
131. Natural Protected Areas National System Law 17.234 from 2000 and modifications:
132. Set the framework for the development and management of the Natural Protected Areas National System (SNAP).

## **G. Describe how the project complies with the Environmental and Social Policy of the Adaptation Fund.**

***Briefly describe in the space below how the Project mainstreams the Principles 1:***

### ***Compliance with the Law***

133. The project integrates compliance with the Laws in both countries. Both countries have several laws, regulations and specific procedures to manage environmental and social projects like this one.
134. At the local level, both countries have a municipal government with a set of competences established by law, such as development planning, management and control of land use, public sanitation services, among others related to mobility, public transport, permits of construction and community development. The project document supports all local regulations related to the specific areas of this project.
135. The Project is articulated through compliance with the different regulations as described in Chapter II. F.

#### **Argentina**

- Law 25.675: National Environmental Policy. General Law of the Environment
- Law 25831: Access to public information
- Law 25688: Regime of Environmental Management of Waters
- Law 25916: Urban Solid Waste Management
- Law 24051 Hazardous Waste Management

#### **Uruguay**

- General Law for the Protection of the Environment (N° 17.283 del 28 de December del 2000):

- National Climate Change Policy to 2050 (3 de November de 2017): Its objective is to promote adaptation and mitigation in Uruguay to the challenge of climate change, contributing to the country's sustainable development.
- Law for the creation and management of the National System of Protected Natural Areas (Nº17.234 of 22 of February de 2000), and its Regulatory Decree (Nº52 de 2005).
- Law on National Water Policy (Nº 18.610 del 2 de October de 2009):
- Law on Territorial Planning and Sustainable Development (Nº18.308 del 18 de June de 2008):
- Law for the creation of the National Emergency System (Nº 18.621 del 25 de October de 2009):
- Law on decentralization and citizen participation (Nº 19.272 del 18 de September de 2014):
- Environment Law (Nº16.466 del 19 de January de 1994):
- Law on the right of access to public information (Nº18.381 del 17 de October de 2008):

Finally, CAF as implementing entity will mainstream the compliance with all the laws. The project has an organization structure with a Project Board and a Project Unit responsible for making management decisions and monitor the compliance with all current regulations.

***Briefly describe in the space below how the Project mainstreams the Principle 2:***

***Access and equity***

The project is designed and implemented in a way that does not impede but rather promote the access of any group to essential services and basic rights.

For the design of the Project during the Pre Concept phase, a consultation process was carried out at the sub national level with the local authorities to evaluate what the existing needs in the region communities were. Then in the process of formulating the note of agreement a consultation process was carried out through informative workshops with the local communities both those directly benefited and those who could have co-benefits of the project. This ensured that the design of the project will not discriminate in any way the communities.

Likewise, the project states that it will design in its Full Proposal phase the communication mechanisms between the project and the communities. This is reflected above all in component 4 (Priority measures to increase social resilience) where it works directly with the community and social organizations where social vulnerability monitoring and analysis instruments are developed with a human rights, gender and generations perspective.

Methodologies of analysis, estimation or identification of the social perception of risk for the construction of resilience will be implemented, support and reconversion strategies will be promoted for the vulnerable population, social networks will be strengthened through the exchange of ACC strategies and experiences. local risk management and communication, education and dissemination strategies will be implemented to reduce vulnerability.

***Briefly describe in the space below how the Project mainstreams the Principle 3:***

***Marginalized and vulnerable groups***

The Project has a relevant participative approach and incorporates specific actions to involve marginalized and vulnerable groups. During the design of the Project, a stakeholder's analysis was undertaken in order to map their respective socio economic conditions in Concepción del Uruguay, Paysandú, Colón, Concordia and Salto (Annex 5).

***Briefly describe in the space below how the Project mainstreams the Principle 4:  
Human rights***

Both countries have ratified the core international human rights treaties. The Human Development Report (UNDP, 2016) show Uruguay in ranking 54/188 qualified as High Human Development and Argentina in ranking 45/188 qualified as Very High Human Development. Human development is all about human freedoms: freedom to realize the full potential of every human life, not just of a few, nor of most, but of all lives. This project would help with these realizations, even though the project are going to be develop in poverty areas with a lot of needs, the principle of universalism of the human rights will be translation into practice in the specific subjects, such as: adaptation measures, reduce vulnerability, reduce the risks of future disasters and help the people of this neighbourhoods to have voice and autonomy and also to be prepared for future disasters among others.

The project will mainstream a human rights-based approach, by ensuring the compliance with the realization of human rights, as established in the Universal Declaration, as well as,

the other international instruments related with human rights. The project would contribute the development of the capacities of the “duty bearers” to fulfil his duties and with the “rights holders” to claim their rights.

Promotion of human rights in the project will be achieved by creating awareness among all involved stakeholders and implementing entities in the project operations, including design, execution, monitoring, and evaluation, about the Universal Declaration of Human Rights as an overarching principle in the implementation.

***Briefly describe in the space below how the Project mainstreams the Principle 5:  
Gender equity and women´s empowerment***

The gender approaches taken in the presented proposal are substantiated by international and national legislation.

The Project aims to strengthen gender equity since women and men have different capacities and vulnerabilities. In this sense, the Project will be an opportunity to increase women and men´s vulnerability knowledge for assessing and analyzing if there is a significantly different risk because of gender aspects that allows to find concrete answers that support the breach reduction.

***Briefly describe in the space below how the Project is likely to improve the Principle 6:  
Core labour rights***

Both countries have ratified the eight core labour conventions, and in general face similar challenges like child labour and discrimination in respect to employment and occupation.

The Project mainstreams core labour rights in all the actions and at different levels. Argentina and Uruguay have mechanisms and laws related to labour rights. During the implementation, this Project will find the best mechanisms to mainstream this principle. CAF will act as an implementing entity. In this case, all the contracts hired will have to consider CAF's regulations. CAF follows strictly core labour conventions, avoiding child labour and any kind of discrimination.

The constructions mitigation measures will strictly follow the general conditions for contracts of civil works as well as the applicable labour legislation of each country. Also and specific output

and activities have been put in place regarding job opportunities for vulnerable communities, in this regard an effort will be made to enhance capacities of working men and women in vulnerable communities to move to formal and less vulnerable livelihoods.

***Briefly describe in the space below how the Project considers the Principle 7:  
Indigenous peoples***

In this Project, there are no identified Indigenous communities present.

***Briefly describe in the space below how the Project considers the Principle 8:  
Involuntary resettlement***

The Concept Note clearly indicates that all resettlement support processes are community based and that there is not going to be any type of involuntary resettlement to be carried

out and/or be supported by the Project.

***Briefly describe in the space below how the Project considers the Principle 9:  
Protection of natural habitats***

There are numerous Natural Protected Areas (national, local and private) in the area of Project implementation. They present different degrees of progress in their management and conservation, institutional agreements, projects and initiatives.

Pilot adaptation programs will be designed for their implementation in order to promote a useful adaptation methodology in areas with ecosystemic relevance, especially in Natural Protected Areas (NPAs) in order to promote the conservation of biodiversity in the context of threats climatic. These programs should consider the mapping and evaluation of environmental services in such a way that the relationship between ecosystems and human activities contributes to the reduction of climate risks in the community and economic spheres.

Exchange activities will take place between the National Parks of El Palmar (Argentina) and Esteros de Farrapos and Islas del río Uruguay (Uruguay) and the intention of a formal agreement between the National Parks Administration (APN) of Argentina and the MVOTMA-SNAP (System of Protected Areas of MVOTMA) of Uruguay.

Works will be identified, designed and executed to adapt vulnerable infrastructure (for tourism, livestock and beekeeping) in protected areas. Evaluation and adjustment of executed works.

In this sense, the project will work in an articulated manner in the improvement, conservation and promotion of the adaptation based on ecosystems as a measure of primordial adaptation for the development of the region.

***Briefly describe in the space below how the Project considers the Principle 10:  
Conservation of biological diversity***

Both countries where intervention will be undertaken are Parties to the Convention on Biological Diversity and have National Biodiversity Strategies.

The project will consider conserving biological diversity during the implementation of ecosystem based adaptation measures through fostering the adoption of native plant species. This will be

promoted for the component 2 and 3 where re signification of spaces as lineal parks and conservation of natural habitats will be developed.

***Briefly describe in the space below how the Project considers the Principle 11:  
Climate Change***

Both countries have ratified the Convention, the Kyoto Protocol and the Paris Agreement. Argentina and Uruguay have presented their First Nationally Determined Contributions (NDCs). The Project will manage the total amount of greenhouse gases emitted from the project implementation by undertaking rapid greenhouse gas emissions calculation using

internationally recognized methodologies.

The process of construction of re signification spaces will not exceed the suggested limits of CO<sub>2</sub> taking into account that they are the construction of green spaces with flood capacity and with the objective of being recreational areas, and may even work as carbon sinks. In component 2, where re signification of vacant spaces will be performed, pollution levels could be generated by vehicle displacements for construction materials that will be local or have a very low to minimal carbon footprint.

***Briefly describe in the space below how the Project considers the Principle 12:  
Pollution prevention and resource efficiency***

The Project will not generate greater pollution taking into account that they are workshops, consultancies for the generation of documents and the conservation and restoration of protected areas. In component 2, where some type of pollutant could be generated, it would be the waste of the construction works of the parks and resettlement areas.

***Briefly describe in the space below how the Project considers the Principle 13:  
Public health***

In general, the submitted proposal does not hold an implication of negative impacts on public health. The release of pollutants produced during the transport of material will be kept minimum and water or soil contamination as well is not expected to occur for this type of infrastructure construction; the other outputs and activities would not affect public health.

However, since community health and safety can be directly affected by noise, vibration, dust creation, traffic, emissions and air quality, implementing bodies will be informed of such impacts from construction work and try to minimize the impact on public health during the process.

To minimize disturbances on the public during building construction, not only the process of transport (i.e. building material delivery and other goods and services) will be managed but particular attention will be placed on the safety and health of workers along with communities residing around the construction site.

***Briefly describe in the space below how the Project considers the Principle 14:  
Physical and Cultural Heritage***

In both countries where the Project will be carried out, there are sites with historical, cultural, artistic, traditional or religious values that may be affected by the increase in coastal erosion.

In both National Parks, a work of exchange, joint learning and construction between the teams and actors of both locations is proposed. Advance in the development of a bi national park, as a biological ecosystem corridor, from a regional scale, and at the local level. New measures

aimed at revegetation and management of invasive alien species. It is also proposed to work on adaptation measures in a coordinated manner, through the development of maps, atlases, censuses, baselines, integrating a more urban rural interface in an integral format. Also try to protect the Jesuit Ruins that are inside El Palmar National Park and that are in danger of collapse due to the erosion of the coastal zone, such as the areas of Nuevo Berlín and Farrapos.

In this sense, the Project will seek the conservation of historical sites of high cultural and tourist value of both countries through the implementation of ecosystem adaptation measures under component 3.

***Briefly describe in the space below how the Project considers the Principle 15:  
Lands and Soil Conservation***

The increase in average annual precipitation and extreme rainfall has generated a series of changes in the hydrological system of the basin, due to the decrease in the capacity of infiltration and storage of water in the soil system, the decrease in volume stored in the underground layers by erosion and compaction, as a result of urbanization, inadequate practices in agriculture, afforestation with exotic species and deforestation of the natural forest. As a result, there is an increase in coastal erosion at times of maximum precipitation and an increase in droughts at times of low rainfall.

One of the cities with the greatest erosion problems is Concordia. For the above, it will seek to generate protection against the erosion of the coast and several repairs in the water treatment plant in the city of Concordia, Argentina. In this sense, the project, in contrast to generating a negative impact, will work on the conservation of the margins with measures of ecosystem adaptation mainly.

## **H. Describe if there is duplication of project with other funding sources**

136. There is no duplication with projects with other funding sources. On the contrary, the proposed actions and measures complement the efforts that both countries are undertaking, especially those regarding land management plans strengthening, resettlement programs and existing EWS institutionalization.
137. Argentina has been working on the disaster risk management promotion through interinstitutional initiatives such as the current Risk Management Work Commission formed by specialist 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 a suitable articulation among the System's members for the effects of contributing to natural disaster related emergencies prevention.
138. On 2016, Inter American Development Bank (IADB) approved the Emergency Program for an Immediate Response to the Flooding in Argentina (AR-L1245) in order to support the transition process of the affected people towards the recovery of their social and economic regular activities, through the rehabilitation of road and water infrastructure regarding flood protection, public use buildings such as damaged schools and evacuation centres. Also, it expects to contribute with the basic services re establishment such as water and electric

energy in the affected areas, and finally cooperate with the remediation of areas that are susceptible of potentiating vectors' effects.

## Uruguay

139. In Uruguay, the Climate Change National Policy in force since 2017, frames the guidelines for sectorial policies regarding adaptation, such as water resources, land planning, housing and biodiversity. Currently, the country is developing a National Adaptation Plan for Cities and Infrastructure (NAP Cities) supported by the Green Climate Fund (GCF) Readiness Programme, which focuses on identifying vulnerabilities and actions in urban areas and infrastructures throughout the country.
140. On the other hand, since 2005 the Housing and Habitat Policy has been consolidated as a State policy, with leading five-year plans. The Housing Five-year Plan 2015-2019 establishes the consolidation of the Land Policy that generates sustainable conditions for the Housing and Habitat Plan as a particular priority. Additionally, another priority is to continue with the efforts to revert the problem of precarious housing from a "right to the city" point of view, and working in a intersectoral environment. In this way, MVOTMA and sub-national governments developed housing plans for the relocation of those communities living in floodable areas. These actions are executed with national funds and are complemented with IADB funding through the Planning and Budget Office from the Republic's Presidency.
141. Regarding risk disaster management, since 2015, the SINAE, through the Euroclima Program funded by various agencies, has started to develop a Disaster Risk Management Plan based in the Regional Plans.
142. Also, since the approval of the Water National Policy, a Water Plan has been developed 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 vulnerable cities regarding floods.
143. From the ecosystems point of view, the following interventions are taking place:
144. "Landscapes and National protected Areas System" project from MVOTMA with funding from UNDP and GEF, that include a pilot site that surrounds Montes de Queguay, Esteros de Farrapos e Islas del Uruguay and Esteros y Algarrobales del río Uruguay NPAs.
145. Also, the "Protected areas and surroundings value chains and governance" project, also by MVOTMA, along with UNDP and the French Fund for Global Environment (FFEM) and the "Biological corridor in Uruguay's west littoral" by CEADU with the European Union. None of these projects represent duplication, but opportunities for synergies.

## **I. Describe the learning and knowledge management component**

146. The Project understands that a regional approach is crucial for facing the CC effects and for implementing sustainable and resilient adaptation measures facing the changes in the
147. hydrological regime of a share driver. Government authorities, institutions and organizations, as well as civil society, community based organizations and educational institutions play different and important roles in the identifications, design and implementation of such measures.
148. In this sense, information, best practices, lessons learnt Exchange and integrations as well as knowledge management are key tools that promote participation and ownership, innovation and efficient allocation of resources and efforts.
149. Regarding disaster risk management, workshops and training for local and regional governments are envisaged, addressing positive experiences on land management, strategies for the development of sectorial plans regarding risk management and EWS, among others. These workshops and trainings will constitute learning and knowledge exchange spaces in order to gather information, unify criteria and set regional strategies. Training for officers, legislators, communication media and communicators, among others, to strengthen technical capacities and create regional knowledge. Validation workshops will contribute with first hand substantial information.
150. Plans, protocols and maps that include CC perspective will form part of resulting documents: land management and sectorial plans, disaster risk management plans, EWS, protocols, ecosystemic services and benefits maps, risk and vulnerability maps, damage and loss assessment methodologies, among others.
151. Regarding vulnerability reduction and resilience building, various workshops will be developed for local and regional governments, community organizations, educational institutions, among others. These workshops seek to generate knowledge, exchange adaptation experiences (financial, normative) and sustainable and resilient infrastructure (urban and housing), vulnerability reduction strategies and the design of pilot programs and projects.
152. Documentation, organization, standardizations and systematization of 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 established in order to sustain this exchange in time, and to update such information and knowledge. Awareness, communication and dissemination plans and actions will be focused in local communities (formal and non formal education, publications, field missions).
153. As complement of these tools, information Exchange and dissemination among other basins and complementary projects will be encouraged.



## **J. Describe the consultative process**

154. During the Field Mission and the project validation workshops (December 4-8, 2017), officials of the CAF team, of the MAYDS, of the MVOTMA, of the Province of Entre Ríos, of the cities of Concepción del Uruguay, Paysandú, Colón, Concordia, Salto, Río Negro, San Javier, representatives of social organizations, private organizations, neighbors, and the consultant in charge of the formulation of the Project participated. In addition, a specialist participated in the survey to identify the profile of vulnerable groups in each of the participating locations. To this end, interviews were conducted with inhabitants randomly selected from the intervention areas, participants of the validation workshops (representatives of NGOs, businessmen, merchants, housewives, etc.), and interviews were held with key stakeholders.
155. 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 that all of them be documented in order to be considered in the design of the project draft. In ANNEX 5, the second consultation process has been systematized, which complements the first consultation instance held in July 2017 (ANNEX 4). In each city, working meetings were held with authorities and representatives of the Municipality in the morning, followed by a field visit of the areas and in the afternoon a Workshop was held with the community.
156. The following paragraphs summarize the information included in these three annexes:  
Annex 4: “Systematization of the Consulting Process. July 2017”; Annex 5: “Systematization of the Consulting Process. December 2017” and Annex 8 “Stakeholder Mapping and Socio Economic assessment of cities, gender and vulnerable groups”
157. Regarding the stakeholders map development, the material forwarded by the different involved jurisdictional levels regarding each output was reviewed, on-site. Skype and telephone interviews were held with over 50 key stakeholders from civil society and the different levels of involved governments in both countries as well as the private sector. The map’s objective is to recognize the stakeholders’ main roles regarding the Project, and to identify possible actions that social and institutional stakeholders could undertake, outlining a network of interinstitutional partnerships regarding the intervention proposal. The stakeholders map defines the role - mission that each organization plays regarding the Project; competences- concrete actions that the stakeholder is responsible for; authority -the level and formality of the stakeholders influence I; their positioning –the stakeholders attitude towards the Project, that can be in favour, neutral or against; and the type of expectation regarding the Project – high, medium or low.
158. The workshops held during the development of the Pre Concept Note were:

- two workshops ,on July 17th and 24th, with the participation of Argentinean and Uruguayan authorities, and
- two workshops in vulnerable cities of the Uruguay river with the participation of national, departmental, provincial and local authorities; one in Concordia (Argentina) and one in Paysandú (Uruguay) (see [Annex 4](#)). Participants from Argentina were representatives of the cities of Gualeguaychú, Concordia, San José, Liebeg and Concepción del Uruguay, and Uruguayan participants were from Artigas, Salto, Paysandú and Río Negro Departments.
- 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 .

159. For the Concept Note development, the Project promoted different participating spaces for public institutions, academy and social organizations. A field mission was undertaken between December 4<sup>th</sup> and 8<sup>th</sup> with the participation of CAF, MAYDS, 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, neighbours, the consultants in charge of the Concept Note development and of 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.
160. Consultation/ validation workshops (see [Annex 5](#)) were developed with the following objectives: i) validating with vulnerable groups and stakeholders/beneficiaries the Project's proposals; ii) documenting and attending vulnerable groups opinions according to AF requirements; iii) validating new proposals from the beneficiaries and iv) generating opinion and validation spaces with beneficiaries, key stakeholders and vulnerable groups.
161. During the sessions, the Project's logical framework summary was provided to the attendees, the AF funding scheme and the activities to be developed were explained. During the group work, an observer recorded concerns and commentaries from the participants. In the plenary session, each group exposed and documented their exchanges. Finally, next steps were explained and the event's closure was carried out.
162. Also, meetings with technical teams and field visits were undertaken in locations where interventions are envisaged (listed below). Requirements were recorded and the proposals were reviewed jointly with officers and technicians in charge.
- Cantera 25 de Mayo neighbourhood, Concepción del Uruguay (with previous visit to South Defence5)
  - Unión Portuaria, Ledesma y Paysandú neighbourhoods
  - El Palmar National Park, Colón
  - Water treatment plant and eroded adjacent coast, Concordia
  - Muelle Negro and linear area Sauzal stream, Salto

163. For Argentina, the activities conducted by GNCC will become key tools to incorporate key stakeholders throughout the Project. The process not only contemplates national agencies and ministries, but also includes subnational governments, communities, private sector and CSO among others. COFEMA and the Federal Water Council (COHIFE) work in a similar way, including representatives from each province. The Project will capitalize the described mechanisms, as well as other institutional arrangements in order to achieve stakeholders participation and commitment.
164. Between 2016 and 2017, there have been several meetings with local governments and key stakeholders to develop specific proposals for each locality and provide evidence of this participative process in order to prepare materials that were used in support to the development of the Concept Note.
165. Numerous bi national proposals are being developed, regarding risk and protected areas management. There are also different tools and partnerships from MERCOSUR and Mercociudades that contribute to undertake joint interventions for the Basin.
166. This South Defense is completed and similar to the North Defense, under construction. Parks, boardwalks, equipment and lighting allocated in these vacant lands were visualized that work as reservoirs during strong rains.
167. Furthermore, a Community Relations Plan will be developed that includes a Key Stakeholders Participation Plan, Complaint Mechanisms and Consultation Processes. It will be enriched from the actions above described and will address the following aspects:
- Previous consultation
  - Stakeholders mapping
  - Key stakeholders identification
  - Dissemination of the following Projects aspects: detailed Project's description, list and explanation for each probable impact; prevention, minimizing, mitigation and compensating measures for those impacts;
  - Monitoring and Complaint and Claiming Plan, establishing a mechanism so any person that feels harmed can inform the responsible person.

## **K. Provide justification for funding requested**

168. The 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 the development of 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 of policy design and implementation and strategies development for facing climate change. 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 these best practices outreach.
169. On the other side, the Project will generate dissemination and assessment actions for society allocating relatively reduced funds, but still have a wide outreach and a positive and

synergic effect on capacities for greater resilience. Adaptation Fund's support, will enable the implementation of a strategy integrated and suitable to the regions specific conditions, that

170. covers from policy planning to specific actions implementation, their monitoring and assessment, and the corresponding articulation with other nationally implemented actions. As a parallel result, this project will allow to generate knowledge and strengthen capacities of the target populations.
171. In particular, AF funds will be allocated into the four Project's strategic components: i)
172. Territorial adaptation and flood risk management policies, plans and instruments, ii) Priority measures for floodable cities' resilience increment, iii) Priority measures for adaptive conservation of vulnerable coastal ecosystems and iv) Priority measures for increasing social resilience.
173. The complete proposal will look into the description of the base line, as well as the additionality regarding the Project's implementation.

#### **Component 1: Territorial adaptation and flood risk management policies, plans and instruments**

##### ☐ Baseline (without Project):

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, lack of a relevant integration of future CC scenarios.

The region also lacks of unified and coordinated EWS and Disaster Risk Management instruments that include CC perspective.

Relevant local and regional institutions related to these areas (land management, services, legislation, among others) also present different capacities and knowledge regarding risk management and CCA. There are no common criteria, parameters or systems in the region for flood related impact, damage and loss assessment, especially on urban areas. the development and improvement of Disaster Risk Management instruments and EWS are fundamental for preventing and mitigating the negative social, economic and environmental effects from CC, particularly regarding floods.

No significant negative impacts were identified during the Concept Note development. Most possible negative impacts may derive from construction works and are related to: noise and dust generation during construction, waste and effluent generation, traffic and circulation interference, among others. In this sense, each construction work within the Project's framework will undergo and Environmental and Social Impact Assessment including Monitoring, Impacts Prevention and Mitigation, Waste Management and Contingencies Plans in accordance to local regulations and considering both AF and CAF Environmental and Social Policies. Also, an Environmental and Social management instrument will be developed for the whole Project's implementation and administration.

Regarding ESP Principles such as "Access and Equity", "Marginalized and Vulnerable Groups", "Gender Equity and Women's Empowerment", the Project was designed with a significant participation and inclusion approach. Several participation and validation instances have and will be undertaken. Also, a stakeholder's map and a socio-economic assessment has been developed in order to identify all vulnerable and marginalized people and include this aspect during the activities design, as described above (see social benefits section).

Regarding gender considerations, data will be discriminated regarding all consultative and participative instances. Also, gender approach will be considered in the communication, diffusion and awareness raising design as well as in the activities regarding labour reconversion, social risk perception, among others.

The Concept Note states that the project is not going to directly perform any resettlement of high flood risk communities, but the activities proposed in this Project will support previously resettled communities or ongoing resettlements in processes led and funded by both governments. These activities include securing public services and infrastructure for new resettlements, social vulnerability monitoring and social risk perception, recovery of vacant flood prone areas for preventing new informal occupation that may lead to further resettlements, for public use and as buffer zones, labour reconversion solutions for previously resettled people, communication, education and dissemination strategies, among others.

☐ With AF funding (with Project)

Territorial and NPA planning and management plans as well as sectorial plans, will be reviewed and updated including CC and future scenarios perspective. They will be conferred a shared regional approach through knowledge and experiences exchange.

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 training will be implemented in order to generate capacities within the institutions to develop resilient and sustainable adaptation measures and regional solutions. Shared methodological guides will be developed for impact, damages and losses estimation and assessment, envisaging the possibility together and systematize the information regionally.

**Component 2 – Priority measures for increasing floodable cities’ resilience:**

☐ Baseline (without Project):

An important portion of the land where the communities relocated as an effect of the floods use to inhabit remains vacant, leading therefore to potential informal relocation processes. Also, some cities present flood prone land very close to urban centres, which can be attractive for spontaneous or new informal settlements if alternative uses are not promoted.

Urban infrastructure (roads, services, etc.) is not adapted to new or future CC scenarios, making it mostly ineffective. Vulnerable communities do not have access to such services, which increases their vulnerability to extreme events. They have also more exposure to pollution and unhealthy conditions.

☐ With AF funding (with Project)

The planned recovery of vacant land, not only will avoid informal occupation or re-occupation of high flood risk areas but will also provide citizens with new public spaces and the recovery of ecosystemic services that will contribute to CCA. The implementation of adapted infrastructure will ensure its availability and services access for the population. It will also reduce compensation and recuperation expenses for local governments.

Financial adaptation measures will significantly reduce the vulnerability of the cities, increasing the resilience of local communities.

**Component 3 – Priority measures for adaptive conservation of vulnerable coastal ecosystems:**

☐ **Baseline (no Project):**

Currently, ecosystemic services, benefits and connectivity are not fully known nor are taken into account regarding CCA and peoples quality of life. Often, this leads to the adoption of inefficient or counterproductive measures that can exacerbate CCs effects or reduce the ecosystemic services (water regulation, coastal defence, etc.) and its resilience.

Productive activities, as well as infrastructure implementation has sometimes severely affected ecosystems, reducing their services and benefits towards CC.

☐ **With AF funding (with Project)**

The identification and mapping of ecosystemic services and benefits will significantly contribute in land planning and management, risk reduction and management, resilience building and people's quality of life.

Additionally, the identification and assessment of non climatic drivers (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 for increasing social resilience:**

☐ **Baseline (without Project):**

Currently, local governments lack collected, documented and systematized information on the communities' vulnerability conditions in order to identify priority and effective measures for its reduction.

Affected and relocated communities, families and institutions' vulnerability has increased and their resilience has decreased due to the impact on their economic and livelihood activities.

☐ **With AF funding (with Project)**

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 learnt for future replications.

Labour reconversion measures will reduce the communities' economic vulnerability and will increase the affected people and institutions resilience.

The communication and dissemination strategy will be based on the perception of risks related to CC, raise awareness on the importance of CCA, of preventive and mitigating measures. It will prioritize increasing communities ability to face CC effects and reducing their vulnerability.

## **L. Sustainability of the project outcomes**

174. 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 feed back new strategic lines regarding those policies locally and nationally. Long term planning instruments that consider CC and future scenarios will be prioritized, contributing to the Project's sustainability.

175. Additionally, the incorporation of 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 CC field and flood management.
176. In this sense, the Project is based in national and local authorities responsible for local development and CCA. Local governments constitute key stakeholders for the Project's activities' implementations, but also regional governments, national organisms, academic institutions and CSO will be included. Institutional coordination is envisaged, and the creation of networks that will maintain the Project in the institutional agendas.
177. Regarding concrete actions, ecosystemic based adaptation measures are considered as the most resilient and, therefore, sustainable, as well as adapted infrastructure. Likewise, NPA strengthening is included in processes that already have budget allocation and maintenance staff, as well as community support which grant these solutions sustainability beyond AF's funding.
178. Financial measures such as revolving funds, insurances, labour reconversion, will contribute to the economic sustainability of ACC, especially in the mid and high risk areas of the vulnerable cities. Particularly, the revolving fund which is designed for assisting the flood affected communities, for housing and productive infrastructure adaptation, will be available for other affected people, with the subsidy return on behalf of the beneficiaries.
179. Finally, the communication strategy and plan, along with education related activities, will also contribute to results sustainability since they increase information, knowledge and awareness on CC, risk reduction, and resilience building. This strategy will also be designed with a gender approach in order to ensure women's access to relevant information.

**M. Provide an overview of the environmental and social impacts and risks identified as being relevant to the project / programme.**

130. A preliminary analysis on the Project's impacts and risks regarding AF's Environmental and Social Principles is presented bellow. A detailed impact assessment and mitigation plan will be developed during the Full Proposal development. (See Annex 6 for complementary information)

Checklist of environmental and social principles	No further assessment required for compliance	Potential impacts and risks – further assessment and management required for compliance
<i>Compliance with the Law</i>		<p>This is a main principle which applies to all projects.</p> <p>Some interventions included in components 2 and 3 may require specific environmental administrative authorizations. For example:</p> <p>Output 7. Vulnerable vacant land from resettlements has been recovered and re signified to prevent informal re occupation and Output 8. Technical assistance and sustainable urban and public services infrastructure have been implemented in new resettlements on secure land.</p> <p>For this, it is important that in phase of developing the full proposal the activities that need them start the processing of the permits, registries, licences, etc.</p>
<i>Access and Equity</i>		<p>As it is not defined the mechanism of identification of the beneficiaries in the concept phase during the full proposal development there should be a mechanism to define this.</p>



Checklist of environmental and social principles	No further assessment required for compliance	Potential impacts and risks – further assessment and management required for compliance
		For example Output 14. Assistance and labour reconversion strategies have been promoted for vulnerable population needs to present the mechanism of access to beneficiaries.
<i>Marginalized and Vulnerable Groups</i>	Vulnerable groups of the Project's implementation area are identified. Projects actions (vacant land re signification and labour reconversion) are designed in order to benefit such groups.	
<i>Human Rights</i>		This is a main principle which applies to all projects.  Eventhough both countries have signed the human Rights Declaration, thereis no protocol that implies how this will be monitor with the diferetrn operational contractors. This has to be defined in the ESMP during the full proposal design.
<i>Gender Equity and Women's Empowerment</i>	The Project seeks to strengthen gender equity since women and men have different capacities and vulnerabilities. The Project will be an opportunity to improve knowledge regarding men and women's vulnerability in order to assess if there are significantly risk differences related to gender issues and find concrete solutions that support the breach reduction.  During the concept note development the project focused that both women and men 1) have equal opportunities to participate as per the AF gender policy; 2) receive comparable social and economic benefits; and 3) do not suffer disproportionate adverse effects during the development process.	

Checklist of environmental and social principles	No further assessment required for compliance	Potential impacts and risks – further assessment and management required for compliance
<i>Core Labour Rights</i>		<p>This is a main principle which applies to all projects.</p> <p>Some interventions included in components 2 and 3 may require specific operational contractors that have to comply with the International Labour Organization (ILO).</p> <p>For this reason during the concept note formulation the ESMP has not been developed and shall be done during the Full Proposal phase.</p>
<i>Indigenous Peoples</i>	In the area of influence there are no indigenous people. For this reason. No risks or adverse impacts is envisaged.	
<i>Involuntary Resettlement</i>	<p>The Project does not include activities that may lead to involuntary resettlements.</p> <p>None of the activities presented will or have a risk of resettlement.</p> <p>Resettlement policies in relation to flood risks in the rio Uruguay region in the last couple of decades have involved social participation and community base approaches, in the hypothetical case that an involuntary relocation risk takes place in relation to the Project, there are a group of existing mechanisms and procedures that apply in order to avoid it.</p> <p>Governments of Uruguay and Argentina have developed a very social mechanism for the needed resettlements.</p>	
<i>Protection of Natural</i>		Project's objectives include ecosystem and NPA

Checklist of environmental and social principles	No further assessment required for compliance	Potential impacts and risks – further assessment and management required for compliance
<i>Habitats</i>		<p>strengthening and vulnerability reduction. El Palmar and Esteros de Farrapos National Parks are included among other protected areas.</p> <p>The Projects activities within protected areas should consider specific regulations and should be evaluated by competent authorities.</p> <p>Output 10. Ecosystemic services and co benefits have been identified and assessed, including CCA and Uruguay river's ecosystems connectivity and Output 11. New ecosystem-based adaptation measures have been designed and implemented are related directly with this principle.</p> <p>However, as at the moment of the Concept Note, the areas of the intervention where not defined, it is not clear of possibility of risk.</p>
<i>Conservation of Biological Diversity</i>		<p>The Project's interventions will consider ecosystemic approaches in the NPA and land management plans, as well as new adaptation strategies bases on ecosystems.</p> <p>Output 10. Ecosystemic services and co benefits have been identified and assessed, including CCA and Uruguay river's ecosystems connectivity and Output 11. New ecosystem-based adaptation measures have been designed and implemented are related directly with this principle.</p> <p>However, as at the moment of the Concept Note, the possible species of the intervention where not defined, it is</p>

Checklist of environmental and social principles	No further assessment required for compliance	Potential impacts and risks – further assessment and management required for compliance
		not clear of possibility of risk.
<i>Climate Change</i>		<p>The project belongs to the “building materials” sector mentioned in the Guidance document for which a greenhouse gasses emission calculation is required.</p> <p>As at the moment of the Concept Note, the possible species of the intervention where not defined, it is not clear of possibility of risk.</p>
<i>Pollution Prevention and Resource Efficiency</i>		<p>Risk of designing and implementing the project in a way that does not meets applicable international standards for maximizing energy efficiency and minimizing material resource use, the production of wastes, and the release of pollutants.</p> <p>As at the moment of the Concept Note, the possible species of the intervention where not defined, it is not clear of possibility of risk.</p>
<i>Public Health</i>		As there are not defined the activities or designs of the project, the screening of public health was not able to be done.
<i>Physical and Cultural Heritage</i>		<p>Risk of a project designed and implemented in a way that may cause damage or harm any cultural sites.</p> <p>The project will try to protect cultural sites that are in danger because of the river erosion caused by the increment of the river level and inundations. However, as at the moment of</p>

Checklist of environmental and social principles	No further assessment required for compliance	Potential impacts and risks – further assessment and management required for compliance
		the concept design was not clear the detail and type of measure that is going to be used, at this stage this causes risk to the principle.
<i>Lands and Soil Conservation</i>	<p>The Project has been design to strengthen this kind of soil, with envisaged activities for preventing erosion progress in the coast of Uruguay river.</p> <p>The Project itself has the potential to reduce the risk of landslides caused by fragile soils in the river.</p> <p>The Project per se, aims to reduce the risk of soil erosion in Uruguay's river by implementing green infrastructure.</p> <p>The Project will comply with the regulations and requirements to avoid any type of problem related to the construction of gabions if needed.</p>	

131. As a result of this analysis, minor risks and environmental and social impacts have been identified. Principle 1, Compliance with the Law will require close follow up during the Project's implementation. In this sense it is classified as category C according to the established ESP. (See Annex 7)

## PART III: IMPLEMENTATION ARRANGEMENTS

### A. Arrangements for project that has been considered.

#### I- Organizations involved in the Project:

##### i) Regional/Bi national Level:

- ☐ Project's Bi-National steering Committee (BNC)
- ☐ Salto Grande Mixed Technical Commission (CTMSG)
- ☐ Uruguay river Administrative Commission (CARU)\*

\*Regarding CARU's role in the Projects implementation, contact has been made among both Ministries and CARU's respective national delegations. Also, CARU members have participated in the consultation workshops. Nevertheless, CARU's specific role has not been determined formally at this stage, which will be formally addressed in a formal joint decision between CARU and the Projects proponents for the Full Proposal. One of the considered roles is clearly related to the hydrological models aspects. The Project has been forwarded to CARU by note 245/17 and has been presented to the water sub commission on Report N°9 with the instruction to contact the Project's responsible in order to deliver contributions to the Project.

##### ii) National Level:

- ☐ Argentina's Ministry of Environment and Sustainable Development (MAyDS).
- ☐ Uruguay's Ministry of Housing, Land Planning and Environment (MVOTMA).

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

\*\*Argentina's Ministry of Foreign Affairs and Cult, General Directorate for the Environment, and Uruguay's Ministry of Foreign Affairs, Environment Direction, could be included in the Project's governance model, this definition will be clearly identified in the Full Proposal.

##### iii) Sub national Level: Provincial/Departmental and Municipal

- ☐ For Uruguay:  
Departmental governments of Artigas, Salto, Paysandú and Río Negro.

□ For Argentina:

Provincial Government of Entre Ríos.

Municipal (local) Governments of Colón, Concordia, Gualeguaychú, Federación, Islas del Ibicuy and Concepción del Uruguay.

## **II- Expected Coordination Guide/System**

A Bi-National steering Committee (BNC) will be established for the Project, with executive nature constituted by one (1) representative from the Argentinean Government through the MAYDS, one (1) representative from the Uruguayan Government through the (MVOTMA), and one (1) representative of CAF.

\*\* Argentina's Ministry of Foreign Affairs and Cult, General Directorate for the Environment, and Uruguay's Ministry of Foreign Affairs, Environment Direction, could also join the BNC.

The BNC will be maximum authority of the Project, where decisions are taken by consensus and annual operative plans, procurement plans, etc. will be approved by consensus.

The BNC will invite representatives of National Executing Units and from the Regional Office, who will have the roll of informing to the members of the CDB on the advances and proposals regarding the Project's activities.

## **III- Operative Structure:**

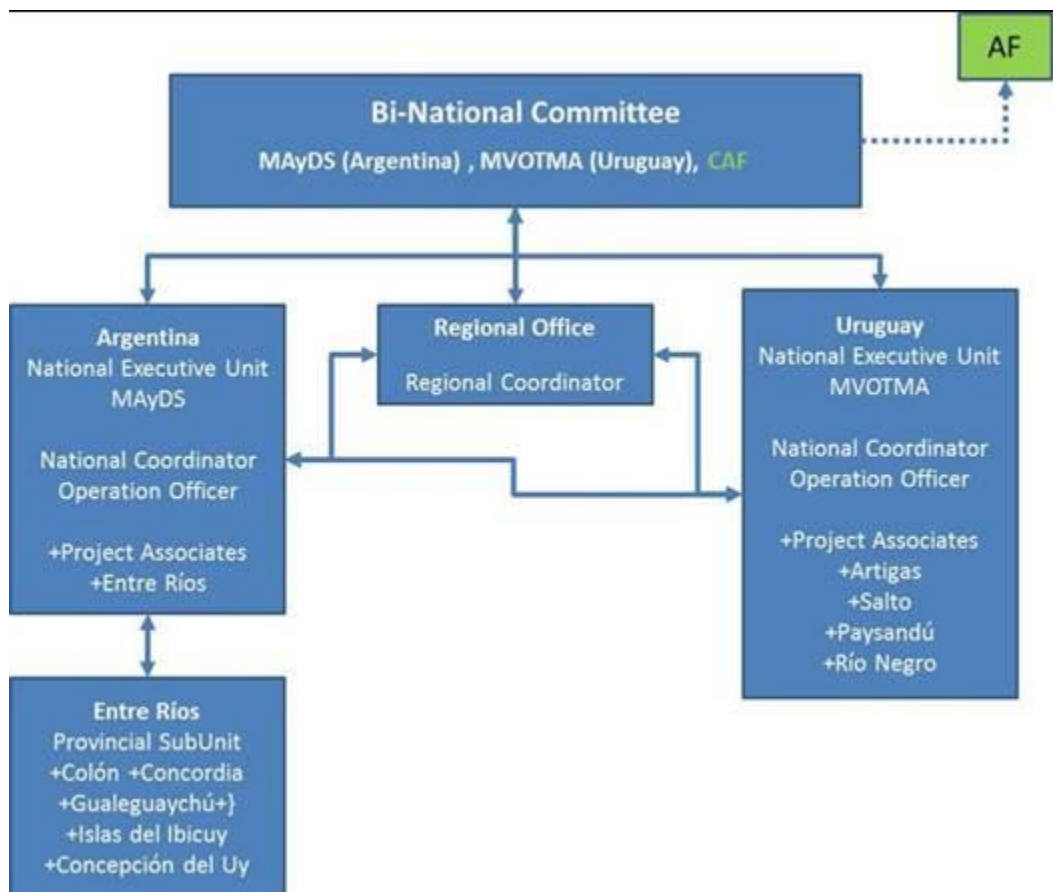
A Regional Office (RO) will be constituted for the implementation of binational Project's outputs and activities. It will submit the annual plans for the bi national outputs to the BNC for its approval. The RO will be directed by a Regional Coordinator who should interact with CAF and will articulate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

Both MVOTMA and MAYDS will create a national executive unit (NEU) within their structure.

Each NEU's coordination will be under a National Coordinator (one for Uruguay and one for Argentina) that will report to the BNC and that will coordinate with the Regional Coordinator. 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's coordination will be supported a National Operational Officer (one for Uruguay and one for Argentina) that will report to the National Coordinator and will interact with CAF for execution and administrative matters, and both National Operational Officers will be selected by the BNC.

CAF will receive the funds through their Special Funds Direction (DAFE). Each country will receive their funds through each CAF's country office who will determine the disbursement mechanisms.



**B. Describe the measures for financial and project / programme risk management.**

Identified risks	Type	Risk appraisal	Mitigation measures
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Identified risks	Type	Risk appraisal	Mitigation measures
Changes in national and/or departmental governments may lead to lack of support of the Project's activities.	Political	Low	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 CC issues in the GNCC and SNRCC's framework, in which national and subnational governments are represented.
Lack of compromise on behalf of local communities may lead in the intervention's failure.	Social	Low	The Community Relations Plan will be developed during the introduction phase, but it is known that governments have been continuously working with affected groups since floods are their main concern. Community stakeholders have been consulted from the first stages, including them in the Project's implementation.
Insufficient financial resources to implement Project's activities.	Financial	Low	A detailed budget will be developed during the Full Proposal preparation. Project's implementation will be supervised in order to identify promptly financial breaches.

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

132. This section will be developed during the Full Proposal preparation.

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

133. Project's M&E Plan will be undertaken according to CAF's standard requirements, as agreed with the AF. A preliminary guideline is listed below. Annual Progress Reports will be developed with the inclusion of the AF's Results Tracker.

134. Independent midterm and terminal assessments will be developed in order to assess the Project's progress and lessons learnt.

135. M&E Plan's budget will be developed during the Full Proposal preparation

Type of M&E activity	Responsible parties	Budget USD (does not include Project team)	Frequency
Project's direct monitoring and quality verification including progress and financial reports, revisions, technical assistance and risk management	<ul style="list-style-type: none"> <li>National Regional Coordinators</li> <li>BNC</li> <li>CAF</li> </ul>	Team's support costs were included in the Project's execution	Quarterly, biannual and annual as required
Assessments (Independent, midterm and terminal)	<ul style="list-style-type: none"> <li>National Regional Coordinators</li> <li>CAF</li> <li>BNC</li> <li>Independent consultants.</li> </ul>	50.000	Midterm and terminal
Audit	<ul style="list-style-type: none"> <li>National Regional Coordinators</li> <li>BNC</li> <li>CAF</li> </ul>	40.000	Annual at year's end

Type of M&E activity	Responsible parties	Budget USD (does not include Project team)	Frequency
Induction meeting, field missions, CDB meetings	<ul style="list-style-type: none"> <li>National and Regional Coordinators</li> <li>BNC</li> <li>CAF</li> </ul>	50.000	Induction meetings within the first two months and bi annual. Other meetings and field missions when required

**D. Include a results framework for the project / programme proposal, including milestones, targets and indicators.**

136. This section will be developed during Full Proposal preparation

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

Project Objective(s) <sup>3</sup>	Project Objective Indicator(s)	Fund Outcome	Fund Outcome Indicator	Grant Amount (USD)
<p>GENERAL OBJECTIVE:</p> <p>Build resilience in coastal vulnerable cities and ecosystems of the Uruguay river by the development of instruments, tools and experiences for adaptation planning and implementation as well as managing climate change and variability impacts and risks.</p>	Will be developed for Full Proposal	1: Exposure to climate risks reduced		

<sup>3</sup> The AF used OECD/DAC terminology for its results framework. Project proponents may use different terminology but the overall principle should still apply

Project Objective(s) <sup>3</sup>	Project Objective Indicator(s)	Fund Outcome	Fund Outcome Indicator	Grant Amount (USD)
<p><b>SPECIFIC OBJECTIVES</b></p> <p>1. To reduce vulnerability conditions and contribute to build CC and variability resilience in vulnerable coastal communities and ecosystems from Uruguay river, including adaptation measures based on communities and ecosystems, while focusing on human rights, gender and generations.</p>	Will be developed for Full Proposal	<p><b>1:</b> Exposure to climate risks reduced</p> <p><b>3:</b> Strengthening of CCA awareness, ownership and local climatic risk reduction</p> <p><b>4:</b> Increase of adaptation capacities of relevant basic public services and infrastructure</p> <p><b>5:</b> Increase in the ecosystems resilience regarding CC response and variability induced stress</p>	<p>1. Relevant information regarding threats and risks was developed and disseminated among stakeholders in due time</p> <p>3.1. Percentage of informed population on adverse CC impact forecast and adequate response measures</p> <p>4.1. Adapted infrastructure</p> <p>5. Strengthened or conserved environmental services and natural resources regarding CC and climatic variability</p>	
<p>2. Promote institutional strengthening by the inclusion of CC mid and long term future scenarios in land management public policies, plans and programs for the vulnerable cities and ecosystems</p>	Will be developed for Full Proposal	<p><b>2:</b> Strengthened institutional capacities for CC risk reduction regarding damages and losses</p> <p><b>7:</b> Improved regulations and policies to promote and strengthen resilience measures</p>	<p>2. Increase of the governments' officers capacities to respond and mitigate climatic extreme events impacts.</p> <p>7. CC priorities have been included into the national development strategies</p>	
<p>3. Promote an integrated</p>	Will be developed for Full Proposal	<p><b>2:</b> Strengthened institutional capacities for CC risk</p>	<p>2. Increase of the governments' officers</p>	

Project Objective(s) <sup>3</sup>	Project Objective Indicator(s)	Fund Outcome	Fund Outcome Indicator	Grant Amount (USD)
climatic risk management in the Project's cities and ecosystems fostering the implementation of EWS.		reduction regarding damages and losses	capacities to respond and mitigate climatic extreme events impacts.	
4. Reduce cities vulnerability by implementing sustainable adapted infrastructure	Will be developed for Full Proposal	4. Increase of adaptation capacities of relevant basic public services and infrastructure	4.1. Adapted infrastructure	
5. Promote CCA through exchanges in urban, ecosystemic and socio cultural best practices and experiences and knowledge management.	Will be developed for Full Proposal	3: Strengthening of CCA awareness, ownership and local climatic risk reduction	3.2 Percentage of population implementing appropriate adaptation responses	

**F. Include a detailed budget with budget notes, broken down by country as applicable, a budget on the Implementing Entity management fee use, and an explanation and a breakdown of the execution costs.**

137. This section will be developed during Full Proposal preparation

**G. Include a disbursement schedule with time-bound milestones.**

138. This section will be developed during Full Proposal preparation

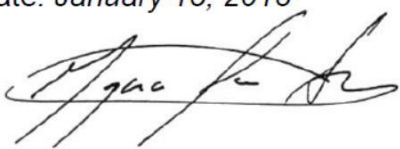
**PART IV: ENDORSEMENT BY GOVERNMENTS AND CERTIFICATION BY THE IMPLEMENTING ENTITY**

**A. Record of endorsement on behalf of the government<sup>7</sup>**

*Provide the name and position of the government official and indicate date of endorsement for each country participating in the proposed project / programme. Add more lines as necessary. The endorsement letters should be attached as an annex to the project/programme proposal. Please attach the endorsement letters with this template; add as many participating governments if a regional project/programme:*

*Endorsement by Ministry of Environment and Sustainable Development - Argentina*  
*Endorsement by Ministry of Housing, Land Planning and Environment - Uruguay*

  Lucas Di Pietro Paolo Adaptation to Climate Change Director Ministry of Environment and Sustainable Development - Argentina	Date January 15, 2018
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Ignacio Lorenzo Director of Climate Change Ministry of Housing, Land Planning and Environment Uruguay	Date: January 15, 2018 
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<sup>6</sup>. 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.



## B. Implementing Entity Certification

*Provide the name and signature of the Implementing Entity Coordinator and the date of signature. Provide also the project/programme contact person's name, telephone number and email address*

I certify that the "**Regional Project Climate change adaptation in vulnerable coastal cities and ecosystems of the Uruguay River (Argentina and Oriental Republic of Uruguay)**" proposal has been prepared in accordance with guidelines provided by the Adaptation Fund Board, and prevailing National Development and Adaptation Plans of Argentina and the Oriental Republic of Uruguay 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.



*Ligia Castro de Doens*  
Implementing Entity Coordinator

Date: *January 15 2018*

Tel. and email: +5717449444  
lcastro@caf.com

Project Contact Person: Carolina Cortés

Tel. And Email: +59323988437 – acortes@caf.com

## **ANNEXES:**

- ☐ Annex 1:Acronyms and abbreviations
- ☐ Annex 2:Consulted bibliography
- ☐ Annex 3:Maps
- ☐ Annex 4:Systematization of the consultation process July 2017
- ☐ Annex 5:Systematization of the consultation process December 2017
- ☐ Annex 6:Social and Environmental Risks Screening and Risk Identification
- ☐ Annex 7: Screening matrix to verify compliance with the Adaptation Fund's Environmental and Social Policy
- ☐ Annex 8:Stakeholder Mapping and Socio-Economic assessment of cities, Gender and vulnerable groups
- ☐ Annex 9:Request for Project Formulation

## PROJECT: “Climate Change adaptation in vulnerable coastal cities and ecosystems of the Uruguay River”

### ANNEX 1. Acronyms and abbreviations

ACRONYM	COUNTRY	DEFINITION
ANEP	Uruguay	National Administration of Public Education (Administración Nacional de Educación Pública)
ANII	Uruguay	National Agency for Research and Innovation (Agencia Nacional de Investigación e Innovación)
ANTEL	Uruguay	National Telecommunications Administration (Administración Nacional de Telecomunicaciones)
APLA	Argentina	Planning Agency (Agencia de Planificación)
APN	Argentina	National Parks Administration
APS	Uruguay	Primary Health Care (Atención Primaria en Salud)
AUCI	Uruguay	Uruguayan Agency for International Cooperation (Agencia Uruguaya de Cooperación Internacional)
AYSA	Argentina	Argentinean Drinking water and sanitation agency
CAF	General	Development Bank of Latin America
CARU	General	Uruguay River Administrative Commission (Comisión Administradora del Río Uruguay)
CC	General	Climate Change
CCA	General	Climate Change Adaptation
CEADU	Uruguay	Studies, Analysis and Documentation Centre
CECOED	Uruguay	Subnational Emergency Coordinating Center (Centro Coordinador de Emergencias Departamentales)
CEER	Argentina	Entre Rios Entrepreneur Council (Consejo Empresario Entre Ríos)
CEMA	Argentina	Business Chamber of Environment (Cámara Empresaria de Medio Ambiente)
CETP	Uruguay	Professional Technical Education Council (Consejo de Educación Técnico Profesional)
CIMA	Argentina	Argentinean Sea and Atmosphere Investigation Centre
CIU	Uruguay	Chamber of Industries of Uruguay
COFEMA	Argentina	Federal Council for the Environment (Consejo Federal de Medio Ambiente)
COHIFE	Argentina	Federal Water Council (Consejo Hídrico Federal)

COIRCO	Argentina	Interjurisdictional Committee of the Colorado River (Comité Interjurisdiccional del Río Colorado)
COREBE	Argentina	Regional Commission of the Bermejo River (Comisión Regional del Río Bermejo)
DCC	Uruguay	Climate Change Division (División de Cambio Climático)
DINAGUA	Uruguay	National Water Directorate (Dirección Nacional de Aguas)
DINAMA	Uruguay	National Environmental Directorate (Dirección Nacional de Medio Ambiente)
DINAVI	Uruguay	National Housing Directorate (Dirección Nacional de Vivienda)
DINOT	Uruguay	National Land Management Directorate (Dirección Nacional de Ordenamiento Territorial)
ENOHSA	Argentina	National Entity of Water Works of Sanitation (Ente Nacional de Obras Hídricas de Saneamiento)
ENOS	General	El Niño – South Oscillation
ERAS	Argentina	Water and Sanitation Regulator Entity (Ente Regulador de Agua y Saneamiento)
EWS	General	Early Warning System
GADE	Argentina	Emergency Cabinet (Gabinete de Emergencias)
GGIR	Uruguay	Integrated Risk Management Group (Grupo de Gestión Integral de Riesgo)
GNCC	Argentina	National Cabinet of Climate Change (Gabinete Nacional de Cambio Climático)
GTANGRD	Argentina	High Level Working Group for the Comprehensive Management of Disaster Risk (Grupo de Trabajo de Alto Nivel para la Gestión Integral del Riesgo de Desastre)
IMPROTUR	Argentina	National Institute of Tourist Promotion (Instituto Nacional de Promoción Turística)
INA	Argentina	National Water Institute (Instituto Nacional del Agua)
INAU	Uruguay	Institute for Children and Youth of Uruguay (Instituto del Niño y el Adolescente del Uruguay)
INDEC	Argentina	National Institute of Statistics and Census of the Argentine Republic (Instituto Nacional de Estadística y Censos de la República Argentina)
INTA	Argentina	National Institute of Agricultural Technology (Instituto Nacional de Tecnología Agropecuaria)
INUMET	Uruguay	Uruguayan Institute of Meteorology (Instituto Uruguayo de Meteorología)
MDN	Uruguay	Ministry of National Defense (Ministerio de Defensa Nacional)
MGAP	Uruguay	Ministry of Livestock, Agriculture and Fisheries (Ministerio de Ganadería, Agricultura y Pesca)
MEC	Uruguay	Ministry of Education and Culture (Ministerio de Educación y Cultura)
MINTUR	Argentina	Ministry of Tourism
MIDES	Uruguay	Ministry of Social Development (Ministerio de Desarrollo Social)
MINTUR	Uruguay	Ministry of Tourism
MJGM	Argentina	Ministry of Finance and Chief of the Cabinet of Ministers
MREyC	Argentina	Ministry of Foreign Affairs and Worship

MAYDS	Argentina	Ministry of Environment and Sustainable Development
MSP	Uruguay	Ministry of Public Health (Ministerio de Salud Pública)
MTOP	Uruguay	Ministry of Transportation and Public Works (Ministerio de Transporte y Obras Públicas)
MVOTMA	Uruguay	Ministry of Housing, Land Planning and Environment (Ministerio de Vivienda, Ordenamiento Territorial y Medio Ambiente)
NDC	General	National Determined Contributions
NMS	Argentina	National Meteorological Service (NMS) of the Ministry of National Defense
NTU	Argentina	National Technological University
ONG	Uruguay/Argentina	Non Gubernamental Organisation (Organización No Gubernamental)
OPP	Uruguay	Office of Planning and Budgeting
ORSEP	Argentina	Regulatory Body of Dams Safety (Organismo Regulador de Seguridad de Presas)
CSO	Uruguay/Argentina	Civil Social Organisation (Organización de la Sociedad Civil)
OSE	Uruguay	State Sewage Water Works (Obras Sanitarias del Estado)
NPA	General	Natural Protected Areas
PNN	Uruguay	National Coast Guard Authority (Prefectura Nacional Naval)
PNCC	Uruguay	National Climate Change Policy Política Nacional de Cambio Climático
PNRCC	Uruguay	National Climate Change Response Plan (Plan Nacional de Respuesta al Cambio Climático)
SiFAP	Argentina	Federal System of Protected Areas (Sistema Federal de Áreas Protegidas)
SIMARCC	Argentina	Argentina's Climate Change Risk Maps National System
SINAE	Uruguay	National Emergencies System
SINAGIR	Argentina	National System for Comprehensive Risk Management (Sistema Nacional para la Gestión Integral del Riesgo)
SlyAH	Argentina	Directorate of Information Systems and Hydrologic Warning (Dirección de Sistemas de Información y Alerta Hidrológico)
SNAACC	Uruguay	National Environment, Water and Climate Change Secretariat (Secretaría Nacional de Ambiente, Agua y Cambio Climático)
SNAP	Uruguay	National Protected Areas System (Sistema Nacional del Áreas Protegidas)
SNIS	Uruguay	National Integrated Health System (Sistema Nacional Integrado de Salud)
SNRCC	Uruguay	National Climate Change and Variability Response System (Sistema Nacional de Respuesta al Cambio Climático y Variabilidad)
SOCAT	Uruguay	Service of Orientation, Consultation and Territorial Articulation (Servicio de Orientación, Consulta y Articulación Territorial)
TCNCC	General	Third National Communication on Climate Change
UCAR	Argentina	Unit for Rural Change (Unidad para el Cambio Rural)
UDELAR	Uruguay	Universidad de la República
UNCCFC	General	United Nations Climate Change Framework Convention

UTE	Uruguay	National Administration of Power Plants and Electric Transmissions of Uruguay (Administración Nacional de Usina y Transmisiones Eléctrica Del Uruguay)
UTU	Uruguay	Labor University of Uruguay (Universidad del Trabajo del Uruguay)

## **PROYECTO: “Climate Change adaptation in vulnerable coastal cities and ecosystems of the Uruguay River”**

### **ANNEX 2. Bibliography consulted**

NAME OF THE DOCUMENT	FORMAT	Description
Caracterización de la vulnerabilidad del área afectada por las inundaciones/ Characterization of the vulnerability of the area affected by the floods.	PDF	Inundaciones de Febrero de 2010 en la ciudad de Durazno. Intendencia de Durazno/ Floods of February 2010 in the city of Durazno. Intendence of Durazno.
Impacto de las Inundaciones de Noviembre de 2009 en Artigas, Salto y Paysandú/ Impact of the Floods of November 2009 in Artigas, Salto and Paysandú.	PDF	Agreement GGIR-UDELAR-PNUD
Inundación Uruguay 2007, Evaluación del impacto ambiental/ Flooding Uruguay 2007, Evaluation of the environmental impact.	PDF	Oficina de Coordinación de Asuntos Humanitarios, Montevideo Uruguay.
Lineamientos estratégicos de contingencia frente a la inundación/ Strategic contingency guidelines for the flood.	PDF	Research project: propuesta habitacional para la contención de damnificados en caso de inundación. Daniel Alonso Reiglia, Valeria Lluviera Palacios. Facultad de Arquitectura, Universidad de la República. 2014
Vulnerabilidad de las áreas inundadas de la ciudad de Artigas. Impacto del evento de diciembre de 2009/ Vulnerability of the flooded areas of the city of Artigas. Impact of the event of December 2009.	PDF	Graciela Loarche Guerra, Adriana Piperno de Santiago, Pablo Sierra Abbate. Universidad de la República.
Hacia un sistema Nacional de Viviendas de emergencia/ Towards a National Emergency Housing System.	PDF	Programa Proyectos de Investigación e Innovación orientados a la inclusión social. 2010. Modalidad 1, CSIC, Universidad de la República.
Perfeccionando el Sistema de Alerta Temprana/ Perfecting the Early Warning System	PDF	Revista Enlaces, Junio 2013.
Mapa de Riesgo de Inundaciones, San José de Mayo/ Flood Risk Map, San José de Mayo.	PDF	Dirección Nacional de Aguas (DINAGUA). Ministerio de Vivienda, ordenamiento territorial y medio ambiente. Intendencia Departamental San José.
Estrategias de inversión en Áreas Urbanas Inundables: el caso de Bella Unión Uruguay/ Investment strategies in Floodplain Urban Areas: the case of Bella Unión Uruguay.	PDF	Artículo EURE, Enero 2013. Adriana Piperno, Pablo Sierra. Universidad de la República.
Inundaciones en Uruguay: aportes desde el ordenamiento territorial/ Floods in Uruguay: contributions from land use.	PDF	Arquitecta Adriana Piperno, Pablo Sierra. Facultad de Arquitectura, Universidad de la República.
Inundaciones, Reporte de situación 21 al 27 de diciembre de 2015/ Flooding, Situation Report 21 to 27 December, 2015	PDF	Report Uruguay
Inundaciones y drenaje Urbano/ Floods and urban drainage	PDF	DINAGUA- MVOTMA. Enero, Abril 2014



DACTM Número 011/12	WORD	Comisión técnica Mixta de Salto Grande, delegación Argentina. 2012
Gestión de Recursos hídricos en Uruguay. Estado, actividad y perspectiva/ Water Resources Management in Uruguay. State, activity and perspective.	PDF	INNOTECH Revista de Laboratorio tecnológico de Uruguay. Enero- Diciembre 2015
Concordia, Plan de desarrollo territorial, proyectos urbanos e instrumentos de Gestión/ Concordia, Territorial development plan, urban projects and management tools.	PDF	Development Plan, Intendancy of Concordia
Planilla total población según sexo por departamento/Total population sheet according to sex by department	EXCEL	Entre Ríos Province
Planilla, población, tipos de viviendas/ Sheet, population, types of housing	EXCEL	Entre Ríos Province
Sheet, population according to age group	EXCEL	Entre Ríos Province
Base de datos/Data Base	WORD	Perspectiva RARNAP
Plan estratégico de Concepción del Uruguay/ Strategic Plan of Concepción del Uruguay	PDF	Pre diagnóstico socio urbano Ambiental. Octubre 2009. Gobierno de Entre Ríos.
Programa de Emergencia para respuesta inmediata por inundaciones en Argentina/ Emergency Program for immediate response to floods in Argentina	PDF	Document of the Inter-American Development Bank. Argentina. Proposal for a loan
Normativa departamental/ Departmental regulations	WORD	City of Salto, Plan of territorial planning and sustainable development of the city of Salto.
Programa Multisectorial de Pre-Inversión IV/ Multi-Sector Pre-Investment Program IV	PDF	DINAPREM. Préstamos BID 2851 OC-AR. Plan estratégico de turismo sustentable de Colón.
Diagnóstico ambiental de la provincia de Entre Ríos/ Environmental assessment of the Entre Ríos Province	PDF	Federal Investment Council
Instrumento estratégico y programático preparado por el Sistema Nacional de Respuesta al Cambio Climático y la Variabilidad/ Strategic and programmatic instrument prepared by the National Response System Climate Change and Variability	PDF	Document adjusted and adopted with favorable opinion by the National Environmental Cabinet on April 27, 2017.
Pozo Solís, Antonio. Mapeo de actores sociales. Lima, 2007.	PDF	Instrument on the methodology of stakeholder mapping
Martín Gutiérrez, Pedro. Mapas sociales: métodos y ejemplos prácticos.	PDF	Examples of stakeholder mapping

Tapella, E. (2007) El mapeo de Actores Claves, documento de trabajo del proyecto Efectos de la biodiversidad funcional sobre procesos ecosistémicos, servicios ecosistémicos y sustentabilidad en las Américas: un abordaje interdisciplinario”, Universidad Nacional de Córdoba, Inter-American Institute for Global Change Research (IAI)	PDF	Stakeholders Mapping for ecosystem processes
Informe Institucional, Económico/ Institutional, Economic Report.	PDF	Report of the Province of Entre Ríos <a href="https://www.entrerios.gov.ar/minecon/userfiles/files/otros_archivos/2015_inf_min.pdf">https://www.entrerios.gov.ar/minecon/userfiles/files/otros_archivos/2015_inf_min.pdf</a>
Law Nº 17.283	PDF	Protección General del Ambiente <a href="https://legislativo.parlamento.gub.uy/temporales/leytemp3665307.htm">https://legislativo.parlamento.gub.uy/temporales/leytemp3665307.htm</a>
LawNº 18.610 del 2 de octubre de 2009	PDF	Ley de Política Nacional de Aguas <a href="https://legislativo.parlamento.gub.uy/temporales/leytemp1557546.htm">https://legislativo.parlamento.gub.uy/temporales/leytemp1557546.htm</a>
Law Nº 18.308,	PDF	Ley de Ordenamiento Territorial y Desarrollo Sostenible <a href="https://legislativo.parlamento.gub.uy/temporales/leytemp5773818.htm">https://legislativo.parlamento.gub.uy/temporales/leytemp5773818.htm</a>
Dirección General de Estadísticas y Censos de Entre Ríos, censo poblacional 2010/ General Directorate of Statistics and Census of Entre Ríos, population census 2010.	PDF	Statistical data
“Plan General de Desarrollo del Área Costera del Puerto de Colón” Tomo 1. Programa Multisectorial de PREINVERSIÓN III. PRÉSTAMO BID 1896/OC-AR. ESTUDIO Nº1.EE.457. Ministerio de Economía y Finanzas Públicas, Secretaría de Política Económica, Unidad de PREINVERSIÓN (UNPRE). Decreto Nº 1022/93 y la Resolución Nº 111/93.	PDF	Information on the coastal development plan of the city of Colón
Report “Impacto de las inundaciones de noviembre de 2009 en Artigas, Salto y Paysandú” Parte I, Convenio GGIR, UNDELAR, PNUD.	PDF	Report on the 2009 floods in target locations
Report for Argentina. “IGUALES? Apoyo a la preparación, implementación y monitoreo del Plan de Acción de Género	word	Information on gender variables of Argentina

II en Argentina, Brasil, Chile Uruguay y Venezuela”, Sandra Cesilini, 2017.  Preliminary Final Report , DIAGNÓSTICO DE GÉNERO EN URUGUAY: “NECESIDADES Y OPORTUNIDADES PARA EL AVANCE DEL GAP II EN EL PAÍS”, FWC BENEFICIARIES 2013 - LOT 9: Culture, Education, Employment and Social EuropeAid/132633/C/SER/multi, María Sarabia Barquero, 2017.	word	Information on gender variables of Uruguay
Fernández, Sonia. La mujer en el sector pesquero uruguayo	PDF	Information on gender in the fishing sector <a href="http://mujeres.infopesca.org/articulos/art001.htm">http://mujeres.infopesca.org/articulos/art001.htm</a>
"Diagnóstico sobre la situación del trabajo femenino en el sector pesquero y acuícola argentino - Región Patagónica".	PDF	<a href="http://mujeres.infopesca.org/publicaciones/pdf/pub_argentina.PDF">http://mujeres.infopesca.org/publicaciones/pdf/pub_argentina.PDF</a>

#### **Links:**

<http://www.gobiernolocal.gob.ar/?q=node/895>

<http://www.gobiernolocal.gob.ar/?q=node/985>

<https://www.entrerios.gov.ar/d gec/condicion-de-vida/>

[https://inta.gob.ar/sites/default/files/script-tmp-inta\\_zonas\\_agroeconmicas\\_homogeneas\\_entre\\_ros.pdf](https://inta.gob.ar/sites/default/files/script-tmp-inta_zonas_agroeconmicas_homogeneas_entre_ros.pdf)

[http://www.fao.org/family-farming/detail/es/c/335302/Género y adaptación al cambio climático \( 2014\)](http://www.fao.org/family-farming/detail/es/c/335302/Género_y_adaptación_al_cambio_climático_(2014))

<http://www.cinu.mx/minisitio/cop16/Guia%20Recursos%20de%20G%C3%A9nero%20para%20el%20Cambio%20Clim%C3%A1tico.pdf>

## ANNEX 3 Maps RU.docx



**MVOTMA**

Ministerio de Vivienda  
Ordenamiento Territorial  
y Medio Ambiente



**Ministerio de Ambiente  
y Desarrollo Sustentable**

**Presidencia de la Nación**

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

**ANNEX 3. Maps**



Fig. 1: Basin of the Rio de la Plata and sub-basins. Modified by Arzamendia,G, 2015<sup>[1]</sup>





Fig. 3 Low basin of the Uruguay River, border between Argentina and Uruguay.  
Source; [www.academiapaso.wordpress.com](http://www.academiapaso.wordpress.com)

Fig. 4 Climatic precipitation of the Cuenca del Plata and the sub-basin of Bajo Uruguay. Períod 1973 – 2013. Modified by CIC 2017<sup>[2]</sup>



*Fig. 5 Projections of the anomaly of the average annual precipitation (%) and the anomaly of the average annual temperature ( $^{\circ}\text{C}$ ), for the three decades considered of the Cuenca del Plata and the sub-basin of Bajo Uruguay. Modified by CIC 20173*

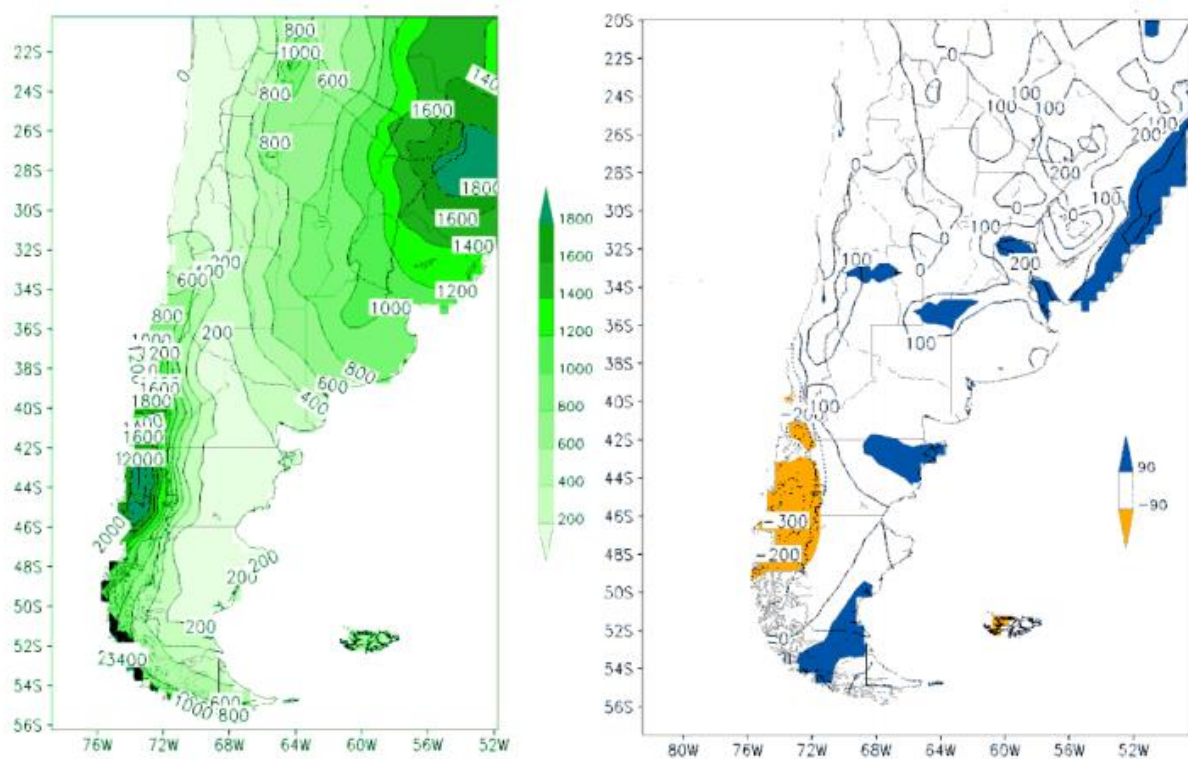


Figure 6: Percent change in annual precipitation from Period 1981-2004. Averages of 42 CMIP4 base models. Top panel RCP4.5 scenario and lower panel RCP8.4. Left, near future (2015- 2039) and right, far future (2075- 2099) [3]



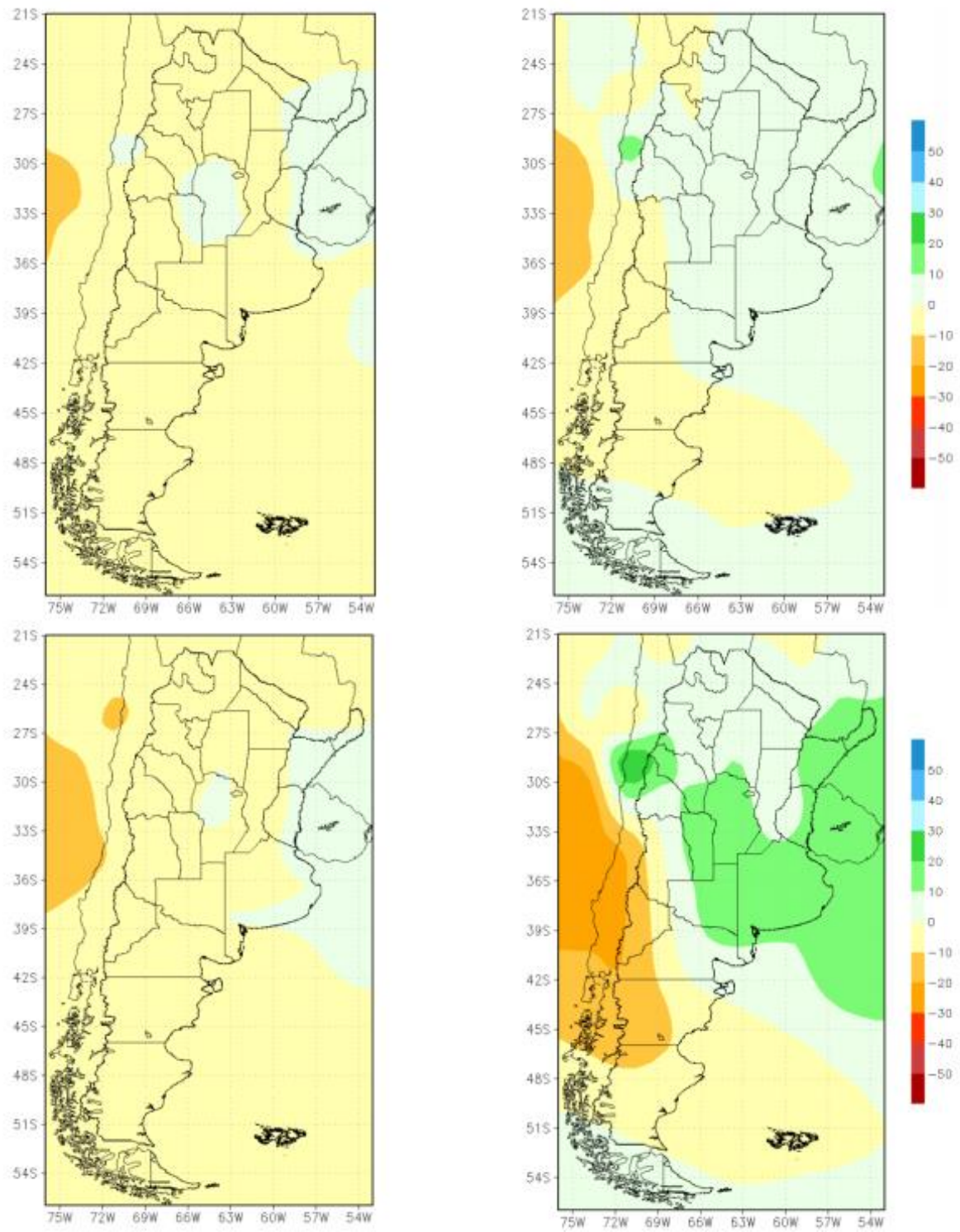


Figure 7: Uruguay River Basin



Figure 1: Rio de la Plata's basin and sub-basins. Modified by Arzamendia 2015<sup>1</sup>

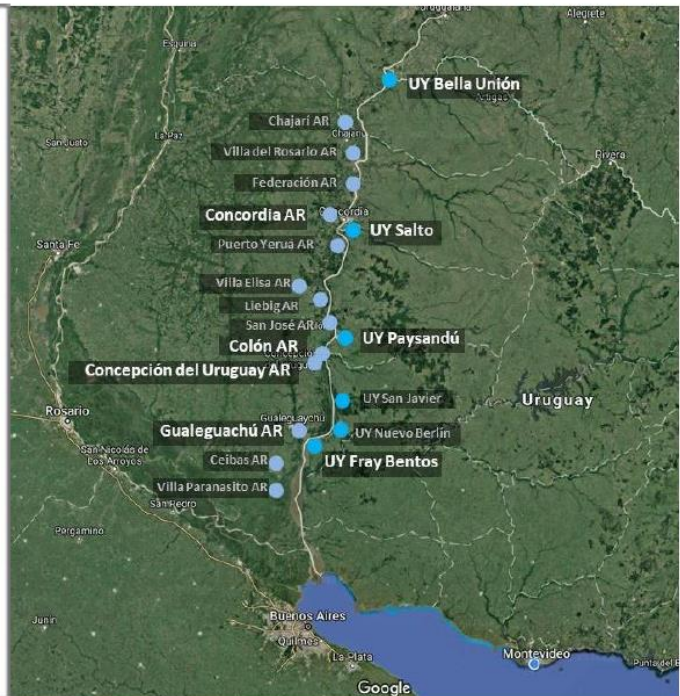


Figure 2: Vulnerable Coastal cities in the margins of the Uruguay River. (Source: Modified from Google 2017, Landsat, Copernicus, Data SIU, NOAA, US Navy, NGA, GEBCO)

#### ESCENARIOS DE CAUDALES EN SALTO GRANDE Y SUS RESPECTIVAS VARIACIONES PORCENTUALES CON RESPECTO AL PERÍODO DE REFERENCIA

Período	Esc A2 (m <sup>3</sup> /s)	Var (%)	Esc B2 (m <sup>3</sup> /s)	Var (%)
1990-1999	5 874		5 874	
2016-2025	8 724	49	7 840	33
2026-2035	7 261	24	7 679	31
2046-2055	9 251	58	7 798	33
2066-2075	8 857	51	7 220	23
2091-2100	9 233	57	9 170	56

Figure: Mean Flow climate change scenarios for the Uruguay River in Salto Grande (Barros, ECLAC 2013)

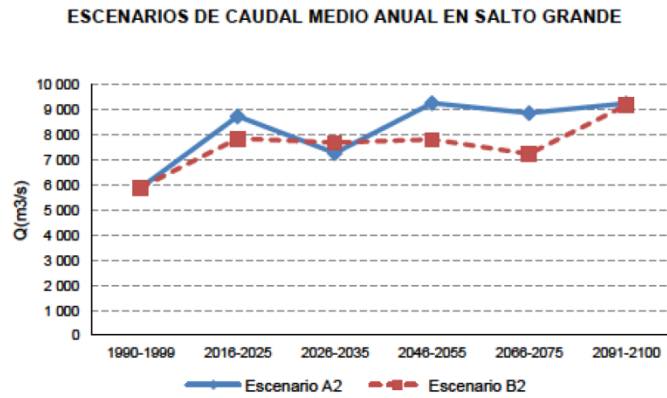


Figure: Mean Flow climate change scenarios for the Uruguay River in Salto Grande (Barros, ECLAC 2013)

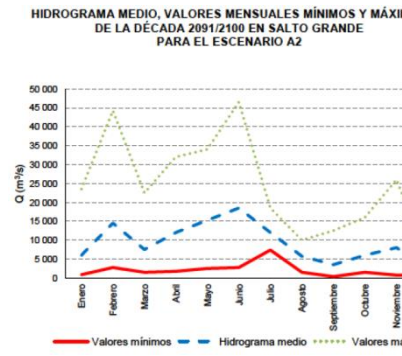
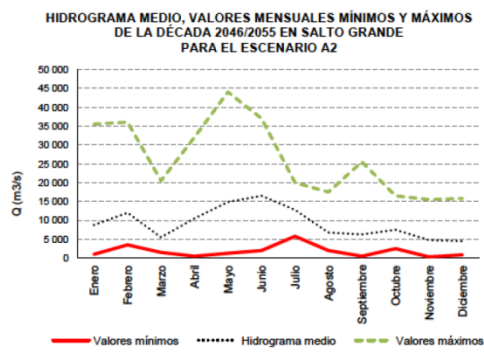
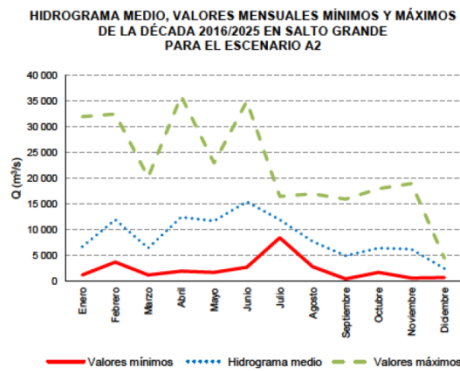


Figure: Max, min and mean flow climate change A2 scenarios for 2016-25, 2046-55 and 2091-2100 in the Uruguay River in Salto Grande. (Barros, ECLAC 2013)

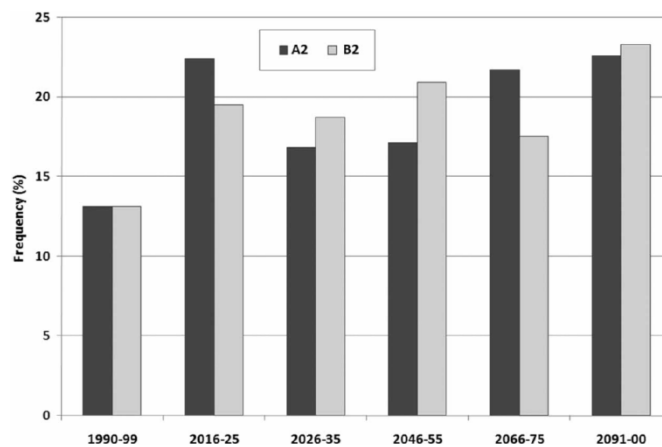


Figure: Decadal frequency (%) of days with water level above the evacuation threshold at Paso de los Libres (Uruguay River) for the emission scenarios B2 and A2 according to the PRECIS climate model.  
(Camilloni et al, 2013)



Figure: Layers of flood risk mapping in Uruguay, (DINAGUA, 2017)

RIESGO		ACCIÓN	CATEGORÍA DE USO (LOTDS)	INSTRUMENTOS
EXISTENTE	ALTO (ROJO)	Promover la transformación Desestimular usos no compatibles	Suelo urbano o suburbano con usos fuera de ordenamiento por inundación	Policía Territorial, Programa de actuación integrada. Relocalización Otros.
	MEDIO (ANARANJADO)	Mitigación	Urbano con restricciones por inundación	Seguros Adaptación de viviendas, Fondos rotatorios Alerta Temprana
	BAJO (AMARILLO)	Mitigación	Urbano con restricciones por inundación, específicamente no instalación de infraestructura vital para la ciudad	Seguros Adaptación de viviendas, fondos rotatorios etc. Alerta Temprana
FUTURO	POTENCIAL	Prevención	No urbanizable (rural, natural, etc.)	TR – 100 en Directriz Nacional de OT EAE (Previsión de riesgos futuros de las medidas del Plan)

Figure: Flood risk zoning criteria and suggested land management approaches (DINAGUA, 2016)

	ESTIMACIÓN DE PERSONAS, HOGARES Y VIVIENDA EN:														
	ZONAS DE RIESGO ALTO					ZONAS DE RIESGO MEDIO					ZONA DE RIESGO ALTO Y MEDIO				
	PERSONAS			HOGARES	VIVIENDAS	PERSONAS			HOGARES	VIVIENDAS	PERSONAS			HOGARES	VIVIENDAS
	TOTALES	HOMBRES	MUJERES			TOTALES	HOMBRES	MUJERES			TOTALES	HOMBRES	MUJERES		
BELLA UNIÓN	467	245	222	144	140	493	241	252	149	159	960	486	474	293	299
PAYSANDÚ	3262	1660	1602	845	935	3021	1506	1515	920	1079	6283	3166	3117	1765	2014
SALTO**	2694	1353	1341	746	792	9325	4486	4839	2930	3054	12019	5839	6180	3676	3846
SAN JAVIER**	41	23	18	16	23	84	44	40	29	44	125	67	58	45	67
NUEVO BERLÍN **	0	0	0	0	0	31	16	15	14	9	31	16	15	14	9
<b>Notas</b>															
1) ESTIMACIÓN REALIZADA EN BASE AL MARCO CENSAL INE 2011 Y MAPAS DE RIESGO DE INUNDACIÓN.															
2) LA ESTIMACIÓN DE PERSONAS, VIVIENDAS Y HOGARES LOCALIZADOS EN ZONAS DE RIESGO ES POSIBLE REALIZARLA PARA AQUELLAS CIUDADES QUE CUENTAN CON MAPA DE RIESGO DE INUNDACIÓN.															
3) EL MAPA DE RIESGO DE INUNDACIÓN EN SALTO, SAN JAVIER Y NUEVO BERLÍN (*) ESTÁ EN PROCESO DE ELABORACIÓN, SE REALIZA UNA ESTIMACIÓN EN BASE A UNA PREFIGURACIÓN DEL MAPA DE RIESGO.															
4) FRAY BENTOS NO CUENTA CON MAPA DE RIESGO DE INUNDACIÓN															

Figure: Summary table of estimated number of people and houses in High Risk, Medium Risk in Uruguay cities of río Uruguay (DINAGUA 2017)

## Flood risk maps

The flood risk maps are based on hydrological threats information that includes: historical flow and rain series that are statistically adjusted and that consider historical registries of extreme flood events. Current flood risk maps in Uruguay DO NOT consider climate change scenarios, since there are no specific climate change river flow and level scenarios performed at urban scale yet in Uruguay, however these flood risk maps do include methodological updating mechanisms that allow for adjustments to include new hydrological information and land use changes.

Regarding the Uruguayan cities included in the project the following flood risk maps have being already developed:



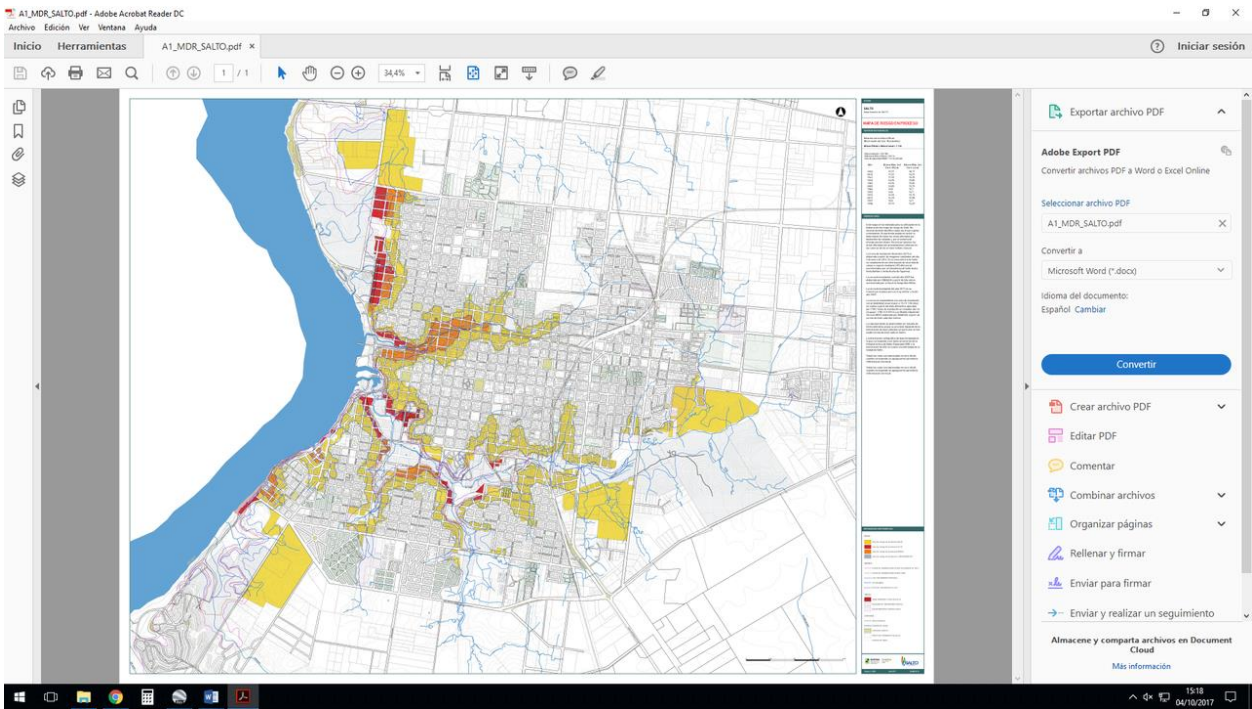


Fig. 9: Flood Risk Map in the process of elaboration. Source: DINAGUA - Int of Salto

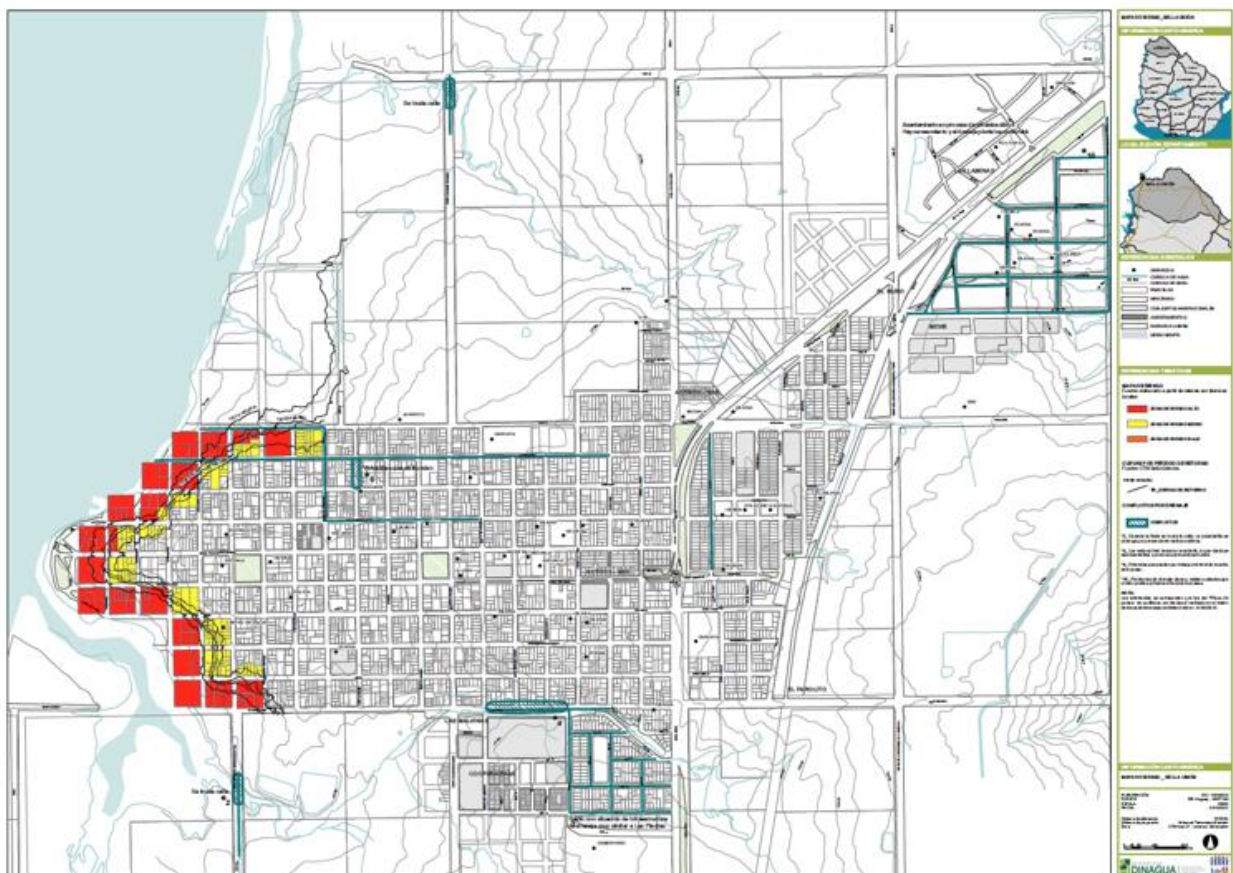


Figure: Bella Union Flood Risk Map

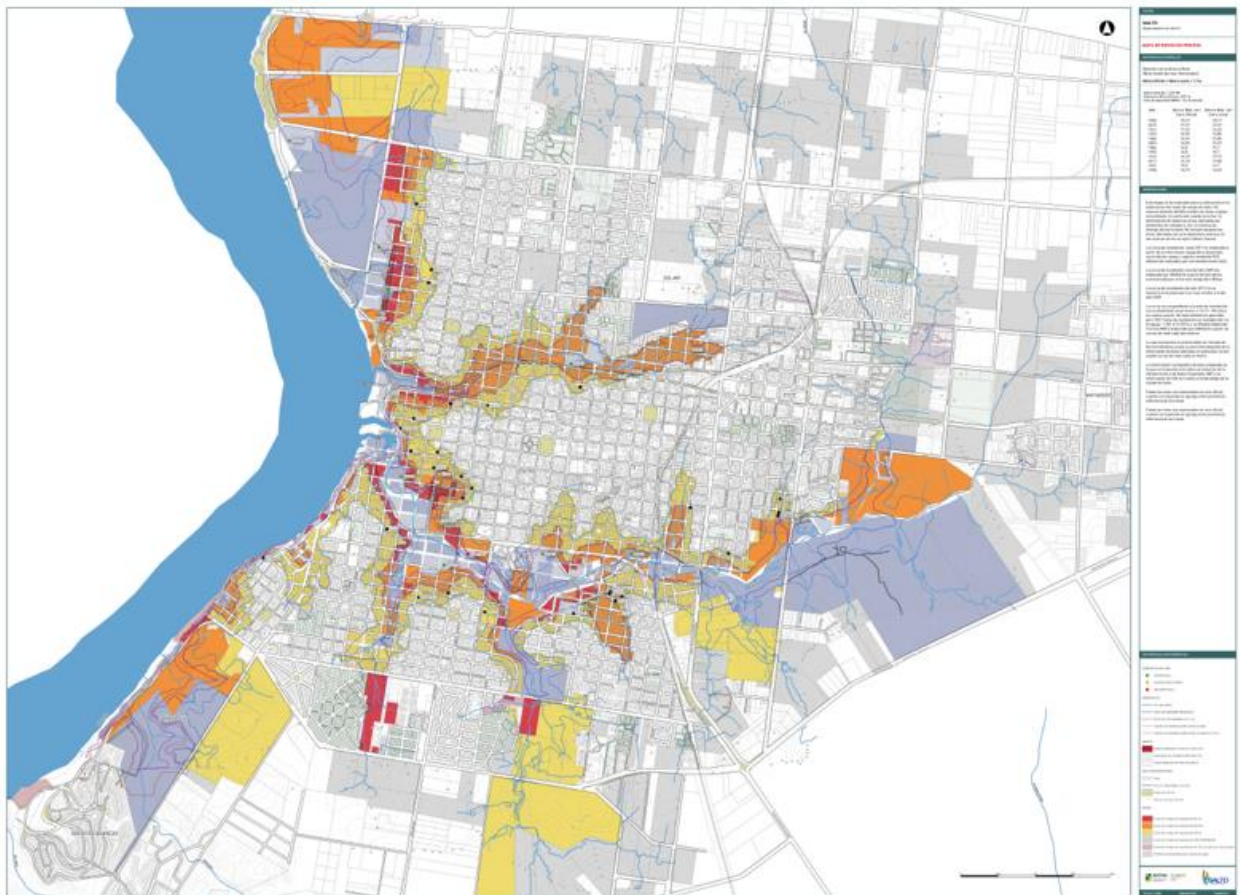
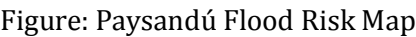


Figure: Salto Flood Risk Map





### Figure: Paysandú Flood Risk Map



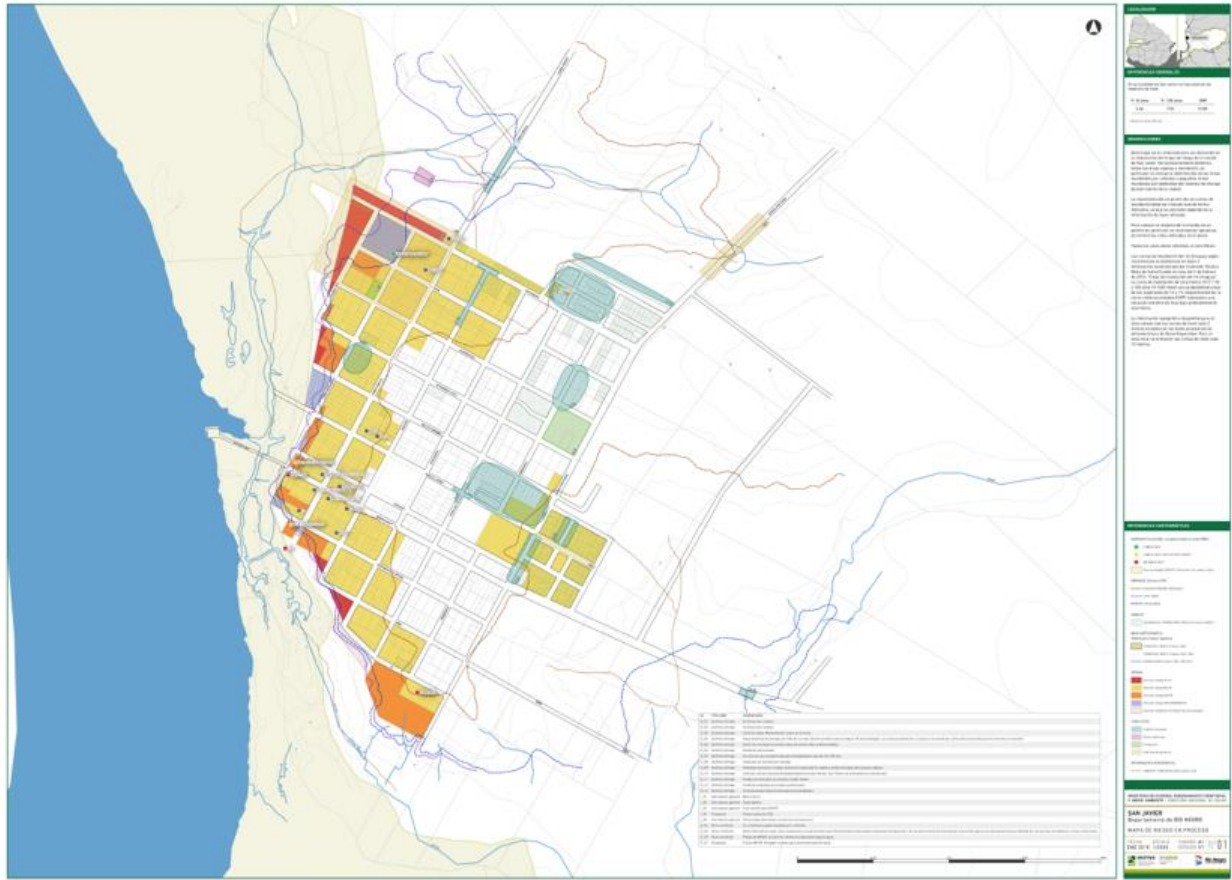


Figure: San Javier Flood Risk Map

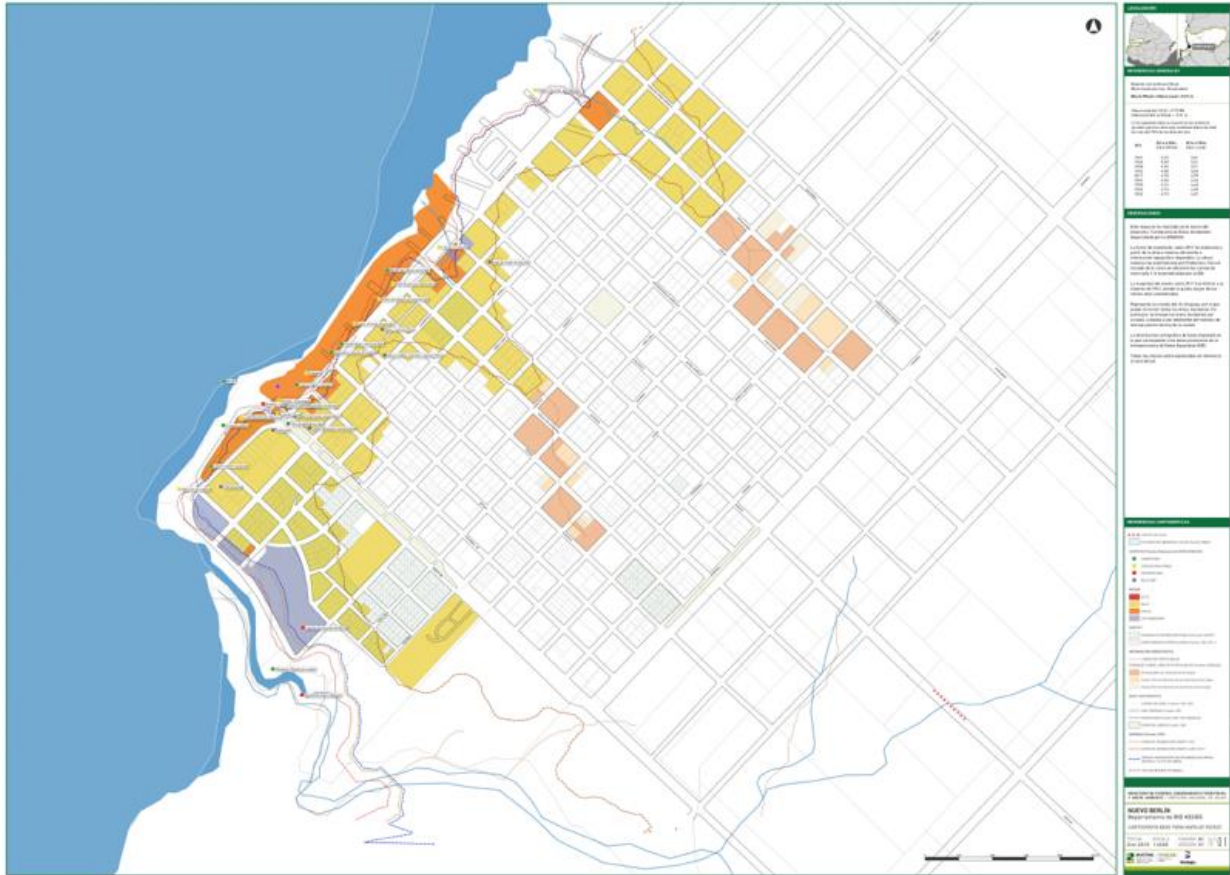


Figure: Nuevo Berlin Flood Risk Map

In Argentina, National and Provincial Governments are encouraging cities in order to build their flood risk maps through training workshops and meetings framed in the concept of capacity building for local risk management.

Flood risk maps are in process but not concluded. However, they will be included in the project during next months.

# Mapa B - Colón - República Argentina

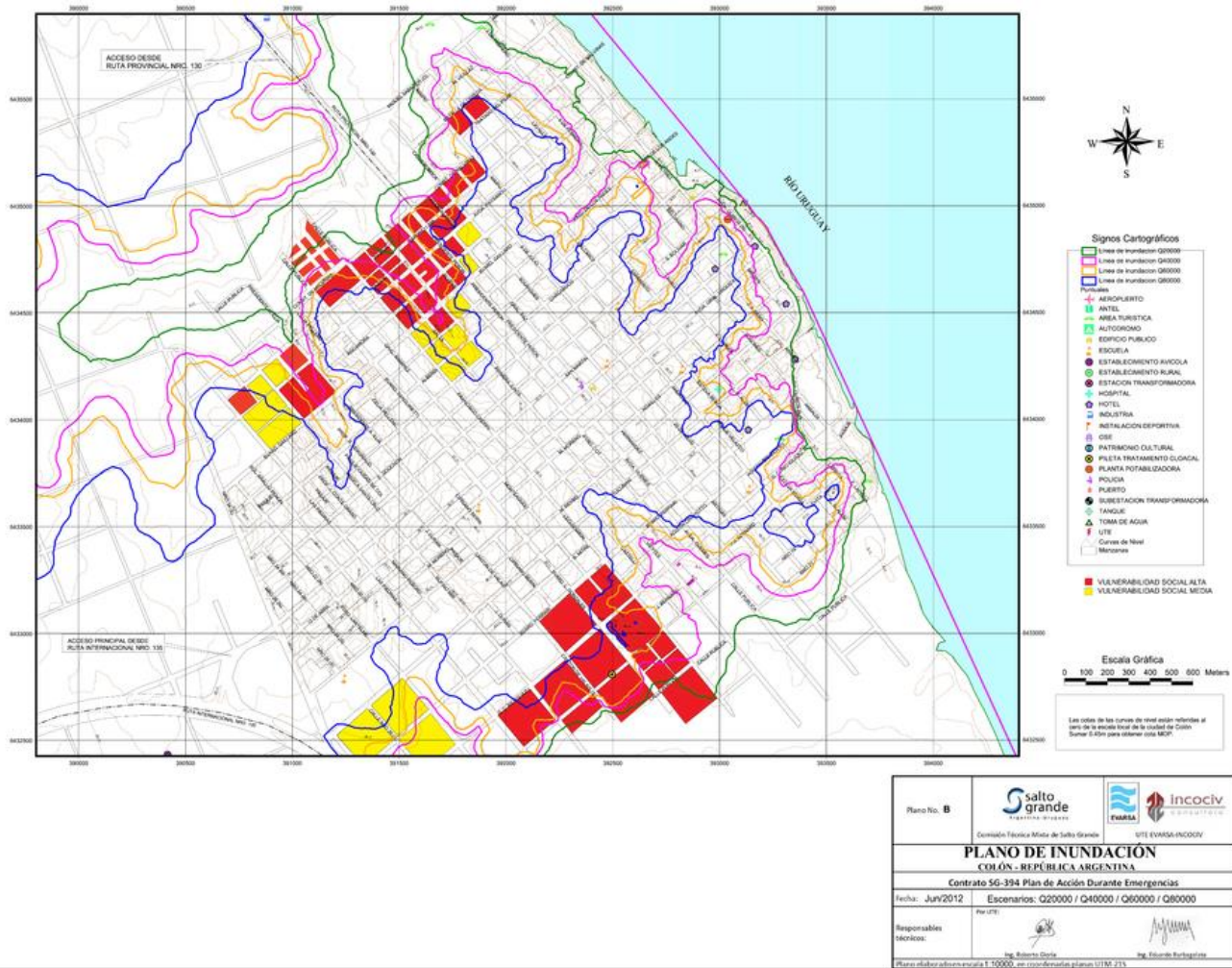


Figure: Colon flood risk map in the process of elaboration (draft version)





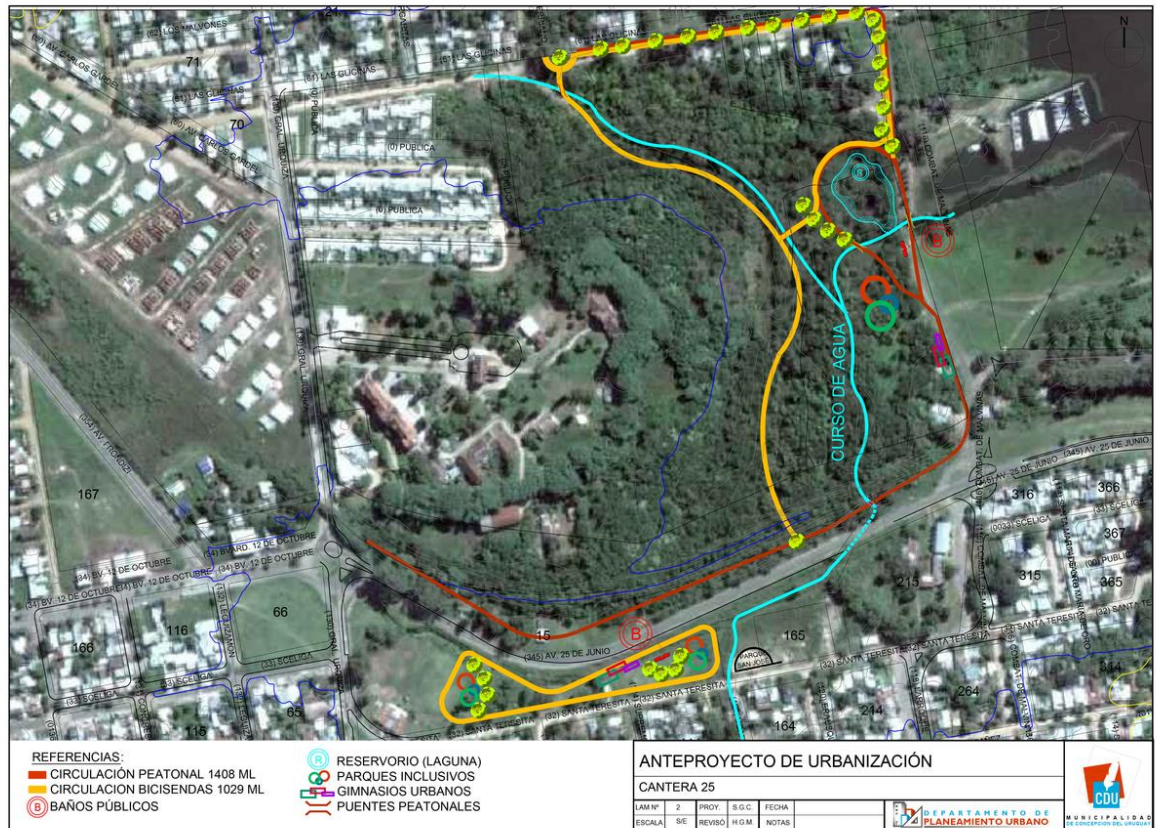


Figure: Concepcion del Uruguay. Remediation proposal for vacant area.





Figure: Concepcion del Uruguay. Remediation proposal for vacant area.

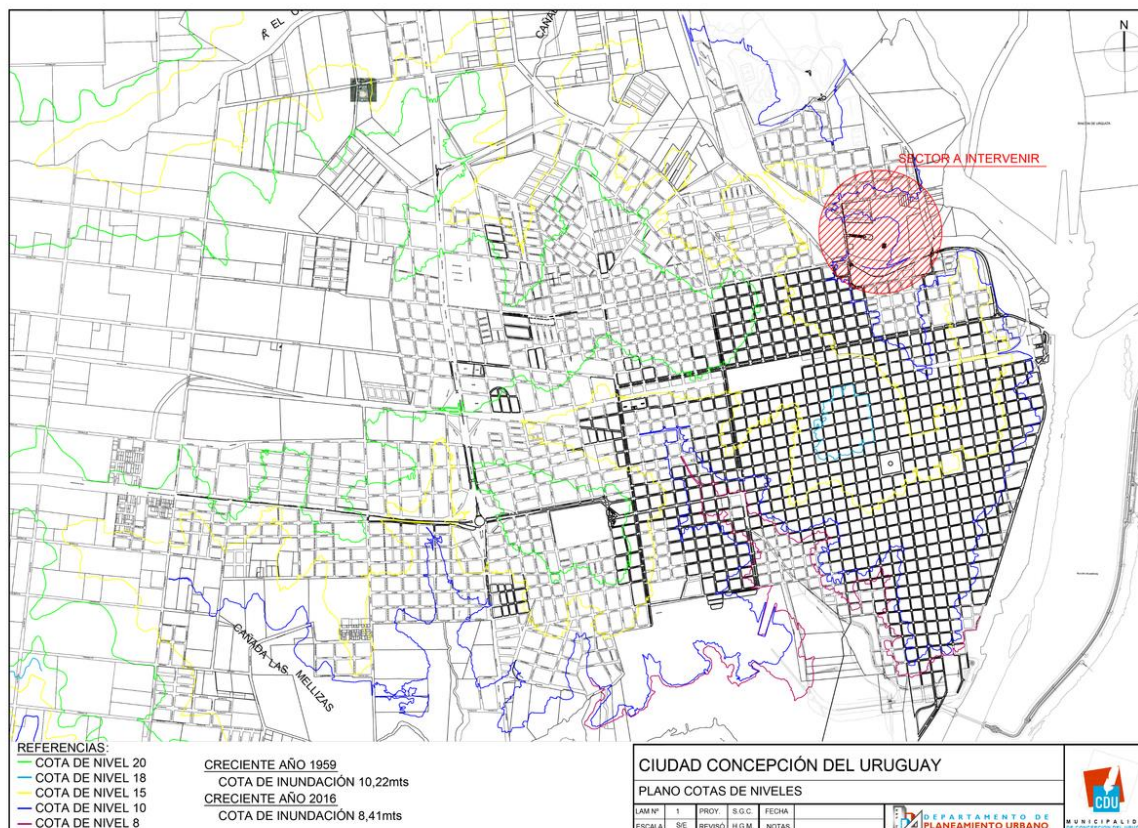


Figure: Concepcion del Uruguay level curves and flood curves with intervention area to be protected by the dam (work in progress)

**Table 1.**

Results for regional climate model ETA (10 km) for the future climate (comparing to 1961 – 1990 period). A raise of the precipitation and temperature outcome is presented for the low Uruguay's basin. Source: CIC 2017.

Macro basin	Precipitation	Temperature				
Periods						
2011-2040	2041-2070	2071-2100	2011-2040	2041-2070	2071-2100	
Upper Paraguay	Decreases the hole year	Decreases DEF	Decreases DEF	Increases all year >2°C DEF>3,5°C	Increases all year >3°C	Increases all year >3°C DEF>4°C

Lower Paraguay	Decreases SOM-DEF	Increases MAM	Increases MAN-SON	Increases all year >2°C	Increases all year >2,5 °C	Increases all year >2,5 °C
Upper Paraná	Decreases the hole year	Decreases DEF	Increases MAM-JJA-SON	Increases all year >2°C	Increases all year >2°C	Increases all year >2,5 °C
Lower Paraná	Increases MAM-DEF	Increases MAM-DEF	Increases MAM-DEF	Increases all year >2°C	Increases all year >2°C	Increases all year >2,5 °C
Upper Uruguay	Increases MAM-SON	Increases MAM-JJA-SON	Increases all year	Increases all year >2°C	Increases all year >2,5 °C	Increases all year >2,5 °C
Lower Uruguay	Increases DEF	Increases JJA-DEF	Increases MAM-DEF	Increases all year >1°C	Increases all year >2°C	Increases all year >2,5 °C
Río de la Plata	Increases DEF	Increases DEF	Increases MAM-DEF	Increases all year >1°C	Increases all year >2°C	Increases all year >2,5°C

1. Arzamendia V, Giraudo AR, Bellini GP (2015) Relaciones biogeográficas de los grandes ríos de la cuenca del Plata basadas en ensambles. Biogeographical relationships of the large rivers of the Plata Basin based on snake assemblages a Revista Mexicana de Biodiversidad 8 674–684 [↑](#)
2. CIC 2017. Hidroclimatología de la Cuenca del Plata. – 1ª ed.- Ciudad Autónoma de Buenos Aires: Intergovernmental Coordinating Committee of the Countries of the Plata Basin - CIC; United States: Organization of American States - OAS. 158 pp. Digital book [↑](#)
3. TCN – Argentina <http://unfccc.int/resource/docs/natc/argnc3s.pdf> [↑](#)



**PROJECT: “Climate Change adaptation in vulnerable coastal cities and ecosystems of the Uruguay River”**

**ANNEX 4. Systematization of the consultation process July 2017**

## **MEETINGS PLANNING SESSIONS - MISSION CARRIED OUT FROM JULY 17 TO JULY 24, 2017**

### **PLAN OF THE MEETING IN BUENOS AIRES - MINISTRY OF ENVIRONMENT AND SUSTAINABLE DEVELOPMENT OF THE ARGENTINE REPUBLIC**

<b>Time</b>	<b>Activity</b>	<b>Person in charge and notes</b>
930	Registration of participants	Registration form [model attached] and an identification with the name of each participant are needed Available drinks (coffee, tea and water)
10:00	Opening	<ul style="list-style-type: none"> <li>Welcome by a representative of the Ministry of Environment and Sustainable Development of the Argentine Republic. 15 minutes.</li> <li>Welcome by a representative of CAF (name to be defined). 15 minutes.</li> </ul>
10:15	Presentation of participants	Sandra Cesilini, external advisor of CAF. Participants will be asked to make a brief individual presentation, indicating the name and entity they represent. 15 minutes.
10:30	Review of the agenda	Sandra Cesilini, external advisor of CAF. The objective and expected results will be explained, a review of the Agenda and a preliminary analysis of the methodology of the workshops will be carried out.
1045: – 12:00	Presentation of Climate Change and MOU among countries	<ul style="list-style-type: none"> <li>Presentation of the national process that is being carried out in Argentina within the framework of the CC Cabinet (in particular the revision of the NDC), some ongoing initiatives and the process of the National Adaptation Plan (presentation of a project proposal to the GCF). (Lucas di Pietro)</li> <li>Brief introduction on the expected effects in Entre Ríos: discussion on the effects observed by the representative of Entre Ríos (Provincial delegation).</li> <li>On specific measures: exchange among all participants to be able to identify the various components that the project would have</li> <li>Discussion on the national aspect of the proposals.</li> <li>Thinking about the institutional governance arrangements of the project: the role of the MAYDS and the province in the execution of the project.</li> </ul>

Time	Activity	Person in charge and notes
		<ul style="list-style-type: none"> <li>• Presentation by Climate Change Directorate of the Ministry of Housing, Land Planning and Environment of the Oriental Republic of Uruguay. Regulations, policies, plans (Mónica Gómez)</li> </ul>
12:00	Presentation of Regional Projects of the Adaptation Fund	<p>Person to be defined (MMA). (20 minutes)</p> <p>Presentation by CAF in which it briefly explains: Chile and Ecuador fund, Representatives of national governments briefly expose the experience with other projects of the Fund, for example the Project: “Construyendo resiliencia al cambio climático y la variabilidad en pequeños productores vulnerables” of Uruguay and the Agriculture of UCAR Argentina.</p> <p>.</p>
12:30 – 1330	Working Session selected cities/locations.	Sandra Cesilini
13:30 – 1345	Presentation of the project concept	Presentation. Questions
13.45 – 14.00	Closing	Closing by the representative of the MMA (to be defined).
		lunch
15.00/16	Trip	1. Travel to Concordia and to Uruguay

## SESSION PLAN LOCAL WORKSHOP IN CONCORDIA - ENTRE RÍOS

Time	Activity	Person in charge and notes
8:30	Registration of participants	Registration form [model attached] and an identification with the name of each participant are needed to be carried in the flap. Available drinks
8:45	Opening	<ul style="list-style-type: none"> <li>Welcome by a representative of the Ministry of Environment and Sustainable Development of the Argentine Republic.</li> <li>Welcome by Ministry of Housing, Land Planning and Environment Uruguay</li> <li>Welcome by local hosts.</li> <li>Welcome by a representative of CAF (name to be defined). Explanation of Mission Objectives (CAF)</li> </ul>
9:15	Presentation of participants	Sandra Cesilini, external advisor of CAF. Participants will be asked to make a brief individual presentation, indicating the name and entity they represent
9:30	Review of the agenda	Sandra Cesilini, external advisor of CAF. The objective and expected results will be explained
9:45 – 11:00	Presentation of Climate Change and MOU among countries	<ul style="list-style-type: none"> <li>Presentation by Climate Change Directorate of the Ministry of Environment and Sustainable Development of the Argentine Republic, according to its regulations, policies, plans, among others.</li> </ul> <p>Orientatively presentations will contain these elements:</p> <ul style="list-style-type: none"> <li>What is the most likely scenario of climate change in the Entre Ríos region</li> <li>What are the main risks and likely impacts expected in the Entre Ríos region</li> <li>What are the main adaptation measures that have been identified and implemented in the Entre Ríos region</li> </ul>

Time	Activity	Person in charge and notes
11:00	Presentation of Regional Projects of the Adaptation Fund	A representative of each ministry, to be defined, explains in a brief presentation the experience of each country with the fund. The CAF presents its own experience, especially taking into account the bilateral aspects and the type of concerns generated from the bottom: Questions and answers about the projects presented
11:45 – 12:30	Presentation Work Session of selected Regions.	Sandra Cesilini with the collaboration of members of the CAF. Working groups for each locality to later integrate into a presentation of the expectation per component of each city, with emphasis on the need to complete the necessary inputs to solve the table "key" of the pre-concept note. In addition to the results (no more than 3 per component) and products (idem), it is important to have an approximation to USD to request (total and per component, if the localities do not bring an estimate, it will be insisted on finding the sources to establish it). The methodology for socializing the proposal and integrating civil society opinions once the note is approved will also be included in the group work.
12:30 – 13.15	Presentation of group works	Presentations by city and round of questions (10 minutes each presentation) Questions
13.15 – 13.30	Closing	Closing by the representative of the national level (name to be defined) and the local hosts
13.30 - 15.00	Lunch	Informal lunch
15.00	Trip	

## SESSION PLAN OF LOCAL WORKSHOP IN PAYSANDÚ

Time	Activity	Person in charge and notes
9:30	Registration of participants	The registration will be made by circulating several copies of the template among the attendees. During group work participants will complete their own identification on a sticker.  Have available all drinks (coffee, tea and water) so that people will serve at will
10:00	Greetings  20 minutos	Initial welcome by: <ul style="list-style-type: none"> <li>• a representative of the Intendencia de Paysandú</li> <li>• a representative of the MVOTMA (objective of the binational initiative, binational interministerial agreement)</li> <li>• a representative of Entre Ríos authorities (risks and impacts of CC on the coast of the Uruguay River) <ul style="list-style-type: none"> <li>- a representative of CAF (Explanation of Objectives of the Mission)</li> </ul> </li> </ul>
10:20	Review of the Agenda	Sandra Cesilini, external advisor CAF. The objective and expected results will be explained.
11:00	Presentation of participants	Sandra Cesilini, external advisor CAF. Participants will be asked to make a brief individual presentation, indicating the name and entity they represent.
11:15 – 12:30	Presentation of Work Session by department.	Sandra Cesilini with the collaboration of members of MVOTMA Groups work for each department and then in plenary according to the matrix proposed on Friday 14/7. This work will provide the necessary inputs to solve the "key" table of the pre-concept note.
12.30 - 13.30	Lunch	Informal lunch
13:30 – 14.30	Plenary	A delegate from each department will present their matrix and a round of questions will be opened (10 minutes each presentation)
14.30	Closing	Closing by representative of MVOTMA and the Intendence of Paysandú
15.00	Trip to Mvd	

## SESSION PLAN END OF MISSION - MINISTRY OF HOUSING, TERRITORIAL PLANNING AND ENVIRONMENT OF THE ORIENTAL REPUBLIC OF URUGUAY

In Montevideo, joint analysis with Argentina on next steps and commitments

Time	Activity	Person in charge and notes
9:30	Registration of participants 30 minutes	The registration of participants will be made once the session begins through a form that will be circulated during the event. Registration sheet is needed [format attached].  Have available all drinks (coffee, tea and water) so that people will serve at will
10:00	Greetings	<ul style="list-style-type: none"> <li>Initial welcome by a representative of MVOTMA 5 minutes.</li> <li>Next, welcome by a representative of CAF (name to be defined). 10 minutes.</li> </ul>
10:15	Presentation of participants	Sandra Cesilini, external advisor CAF. Participants will be asked to make a brief individual presentation, indicating the name and entity they represent. 5 minutes.
10:20	Review of the agenda	Sandra Cesilini, external advisor CAF. The objective and expected results will be explained. 15 minutes
10:35 – 13:00	Presentation of MOU between countries	<p>Presentation by the consultant of the minutes of the two national workshops including activities and main agreements reached. Approval of the minutes by the authorities. 15 min</p> <p>Presentation by the consultant of the matrix with the proposed components for the project. 15 min</p> <p>Preliminary analysis of the components and the tentative budget by authorities and technicians. 1 hour</p> <p>Steps to follow. 30 min</p> <p>Balance of the mission by the authorities and technicians. 15 min</p> <p><i>The consultant will present the minutes of the meeting on Monday, July 24, the same will be signed by the heads of the Climate Change Directorates of both Ministries, representative of the CAF and the consultant. The minutes will contain a signature sheet that will circulate electronically for signature.</i></p>

## FIELD VISITS AND PUBLIC CONSULTATIONS REPORT

During the week of July 17th – July 24th, a series of consultative processes were carried out with members of different government positions. The Project's pre-concept force ideas were discussed and a direct contact with the local situations of the prioritized cities was established. An outline for expected results was elaborated jointly among the assistants, which was shared later with all counterparts during the week of July 24th – July 28th.

## BUENOS AIRES WORKSHOP

On July 17<sup>th</sup>, a presentation workshop took place in CAF's offices with representatives from the Adaptation Fund (AF), National Governments from Argentina and Uruguay and Provincial authorities from Entre Ríos (Argentina).

In addition to the speakers listed below, there were also present: Andrés Rugeles (CAF), José Blanco (environmental specialist CAF), Franz Rojas (hydrology specialist CAF Venezuela), Andrea Rispo (environmental specialist CAF Argentina), Paula María (Entre Ríos Environment Secretariat's International Projects Unit Coordinator), Horacio Miranda (Entre Ríos' international cooperation specialist), Sofía Castillo (MAYDS CC Direction), and Sandra Cesilini (consultant).

### Presentations:

Carolina Cortés, CAF's specialist presented Regional Projects from the AF, briefly describing a bi national experience between Chile and Ecuador that has been submitted to the AF.

Lucas di Pietro Paolo, CCA Director for the Argentinean Environment and Sustainable Development Ministry (MAYDS), presented the national process that is being implemented in the CC Cabinet's orbit (especially regarding the NDC revision), some initiatives that are taking place and the Adaptation National Plan's (PNA) process. In addition to this, he revised the submissions to the AF, briefly described past experiences with the AF such as a cattle Project from Uruguay and one agriculture Project with Rural Change Unit (UCAR) Argentina. He also revised the process for the funding request to CAF in order to elaborate this pre-concept note.

Daniel Tomasini, Entre Ríos' adviser made a brief introduction explaining the expected results for the Province and mentioned some CC effects identified on the Uruguay's river basin.

Mónica Gómez, from the Ministry of Housing, Land Planning and Environment (MVOTMA) from Uruguay briefly explained CC related norms, policies and plans in Uruguay. She also described the analytic principles that were considered when working with the prioritized departments in order to present a consolidated proposal.

The attendants worked on how to include concrete measures to the proposal and how they could be detailed in the exchange workshops with the rest of the stakeholders so as to define the Project's components.

A round of guided interventions focused on the bi national aspects of the Project's proposed measures was made. Necessary institutional arrangements and stakeholders' role were also discussed.



On July 18th, the workshop was held in Concordia. Its goal was to present the Project and related information such as AF background, CAF role to the different municipalities. A space was created for municipalities to describe their main vulnerable situations, the negative impacts caused by climate events, especially floods and the implementation requirements that could be eligible for this Project.

Technical representatives from the areas of planning, environment, civil defense, social services and infrastructure of the coastal municipalities of Uruguay river, as long with Municipal authorities from San José, Liebig, Colón, Gualaguaychú, Concordia, Puerto Yeruá and Concepción del Uruguay were present. Amongst the attendants we can mention Sofía del Castillo on behalf of MAYDS, Secretary of Government Marcelo Benedetto, and Carlos Pasquet, Public Building and Services Secretary from Concordia (See attendants list attached).

Roberto Zabala from the Environment Secretary of Entre Ríos explained how this Project originated in a last year's Governor Gustavo Bodet's visit to Morocco where Entre Ríos presented their Provincial Strategy to face CC effects and international funding management for its implementation. He described the workshop as an opportunity for municipalities to present their issues on CC and floods and stated that it is fundamental to design and adapt cities' infrastructure to this phenomena.

María de los Ángeles Petit, Concordia's Municipal Cabinet Coordinator, pointed out that coastal municipalities have been already actively working on these issues, especially on the identification of socio environmental damage caused by floods. She mentioned that last year half of the city was flooded four times, which implied a substantial economic cost for rehabilitation of the affected areas and social support for evacuees. She also made reference to the Social Evaluation Commission formed alongside the community to define the coastal defense to be implemented.

Concordia's Vice Mayor, Armando Gay, emphasized the need to rethink a strategy to face CC's negative impacts.

Martín Armanazqui, Parque El Abasto's Environmental Development Unit Coordinator (UDAAPA) indicated that the currently, is the Unit is working with a strong environmental approach "with coordinated policies with Uruguay river's coast as well as with the neighboring country". He also added that this experience will "empower these joint actions". He highlighted the Province's municipalities' and CAF's commitment and articulated work.

Roberto Destri, Director of Civil Defense from Entre Ríos Province presented a general description of the basin's context regarding floods.

The workshop had considerable media coverage. Some of the links to local press are detailed below: <sup>1</sup>

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<sup>1</sup>

[https://www.google.com.ar/url?sa=t&rct=j&q=&esrc=s&source=newssearch&cd=3&cad=rja&uact=8&ved=oahUKEwjpwK3\\_LLVAhULjpAKHSoyBxUQqQIILCgAMAI&url=http%3A%2F%2Fconcordiadirecto.com%2Fla-provincia-realizara-en-concordia-el-primer-taller-sobre-adaptacion-al-cambio-climatico.html&usq=AFQjCNE6gtdxVebxl4oxOudvG2nGE\\_ZV3A](https://www.google.com.ar/url?sa=t&rct=j&q=&esrc=s&source=newssearch&cd=3&cad=rja&uact=8&ved=oahUKEwjpwK3_LLVAhULjpAKHSoyBxUQqQIILCgAMAI&url=http%3A%2F%2Fconcordiadirecto.com%2Fla-provincia-realizara-en-concordia-el-primer-taller-sobre-adaptacion-al-cambio-climatico.html&usq=AFQjCNE6gtdxVebxl4oxOudvG2nGE_ZV3A),  
<http://www.analisisdigital.com.ar/noticias.php?ed=1&di=o&no=258418>,  
<http://www.eldiaonline.com/gestionan-recursos-prevenir-los-danos-las-inundaciones/>

### Work session presentation – Selected Regions

CAF, with the province's collaboration, worked in groups divided by city and integrated each group's results with a presentation of the potential actions to be included in the Project.

Four working groups were established with officials from Concepción, San José y Liebig, Gualeguaychú, Colón, Puerto Yeruá y Concordia, alongside CAF and Province representatives. Expectations for each component were discussed with focus on completing the pre-concept note's key table.

Besides the expected results and products, funding request and eligible expenses for this project were discussed. The need to find sources for an adjusted budget was stressed and a group debate on the socialization methodology of the proposal, after its approval by the AF, and on how to integrate civil society's input, was carried out.

Working group's outcomes summary: Each of the municipalities presented their main problems with floods and their ideas in terms of public work and technical assistance needs.

#### Concepción del Uruguay:

It was particularly concerned for the Project: Northern defense and the reparation of Southern defense. They also expressed their concern in terms of touristic impact of the floods and green spaces remediation.

#### Concordia:

-They expressed their concern for different defenses location and remediation for resettlements made with other financial sources:

They expressed the concern in terms of the center of the city, social and health problems related to floods. They also proposed green infrastructures for remediation. San José and Liebig were concerned about sewerage water and sanitation problems. They also centered their conclusion in the consequences of evacuation of people.

People's isolation due to floods also affects their access to health and educational services.

The productive impact was reviewed in terms of agricultural products and tourism.

The problems related to shelters for the emergency were also mentioned as a main issue.

#### San José y Liebig

Main Points referred to accessibility during floods periods, productive impacts (agricultural and tourism) and access to public services (health and education, sewerage and sanitation) warning systems and centers for evacuation.

#### Gualeguaychú:

Eradication of the people living in floodable areas. The Municipality's representatives identified deforestation of native species for agricultural uses as a problem related to the increase of flood impacts. They also expressed the need of having an EWS in town.

## PAYSANDÚ WORKSHOP<sup>2</sup>

The workshop took place in Paysandú, Uruguay, on July 20th with attendance from MVOTMA and the 4 prioritized departments' technicians and officials, representatives from DINAMA, DINOT, SNAP, DINAGUA, CARU, North Uruguay's academic institutions, Carolina Cortés, Mission Chief for CAF, Franz Rojas, Operational Innovation and Knowledge Management Direction's principal executive, Social Development Vice-presidency (CAF), Marcos Guissani, Environment and CC principal executive (CAF) and Sandra Cesilini, consultant.

The workshop was opened by Secretary General of the government of Paysandú, Mario Díaz, Gabriela Pignataro from MVOTMA and Carolina Cortés in representation of CAF.

CAF and MVOTMA jointly coordinated working groups for each Department for a final plenary session to share each group's results with the support of the dimension's grid presented by MVOTMA. This work provided the necessary inputs for the pre-concept's note key table. Each group had technical assistance from national officials that had previously worked with the departments in three previous workshops.

### Working group's outcomes summary

#### Artigas and Bella Unión:

It is necessary to have data of the river's dynamics up and downstream the dam. The dam's hydrological models would be very helpful.

Binational efforts and sharing of information will be very helpful for the work that is already being done. Artigas is the city that passes on information to Brazil regarding floods.

The behavior of the population, which is going back to the flooded area, is a matter of concern.

There are 22 houses being built in this area

Auto evacuees

50 m<sup>2</sup> houses

MEVIR land is used for 40 houses

Rincón de Franquia Wildlife Protected Area is jointly managed by the Municipal government and an NGO. Cañada Santa Rosa is proposed as a complementary area taking into account the ecosystemic approach of this Project and the need to recover public spaces for tourism and recreation. The mentioned protected area has a managing plan which is being reviewed for the potential integration of more islands to the protection limits.

Regarding risk scenarios, concern on the waste water treatment plant was mentioned since it is below the flood line.

The National System of Emergency organizes scenarios till 2050

The Departments received Juridical support from MVOTMA for relocations.

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2

<http://webcache.googleusercontent.com/search?q=cache:KslconF53J8J:www.paysandu.gub.uy/cecoed/4747-la-intendencia-y-el-mvotma-organizan-taller-regional-sobre-cambio-climatico>

Barrio Piratas (Artigas) relocation should have a specific plan before delivering the new houses.

Paysandú:

In the collector canal chrome is concentrated and there should be samples taken to estimate chromes concentration in soil.

It is proposed that a matrix is elaborated with information on high risk on floods, droughts and health problems associated. Also, a Risk Management System and Territorial Planning Plan are suggested.

Territorial policy. It is stated that a risk map is being elaborated, as well as relocation policies along the National Government.

A donation policy is being worked on for a 3 stages relocations. 400 relocations of lower Curupí and La Chapita neighborhoods.

It's also been suggested to work with "Unión Portuaria" and Ledesma company in an area that, by another funding, the Planning and Budget Office will designate.

Moreover, Brazil Av situation is mentioned, since it cannot be relocated. Mezzanine or retention valves are suggested among others. Some families (aprox 100) are reluctant to be moved out of their traditional locations

A Project was presented, aiming at recovering the coastal zone as a boardwalk.

Within the territory of the wetlands are planned to create protected areas.

Serious problems were detected in SACAR and Curtiembre creeks

There has been joint work carried out with CARU regarding environmental restoration. Currently the focus is in the South, but the aim is to reach the whole coast.

Attention is brought up to the effluent treatment plant since it is below flood line as well as the rest of the infrastructure, since the flood level grew from 5,6 to 6,5.

The following products were identified and proposed:

a) Working on reinsertion for population affected by floods and job support for reconversion of resettled people, who have a venture that should be readjusted b) Communication campaign c) Re signification Project. d) Fluvial ecosystem restoration.

Salto:

Salto has recently started to work on a risk map that includes protected areas.

Intervention behind the blocks that suffer recurrent floods with considerable impacts is suggested.

For housing stock adaptation, floodgates. Create different levels that allow different prices in the market

The need for resignification of vacant land, a new relation with the river, and preventive strategies before occupation in Sauzal and Ceibal South neighborhoods is mentioned.

On the other hand, the North presents strong signs of erosion that affect connectivity (such as bridges) during floods.

There is a new territorial planning, a territorial police that control the areas after a resettlement process

Monitoring the water flow and its quality, land ownership and possession, this vacant land should be regarded as tools for a better management of public spaces.

The quality of the Waters is also a problem, they are thinking on the creation of buffer areas

#### Río Negro:

Priorities are being shared with other departments. The importance of two distant and different areas is recognized: Grau and Farrapos.

Esmeralda stream's basin has already 7000 inhabitants and there's a new urbanization in Laureles stream basin too. They are planned and have different realities due to their location.

It is mentioned that the local authorities are undertaking different approach studies with the University in various sectors. They are making a territorial planning including areas with existing houses and another sector that must be completely re planned

Farrapos Protected Area works with the National Protected Areas System (SNAP) and San Javier and New Berlin, which involve the whole protected area. The CC aspects are considered in these projects.

The management plan for this area is being reviewed since more islands could be included in the protection limits. Also, CC aspects are integrated and a physic, social, pluvial and housing registry is being executed.

It is estimated a total of 1000 families for relocation. It is based in an academic study by UDELAR (Universidad de la República).

In San Javier there were 50 evacuees, many of who were working in a MEVIR plan and moved out. New Berlín doesn't have a plan for new evacuees.

The importance of an Infrastructure Plan is emphasized. Territorial Police's norm hasn't been ruled yet.

They work with Emergency Coordinated System (SECOED) and propose an EWS for the department.

Other proposals include a lineal park in Laureles stream, the recovery of San Javier's pier. In Rio Negro agricultural and touristic activities are of much importance.

#### ***National Emergency System (SNE) representative's intervention:***

It is mentioned that the Uruguayan SNE works differently from the Argentinean since it is interinstitutional. It is mentioned that the SNE requires empowering and the publication and sharing of the Salto Grande Mixed Technical Commission's data is proposed as a very useful tool.

Other topics were mentioned such as adaptive measures with DINAGUA, social perception of risks, health and epidemiological issues such as dengue and flood risk management, regional plans and hydrological models.

It is pointed out that the heat-cold waves, eutrophication, agrochemicals and fires should be considered.

Sandra Cesilini explained binational components such as best practices, health issues and technical tools analysis to improve early warning models.

***Ignacio Lorenzo (MVOTMA) closure:***

Climate Change Director Lorenzo proposes diverse financial aspects of the housing stock adaptation and emphasized on the need to evaluate revolving funds implementation.

Finally, the Director thanks the workshop attendees for the obtained results and points out that these kind of workshops reinforce what has done.

**MISSION'S CLOSURE WORKSHOP IN MONTEVIDEO**

During this event held on July 21st, Sandra Cesilini made a presentation summarizing both national workshops including activities and main reached agreements. General and specific objectives and the key table (components, expected results and products) were discussed.

A preliminary component and budget analysis was carried out by authorities and technicians.

Besides MVOTMA representatives, the attendants included: Carolina Cortés, Mission Chief for CAF; Franz Rojas, Operational Innovation and Knowledge Management Direction's principal executive, Social Development Vice-presidency (CAF), Marcos Guissani, Environment and CC principal executive (CAF), Sandra Cesilini, consultant, and Argentinean and Uruguayan CC technicians (these last on Skype).

A specific Meeting with Jorge Rucks MVOTMA Undersecretary, directors of different MVOTMA Areas: José Freitas DINOT, Guillermo Scarlato Ecosystems Direction. This meeting was held to validate the main list of components and products. In the meeting Carolina Cortés exposed the approaches and main products derived from the workshops and the national authorities gave their comments based on the work that is done with the municipalities.

The authorities expressed the current collaboration process with Argentina and the need to reflect this process in a shared project.

**The following scheduled was established:**

24/7 Sandra sends CAF improved LM on the 21/7 version worked in Uruguay.

25/7 Country's review and approval

26/7 Teleconference

28/7 Pre-concept draft

1/8 Reception of commentaries and adjusting

**MISSION'S BALANCE BETWEEN ARGENTINEAN NATIONAL AUTHORITIES AND CAF:**

The mission's balance was done via Skype with Argentinean National Authorities with whom the basic contents table's draft was shared. A joint review was established and MVOTMA's directors commented their expectations. Focal points for each country for information gathering were discussed and it was determined that besides the Pre-Concept Note, additional funds were necessary for the elaboration of the Concept Note.

## **ANNEX REGISTRATION OF PARTICIPANTS**

### **LIST OF PARTICIPANTS BUENOS AIRES**

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Sandra Cesilini –Consultant

### **LIST OF PARTICIPANTS CONCORDIA**

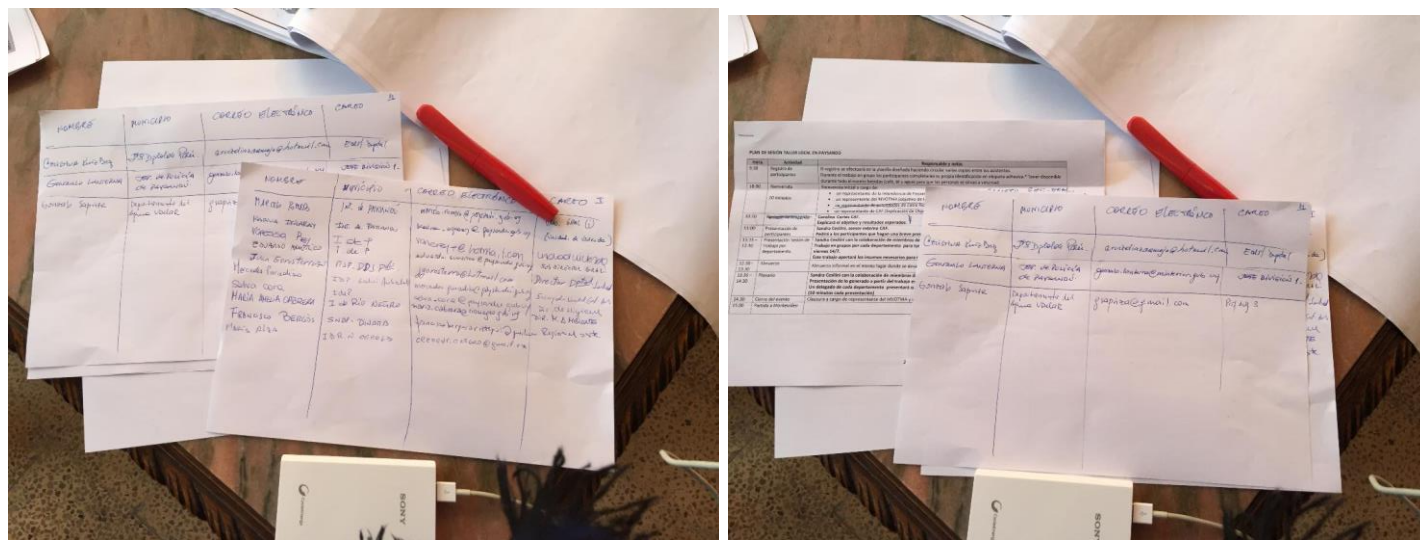
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 Consultant

## **PHOTOGRAPHIC ANNEX OF THE WORKSHOPS**

**Induction workshop in Buenos Aires- CAF headquarters -**

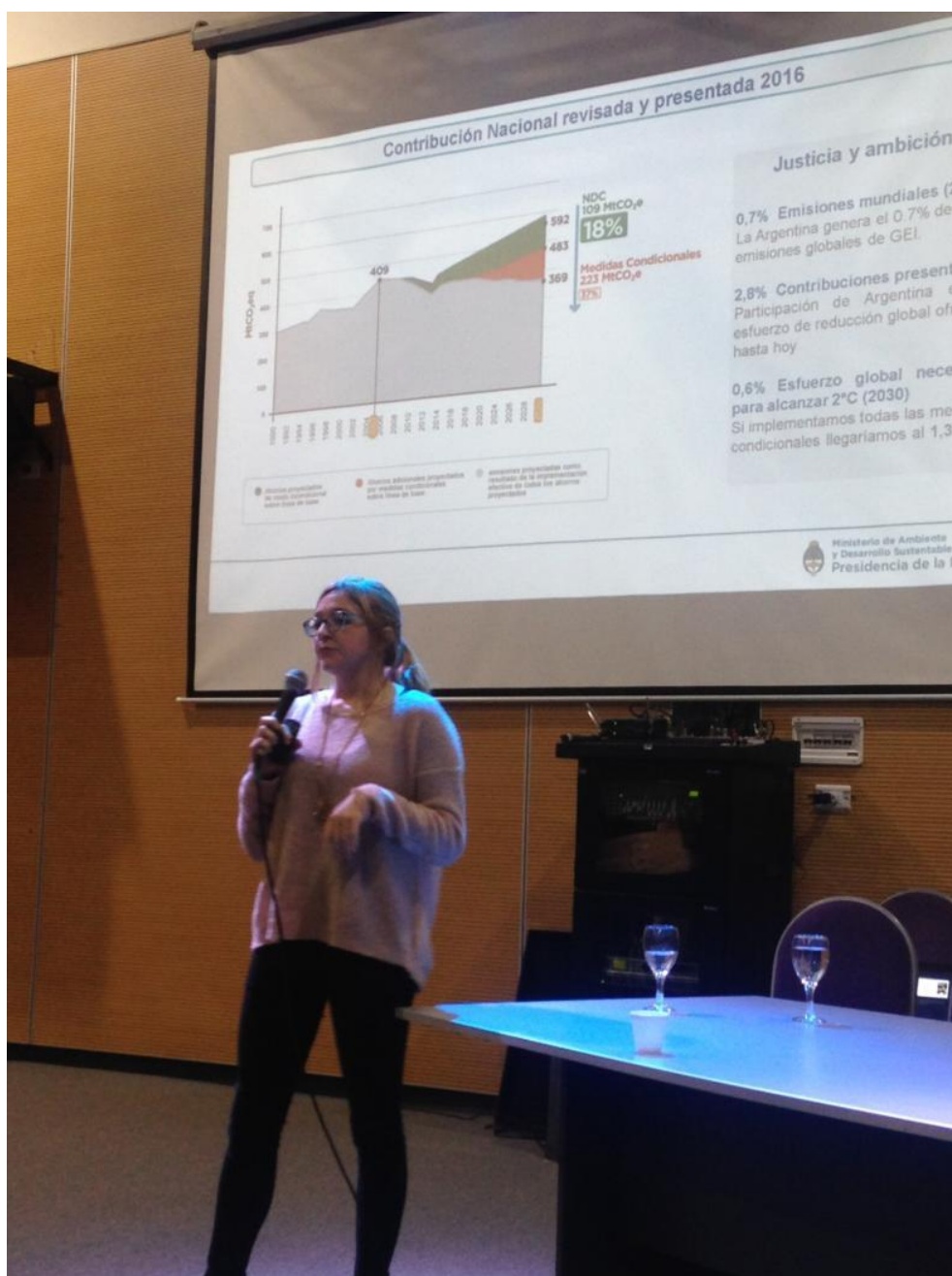


**Presentations and working sessions among Project's team: MAyDS, MVOTMA, CAF, Entre Ríos province-**





**Project's guidelines presentation and consultations during Concordia Workshop. Entre Ríos Province, Argentina.**



**Working sessions during Concordia workshop**



**Project's guidelines presentation and consultations during Paysandú Workshop, Uruguay**





**Opinion and consultation space during inception workshop in Paysandú's House of Culture**



**Proposed activities description and location presentation**



**Group picture with Paysandú Workshop assistants**



**Mission closure at Montevideo (21/07/2017) with MVOTMA team**



**Group work on Projects logical framework and governance**





## FIELD VISITS

Concordia City – affected zones where flood line can be observed



Elevated house and coastal zone



Group picture at Concordia



**Paysandú City – flood affected zone indentification**





**Affected zones and coastal areas –La Chapita Neighbourhood-**





**Salto Grande City –flood marks and castal zone in Sauzal y Barrio Ceibal Sur selected areas-**



## **PROJECT: "Climate Change adaptation in vulnerable coastal cities and ecosystems of the Uruguay River"**

### **ANNEX 5. Systematization of Consultative Process of December 2017.**

#### **Report: Proceedings of the field mission of December 2017**

A field mission is developed, according to the agreement with the parties involved, from 4 to 8 December. Participants belonged to the CAF team, officials of MAYDS, MVOTMA, of the Entre Rios Province, of the cities of Concepcion del Uruguay, Paysandú, Colón, Concordia, Salto, Rio Negro, San Javier, representatives of social organizations, private sector, neighbors, and the consultant in charge of formulating the Project (calendar and contact list are attached).

In this framework, meetings with authorities and representatives of the Municipality were scheduled in each city in the morning, a field visit of the identified areas with the proposals on territory and in the afternoon a workshop with the community.

#### **● LOCATIONS VISITED**

Entre Rios Region, Argentina:

- Concordia
- Colón
- Concepción del Uruguay

Coastal region of Uruguay; cities of

- Salto
- Paysandú

For the development of the Consultation/Validation Workshops, the following methodology was used, agreed by the entire team involved in the project and a summary of the logical framework was delivered (**Annex II**).

- **PLAN OF CONSULTATION/VALIDATION WORKSHOPS**

This plan was agreed with the team and implemented as the proposal described in the following paragraphs:

Objective of the workshops:

1. Validate with vulnerable groups and target groups/key stakeholders agreeing with the project.
2. The Adaptation Fund requires that vulnerable groups who may be affected by the project are consulted and their opinions are documented and addressed where possible.
3. As defined by the Adaptation Fund, vulnerable groups are "groups of persons not able to anticipate, cope, resist and recover from the impacts of (external) pressures that face a higher risk of poverty and social exclusion than the general population. The vulnerability may result to belong or perceived as belonging to a particular group or institution, and is a relative and dynamic concept". These groups are the ones that could be affected negatively by the project. That is, if an intervention infrastructure implying resettlements is done, if there are indigenous people who do not participate in the knowledge components because of language, women also do not participate in the information activities due to schedules, etc.
4. The beneficiaries/stakeholders groups must agree with the measures and be willing to participate in the project. Validate whether there are new proposals to consider.
5. Workshops should allow vulnerable groups and key project stakeholders to express their views on the proposed intervention.

Who should participate:

1. The participation of key vulnerable groups and beneficiaries/stakeholders groups relevant to the proposed intervention in the project should be ensured.
2. Vulnerable groups include: "women, minors, elderly, indigenous, tribal groups, displaced persons, refugees, persons with disabilities, and people living with HIV/AIDS as well as groups further identified as seasonal migrants or undocumented".
3. You must ensure, as far as possible, equal participation of women and men.

How you should engage participants:

1. Consultative meetings should be organized at times that do not limit the participation of vulnerable groups.
2. Participants must be adequately informed of the proposed intervention. The transmission must be in appropriate formats (e.g., inclusive language, maps) to take into account the needs of particular groups (e.g., persons with disabilities).
3. Participants must be able to freely express their opinions, perceptions and suggestions regarding the proposed intervention, all of which must be documented.

Recommendations for the consultation/validation workshops:

1. Participating groups must be identified and invited in advance.
2. Participants must have available the information of the proposed intervention in easily understandable formats such as maps and designs.
3. People who know the details of the intervention should be available, so they can explain and address the concerns of the participants.
4. The minimum work is a four hour session that includes (i) providing information on the proposed intervention, (ii) space for analysis and reflection group, and (iii) sharing of comments of groups.

*The proposed work session scheme was:*

10 minutes	Welcome and introduction to the meeting
15 minutes	Explanation of grants scheme of the Adaptation Fund (10 minutes presentation + 5 minutes questions)
15 minute	Explanation of the project (results framework) (10 minutes presentation + 5 minutes questions)
15 minute	Explanation of the procedure to be performed in the locality where the query is being held
60 minutes	Group work. 10 minutes Introduction to group work and group organization. 50 minutes work group. In each group a monitor records the concerns and comments of participants. A person must be available to provide information on the proposed intervention.
60 minutes	Plenary for submission of comments. Contributions of each group must be documented.
15 minutes	Explanation of next steps and closing.
190 minutes	

*Other actions:*

- Photographic record
- Attendance Record
- Risk maps - maps of adaptation measures - intervention

#### ● PROCEEDINGS OF MEETINGS

### CONCEPCION DEL URUGUAY

Meeting 12.04.2017 – 10 a.m. Mayor's office of Concepcion del Uruguay, Entre Rios

Participants: José Eduardo Laurito, mayor of the Municipality of Concepcion del Uruguay, Secretary of Social Development, Health and Human Rights, Sec Environmental Health, 6 Councilors, Coordinator of Health Service, Social Worker, Provincial Directorate of Civil Defense; Civil Defense Coordinator, representatives of the Entre Rios province (coordinator for the province, Ministry of Environment – technical and legal area, consultant Sandra Cesilini, representatives of CAF (Carolina Cortés and Alejandro Miranda), representative of the Ministry of Environment and Sustainable Development (DACC).



The meeting began with a presentation of each of the attendees, and the introduction of its motive and purpose, besides thanking previous contacts and their cooperation in the project.

Carolina Cortes says the role of CAF and the Adaptation Fund, and that the project is binational (regional) with Uruguay where there is a window to raise funds up to USD 14 million. Since June 2011 they are working on the formulation of the pre concept note, that was approved in October this year, and now they are working on the concept note. Salto, Paysandu and Rio Negro in Uruguay and Concepción del Uruguay, Concordia and Colón in Argentina were selected.

Objectives, components and products specified in the project, specifying the proposed adaptation measures are explained. It is clarified that National Parks and Protected Areas will be included. The idea is that the community gain ownership of the project.

Regarding the budget, it was agreed that 50% is for each country, and specifically allocated to infrastructure component: 6 million.

As much information about the area of intervention is requested. E.g. Map of risk, prioritizing the area. The mayor said that there are 3 people who will coordinate, they are at the meeting. They are with planning and deadlines to meet. It is asked to survey the location.

Carolina, mentions the issue of redefinition of vacant spaces, and says it could improve the defense.

The mayor points out that Concepción del Uruguay in the last 20 years, has problems. Since it had taken a loan from IBRD Entre Rios (provincial law 9080) and made 10 works of projects against flood. 3 in Concordia, 2 Parana, among others, 1 in Concepcion del Uruguay (Coastal defense Sur) opened in July 2006, 547 families are protected, and there has been no relocation of settlements.

He took office in December 2015, they had four floods and 3 with evacuation of families (in 2 years). In the last flood there were not evacuated only by 8 cm. In January 2016, a big storm, and in February 2016, excessive rainfall.

The Central focus district will be Cantera 25. There will be a protection of an unprotected sector, water and sewer services are needed. This city is the first to cross the highway. The neighborhood is just 9 blocks from the mayor's office. The families are in a privileged place, just 9 blocks from the main square, and is one of the most neglected areas of the city.

Regarding costs of flood: the 1st flood exceeded 10 million pesos, much depends on growing, some last a month but others can reach several months. Each flooded person received contributes for \$ 7000.- (it was paid only once in the 3 floods). It was always thought it was a place to eradicate, but people do not want to go, then it has to be resignified.

Coastal defense Sur: with Program Habitat for infrastructure issues, water, sewer, paving etc.

This project seeks to advance this sector as the Coastal defense Sur at the time when it started.

The project was designed and the work tendered and has a cost of 224 million pesos, in November the Agreement was signed. It is estimated to begin in January 2018, with contributions from nation and province.

Green areas are protected, no settlement characteristics. Not in the collective unconscious the idea of occupation.

Veronica Viduzzi notes the importance of giving other uses to the area. The Mayor points out that if the money is enough, there is a landscaping project at the site. They put in order of priority, improved quality of services for people. Green space does not require large amount of funds. In one corner there is the RCMP, but it is a controlled scheme, on the other side there is a chapel, and there is an important property that ends at the port.

These numbers are USD 500,000, to cover what is needed in sewers, water and connections. It is the central area which would fail to do this. But work has been done.

Number of families affected in the area: 16 grid blocks, Bulevar Irigoyen hayas Santa Teresita, 200 families (approx), SUM, civil association, comedores.

Rising river would be solved by the defense. The problem of flooding with sewage is due to boiled water.

From the defense there is a vacant area in the city, with soil that may have an attraction that now it has not. Not being flooded now it appeals settle there. Lacking services when it rains, there are floods and pollution in that sector. So better than this place does not have an irregular use of space, and sanitation will require that space.

He hopes that the issue of water and sewer works complements the resignification of the space.

The Mayor welcomes the opportunity, and mentions that they met with CAF in Montevideo, and then in Bs. As. He thanks them and Nation for the peacemind that there is a strong possibility of improving the quality of life and sustainability of a vulnerable sector. This emerges as a social claim, it has not been imposed as public agenda. It was installed for flood protection claim. They are half of Concordia, and these are largely neglected sectors. 2 housing districts were built but families do not want to leave that place. Nobody wants to go west of the city, as the transfer is a cost and access to health care, schools, etc. They find the best to stay there.

In 1987, the mayor was able to move people from the southern sector to another place, but it brought a social problem. There were other groups who were resettled. It is assumed that they did not want this resettlement.

Currently they share a very precarious connection between several neighbors.

When people settle, the state starts to provide services until some resistance is overcome, and this is an issue that has not been handled well to achieve social agreements. If we give them all the services, then they consolidate. And they have more to do with a cultural trait.

Veronica says that the project has other measures that are broader than those of the localities where they will work. E.g. The issue of incorporating the focus on plans, etc. Awareness work in risk management. And the province contributing and supporting from development, supporting nonstructural measures accompanying the project.

It is a "complainer" neighborhood and it learned that claiming do better.



**Images from the meeting in Concepción del Uruguay, with executive and legislative authorities, including technical referents from different areas.**

Meeting with technical team: 11:15 a.m.

It is claimed that, in presence of excess water, temporary contamination exists for identified areas of intervention.

From the workshop conducted, several alternatives appeared such as protection of tourist areas, but protect vulnerable sectors is basic.

They found, by the number of people and health status, that the project may remedy that situation, of decades of flooding. It is an established neighborhood in that area. Then as complement of the defense, the situation of that neighborhood should be improved.

The area is crossed by the Arroyo el Gato, with strong flow of storm drains, sanitation more difficult due to lack of sewers.

Statement of the situation by township officials. Postponement of the neighborhood as a result of the scheme suffering from floods, and changing criteria in urban planning. From the idea of a defense in the neighborhood, the neighborhood is consolidated and they think about protecting (formerly eradication). See how this need is linked with flooding. It is the postponement of this town near the city center. By changing the criteria, the support to this project is favored.

The consequences of what the population does, involves the alteration of environment by floods. Why to recover it as a public space: since new homes are acquired, it will be an impermeable soil and can become worse than the current situation. The priority of the project is that area as a storage area because it receives excess water by rain. Improved water and sanitation for the population that borders that area is required, because the negative consequences that appear as a result of flooding affects the area.

A clear example of implementing adaptation measures, define the number of affected families and improve their quality of life. Quantify to apply it as a measure of country. Recovery of that space for the city. In this case also incorporate other city dwellers because they also benefit from this measure.

They will be respectful of the priorities of each jurisdiction.

Climate change is evident with more frequent and more intense rainfall. It is noted that the province help inform and is available to collaborate with these events.

From DC seeks to promote DC boards are the first agents to act in emergency and need prepared people and the elements to respond to emergencies. They are

headquartered in Concepción del Uruguay, they are made available for risk management. It is mentioned one of the expected results in the development and updating of plans and maps of risk management.

Even with the defense raised, an emergency plan is needed, and this component also strengthens the project.

Deadlines for completing the work of defense, has 2 years of lead time provided by contract labor. In January 2018 it will be under construction.

The community is not informed about the project, fearing to mention something since it cannot be assured that works are effectively performed.

It is important to identify the real expectations regarding the execution of this work on the defense that really is going to run and then consider it for the Project of FA.

#### Information required:

- Draft of neighborhoods, sewers studies, etc.
- Social survey (see dimensions when they know they must evacuate) for Cantera 25.
- Reports the amount of assisted flooded, self evacuated, etc.
- identified people with highest social vulnerability of the area.
- the plans have everything in files. (Planning of Province and the municipality).
  - It is requested that the drafts were raised to the municipalities.
  - A joint agenda where municipalities are asked to participate.

Carolina said that on January 15 should be delivering the finished project (Concept Note), but the other possibility is to deliver in August.

It is mentioned that it is not necessary an advance of the activities and their budget. But it will be necessary to reach a budget by product.

#### Visit to Barrio Cantera 25



**Images from El Gato creek, which is part of the vacant land proposed for re signification within the Project.**

#### Consultation/Validation Workshop in Concepción del Uruguay

They declare that everything that comes to improve habitat neighbor, is welcome. However, they consider a priority the issue of sewers and flooding in their homes.

Some neighbors mentioned that the flooding takes place, for undeveloped sewage system, and flooding rains do not filter. This situation will worsen when the stream is closed with cement. They fear to continue with more accumulated water. Groundwater problem. There is water all year round. It is responded that the issue of sewers is not ruled, but it has to be justified well.

In addition, some referents of the University of Entre Rios based in Concepción del Uruguay commented on a Climate and Health research, identifying 3 districts with potential cases of Leptospirosis and Dengue.

The SAT is also included. There is a range where it can be contemplated what they identified as priority issues.

A neighbor said that the flood affects their daily lives, even in plants grown at home.

He notes that Brazil does not participate in the Uruguay River Basin and it should manage its responsibilities.



**Consultative workshop held with Cantera 25 de Mayo neighbourhood's community. Concepción del Uruguay.**

## **PAYSANDÚ**

### 05/12/2017 Meeting

It is cleared that no studies unrelated to investment categories or activities related to the components are financed.

Plans and other things effective to be funded are shown, there are two work pillars, Paysandú and Rio Negro.

### **Rio Negro Representatives who attended Paysandú workshop**

e.g. POT are made if a change is needed if there are climate change variables. Risk maps and whether they have or not CC scenarios. NNRR are with risk maps and SAP to see which incorporate, it is defined to deepen in the meeting aspects related to protected areas.

From the MVOTMA it is made explicit how to incorporate adaptation to POT, technical assistance to carry out adaptation, technical assistance, one to DINAGUA, e.g., To improve data through AT. MVOTMA illustrates actions by locality.

From the Municipality of Rio Negro it is asked for the political five years. Rio Negro has presented to other sources, what should be done to reconcile between various financings. It is responded that it is incremental, it can be adjusted.

MVOTMA arises how it starts running with other funds. CAF recognizes that actions can be modified, but when it is defined, it continues on the same course of action.



DINOT of Rio Negro, in the case that it is a regional strategy, regional plan and strategy, other documents.

ESTEROS del Farrapos Adaptation Plans handling areas. It is mirrored in SAP

Paysandú Representatives said

It is disclosed that the on 6<sup>th</sup> a new interagency workshop would take place on the new port access. Tomorrow it will be explained how the city of Paysandu and harbor leveling process will be. It will be a component of consultation.

Local participatory processes and ensuring consultation and tendering.

It is explained what is being presented to FA, MVOTMA thinks about networks that serve areas of intervention.

Work for the week of 22/12 is compromised.

As there has not been presence of civil society, although health and education officers of Paysandú were present, the municipality is required to provide information of consultations to incorporate them.

Officials review the total logical framework to make sure what their contribution will be.

For Paysandú there was already a definition of Barrio Union Portuaria and Ledesma and information on vulnerable people is collected on site.

#### Visit to Barrio Unión Portuaria- Ledesma - La Chapita



#### Consultation/ Validation Workshop in Paysandú

The workshop started at 4 p.m. with a brief presentation of the Global Project developed and deadlines for the presentation, by Carolina Cortes.

Then the Administration technicians presented the proposed implementation in Paysandú, in Barrios Ledesma and Union Portuaria, and urban creek and wetlands of Curtiembre.

Participants: representatives of the departmental steering group on health, land planning, environmental management, DINAVI, Climate Change/Protected Areas, the Government of Paysandú, Health Directorate, Department of Rio Negro.

Issues raised: resignification of relocation zone, Revolving Fund, wetland areas.

Social resilience, land use plans, and incorporate CC approach, e.g. signposting to know how far the river reaches, design of sustainable neighborhoods (with a specific use, public space, green). Public infrastructure design compatible with the CC and river conservation (planting trees).

Proposals: in the area of Sacra creek there is a native forest that was not included, and it could be included as retention area of flooding. It is very devastated by cutting firewood, and 3 lumber camps were found.

For the conservation of forests in that area, there are 2 problems: illegal logging and encroachment of exotic plants. If removal of exotic were promoted by woodcutters, it would help, as it could be used for fuel. But so far there is no program that tells you to cut and what not. It would be a good campaign. This activity is their way of life and it would be hard to stop being lumberjacks. Therefore, at the same time it could be promoted in the population, the use of these woods. Empowering people to distinguish and know what to cut. The woodcutter does not know what is allowed and what is not. Also train those who buy, as bakeries and the general population. The issue of invasive exotic plants is not known.

Inputs needed: training and dissemination.

For validation of Project:

Component 1.

P1. Not for Paysandú, they already have it.

P2. Include in health plans the focus on climate change. Exotic invasive (insects).

P3. It is part of developing a national methodology to assess the losses and damages on an annual basis. To see the evolution. This methodology is generated at national level and it could be used at departmental level. Included health issues, social, etc.

P4. This product will be treated at national level, and with CARU, SINAIE.

P5. Okay, nationwide.

Component 2.

P6. Ok, with the resignification.

P7. Ledesma and Union Portuaria, are in process of rehousing, and by the beginning of this project they would be relocated. In addition, the mayor has inspectors who control the area daily so that there are no new settlements in the relocated sites. There is a housing planning process. There are stages of relocation in the relocation zone. Prior environmental viability conducted in Chapita, and a study of soil. There is a prior environmental authorization from DINAMA, on the project of Port.

P8. Not for Paysandú



P9. Revolving Fund for the Port as support building mitigation to CC of Av. Brazil (look for info on number of beneficiaries), by regulation they have a specific regulation. It arises how the \$ 100,000 for the formulation of full proposal can be used.

Component 3.

P10. That's for protected areas

P11. No

P12. They make a proposal: to streams: La Curtiembre and the mouth of the Sacra. Idea of a theme park in the Curtiembre, make a path, put the posters in native forests. But the Sacra is more complex than the Curtiembre. (SEE THE PROPOSAL THAT THEY MENTION).

Component 4

P13. Paysandú participates as provider and recipient of BP.

P14. Develop the methodology and implementation of monitoring in the relocated area.

P15. They want to participate.

P16.

P17.

P18. They think of the families relocated as strategies for reconverted, or production support. Prioritizing parent households, and prioritize female headed households.

P19.

P20. Develop joint protocols (binational), for dengue. Develop contingency plan. (See how it relates to CC). That can be done with the OK of Public Health.

Ledesma and Port Union are priority.

There was a march against violence against women in the neighborhood. They have pigs and garbage. They have productive activities all year round, multitasking. No specific productive activity.



## COLÓN

### Meeting 12/06/2017 10 a.m. Mayor's office of Colón

After the presentation of the attendees, Carolina Cortes illustrates the reason for the meeting and the project guidelines.

Since Colón did not participated in the July workshop, its participation as one of the locations of the project is justified.

Cristian Brasseur, project coordinator of the Sec. Ministerial Planning of the Province of Entre Rios, suggests working on the margin of one of the streams. He mentioned that since through the national government they have received funds for the relocation, it is scheduled. They received the first advance, to 4 blocks that gave the municipality to 80 homes there. But a percentage of the people do not want to move. Some say that the coastal defense is a double edged sword, as in Santa Fe. So they do not insist so much on coastal defense as in relocation. They are also working on the issue of future sanitation of the river, in plants, including Gualeguaychu, Concordia, Concepcion del Uruguay.

In each river flooding the tourism sector is severely affected. Uruguay announced that it managed resources to complete Salto Grande (which is actually 60%), taking care not to affect the park area. In two days, if Uruguay needs to generate electricity, they open water, and they take away 60% of coastal walks, without notice nor compensation. They flooded all cities below, with serious damage. When it floods in winter it is more complicated.

Neighborhood coordinators, with enterprises, staff of the municipality, church and other groups.

Maria says UCAR will be the executing agency for projects of the National Adaptation Plan.

They invite to meet in the National Park with all authorities.

Projects in islands that are prone to flooding, and a binational park project, to try to refloat. Prefectura (National Force dedicated to coastal security) has given data, on the average rainfall. Better environmental management. Jesuit ruins with CAFES and INTI project. No impact on losses by the dam. Data are being sought to justify it.

Recovery from this area when resettlement is made and to be preserved as green public area. They have planned the intervention area and the entire relocation.

The land use plan Colón 2011, remains in force. The draft of defense was presented by the DINAPREM. The deadline to tender the coastal defense is for August 2018. 80 hectares are flooded today. The 80 homes that are being transferred are within the hectares of coastal defense. They think of the southern coastal defense that is not installed on beaches and have no negative impact on tourism.

In Concordia are considering a coastal defense embankment, and some mobile gate; Bajo Thermal Wather is a tourist area, where it was planned the planting of trees and a walkway, not done yet. Costa del Arroyo Artalaz (creek coast), next to the northern reserve and Barrio San José and coastal paths.

In short, it is proposed to work in the area formerly occupied by families who were relocated carrying a green area for public use to prevent settling of new families. Another proposal is to evaluate a study on flood prone banks of the creek. Another

proposal is to make a southern coastal defense like the city of Concepcion del Uruguay to avoid the relocation of San Gabriel neighborhood. Finally, it is proposed to work in the revolving fund for the reparation of families affected by the floods.

#### Consultation/Validation Workshop 6/12/2017 12: 30hs in El Palmar National Park

Participants: teacher linked to the PA and Farrapos civil association, director of architecture and land planning of Río Negro, he works with a pilot experience of SNAP and the municipality of Nuevo Berlin, president of the development company (San Javier), director of Parque de Esteros de Farrapos, attorney for the municipality of Río Negro, territorial organization, she works with the SNAP, Mayor of the municipality of San Javier, which has PA, social cadaster officer, Head of park ranger of El Palmar, environmental and team management technician for this project, Mayor of El Palmar National Park, Guillermo Martín-national coordinator of national parks-, participants who work in the ranch and reserve El Potrero, in Conservation and planning of El Palmar, in the CC Directorate of MVOTMA, Gabriela Pignataro, Guillermo Scarlato - manager of the ecosystems area where SNAP is located, bio marine ecosystems, general director and environment of the Province of Entre Ríos, Alejandro Miranda, representative of CAF in Bs.As. Carolina Cortes-project manager at CAF-, the environmental management of the Intendancy of Río Negro, María del Valle Peralta of MAyDS, Sandra Cesilini, Ma. José -collaborator of the environment secretary of Entre Ríos, Victoria Burgués, she works at forestry company, they have two private areas. It is also highlighted that all the people from the Uruguayan side who are present are part of the PA Specific Advisory Commission (CAE).

The meeting begins with the words of welcome from the mayor of El Palmar National Park. Then Carolina Cortes also thanks the institutions present and comments on the reason for the meeting and explains the progresses so far in the formulation of the Project. It is noted that specifically Component 3 is for PA.

Guillermo Scarlato points out that it is important to advance in an exchange work, joint learning and construction between both actors (ARG.URU). The MVOTMA and the MAyDS signed an MoU between both countries on environmental matters. Among the topics are biodiversity, response to climate change, and protected areas. They have a history of exchange, but recently they take up again with short but sustained steps, with the idea of moving forward in a general framework with concrete actions. Work in both systems: general and specific interventions. There are links in the cross-border areas. Measures and uses for CC scenarios. Contribution specifically in component 1, 3 and 4. But there may also be contributions for component 2, seeing how protected ecosystems behave in urban ecosystems. Advance in a search for cooperation that goes beyond the project itself. Interesting job opportunity, the project is very useful to leverage and continue building.

Guillermo Martín points out that he coincides with Guillermo Scarlato. Policies that have been developed for Uruguay River have been assumed. The ideas come together well, then we must analyze how to put them into practice. He wants to extend it to the biological corridors that unite both countries. It is necessary to intervene so that changes that harm the environment do not happen. Confluence on both coasts and in analyzing what can be contributed through this project so that this conjunction works.

Consider the view on conservation and then enter the considerations of other actors, such as the case of the Province of Entre Ríos. E.g. From the nursery is provided with native species for afforestation of streets (example of articulation with the urban ecosystem). There are historical sites (Jesuit ruins).

Gabriela suggests some ideas linked to the requirements of the Adaptation Fund.

They mention that parts of these issues have been dealt with by CARU, but they have difficulty moving forward because the teams are on the ropes. They raise the issues, but they do not develop them.

It is also proposed the development of baselines, such as the ATLAS of Río Uruguay, mapping, census, identifying the status of forests and ecosystems and monitoring. This information is held by CARU.

Another project with development is the issue of the binational park, corridor of biological ecosystem, which is encouraged to see a regional scale, and unites the localities. It is found in the rural areas and it gets into urban, it has the virtue of integrating, since its vision is that they are very fragmented. This project was developed binationally and has pre-feasibility in CARU. Analyze what are the doors for society to visualize this. It is not so easy to find the door of nature, for example, that there were centers of interpretation with the look of CC, and a visual space of the offices, that there is continuity. It started from the municipality of Colón and the town of Quebracho, independently on both banks. This implies the discussion of the Uruguay River. Later this project is taken by a project of pre-feasibility by a project of regional development of 2001, to consider the protection of the coasts and islands of the Uruguay River, that contrasted with the idea of construction of a condenser dam. In the framework of what is discussed, they will remain working on this project.

It is also considered the management of common measures to protect this corridor. In Farrapos there is urban activity in the park, this does not happen in the case of El Palmar. In addition, problems with 3 cases of livestock within their PA. They are small ranchers, without field. Floods make grazing difficult. In addition, there is beekeeping and fishing. And another activity is tourism within the park, that have been affected. On the Argentine side, there is no productive activity within the park.

It is raised as a theme to work, the invasive exotic species. There is loss of native forest and it affects the estuary.

It is mentioned that in addition to the actions of component 3, it would be good to consider actions that are in component 1 (plans and protocols in PA) and that Uruguay is interested in working with Argentina, since the Uruguay River will be a scenario with changes in the CC, and that is necessary to work as a broker on the part of both countries. How to adapt conservation plans and policies to the CC. And see how things and coastal ecosystems contribute to favoring protection against climate changes.

Tourism is a shared activity and is affected by the CC on both coasts. The actors affected by this activity are vulnerable to CC, this productive axis should be seen.

Uruguay agrees to work in the handling of exotic species, to do it together. Territorial organization is interested in this happening beyond the jurisdiction or who implements it. Regarding public use, it is done mostly on the coast of the Uruguay River. The Jesuit ruin is falling due to erosion to the river, it is the place next to the river, it is the most visited tourist attraction inside the park. They are being eroded by the water.

The departmental government of Río Negro also agreed on a joint project line of work, based on a territorial plan of Nuevo Berlín and San Javier (both coastal to the UR, and linked by the PA). In addition, the coastal space constitutes a territorial unit. In Río Negro, the problems in the PA and in the urban area are linked. There are people living and working in these areas, it is not only tourism for those who visit, but for those who live there.

There is a past that unites them and there is physical evidence, linked to the environmental value of the territory, built over centuries. To re-hierarchize the river, is to give it fluvial activity. Before the river was the road of circulation.

What happens to the zone of the Jesuit ruins, also affects New Berlin and Farrapos to other ruins, and beaches.

It is noted that in component 3, P10, Mapping is linked to planning and it is important that it be done. It is necessary to systematize, it is related to using information that is in the ATLAS, which is in the Cuenca del Plata program but with a view to identify, map ecosystem services, it would serve to adapt the plans in the PA.

Regarding the Binational Park, the P11. it is related to articulation of PA actions in both margins to make the purposes that both follow more effective (part of policy design and part of implementation).

Regarding P12, he believes that it could include the issues of revegetation and management of invasive exotic species. In some places the native vegetation was lost due to the substitution of exotic vegetation.

Conferences on one side and another with mixed teams from both countries (they plan together to learn and implement it together, and in very precise areas). Do the same on one side and on the other, to build trust and work together in both countries.

In the Esteros of Farrapos they are fundamental for the reproduction of the fish of the Uruguay River, in the measure that they are affected, by the degradation, produce by exotic species, then they lose the capacity to retain the sand.

Alejandro Miranda suggests that it can be discussed on the answers to avoid erosion, or reduce the difficulties in the issues raised (related to livestock, beekeeping, fishing, etc).

The biodiversity corridor approach, addresses the issue of biodiversity, and analyze how they will sustain wildlife. A problem arises, but it is not well diagnosed.

When the river falls, what comes from the cities remains in the river, and it is expected to improve it as well as the tourist view, and the demand for the coast in San Javier, because it is increasing.

Zavala, says that given the needs that require political commitments, Uruguay and Argentina have a deliberative body, which share with Brazil, studies and political decisions are required. He proposes to determine the measures that are needed, the quickest, the ones that can be solved today, with the little money that is going to be available. We must analyze what can be done at this time with the 3 million dollars.

Victoria asks if it is feasible to make terraces in the area of the ruins and mentions other measures that are durable over time. They tell her that the executive project was being developed by CAFESG (the administrator commission of the surplus funds of Salto Grande) but they did not manage to do so. Yes, and it is a concrete project to execute. The stage of the executive project was reached.

Guillermo Sacarlato, points out that there is a part of work that has to do with adjusting the plans and areas with CC. It would imply vulnerability analysis and the

different ecosystem services that are derived. Among the options identified as necessary, are actions to address coastal erosion: exotic plants care, and that can be evaluated with a baseline, an intermediate evaluation and a final evaluation.

Another issue that it proposes to incorporate thinking about the PAs and the actors that perform their activity in the PAs, are the mechanisms of early warning against high vulnerability, to prevent when a flood comes.

José, considers that the environments are resilient, but the ruins are not. You play against the clock, the CC falls on the river, the erosion. The ruins have 2 projects, an executive project of the CAFESG and another project generated by the INTI, but not integrated with the other. It is needed a more general view of the ruins and act fast. It is a legacy of the Province of Entre Ríos.

Carolina, suggests calling it an update of the new project to implement it.

Castelli, highlights that one of the important pieces is the improvement of the coastal edge of the Department of Río Negro. They need the ability to translate what the studies say. Improve the arrival of boats, and promote tourism activities. Towards the north of San Javier is the Old Port, a spa and tourist place, to identify where to build the hotels.

Simon, mentions the amount of fish that die after each flood. And when exotic vegetation grows. The native flora dies (graminia, ceibo), for it has to do with the contaminants of agrochemicals, tanneries etc. This comes from Brazil. Animals lose their hair in the flood, and other issues that harm them.

There are problems of development and climate change, which are mixing. Analyze how much of the erosion comes from the effects of the change in the dynamics of water use by the dam. From the dam, the Farrapos channels collapsed and produced a very large environmental change.

Pilot cases have to be done to restore environments and coasts, where impacts have already occurred or are occurring.

GS. He believes it is possible to say today which coastal ecosystem restoration actions, integrating with exotic control and revegetation with natives. They are expensive actions of green infrastructure, require a capacity development of both countries, with teams working in the field. They have to be seen as part of the same issue, and i speaks as a response to climate change phenomena.

The project in its first stage finishes adjusting (with baseline, service identifications) and then it will continue to adjust in the development of the project.

Add historical value to the system, natural cultural heritage.

A priori, everything ok with the heritage safeguards.

If the project can leverage actions with these exotic issues it would be very good because they are expensive actions.

Regarding component 4, they are interested in working on it, in the design of the project. Discourse development, and positioning of the environmental issue as a tool for development. Since PA and Biodiversity want to be part, there are cultural changes. Particular theme of the parks: Jesuit ruins

Beekeepers with floating on tanks for risk. And for farmers ...

Analyze the issue of environmental cultural heritage on both coasts (see with Paola).

See the theme of historical sites as they continuously receive students and tourists, and schools.



In summary, both countries propose working on protected areas. It is proposed to provide protection for the Jesuit Ruins that are within the El Palmar National Park and that are in danger of collapse due to the erosion of the coastal zone. In the binational field, it is proposed to develop maps, atlases, censuses, baselines, integrating a more urban rural interface in an integral format. There is some background to a pre-feasibility study that CARU has. National Parks will send the formal proposal.

**Meeting SNAP, APN, CAF, Representatives of Private Reserves network, Representatives of Province of Entre Ríos and Consultant in Parque Nacional El Palmar (Province of Entre Ríos, near Colón)**



Visit to El Palmar



**Parque Nacional El Palmar and it coast, visit with National Park Authorities**





### **Cultural Heritage Jesuits Ruins in Parque Nacional El Palmar**

#### Consultation/Validation Workshop in Colón

The activity began at 4:00 pm with the presentation of the guidelines of the Project and then the work of prioritizing the proposed actions in three groups. It is worth mentioning that in addition to Colón organizations, organizations from Paysandú also participated.

It is pointed out that tourism is the main income to the city, low thermal area. There is a lagoon and stream is the last thing to drain. Act as a buffer.

Regarding the flooded homes, it is mentioned that, in the flood of 2015, the elevation reached 10.40 meters. 1600 evacuated. High public expenditure.

It is possible to create green and recreational spaces in the San Gabriel neighborhood. So that there is no recidivism of people who settle there again. Create public green space for young people and neighbors. Social and recreational space.

Many people on the banks of the stream La Leche, which are flooded.

Evita Street is like a well, they are usurped land, they are under level 10., then 6 blocks away the stream, and water enters through there, how can that street be drained? Or make a retaining wall and gate in the stream so that it does not "enter" the city. And they propose to fill the land.

32 families have been rehoused. Those who do not want to go are helped by the municipality. Many went by judicial order, by a resolution of the municipality. The places became parks.

The situation of being flooded is naturalized, and they get the furniture by donation. it's a lifestyle. All places are usurped and flooded.

The owners of some well-built houses that are in the area, for the view to the river, and other houses are rented in the meantime.

There is a working group that want to make retaining walls. Here at some point it was spoken, but it was discarded.

The value of green spaces is proposed so as not to have more settlements there, and to carry out plantations of native species that have greater water absorption.



**CONCORDIA**

Meeting 7/12/2017, 10: 20 a.m. Intendancy of Concordia -Centro de Convenciones de Concordia

The framework of the Project is presented, and the national framework on climate change issues, based on the political agreements of Argentina with Uruguay and Brazil, in which this project linked to the Uruguay River is framed.

Participants: Secretary of Public Works and Services, Technical Manager of Sanitary Works, officer of the Area of Territorial Approach, of Environmental Sanitation, of Coordination of Environmental Development, of Public Works of the municipality, and of Waste Management. Later the Mayor joined the meeting.

They indicate that they have been working and visited the most affected area on another occasion, and highlight the mayor's interest in working together and continue to make progress in the realization of this initiative. And they are grateful for being able to carry out initiatives in the city.

They affirm that the quantity of rains has increased, in addition to the flood of the Uruguay River in the last years. The people who work in the field with the neighbors are the ones who can best tell the needs.

Carolina Cortes describes the progress of the project and the logical framework under construction. The deadlines for the presentation of the proposal are mentioned.

The officials of the Province of Entre Ríos point out that they have been talking about P.8, of the second component. They are in the process of relocating 350 families to be relocated, an area of great affectation due to the flooding of the Uruguay River. Some of these families already relocated, need to improve basic services (100 families relocated so far in several neighborhoods), to be better and not discourage the next families to be relocated.

In December 2015, the families of the new program began to move with public funding. Where the families were taken, landscaping, paving, etc. will be done.

In 2013, people were moved in the neighborhoods, and they did it with their own funds.

From the municipality it is pointed out that Concordia is a thermometer on what the CC affects. Now the floods are very abundant, before every 3 years and now every year. Relocations have been made with own funds (which did not get to do all the sanitation services, sewers, river drains, waters), and a large one with external financing.

Carolina states that she was talking about what happened to the people who relocated so that they would not return, and at that time they talked about P.18 about work reconversion, but she says that it is not easy to explain the link with CC.

They have seen a significant change in the new houses that are very good and with conditions, but it is hard to see how to justify it is about CC.

The team of the province mentions that the municipality went out to look for land as it could, but they did not cover all the services.

Carolina also points out that by the photos it is not safe for people to return to the floodplains. They respond that the places visited in July are the sector that was relocated by a program for external financing. The places where they want to work are in the relocations with their own funds.

But the issue is that the problem is not solved to people.

Carolina proposes to work on the place where they were evacuated, instead of where they were relocated. But the purpose of the fund is not to improve the conditions of the population.

Veronica points out that the line of work on relocation in Concordia would be important to encourage, to publicize this experience and that it can be replicated in other areas. Something that helps new families with the possibility of relocating, what they want to do.

Consultation on the coastal protection that generates a constant coastal erosion, the water treatment plant. San Carlos area.

1500 meters of coast protection, to protect the plant and a sector of the coast. The cost depends on the length in which it is made (2 million dollars for 1000 meters). And the plant has approximately 300 meters. The water treatment plant takes water from the river and takes it to a hill, and the soil of that mound is eroding by the river, but in the short term it is at risk (intake of river catchment) and it is provision of potable water from Concordia. It's just an idea, there's no project. There is something about the decision made by CAFESG (the administrator commission of the surplus funds of Salto Grande) but there is no solution project. There is an assessment.

Normally, it could be 5% or 6% of the work, as to estimate the costs of the studies.

There were exchanges with the people of Salto and the project was presented to the CARU.

They have a project in Playa Nebel (central zone of Concordia that wants to give a protection treatment similar to that of the Concordia waterfront), and have an advanced project of protection and landscaping. It is next to the village.

They say that the neighbors agreed to leave in bad conditions, they did what they could. It is a division of lands bought by the people where they still live in boxes, in precarious wooden houses. They just drilled water, they do not have a sewer, they do not have a community center. Unsatisfied expectation, picket and route cut. Approach the expectations of the neighbors with a lot of care. Many times the neighbors of the places where they are installed are not consulted.

They had weekly meetings with the affected neighbors. That is a very rich source of information, try to recover that work and give continuity. They talk about recovering from the coastal defense towards the river. So far the coastal defense does not cover Nebel Norte, and that's why they consider it better to work. Coldaroli Street, is being thought to make a coastal road with coast protection that has no defense and has families living. Around 20 families would move financed by the government.

a) Coastal protection to the water treatment plant, to avoid erosion process (could give the budget). If the plant falls, the cost is very high. Mireya is the contact for this project.

b) Recovery of floodplain, Playa Nebel, with the relocation of 20 families underway, that is continuing a project that is underway. It is a protection (repeat the Concordia waterfront in a nice area, but eroded, it will continue to flood, but erosion is prevented from advancing) approx. 1000 meters.

c) Analyze flood areas with problems to be able to make storm drains. Systematization of storm drains. The social impact is wider. Record of rains of the last two years (in hydraulics of the Province of Entre Ríos), social assistance expenses. This year, due to rain problems 10 times, the flooding of the river is 1 a year. The greatest impact is the flood caused by the river, but the most important response is that of storm drains. The one of the water treatment plant impacts to many settlers. See water runoff plant. For relocation they are with the National Secretary of Housing. Habitat Program.

Both projects can be defended, but the necessary budget must be analyzed.

They have an early warning system. In Entre Ríos it includes Federal, Feliciano, La Paz and Santa Elena (with UNDP support). Ten days before to know how to deal with the

flood. They do it in conjunction with Nation. A system linked to the meteorological and hydrological warning system. They feed the national provincial network and the Cuenca del Plata.

The Mayor of the city, Enrique Cresto, joined the meeting, and a summary of what was previously discussed with his work team was presented.

He notes that he had meetings with several agencies and has obtained funding only for some projects.

He mentions a meeting with CAF and the rest of the intendants. He points out that CAFESG (the administrator commission of the surplus funds of Salto Grande) is acting as a consultant with qualified human resources, and a project for the water treatment plant is being presented. As these surpluses disappeared (which were for coastal protection and this type of projects) then now they have the projects.

He emphasizes the importance of the construction of sewers and the installation of water for conflicted relocated neighborhoods. Another issue is that of storm drains.

He mentions that the city of Concordia is the most affected by the floods and by the Salto Grande dam. In the last flood, they had 12,000 people evacuated, and then Salto follows. This river fluctuates in 12 meters.

The budget and the distribution of funds between Argentina and Uruguay is clarified, given that the mayor inquired about the criteria used for the distribution of funds in each city.

The province clarifies that they decided the cities involved as the most affected.

The intendant proposes to focus on coastal protection, so that the project is more viable. They have all the projects done.

The erosion of the San Carlos area, for example, can be observed in google maps.

#### Visit to the Concordia water treatment plant in risk by floods and eroded coastal area







## **SALTO**

### Meeting 8/12/2017, 11 a.m. Intendencia of Salto

Participants: director of special investment and development projects, territorial management of the MVOTMA, environmental ecosystem area, CC division of MVOTMA, Mónica division of CC, national division of waters, water management of MVOTMA, territorial management office (Intendancy), works director (Intendancy), Carolina and Alejandro (CAF) and Sandra (Project consultant).

Mariana Kasprzyk comments on how the idea of this project came about and where a cooperation agreement between both countries was established, and the possibility of presenting regional projects on CC. In this framework it was seen that CAF could be the institution to help them present the project, and so far the pre-concept note was elaborated and approved. There is still to present the conceptual note and the complete proposal. From the municipality it is mentioned that the activities in this town, the Salto plan, will serve as a base.

Mónica points out that the workshop that will be held this afternoon will be a validation workshop on what began to work in the July workshop and what advanced in the pre-concept note. Every time we will advance in the detail and specifications of the projects, therefore, the work with the intendancies and the work with the community will increase. Since the community must be involved from the stage of formulation of the project through consultations and participation spaces.

Then Carolina briefly explains the progress of the Regional Project, and the role of CAF. Before the consultation on the distribution of the funds, it is clarified that it has been originally thought that the distribution is 50% so that they support the actions of each country.

They explain that work is being carried out on the relocation of 38 homes, which is currently under construction. Then we will continue with a second stage of the construction of 40 houses. And they will also build a square.

Zona Ceibal: one of the affected areas.

The wetland Zone: another affected zone.

After the last flood, 9 families lost everything, and are the beneficiaries of this first stage of housing. As an intendancy, they plan to throw everything down and make public spaces, or that some club take it on loan and make some type of beach, or court. But some lands are public, others private, and others do not know who they belong to; That is why it is a complex situation.

In Quiroga flooded people have been relocated, but some have received housing, but have returned to the river, so they are working on how to avoid this.

Some people are not willing to share the place or live with other families. Others do not want to leave because of the family environment they have in the neighborhood (school nearby, store nearby). Sometimes, the children want to go to another neighborhood, but the mother and grandmothers don't.

Although these issues are linked to works, it is important that the social area is incorporated, as it crosses them. In addition, in these neighborhoods they are working with national programs. It observes that a control and monitoring system has not been institutionalized, and the resignification of those spaces has failed. Phenomenon of occupation of the coastal zone.

Natural rural area that is protected on the settlements, but is where several families have settled in recent times. There are many spaces that have been reoccupied after families have been relocated. Zone of the coastal strip of the natural rural area: it is between the Caballada (the refrigerator) to Arenitas Blancas. It is close to the city (Neighborhood Improvement Program, which includes regular and irregular areas). It is intended to make an intervention, as a partial plan. Due to the characteristics of the land, they do not believe that it is best to build a corridor with recreational spaces.

Monica also mentions the case of the territorial police in Paysandú, linked to the judicial power.

In the water plan, there are several consultancies, which Mónica points out that could be channeled through the Project. It is mentioned that it is necessary to elaborate a protocol of procedures.

They have already made progress in the study of soil priority; the TDR and the call have been made. Salto was prioritized.

They evaluate if they can be centralized in any project derived from the water plan.

The intendancy must define the sectoral water plan, and based on that, these projects can be supported. In the Intendancy, they have a risk map.

Adaptation of stock: these are frequently affected homes with historical and patrimonial value, which would require adaptation measures.

Analyze to delimit an area and amount to reform and then think about a percentage of adherence and think about a Revolving Fund. It enters as an investment, but allows a permanent fund. They would act as soft loan funds. With repayment, but without interest, managed by intendencia or another agency.

The beneficiaries would be private homes and businesses, to promote improvements and measures to adapt to floods. Successful experience on the Revolving Fund in the GOE neighborhood in Montevideo, which had a 100% refund. It is thought for the mouth of El Sauzal, which has heritage value, and there is an orange area of the risk map.

They have a project aligned with what the municipality has been doing, improving the coastal strip, avoiding occupations, it is a flood zone. Must equip this area to handle the issue of river changes.



It is linked to roads with the railway that went to Artigas. Stock adaptation measures in the population that is installed in the area. Approximately two lines of blocks are flooded.

Evaluation:

- Improvements in the areas to relocate. To be reoccupied, with a resignification and equipment of vacant land. Approximately 40 homes.

- the project at the in the Sauzal creek is linked with stock adaptation.

They explain that the land use study would be ready for next year.

Regarding the second stage of works, the plans were already presented, and they begin in 2018, will last approximately 10 months.

It is proposed to evaluate what happens to the problem identified in the area that they reoccupy, if there are other funds available for territorial police.

Some time ago, the muelle negro began to recover, the one that crosses the Sauzal stream, and arrives at the parquet lineal, parallel to the calle 14th of April. Project Parque Lineal El Sauzal.

The equivalent to the validation workshop will be done through a review of the documentation already made by the Intendancy on community consultations.





**Representatives of: Intendencia of Salto, government of Uruguay, CAF and Consultant.**

Visit to Muelle Negro, and the lineal zone El Arroyo Sauzal (Sauzal creek)



## Appendix I: Mission Agenda

DATE	TIME	PLACE	ACTIVITY	PARTICIPANTS
<b>Domingo 3 de diciembre</b>	08:30	Rivadavia 1128, CABA	Salida a Concepción del Uruguay	Carolina Cortés, Alejandro Miranda, Sandra Cesilini
<b>Lunes 4 de diciembre</b>	10:00 – 12:00	<b>Concepción del Uruguay- Argentina</b> Municipalidad de Concepción del Uruguay Domicilio: San Martín 697	Reunión con Municipio.	Secretaría de Ambiente de la Provincia mediante Roberto Zabala, Verónica Viduzzi, María José Migliora y Sandra Sánchez Autoridades del Gobierno Provincial de Entre Ríos y autoridades locales, CAF, Representante de Ministerio de Ambiente Nación.
	16:00 – 19:00	Salón de capilla San José. Domicilio: Calle Santa Teresita y Larroque.	Taller con la comunidad.	Autoridades del Gobierno Provincial de Entre Ríos y autoridades locales, Representante de Ministerio de Ambiente Nación. Secretaría de Ambiente de la Provincia mediante Roberto Zabala, Verónica Viduzzi, María José Migliora y Sandra Sánchez CAF y Organizaciones de base convocadas por el Municipio.
<b>Martes 5 de diciembre</b>	12:30 – 14:30	<b>Paysandú – Uruguay</b> Edificio Municipal	Reunión con Intendencias de Paysandú y Río Negro	Autoridades locales, CAF, Representantes de MVOTVA Uruguay
	16:00 – 19:00	Casa de la Cultura Sala Elsa Morales	Taller con la comunidad	MVOTMA envió lista de participantes, organizaciones de base, OSC e intendencias
<b>Miércoles 6 de diciembre</b>	10:00 – 12:00	<b>Colón- Argentina</b> Municipalidad de Colón Domicilio: 12 de abril 500	Reunión con Municipio.	Autoridades del Gobierno Provincial de Entre Ríos y autoridades locales, CAF, Representante de Ministerio de Ambiente Nación. Secretaría de Ambiente de la Provincia mediante Roberto Zabala, Verónica Viduzzi, María José Migliora y Sandra Sánchez, CAF, Intendente de

				Parques.
	13:00 – 15:00	<b>Parque Nacional El Palmar</b>	Reunión SNAP / APN y otros actores públicos, privados y sociales	Francisco Bergós (regional SNAP en el Litoral Oeste); Gabriel Pineda (director del Parque Nacional Esteros de Farrapos); Gabriela Pignataro (División Cambio Climático); Pablo Urruti (División Biodiversidad); Guillermo Scarlato y Intendencia de Río Negro, Municipios de San Javier y Nuevo Berlín y organizaciones de productores rurales y otros actores locales vinculados al Parque Nacional Esteros de Farrapos  Secretaría de Ambiente de la Provincia mediante Roberto Zabala, María José Migliora y Sandra Sánchez. Actores públicos y privados, sociales/ nacionales, provinciales y locales  CAF
	16:00 – 19:00	"El Mangrullo" Domicilio: Evita 224	Taller con la comunidad	Secretaría de Ambiente de la Provincia mediante Roberto Zabala, verónica viduzzi, María José Migliora y Sandra Sánchez (a confirmar) CAF Representante de Ministerio de Ambiente Nación. Organizaciones de Base convocadas por el Municipio
<b>Jueves 7 de diciembre</b>	10:00 – 12:00	<b>Concordia- Argentina</b> Municipalidad de Concordia Domicilio: Mitre 76	Reunión con Municipio	Autoridades del Gobierno Provincial de Entre Ríos y autoridades locales, CAF, Representante de Ministerio de Ambiente Nación.
	16:00 – 19:00	Centro de Interpretación Ambiental Arroyo	Taller con la comunidad	Autoridades del Gobierno Provincial de Entre Ríos

		Manzores Domicilio: Salta y Néstor Kirchner		Secretaría de Ambiente de la Provincia mediante Roberto Zabala, Verónica Viduzzi, María José Migliora y Sandra Sánchez y autoridades locales, Representante de Ministerio de Ambiente Nación. CAF y Organizaciones de base convocadas por el Municipio
<b>Viernes 8 de diciembre</b>	10:00 – 12:00	<b>Salto- Uruguay</b> Edificio Municipal	Reunión con Intendencia	Autoridades locales, CAF, Representante de MOTVA Uruguay
	14:00 – 16:00	Palacio Córdoba Intendencia de Salto	Taller con la comunidad. Incluye actores de Salto y Bella Unión (Artigas), comprendiendo actores relacionados al área protegida Rincón del Franquía	Autoridades locales, CAF, Representantes de MOTVA Uruguay, organizaciones de base y OSCs.

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## Appendix II: Preliminary Logframe to be validated

Project Components	Expected Results	Expected Outputs	Countries
<b>1. Territorial Planning and Risk Management</b>	i) The departmental and provincial governments have been strengthened by including CC scenarios in their planning and management instruments and by strengthening their institutional capacities	1. Territorial planning plans were revised/updated including the perspective of CC and strategies for access to urban land, considering flows and return periods of the Uruguay River.	Uruguay - Argentina
		2. Programs, sectoral plans and protocols of the protected areas, housing, water and health were designed or updated considering the adaptation to climate change	Uruguay – Argentina
		3. Methodological guides were designed for the evaluation of damages and losses.	Uruguay – Argentina
	ii) The governments of Argentina and Uruguay updated and implemented CCA measures in a coordinated manner.	4. Communication strategies and resources of Early Warning System for the vulnerable coastal cities of the Uruguay River were designed and implemented.	Uruguay - Argentina
		5. Support was provided for the implementation of regional risk and disaster management plans on the coast of the Uruguay River including CCA.	Uruguay - Argentina
		6. The implementation of the Determined Contributions of Argentina and Uruguay was supported for the national adaptation processes based on pilot experiences.	Uruguay – Argentina
<b>2. Priority actions to increase urban resilience.</b>	iii) The coastal cities of the Uruguay River increased their resilience to the CC by implementing urban, environmental, social, economic and financial adaptation measures.	7. The lands available for resettlement were recovered including executive project, participatory technical design and social validation. The implementation includes construction and equipment.	Uruguay - Argentina
		8. Technical assistance for sustainable urban infrastructure in new resettlements. It includes design and implementation of potable water systems and sewers adapted to the new climatic conditions.	Uruguay - Argentina
		9. Financial measures were designed and implemented for CCA (revolving funds, insurance, among others), regulations and housing improvement for high and medium risk areas.	Uruguay – Argentina
<b>3. CCA measures for the conservation of the ecosystems</b>	iv) Implemented on both banks of the Uruguay River ACC measures based on ecosystems that increase their	10. Services and ecosystem benefits, contributions to the CCA and connectivity of the ecosystems of the Uruguay River were evaluated and mapped.	Uruguay – Argentina
		11. New ecosystem-based CCA	Uruguay -

of the Uruguay River	resilience	strategies were designed and implemented, including pilot experiences based on erosion/ sedimentation and other impacts.	Argentina
		12. The selected coastal areas of the Uruguay River were restored/recovered through revegetation with native species.	Uruguay - Argentina
4. Priority measures to increase social resilience.	v) Communities and social organizations increased their resilience by sharing climate risk management and CCA strategies.	13. Binational strategies were shared in training and good practices in adaptation concerning the management and adaptation of climate change risks, planning, territorial police, adaptation of housing infrastructure and recovery of available land.	Uruguay – Argentina
		14. Analyzes and monitoring tools for social vulnerability were developed with a focus on human rights, gender and generations.	Uruguay – Argentina
		15. Methodologies of social risk perception and participatory vulnerability reduction strategies were developed.	Uruguay - Argentina
	vi) ACC measures were strengthened and appropriated by the community through awareness-raising actions, making them more sustainable.	16. Social networks were strengthened through the exchange of CCA strategies and local risk management.	Uruguay - Argentina
		17. Existing networks were strengthened by sharing local experiences.	Uruguay – Argentina
		18. Labor reconversion strategies were developed for relocated families, reducing their vulnerability.	Uruguay – Argentina
		19. Communication and dissemination strategies were implemented to reduce vulnerability.	Uruguay - Argentina
		20. Instruments, information and good practices of CC related to health were shared.	Uruguay - Argentina

# Annex III: Assistance sheet

## List of Attendants Concepción del Uruguay

Concepción del Uruguay - Reunión Interdependencia  
4/11/2017



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Concepción del Uruguay - Interdependencia  
4/12/2017



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Contrata y Trazado de Obras  
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Cortés Cecilia

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FABIAN DAHET (DEFENSA LINEA PROVINCIA)

MIGUEL DUPONT (D.C.)

WILMA SOSA / VIRGINIA SANSON / SERGIO VARELA

QUEO DE INICIADA LA REUNION, SE SUMO MAS GENTE ACOMPAÑADA.

25 PERSONAS PRESENTES



- June 04/12/17

- Oscar Noir 15418225  
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- Sergio Bertelotti 15523109  
DEC SALUD
- Fernando Beycond 15559376  
OBRAS SOCIALES
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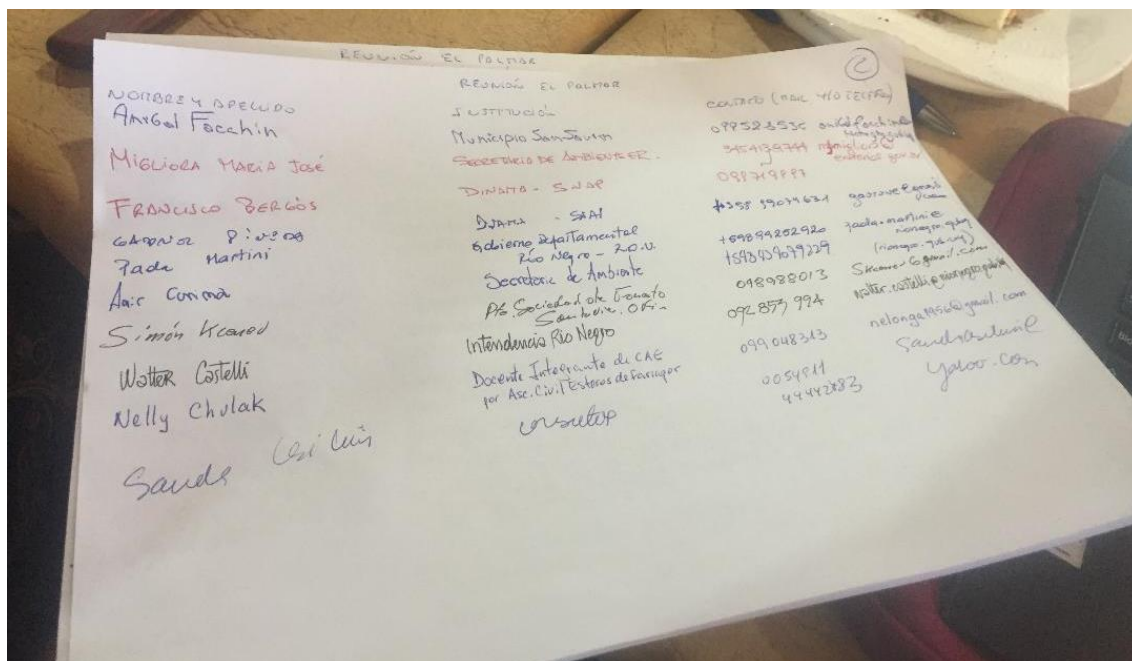
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REBOREDO, MARTIN	SECRETARIA DE OBRAS Y SERVICIOS PUBLICOS	SECRETARIA DE OBRAS Y SERVICIOS PUBLICOS
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Carolina Cortés	CAF	CAF
Sandra Quiroga	consultora	consultora

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GABRIEL PIVON	DINAMA - SNAE	DINAMA - SNAE
TADA MARTINI	DINAMA - SNAE	DINAMA - SNAE
AIR COMMA	DINAMA - SNAE	DINAMA - SNAE
SIMON KICARD	DINAMA - SNAE	DINAMA - SNAE
WALTER COSTELLI	DINAMA - SNAE	DINAMA - SNAE
NELLY CHULAK	DINAMA - SNAE	DINAMA - SNAE
Sandra Quiroga	consultora	consultora



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Taller en Salto (p/2 tarde)

## PROJECT: “Climate Change adaptation in vulnerable coastal cities and ecosystems of the Uruguay River”

### ANNEX 6. Social and Environmental Risks Screening and Risk Identification

Using the [UNDP Social and Environmental Screening Procedure Guideline](#), the Social and Environmental Risks Screening Checklist and the Identification and preliminary Management of Social and Environmental Risks were developed.

#### a. Social and Environmental Risks Screening Checklist

#### Potential Social and Environmental Risks Screening Checklist

Checklist of environmental and social principles	Questions	Yes / No
	1.1. Does the Project / Programme demonstrate any incompliance with any applicable domestic law?	Arg – NO



Checklist of environmental and social principles	Questions	Yes / No
1. <i>Compliance with the law</i>		Uru - NO
	1.2. Does the Project / Programme demonstrate any incompliance with any applicable international law?	Arg – NO Uru - NO
2. <i>Access and Equity</i>	2.1. Could the Project / Programme hold a risk of any group not being adequately informed and engaged to access the range of project benefits?	Arg – NO Uru - NO
	2.2. Could the Project / Programme obstruct access of any group to the essential services and rights stipulated in the Principle? (e.g. Health services, clean water and sanitation, energy, education, housing, safe and decent working conditions, and land rights)	Arg – NO Uru - NO
	2.3. Could the Project / Programme potentially restrict allocating and distributing project benefits to any groups and particularly with respect to marginalized or vulnerable groups?	Arg – NO Uru - NO
	2.4. Could the Project / Programme likelihood lead to discrimination or creating favoritism in accessing project benefits?	Arg – NO Uru - NO
3. <i>Marginalized and Vulnerable Groups</i>	3.1. Could the Project / Programme have adverse impacts on enjoyment of lifestyle, livelihood of the affected population and particularly of marginalized and vulnerable groups?	Arg – NO Uru - NO
	3.2. Could the Project / Programme potentially restrict availability, quality of and access to resources or basic services, in particular to marginalized individuals or groups?	Arg – NO Uru - NO
	3.3. Is there a likelihood that the Project / Programme would have inequitable or discriminatory adverse impacts on affected populations, particularly people living in poverty or marginalized or excluded individuals or groups?	Arg – NO Uru - NO
	3.4. Is there a likelihood that the Project / Programme would exclude any potentially affected stakeholders, in particular marginalized groups, from fully participating in decisions that may affect them?	Arg – NO Uru - NO
4. <i>Human Rights</i>	4.1. Could the Project / Programme lead to adverse impacts on enjoyment of the human rights (civil, political, economic, social or cultural) of the affected population and particularly of marginalized groups?	Arg – NO

Checklist of environmental and social principles	Questions	Yes / No
		Uru - NO
	4.2. Is there a risk that rights-holders do not have the capacity to claim their rights?	Arg – NO Uru - NO
	4.3. Is there a risk that duty-bearers (local communities or individuals) will not get an opportunity to raise human rights concerns regarding the Project / Programme during the stakeholder engagement process?	Arg – NO Uru - NO
	4.4. Is there a risk that the Project / Programme would exacerbate conflicts among and/or the risk of violence to project-affected communities and individuals?	Arg – NO Uru - NO
5. <i>Gender Equity and Women's Empowerment</i>	5.1. Is there a likelihood that the Project / Programme would have adverse impacts on gender equality and/or the situation of women and girls?	Arg – NO Uru - NO
	5.2. Would the Project / Programme potentially reproduce discriminations against women based on gender, especially regarding participation in design and implementation or access to opportunities and benefits?	Arg – NO Uru - NO
	5.3. Is there a risk that the Project / Programme do not allow women's groups/leaders to raise gender equality concerns regarding the Project implementation?	Arg – NO Uru - NO
	5.4. Would the Project / Programme potentially limit women's ability to use, develop and protect natural resources, taking into account different roles and positions of women and men in accessing environmental goods and services? (e.g. activities that could lead to natural resources degradation or depletion in communities who depend on these resources for their livelihoods and well being).	Arg – NO Uru - NO
6. <i>Core Labour Rights</i>	6.1. Is there a risk that the Project / Programme infringe the freedom of association and the effective recognition of the right to collectively bargaining? (ILO 87 and ILO 98)	Arg – NO Uru - NO
	6.2. Is there a risk that the Project / Programme develop any forms of forced or compulsory labour? (ILO 29 and ILO 105)	Arg – NO Uru - NO



Checklist of environmental and social principles	Questions	Yes / No
	6.3. Does the Project / Programme, due to its characteristics, have associated risks relative to the presence of child labour? (ILO 138, ILO 182)	Arg – NO Uru - NO
	6.4. Does the Project / Programme, due to its characteristics, have associated risks relative to discrimination in respect of employment and occupation? (ILO 100 and ILO 111)	Arg – NO Uru - NO
	6.5. Does the Project / Programme have associated occupational risks that are inherent to the activities carried out in the construction and/or operation phases? (e.g. electrical risks, physical risks, mechanical risks, chemical risks, psychosocial risks, biological risks, and/or ergonomic risks).	Arg – NO Uru - NO
	6.6. Does the Project / Programme, due to its characteristics, have associated risks such as fire, explosion, flood, leak of toxic, irritant, or corrosive gasses, spills (uncontrolled) of dangerous chemical products?	Arg – NO Uru - NO
	6.7. Would the Project / Programme directly or indirectly involve undermining an employment or livelihoods that comply with national and international labor standards? (e.g. principles and standards of ILO fundamental conventions)	Arg – NO Uru - NO
7. <i>Indigenous Peoples</i>	7.1. Are indigenous peoples present in the Project / Programme area (including Project area of influence)?	Arg – NO Uru - NO
	7.2. Could the Project / Programme hold a risk of indigenous families or communities not being adequately informed and engaged to access the range of project benefits?	Arg – NO Uru - NO
	7.3. Could the Project / Programme potentially restrict allocating and distributing project benefits to indigenous communities?	Arg – NO Uru - NO
	7.4. Is there a potential for forced eviction or the whole or partial physical or economic displacement of indigenous peoples, including through access restrictions to lands, territories, and resources?	Arg – NO Uru - NO
	7.5. Would the Project / Programme potentially affect the Cultural Heritage of indigenous peoples, including through the commercialization or use of their traditional knowledge and practices?	Arg – NO Uru - NO

Checklist of environmental and social principles	Questions	Yes / No
8. <i>Involuntary Resettlement</i>	8.1. Would the Project / Programme potentially involve temporary or permanent and full or partial physical displacement?	Arg – NO Uru - NO
	8.2. Would the Project / Programme possibly result in economic displacement (e.g. loss of assets or access to resources due to land acquisition or access restrictions – even in the absence of physical relocation)?	Arg – NO Uru - NO
	8.3. Is there a risk that the Project / Programme would lead to forced evictions? <sup>1</sup>	Arg – NO Uru - NO
	8.4. Would the proposed Project / Programme possibly affect land tenure arrangements and/or community based property rights/customary rights to land, territories and/or resources?	Ch Arg – NO Uru - NO
	8.5. Does the Project / Programme require the purchase of land for its implementation? (the answer is yes even if only one property needs to be purchased).	Arg – NO Uru - NO
9. <i>Protection of Natural Habitats</i>	9.1. Is the Project / Programme implemented in or near natural or critical habitats? (e.g. example, primary forests, coral reefs, mangroves, moors).	Arg – YES Uru - YES
	9.2. Would the Project / Programme potentially cause adverse impacts to habitats (e.g. natural, and critical habitats)?	Arg – NO Uru - NO
	9.3. Are any Project / Programme activities proposed within or adjacent to environmentally sensitive areas, including legally protected areas, areas proposed for protection, or recognized as such by authoritative sources and/or indigenous peoples or local communities? (e.g. nature reserve, national park).	Arg – YES Uru - YES
	9.4. Is the Project / Programme implemented in and affect areas with conservation value designated with international recognition? (e.g. Ramsar site, natural heritage of humanity, biosphere reserve, AICA).	Arg – YES Uru - YES

<sup>1</sup> Forced evictions include acts and/or omissions involving the coerced or involuntary displacement of individuals, groups, or communities from homes and/or lands and common property resources that were occupied or depended upon, thus eliminating the ability of an individual, group, or community to reside or work in a particular dwelling, residence, or location without the provision of, and access to, appropriate forms of legal or other protections.

Checklist of environmental and social principles	Questions	Yes / No
	9.5. Does the Project / Programme involve harvesting of natural habitats, plantation development, or reforestation?	Arg – NO Uru - NO
	9.6. Does the Project / Programme include the use of tropical species? (e.g. agricultural crops, animal farming, aquaculture, forestry plantations).	Arg – NO Uru - NO
10. <i>Conservation of Biological Diversity</i>	10.1. Does the Project / Programme pose a risk of introducing invasive alien species?	Arg – NO Uru - NO
	10.2. Is there a potential of a significant or unjustified reduction or loss of biological diversity?	Arg – NO Uru - NO
	10.3. Is the Project / Programme implemented in areas holding a significant value for biodiversity? (e.g. populations of endemic species, species classified as in critical danger, danger, or vulnerable in the red list, or permanent or seasonal aggregations).	Arg – NO Uru - NO
	10.4. Does the Project / Programme involve changes to the use of lands and resources that may have adverse impacts on ecosystems and associated biodiversity?	Arg – NO Uru - NO
	10.5. Would any of proposed Project / Programme activities pose risks to endangered species?	Arg – NO Uru - NO
	10.6. Does the Project / Programme include the use of live resources of the native biodiversity? (e.g. fishing, agricultural crops, animal farming, aquaculture, or forestry)	Arg – NO Uru - NO
	10.7. Does the Project / Programme involve the production and/or harvesting of fish populations or other aquatic species?	Arg – NO Uru - NO
	10.8. Does the Project / Programme involve utilization of genetic resources? (e.g. collection and/or harvesting, commercial development)	Arg – NO Uru - NO

Checklist of environmental and social principles	Questions	Yes / No
11. <i>Climate Change</i>	11.1. Does the Project / Programme emit during its life cycle > 25 000 tons of CO2 equivalent / year? <sup>2</sup>	Arg – NO Uru - NO
	11.2. Would the proposed Project / Programme be susceptible to or lead to increased vulnerability to earthquakes, subsidence, landslides, erosion, flooding or extreme climatic conditions?	Arg – NO Uru - NO
	11.3. Is the proposed Project / Programme likely to directly or indirectly increase social and environmental vulnerability to climate change now or in the future (also known as maladaptive practices)? (e.g. changes to land use planning may encourage further development of floodplains, potentially increasing the population's vulnerability to climate change, specifically flooding).	Arg – NO Uru - NO
	11.4. Will the Project / Programme increase vulnerability of the areas that historically have suffered from disaster due to climate variability phenomena such as the cycles of El Niño and La Niña?	Arg – NO Uru - NO
12. <i>Pollution Prevention and Resource Efficiency</i>	12.1. Does the Project / Programme imply the construction, rehabilitation, operation, or closure of residual water management systems and/or solid residues in populated centers? (e.g. sanitary sewage system, treatment plant for residual waters, waste collection and disposal system, sanitary filling).	Ch Arg – NO Uru - NO
	12.2. Does the Project / Programme imply activities related to the extraction and/or transformation of metallic or non-metallic minerals, hydrocarbons, and/or aggregate washing?	Arg – NO Uru - NO
	12.3. Will the proposed Project / Programme potentially involve the manufacture, trade, release, and/or use of hazardous chemicals and/or materials? (e.g. DDT, PCBs and other chemicals listed in international conventions such as the Stockholm Conventions on Persistent Organic Pollutants or the Montreal Protocol).	Arg – NO Uru - NO
	12.4. Does the Project / Programme imply the production, use, or marketing of dangerous substances? (e.g. pesticides, sulfuric acid). Dangerous substances are those identified as such in the respective national listing, or through the international risk rating established in the Globally Harmonized System of Classification and Labeling for Chemical Products.)	Arg – NO Uru - NO

<sup>2</sup> In regards to CO<sub>2</sub>, 'significant emissions' corresponds generally to more than 25,000 tons per year (from both direct and indirect sources). [The Guidance Note on Climate Change Mitigation and Adaptation provides additional information on GHG emissions.]

Checklist of environmental and social principles	Questions	Yes / No
	12.5. Does the Project / Programme include activities that require significant consumption of raw materials, energy, and/or water?	Arg – NO Uru - NO
	12.6. Does the Project / Programme imply the generation and management of large quantities of contaminants? (e.g. industrial residual waters, particulate matter, noise, unpleasant odors, garbage).	Arg – NO Uru - NO
	12.7. Will the Project / Programme produce and manage dangerous waste? (e.g. hospital waste, mining waste, expired pesticides, heavy metals). Dangerous wastes are those identifies as such in the national listings or in international lists/catalogues (for example, the European waste list)	Arg – NO Uru - NO
13. <i>Public Health</i>	13.1. Would elements of Project / Programme construction, operation, or decommissioning pose potential risks to public health safety?	Arg – NO Uru - NO
	13.2. Would the Project / Programme pose potential risks to public health and safety due to the transport, storage, and use and/or disposal of hazardous or dangerous materials? (e.g. explosives, fuel and other chemicals during construction and operation)?	Arg – NO Uru - NO
	13.3. Would failure of structural elements of the Project / Programme pose risks the public health? (e.g. collapse of buildings or infrastructure)	Arg – NO Uru - NO
	13.4. Would the Project / Programme result in potential increased health risks? (e.g. from water-borne or other vector-borne diseases or communicable infections such as HIV/AIDS)?	Arg – NO Uru - NO
	13.5. Does the Project / Programme pose potential risks and vulnerabilities related to occupational health and safety due to physical, chemical, biological, and radiological hazards during Project / Programme implementation, construction, operation, or decommissioning?	Arg – NO Uru - NO
14. <i>Physical and Cultural Heritage</i>	14.1. Is the Project / Programme being implemented in areas with unique natural values recognized at the community, national or international level? (e.g. heritage recognized by 1972 UNESCO Convention Concerning the Protection of the World Cultural and Natural Heritage)	Arg – NO Uru - NO
	14.2. Do the country where Project / Programme will be carried out have not ratified and entered into force of the Convention Concerning the Protection of the World Cultural and Natural Heritage?	Arg – NO

Checklist of environmental and social principles	Questions	Yes / No
		Uru - NO
	14.3. Will the proposed Project / Programme result in interventions that would potentially adversely affect sites, structures, or objects with historical, cultural, artistic, traditional or religious values or intangible forms of culture? (e.g. knowledge, innovations, practices)? (Note: Projects intended to protect and conserve Cultural Heritage may also have inadvertent adverse impacts)	Arg – NO Uru - NO
	14.4. Does the Project / Programme propose is using tangible and/or intangible forms of cultural heritage for commercial or other purposes?	Arg – NO Uru - NO
15. <i>Lands and Soil Conservation</i>	15.1. Does the Project / Programme foresee the presence of fragile soils? (e.g. soils on the margin of a desert area, coastal soils, soils located on steep slopes, rocky areas with very thin soil) within the project area)	Arg – YES Uru - YES
	15.2. Does the Project / Programme activities could result in the loss of non-fragile soil within the project area?	Arg – NO Uru - NO
	15.3. Does the Project / Programme imply movement of land with the removal of large volumes of soil?	Arg – NO Uru - NO
	15.4. Does the Project / Programme imply construction, expansion, rehabilitation, maintenance, and/or operation of infrastructure, among others, irrigation systems, transfers from basins, dams and reservoirs, hydraulic energy production systems, or systems to capture, treat, and supply water to urban centers?	Arg – NO Uru - NO
	15.5. Does the Project / Programme imply large-scale agricultural crops, industrial production, livestock, and/or forestry plantations?	Arg – NO Uru - NO
	15.6. Would the Project / Programme exacerbate risk of erosion?	Arg – NO Uru - NO

b. Identification and preliminary Management of Social and Environmental Risks

Rating the 'Impact' of a Risk

Score	Rating	Social and environmental impacts
5	Critical	Significant adverse impacts on human populations and/or environment. Adverse impacts high in magnitude and/or spatial extent (e.g. large geographic area, large number of people, transboundary impacts, cumulative impacts) and duration (e.g. long-term, permanent and/or irreversible); areas impacted include areas of high value and sensitivity (e.g. valuable ecosystems, critical habitats); adverse impacts to rights, lands, resources and territories of indigenous peoples; involve significant displacement or resettlement; generates significant quantities of greenhouse gas emissions; impacts may give rise to significant social conflict
4	Severe	Adverse impacts on people and/or environment of medium to large magnitude, spatial extent and duration more limited than critical (e.g. predictable, mostly temporary, reversible). The potential risk impacts of projects that may affect the human rights, lands, natural resources, territories, and traditional livelihoods of indigenous peoples are to be considered at a minimum potentially severe.
3	Moderate	Impacts of low magnitude, limited in scale (site-specific) and duration (temporary), can be avoided, managed and/or mitigated with relatively uncomplicated accepted measures
2	Minor	Very limited impacts in terms of magnitude (e.g. small affected area, very low number of people affected) and duration (short), may be easily avoided, managed, mitigated
1	Negligible	Negligible or no adverse impacts on communities, individuals, and/or environment



### Rating the 'Probability' of a Risk

Score	Rating
5	Expected
4	Highly Likely
3	Moderately likely
2	Not Likely
1	Slight

The combination of impact and probability is then used to determine the overall significance of the risk (Low, Moderate or High)

Impact	5	Red	Red	Red	Red	Red
	4	Yellow	Yellow	Red	Red	Red
	3	Green	Yellow	Yellow	Yellow	Yellow
	2	Green	Green	Yellow	Yellow	Yellow
	1	Green	Green	Green	Green	Green
		1	2	3	4	5
Probability						
Green = Low, Yellow = Moderate, Red = High						

What are the Potential Social and Environmental Risks?	What is the level of significance of the potential social and environmental risks?			What social and environmental assessment and management measures have been conducted and/or are required to address potential risks (for Risks with Moderate and High Significance)?
<i>Risk Description</i>	<i>Impact and Probability (1-5)</i>	<i>Significance (Low, Moderate, High)</i>	<i>Comments</i>	<i>Description of assessment and management measures as reflected in the Project design. The assessment considered all potential impacts and risks based on the 'Guidance document for Implementing Entities on compliance with the Adaptation Fund Environmental and Social Policy' (AF, 2016)</i>
<b>Risk 1:</b> The Project implemented is in natural or critical habitats. <b>Principle 9. Protection of Natural Habitats</b>	I = 3 P = 3	<b>Moderate</b>		Yes, even though the implementation of a project in natural or critical habitats is not a risk, it is important to remark that any activity developed in this type of habitats must be carefully designed and evaluated to avoid any type of stress to the habitat.
<b>Risk 2:</b> The Project activities proposed are within or adjacent to environmentally sensitive areas, including legally protected areas, areas proposed for protection, or recognized as such by authoritative sources and/or indigenous peoples or local communities? <b>Principle 9. Protection of Natural Habitats</b>	I= 3 P= 3	<b>Moderate</b>		
<b>Risk 3.</b> The Project implemented in areas with conservation value designated with international recognition? (e.g. Ramsar site, natural heritage of humanity, biosphere reserve, AICA). <b>Principle 9. Protection of Natural Habitats</b>	I= 3 P= 3	<b>Moderate</b>		
<b>Risk 4.</b> The Project foresee the presence of fragile soils. <b>Principle 15: Lands and Soil Conservation</b>	I = 3 P = 3	<b>Moderate</b>	The project will be developed in fragile soils, which is why the project works as an adaptation measure to prevent this soil from generating greater impacts on the population.	<p>The project itself has the potential to reduce the risk of landslides caused by fragile soils in the river.</p> <p>The project per se, aims to reduce the risk of soil erosion in Uruguay's River by implementing green infrastructure.</p>

			The project implies construction works as mitigation and adaptation measures in both countries. The infrastructures would help with the probability of future disasters cause of landslides and collapses.	The project will comply with the regulations and requirements to avoid any type of problem related to the construction of gabions if needed.
<b>Based on the identified risks and risk categorization, what requirements of the ESP<sup>3</sup> are relevant?</b>				
Check all that apply			<b>Comments</b>	
<b>Principle 1: Compliance with the law</b>	<input type="checkbox"/>			
<b>Principle 2: Access and Equity</b>	<input type="checkbox"/>			
<b>Principle 3: Marginalized and Vulnerable Groups.</b>				
<b>Principle 4: Human Rights</b>	<input type="checkbox"/>			
<b>Principle 5: Gender Equity and Women's Empowerment</b>	<input type="checkbox"/>			
<b>Principle 6: Core Labour Rights</b>	<input type="checkbox"/>			
<b>Principle 7: Indigenous Peoples</b>	<input type="checkbox"/>			
<b>Principle 8: Involuntary Resettlement</b>	<input type="checkbox"/>			
<b>Principle 9: Protection of Natural Habitats</b>	<input checked="" type="checkbox"/>		This principle will be satisfied taking into account that the project activities are mainly ecosystem based adaptation in the Protection Areas in Uruguay and Argentina	
<b>Principle 10: Conservation of Biological Diversity</b>	<input type="checkbox"/>			
<b>Principle 11: Climate Change</b>	<input type="checkbox"/>			
<b>Principle 12: Pollution Prevention and Resource Efficiency</b>	<input type="checkbox"/>			
<b>Principle 13: Public Health</b>	<input type="checkbox"/>			
<b>Principle 14: Physical and Cultural Heritage</b>	<input type="checkbox"/>			
<b>Principle 15: Lands and Soil Conservation</b>	<input checked="" type="checkbox"/>		This principal will be largely fulfilled, because the main objective of the project is to minimize the risks caused by fragile soils as the ones in Salto and Concordia.	
<b>What is the overall Project risk categorization?</b>				
Select one (see <a href="#">SESP</a> for guidance)			<b>Comments</b>	

<sup>3</sup> ESP: 15 environmental and social principles of the Adaptation Fund's Environment and Social Policy

<b>Low Risk</b>	<input type="checkbox"/>	
<b>Moderate Risk</b>	<input checked="" type="checkbox"/>	<p><i>Given that the project has an explicit focus on adaptation measures through resignification of vacant spaces, early warning systems (EWS), contingency plans and population awareness, the risk towards adversely affecting conservation values is limited.</i></p> <p><i>During the formulation of the Full Proposal must be assessed again taking into account the details of the adaptation measures.</i></p>
<b>High Risk</b>	<input type="checkbox"/>	

## Annex 14. Social and Environmental Risks Screening and Risk Identification

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Using the Manual of basic Environmental and Social Management System procedures and functions at National Implementing Entities – Readiness Programme for Climate Finance, the Social and Environmental Risks Screening Checklist and the Identification and preliminary Management of Social and Environmental Risks where developed.

The process of risk identification or screening risks for the project design followed the 15 principles of the ESP. Principles 1 (Compliance with the Law), 4 (Human Rights) and 6 (Core Labour Rights) which apply to all project, outcomes, outputs and activities. The other 12 principles which where relevant for the project were screened as well. For the case, all of them were screened. Establishing their relevance is one of the outcomes of the risk identification process.

### a. Categorization

Components:

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

Questions	Component Answer YES / NO			
	1	2	3	4
Does the Project Outputs / Activities have significant adverse environmental or social impacts that are diverse?	NO	NO	NO	NO
Does the Project Outputs / Activities have significant adverse environmental or social impacts that are widespread?	NO	NO	NO	NO
Does the Project Outputs / Activities have significant adverse environmental or social impacts that are irreversible?	NO	NO	NO	NO
Does the Project Outputs / Activities have few adverse environmental or social impacts?	NO	NO	NO	NO

Does the Project Outputs / Activities have in small scale / low widespread adverse environmental or social impacts?	NO	YES	Not Clear	NO
Does the Project Outputs / Activities have reversible or easily mitigated adverse environmental or social impacts?	NO	YES	Not Clear	NO
Does the Project Outputs / Activities have no adverse environmental or social impacts.	YES	NO	Not Clear	YES
Categorization	B	C	C	

The results of the screening showed that Component 1 and Component 4 are categorized as low risk (Category C) because of their nature of capacity building (Social vulnerability monitoring, Social risk perception assessments, Assistance and labor reconversion strategies, Social networks have been strengthened, communication, education and dissemination strategies h) which will not generate any significant environmental or social impacts.

Component 2 and 3 are categorized as medium risk (Category B), taking into account that it may cause unintentionally few, small, reversible and easily mitigated environmental or social impacts particularly in Outcome “Resilience in coastal cities has been increased by the implementation of structural and nonstructural adaptation measures” and “Adaptive conservation measures have been implemented in vulnerable ecosystems on both margins of the Uruguay river including their ecosystemic services identification and assessment”.

#### **b. Social and Environmental Risks Identification Checklist with in the Manual of Basic ESMS procedures**

For the above Components 2 and 3 proceed with the risk identification with all of the outputs and activities.

In the case of having Unidentified Sub-projects this during the implementation phase but always before their explicit implementation will have to be screened under the risk identification matrix again.

Component 2:	Outputs
Priority Actions to increase resilience	7. Vulnerable vacant land from resettlements has been recovered and re signified to prevent informal re occupation. 8. Technical assistance and sustainable urban and public services infrastructure have been implemented in new resettlements on secure land. 9. Solutions have been design and financial mechanisms have been implemented to promote CCA in mid risk housing and commercial buildings.
Component 3:	Outputs
Priority measures for adaptative conservation of vulnerable coastal ecosystems.	10. Ecosystemic services and co benefits have been identified and assessed, including CCA and Uruguay river's ecosystems connectivity. 11. New ecosystem-based adaptation measures have been designed and implemented.



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**Component 2 and Component 3**

<b>Checklist of environmental and social principles</b>	<b>Questions</b>	<b>Yes / No</b>	<b>Risks Associated</b>	<b>Yes / No</b>
<b>1. Compliance with the law</b>	1.1. Does the Project demonstrate any incompliance with any applicable international law?  Has the project identified all the specific, applicable domestic and international laws, regulations, standards, procedures and permits that apply to any of its activities?	Arg – NO Uru – NO	The project could not comply with applicable domestic and international law	Arg – YES Uru – YES
	1.2. Has the project identified activities that may require prior permission (such as planning permission, environmental permits, construction permits, permits for water extraction, emissions, and use or production or storage of harmful substances)	Arg – YES Uru – YES		
	1.3. Has the project identified environmental and social safeguarding requirements, other than those of the AF (e.g. national or of co-financing entities). Use the appropriate screening tools, including any threshold lists and sectorial requirements?	Arg – NO Uru – NO		
	1.4. Has the project identified technical or industry standards that apply to any of its activities?	Arg – YES Uru – YES		
<b>2. Access and Equity</b>	2.1. Has the project identified benefits and its geographical area of effect?	Arg – YES Uru – YES	The project could provide un fair and un equitable access to benefits in a narrow, not inclusive way.	Arg – YES Uru – YES
	2.2. Has the project identified any marginalized or vulnerable groups among potential project beneficiaries? (stakeholder mapping in order to identify the potential beneficiaries, rivals, disputants, marginalized or vulnerable people)	Arg – YES Uru – YES		
	2.3. Has the project identified any existing inequities with respect to these marginalized or vulnerable groups?	Arg – NO Uru – NO		

Climate change adaptation in vulnerable coastal cities and ecosystems of the Uruguay River.				
Component 2 and Component 3				
Checklist of environmental and social principles	Questions	Yes / No	Risks Associated	Yes / No
	2.4. Has the project identified the existing access to the essential services and rights indicated in the principle?	Arg – NO Uru – NO	The project would impede access to basic health services, clean water and sanitation, energy, education, housing, safe and decent working conditions, and land rights. Projects or programmes should not exacerbate existing inequities, particularly with respect to marginalized or vulnerable groups	
	2.5. Has the project described the mechanism of allocating and distributing project benefits, and how this process ensures fair and impartial access to benefits?	Arg – NO Uru – NO		
	2.6. Has the project developed stakeholder and local authorities' consultations?	Arg – YES Uru – YES		
3. <i>Marginalized and Vulnerable Groups</i>	3.1. In the influence area of the project has there been identified the presence of marginalized or vulnerable groups, including but not limited to children, women and girls, the elderly, indigenous people, tribal groups, displaced people, refugees, people living with disabilities and people living with HIV/AIDS?	Arg – YES Uru – YES	The project may impose any disproportionate adverse impacts on marginalized and vulnerable groups including children, women and girls, the elderly, indigenous people, tribal groups, displaced people, refugees, people living with disabilities, and people living with HIV/AIDS.	Arg – NOT CLEAR Uru – NOT CLEAR
	3.2. Has the project quantified all the groups identified using accepted methods based, where possible, on disaggregated data?	Arg – YES Uru – YES		
	3.3. Has the project described the characteristics of any marginalized or vulnerable groups, identifying their particular vulnerabilities that would or could make them disproportionately vulnerable to negative environmental or social impacts caused by the implementation of the activities of the project?	Arg – YES Uru – YES		
4. <i>Human Rights</i>	4.1. Has the project evidenced if the host country is cited in any Human Rights Council Special Procedures, be they thematic or country mandates?	Arg – YES Uru – YES	Risk that the project does not promote and respect international human rights.	Arg – NOT CLEAR Uru –
	4.2. Has the project provided an overview of the relevant human rights issues that are identified in the Special Procedures?	Arg – YES Uru – YES		

Climate change adaptation in vulnerable coastal cities and ecosystems of the Uruguay River.				
Component 2 and Component 3				
Checklist of environmental and social principles	Questions	Yes / No	Risks Associated	Yes / No
	4.3. Has the project include human rights issues in stakeholder consultations during project identification and/or formulation?	Arg – YES Uru – YES		NOT CLEAR
	4.4. Has the project included the findings of the consultations on human rights issues in the project document?	Arg – YES Uru – YES		
5. <i>Gender Equity and Women's Empowerment</i>	5.1. Has the project identified activities that are known to exclude or hamper a gender group based on legal, regulatory or customary grounds?	Arg – NO Uru – NO	Risk that that both women and men have unequal opportunities to participate as per the AF gender policy	Arg – NO Uru - NO
	5.2. Has the project conduct or consult a gender analysis of the supported sector / area, describing the current situation of the allocation of roles and responsibilities in sector or area?	Arg – YES Uru – YES		
	5.3. Has the project identified elements that maintain or exacerbate gender inequality or the consequences of gender inequality?	Arg – NO Uru - NO	Risk that that both women and men receive incomparable social and economic benefits	Arg – NO Uru - NO
	5.4. Has the project identified particular vulnerabilities of men and women that would or could make them disproportionately vulnerable to negative environmental or social impacts caused by the outputs / activities of the project?	Arg – NO Uru - NO	Risk that that both women and men suffer disproportionate adverse effects during the development process	Arg – NO Uru - NO
6. <i>Core Labour Rights</i>	6.1. Has the project determined if the host country has ratified the eight ILO core conventions	Arg – YES Uru – YES	Risk of not meeting the core labour standards as identified by the International Labour Organization (ILO).	Arg – YES Uru – YES
	6.2. Has the project reviewed the latest ILO assessments of application of the standards in the country?	Arg – YES Uru – YES		
	6.3. Has the project identified any past/present/planned ILO assistance to meet the standards through social dialogue and technical assistance?	Arg – YES Uru – YES		

Climate change adaptation in vulnerable coastal cities and ecosystems of the Uruguay River.				
Component 2 and Component 3				
Checklist of environmental and social principles	Questions	Yes / No	Risks Associated	Yes / No
	6.4. Has the project identified information on any ILO Special procedures relevant to the Member nation including details on the triggering representation or complaints	Arg – NO Uru - NO		
	6.5. Has the project identified how the ILO core labour standards are incorporated in the design and the implementation of the outputs / activities' project?	Arg – NO Uru - NO		
	6.6. Has the project describe the common labour arrangements in the sector(s) in which the project will operate, with particular attention to all forms of child labour and forced labour.	Arg – NO Uru - NO		
7. <i>Indigenous Peoples</i>	7.1. Has the project identified if indigenous peoples are present in the area of influence?	Arg – YES Uru - YES	Risk of inconsistency of the project with the rights and responsibilities set forth in the UN Declaration on the Rights of Indigenous Peoples and other applicable international instruments relating to indigenous peoples.	Arg – NO Uru - NO
	7.2. Has the project quantify the groups identified of indigenous peoples?	Do not apply		
	7.3. Has the project determined if there are provisions for a realistic and effective Free, Prior, Informed Consent process, giving a community the right to give or withhold its consent to proposed projects that may affect the lands they customarily own, occupy or otherwise use?	Do not apply		
	7.4. Has the project provided a summary of any reports, specific cases, or complaints that have been made with respect to the rights of indigenous peoples by the Special Rapporteur on the rights of indigenous peoples and that are relevant to the project?	Do not apply		
8. <i>Involuntary Resettlement</i>	8.1. Has the project identified if physical or economic displacement is required or will occur as a consequence of its implementation?	Arg – YES Uru - YES	Risk of not minimizing or avoiding the need for involuntary resettlement.	Arg – NO Uru - NO
	8.2. Has the project determined if it is voluntary or involuntary resettlement?	Arg – YES Uru - YES		

Climate change adaptation in vulnerable coastal cities and ecosystems of the Uruguay River.				
Component 2 and Component 3				
Checklist of environmental and social principles	Questions	Yes / No	Risks Associated	Yes / No
	8.3. Has the project identified stakeholders whose livelihoods may be affected, directly or indirectly, and if this may lead to resettlement?	Arg – YES Uru - YES	Risk of not produce a well informed of rights, consultation, and offered technically, economically, and socially feasible resettlement alternatives or fair and adequate compensation.	Arg – NO Uru - NO
	8.4. Has the project identified stakeholders whose assets or access to assets may be affected, directly or indirectly, and if this may lead to resettlement and its consequences including indemnification, compensation, etc.	Arg – YES Uru - YES		
9. <i>Protection of Natural Habitats</i>	9.1. Has the project identified all the critical natural habitats in the region that may be affected?  The area considered should be large enough to be credible and be chosen in function of the impact generating agent (e.g. noise) and an appreciation of its propagating ability. The habitats to be considered include all those recognized as critical in any way, be it legally (through protection), scientifically or socially.	Arg – YES Uru - YES	Risk of involving unjustified conversion or degradation of critical natural habitats, including those that are (a) legally protected; (b) officially proposed for protection; (c) recognized by authoritative sources for their high conservation value, including as critical habitat; or (d) recognized as protected by traditional or indigenous local communities.	Arg – NOT CLEAR Uru – NOT CLEAR
	9.2. Has the project identified for each critical natural habitat, the mechanism by which it is particularly vulnerable.	Arg – YES Uru - YES		
	9.3. Has the project considered all the activities to identify actual risks for each of the natural habitats identified taking into account the specific characteristics of the activity (location, dimension, duration etc.) and the vulnerability mechanism(s) of each habitat identified.	Arg – YES Uru - YES		
10. <i>Conservation of Biological Diversity.</i>	10.1. Has the project identified all the elements of biodiversity interest in the region that may be affected?  The area considered should be large enough to be credible and be chosen in function of the impact generating agent and an appreciation of its propagating ability. It is important in the identification of the elements of biodiversity interests not to limit this to the species level but to include all elements of biodiversity	Arg – YES Uru - YES	Risk of not avoiding any significant or unjustified reduction or loss of biological diversity or the introduction of known invasive species	Arg – NOT CLEAR Uru – NOT CLEAR

Climate change adaptation in vulnerable coastal cities and ecosystems of the Uruguay River.				
Component 2 and Component 3				
Checklist of environmental and social principles	Questions	Yes / No	Risks Associated	Yes / No
	interest, including landscapes, ecosystem processes, habitats, and hydrological cycles, processes of erosion and sedimentation and interactions between taxa. Include all elements enjoying local or international protection			
	10.2. For each identified biodiversity element, has the project identified the mechanism by which it is particularly vulnerable? (Changes in flow regime or water quality for a seasonal wetland or disruption of migration routes).	Arg – NO Uru - NO		
	10.3. Has the project identified actual risks for each of the biodiversity elements identified taking into account the specific characteristics of the activity (location, dimension, duration etc.) and the vulnerability mechanism(s) of each biodiversity element identified?	Arg – NO Uru - NO		
	10.4. Has the project identified the potential of introducing – intentionally or accidentally – known invasive species?	Arg – NO Uru - NO		
	10.5. Has the project identified the use of living modified organisms resulting from modern biotechnology?	Arg – NO Uru - NO		
11. <i>Climate Change</i>	11.1. Has the project determined if it belongs to a sector mentioned in the Guidance document for which a greenhouse gasses emission calculation is required?  <ul style="list-style-type: none"> <li>Energy, transport, heavy industry, building materials, large-scale agriculture, large-scale forest products, and waste management.</li> </ul>	Arg – YES Uru - YES	The risk of resulting in any significant or unjustified increase in greenhouse gas emissions or other drivers of climate change.	Arg – NOT CLEAR Uru – NOT CLEAR
	11.2. Has the project carry out a qualitative risk identification for each of the following drivers of climate change:  <ul style="list-style-type: none"> <li>Emission of carbon dioxide gas from the use of fossil fuel and from changes in land use</li> </ul>	Arg – NO Uru - NO		

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

**Component 2 and Component 3**

<b>Checklist of environmental and social principles</b>	<b>Questions</b>	<b>Yes / No</b>	<b>Risks Associated</b>	<b>Yes / No</b>
	<ul style="list-style-type: none"> <li>• methane and nitrous oxide emissions from agriculture</li> <li>• emission of hydrofluorocarbons</li> <li>• perfluorocarbons</li> <li>• sulphur hexafluoride</li> <li>• other halocarbons, aerosols, and ozone.</li> </ul>			
	11.3. Has the project carry out a qualitative risk identification of any impact on carbon capture and sequestration capacity.	Arg – NO Uru - NO		
<b>12. Pollution Prevention and Resource Efficiency</b>	12.1. Has the project identified activities with preventable waste or pollution production?	Arg – NO Uru - NO	Risk of designing and implementing the project in a way that does not meets applicable international standards for maximizing energy efficiency and minimizing material resource use, the production of wastes, and the release of pollutants	Arg – NOT CLEAR Uru – NOT CLEAR
	12.2. Has the project determined the nature and quantity of the waste, as well as those of possible pollutants that may be produced?	Arg – NO Uru - NO		
	12.3. Has the project determined if the concept of minimization of waste and pollution production has been applied in the design phase and if this will be effective during implementation?	Arg – YES Uru - YES		
	12.4. Has the project determined if applicable local, national and international regulations regarding any waste and pollution generation have been applied and will be complied with?	Arg – YES Uru - YES		
	12.5. Has the project determined if the concept of minimization of resource use has been applied in the design phase and if this will be effective during implementation?	Arg – NO Uru - NO		
	12.6. Has the project determined where international standards for maximizing energy efficiency and minimizing material resource use may apply?	Arg – YES Uru - YES		
<b>13. Public Health</b>	13.1. Has the project identified using an appropriate health impact screening tool (check list) potentially significant negative impacts on public health generated?	Arg – YES Uru - YES	Risk of a project designed and implemented in a way that produces	Arg – NO Uru - NO



Climate change adaptation in vulnerable coastal cities and ecosystems of the Uruguay River.				
Component 2 and Component 3				
Checklist of environmental and social principles	Questions	Yes / No	Risks Associated	Yes / No
			potentially significant negative impacts on public health.	
14. <i>Physical and Cultural Heritage</i>	14.1. Has the project determined if the host country has ratified the 1972 UNESCO Convention Concerning the Protection of the World Cultural and Natural Heritage?	Arg – YES Uru - YES	Risk of a project designed and implemented in a way that does not avoids or promotes the alteration, damage, or removal of any physical cultural resources, cultural sites, and sites with unique natural values recognized as such at the community, national or international level. Projects or programmes should also not permanently interfere with existing access and use of such physical and cultural resources.	Arg – NO Uru - NO
	14.2. Has the project identified the national and local legal and regulatory framework for recognition and protection of physical and cultural heritage?	Arg – YES Uru - YES		
	14.3. Has the project described in the influence zone all the elements of the cultural heritage, their location and their vulnerabilities?  The area considered should be large enough to be credible and be chosen in function of the impact generating agent (e.g. vibrations, landscape elements) and an appreciation of its propagating ability. Include all elements enjoying local or international protection.	Arg – YES Uru - YES		
	14.4. Has the project determined if the cultural heritage is being accessed by communities?	Arg – YES Uru - YES		
	14.5. Has the project determined if any of the heritage elements included in the List of World Heritage in Danger is in the influence zone?	Arg – YES Uru - YES		
	14.6. Has the project considered all the activities to identify actual risks for each of the heritage elements identified taking into account the specific characteristics of the activity (location, dimension, duration etc.) and the vulnerability mechanism(s) of each heritage element identified?	Arg – YES Uru - YES		
	15.1. Has the project identified the presence of fragile soils within the influence area?	Arg – YES		Arg – NO

Climate change adaptation in vulnerable coastal cities and ecosystems of the Uruguay River.				
Component 2 and Component 3				
Checklist of environmental and social principles	Questions	Yes / No	Risks Associated	Yes / No
15. <i>Lands and Soil Conservation</i>		Uru - YES	Risk that the designed and implemented does not promotes soil conservation and avoids degradation or conversion of productive lands or land that provides valuable ecosystem services.	Uru - NO
	15.2. Has the project identified activities that could result in the loss of otherwise non-fragile soil?	Arg – NO Uru - NO		
	15.3. Has the project identified productive lands and/or lands that provide valuable ecosystem services within the influence area?	Arg – NO Uru - NO		
	15.4. Has the project identified activities that may lead to land degradation?	Arg – NO Uru - NO		

### **c. Unidentified Sub Project Environmental and Social Risk Identification Mechanism**

As it was presented in the Proposal, during the design and formulation of the project it was not possible to identify till 100% de activities correspondent to Component 1.

For the above, the screening for all outputs developed in Component 1 was done, however as part of the ESMP it is created the Unidentified Sub Project Environmental and Social Risk Identification Mechanism which will assure that when the activities are completely design and before implementation of them, they pass throw the Risk Identification and develop management measures to mitigate the risks found.

The Process for this is exactly the one it was undertaken for the project during the design of the project.

1. The activities and designs for achieving the objectives of Outcome 2. Reduced vulnerability to floods, landslides and mudflows in two coastal cities; Outcome 3. Improved climate monitoring and means to alert the local population and Outcome 4. Improved means to respond to floods, landslides and mudflows have to be detailed and actualized with the climate change scenarios to assure they are resilient.
2. Activity and designs shall be screened in line with the Adaptation Fund's ESP and Gender Policy.
3. All risks identified will recognize different mitigation measures and responsible for compliance.
4. Compliance Monitoring and Verification is required for all activities

The process is described in Figure 1and Figure 2.

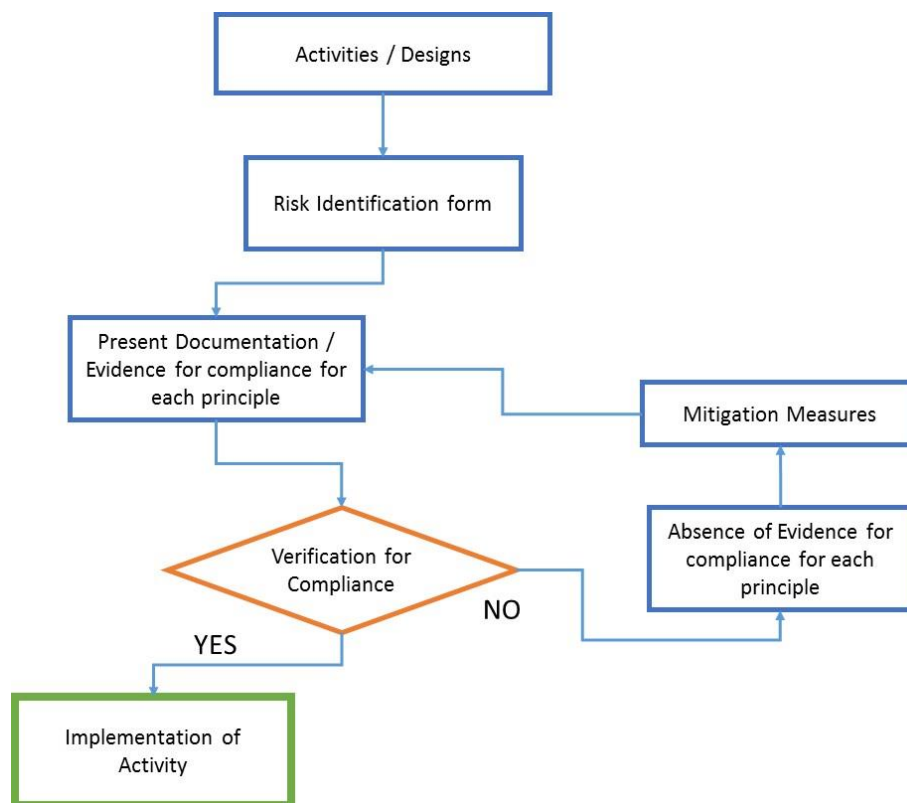


Figure 1. Risk identification – Mitigation Measures – Activity Implementation Mechanism

Social and Environmental Risks Identification Checklist with in the Manual of Basic ESMS procedures				
Component 1: Output 1.1 - Output 4.3				
Checklist of environmental and social principles	Questions	Yes / No	Risks Associated	Yes / No
Principle 1			Risk 1	
Principle 2			Risk 2	
			Risk 3	
.....				
Principle 15			Risk 18	



Mitigation measures for management of environmental and social impacts and risks identified			
Component 1: Output 1.1 – Output 4.3			
Identified risks/impacts	Environmental and Social principles	Planned mitigation measure	Responsible for Verification
Risk 1	Principle 1		
Risk 2	Principle 2		
	.....		
Risk 17	Principle 15		

Figure 2. Risk identification – Mitigation Measures Tables



## **“Climate Change adaptation in vulnerable coastal cities and ecosystems of the Uruguay River”**

### **ANNEX 8: Stakeholder Mapping and Socio-Economic assessment of cities**

**Consultant: Sandra Cesilini  
January 2018**

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ANNEXES: INTERVIEWS, MINUTES, WORKSHOPS, MEETINGS AND DOCUMENTS CONSULTED

## 1. Introduction

According to the objective of structuring and formulating a Concept Note of the Project "Climate change adaptation in vulnerable coastal cities and ecosystems of the Uruguay River" - to be presented by the Development Bank of Latin America (CAF), the Ministry of Housing, Land Planning and Environment (MVOTMA) of the Oriental Republic of Uruguay and the Ministry of Environment and Sustainable Development (MAyDS) of the Argentine Republic to the Adaptation Fund in the Board of October 2017- this document was developed in compliance with the specific objective: *"Carry out a key actors map, identifying vulnerable groups and assessing socio-economic gender conditions of the target sites"*.

The present study **"Report with Actors Map and Socio-Economic assessment of cities"** has been developed according to the Terms of Reference of this consultancy, as well as to interviews held with the MVOTMA, the MAyDS, and the CAF.

## 2. Institutional legal framework

### 2.a - Institutional legal framework - Argentina

The Government of the Argentine Republic declared the State Emergency due to a water crisis on January 28, 2016 through the Executive Decree 266/2016, as a reference to the Provincial Decrees N. 618 dated August 13, 2015 of Buenos Aires Province; N. 3.137 dated September 22, 2015 of Santa Fe Province; N. 140 dated December 17, 2015 of Chaco Province; N. 338 dated December 21, 2015 of Entre Ríos Province; N. 54 dated December 28, 2015 of Formosa Province; N. 156 of December 30, 2015 of Misiones Province, and January 4, 2016 of Corrientes Province, as consequence of the climatic phenomenon that led to the declaration of water emergency in these provinces.

Although the vulnerability of the country to various natural phenomena is high, regulations and institutions related to disaster risk management are relatively less developed. Argentina does not yet have regulations specifically addressing a comprehensive disaster risk management by defining responsibilities among the different levels of government for each process, namely: identification, prevention and risk reduction, disaster management, recovery and financial protection. Notwithstanding the foregoing, the country has the Decree N. 1.250 of 1999, which creates the SIFEM, with the objective of "Coordinating the government action at the national, provincial and local levels, through the formulation of policies and the definition of coordinated and integrated actions to help the State to prevent, mitigate and assist those affected by emergencies, optimizing the allocation of resources". This decree creates the Emergency Cabinet (GADE) as an executive unit of the SIFEM and also provides functions and hierarchical responsibilities for its operations.

### 2.a.1 - Territorial organization - Argentina

The geographical component is detailed below, highlighting the most relevant characteristics of the territorial organization of Argentina in order to provide complementary data for a complete understanding of the intervention areas.

Territorially, the Argentine Republic is organized in 23 provinces and the Autonomous City of Buenos Aires, where the seat of the federal government is located.

The provinces divide their territory into departments and these in turn are made up of municipalities (with the exception of the province of Buenos Aires). All the provinces have a local government and within each one there are usually different municipalities.

Entre Ríos is one of the twenty-three provinces that make up the Argentine Republic. It is part of the Central Region, although it is also included within the Mesopotamia formed by the Uruguay and Paraná rivers, in the Argentine Coast.

The Provincial Constitution reform, dated 2008, recognized the municipal autonomy enshrined in the Article 123 of the National Constitution of 1994: "*Art. 123: Each province dictates its own Constitution, in accordance with the provisions of Article 5, ensuring municipal autonomy and regulating its scope and content in the institutional, political, administrative, economic and financial order*".

Entre Ríos Province is divided into 17 departments, subdivided into 103 districts and 14 original *ejidos* of departmental capital cities, according to the reform of the provincial constitution in force since November 1, 2008, which establishes in its article 2: "*Art.2: The territory of the Province is divided into seventeen departments called: Paraná, Diamante, Victoria, Gualeguay, Gualeguaychú, Uruguay, Colón, Concordia, La Paz, Villaguay, Tala, Nogoyá, San José de Feliciano, Federación, Federal, Islas del Ibicuy and San Salvador, with the limits agreed by the laws in force and without prejudice to the legislative power to create others and modify the territorial and administrative jurisdiction*".

The Entre Ríos departments are not organized administrative divisions since they do not have any government body, their purpose is to serve to the decentralization of the provincial administration. The administration of the local communities, towns and rural centers of the province is made up through municipalities and government boards.

## 2.b – Institutional legal framework - Uruguay

According to the studies conducted on the subject, Uruguay will be especially affected by climate variability. The country is particularly sensitive to extreme events, such as droughts, floods, cold and heat waves, strong winds, tornadoes, hailstorms, frosts, heavy rains and severe storms. These natural threats, in interaction with exposure and social vulnerability, have caused multiple impacts on populations, infrastructures, ecosystems, biodiversity.

Uruguay's interest in addressing the issue of climate change with a cross-cutting approach to the set of public policies, has been manifested through different institutional measures and the strengthening of public capacities in management and decision-making. In particular, a Climate Change Unit has been existing since 1994, currently called Climate Change Division, in the **Ministry of Housing, Land Planning and Environment (MVOTMA)**, which acts as an operational and executing body in relation to climate change. In 2000, through Law N. 17.283 of **General Protection of the Environment**<sup>1</sup>, the MVOTMA was designated as the competent national authority for the implementation and application of the

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<sup>1</sup> See in <https://legislativo.parlamento.gub.uy/temporales/leytemp3665307.htm>

Convention. Also, by means of this law, it is declared: i) the protection of the environment, the quality of air, water, soil and landscape; ii) the conservation of the biological diversity and the configuration and structure of the coast; iii) the reduction and adequate management of toxic or hazardous substances and wastes whatever their type; iv) the prevention, elimination, mitigation and compensation of negative environmental impacts; v) the protection of shared natural resources and those located outside of areas subject to national jurisdictions; vi) regional and international environmental cooperation and participation in the solution of global environmental problems; and vii) the formulation, implementation and application of the national environmental and sustainable development policy.

Another highly significant instance in the development and institutional strengthening was the creation by Decree 238 of 2009 of the **National Response System to Climate Change and Variability (SNRCC)**, in order to coordinate and plan the public and private actions necessary for the prevention of risks, mitigation and adaptation to climate change. It is the SNRCC that draws up the National Climate Change Response Plan published in January 2010 and the National Climate Change Policy during 2016.

The SNRCC has two Operational areas: the Coordination Group and the Advisory Commission. The Chair of the Coordination Group is exercised by the Ministry of Housing, Land Planning and Environment and the vice presidencies are exercised by the Ministry of Livestock, Agriculture and Fisheries and the Office of Planning and Budget. The Coordination Group is also made up of the Ministry of Industry, Energy and Mining, the Ministry of Foreign Affairs, the Ministry of Public Health, the Ministry of Tourism, the Ministry of National Defense, the Ministry of Economy and Finance, the Congress of Intendants and the National Emergency System. The Ministry of Social Development, the Ministry of Education and Culture, the Ministry of Transport and Public Works and the Uruguayan Meteorological Institute participate as guests of the Coordination Group. The Advisory Commission is organized into working groups in which technicians from the Coordination Group, the academy, the private sector and organized civil society participate.

The general objective of the **National Climate Change Policy**<sup>2</sup> is to promote adaptation and mitigation in the Oriental Republic of Uruguay facing the challenge of climate change. This Policy must contribute to the sustainable development of the country, with a global perspective, of intra and intergenerational equity and human rights, promoting a more resilient, less vulnerable society, with greater capacity to adapt to change and climate variability, and more aware and responsible for this challenge, promoting a low-carbon economy, based on environmentally, socially and economically sustainable productive processes and services that incorporate knowledge and innovation. Its time horizon is 2050 and it foresees its development and implementation in the short, medium and long term. For this to succeed, a multistakeholder approach must be guaranteed, including public, private, academic and civil society institutions and organizations, through efficient inter-institutional and intersectoral spaces that promote, formulate, implement, monitor and evaluate this Policy and its lines of action, and the plans, programs and projects for mitigation and adaptation to climate change and variability, with the State as the leader of these processes. The provisions of the current legislation will be considered, specifically the Article 19

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<sup>2</sup> Strategic and programmatic instrument prepared by the National Response System to Climate Change and Variability, adjusted and adopted with favorable opinion by the National Environmental Cabinet on April 27, 2017.

of Law N. 17.283 of December 28, 2000 that defines MVOTMA's competences related to climate change; the Executive Power Decree Number 238 of May 20, 2009 and Executive Power Decree Number 79 of February 24, 2010, which creates, defines the competences and the integration of the National Response System to Climate Change and Variability; and Article 33 of Law Number 19.355 of December 19, 2015, regulated by Decree of Executive Power Number 172 of June 6, 2016, which creates and defines the competencies of the **National Secretariat of Environment, Water and Climate Change (SNAAC) and of the National Environmental System (SNA) and the National Environmental Cabinet (GNA)** with the task of strengthening, articulating and coordinating Uruguay's public policies to protect the goods and services provided by ecosystems and increase adaptation to climate change. The GNA is integrated by the President of the Republic together with the Ministers of Housing, Land Planning and Environment, Livestock, Agriculture and Fisheries, Energy and Mining Industry, National Defense, Public Health and Economy and Finance.

In terms of water quality, the Executive Power sanctions by decree<sup>3</sup> the quality standards of water courses and the standards to which effluents must be adjusted for their discharge. Subsequently, other legal and regulatory standards that complement the legal water regime are sanctioned, considering them an integrated element to natural resources. In 2004, through an initiative of civil society organizations, the reform of article 47 of the Constitution was approved through a plebiscite, with a paradigm shift in relation to environmental protection, management of natural resources and in particular of water resources, indicating that "superficial waters, as well as the underground ones, with the exception of the pluvial ones, integrated in the hydrological cycle, constitute a unitary resource subordinated to the general interest, that is part of the public domain". The concept of the integrality of the resource, as well as the explanation that it is subordinated to the general interest and that belongs to the public domain, constitute the bases for the formulation of the National Water and Sanitation Policy for the water resources management. In this framework, in 2005 the National Water and Sanitation Directorate (DINASA<sup>4</sup>) was created, currently the National Water Directorate (DINAGUA) under the Ministry of Housing, Territorial Planning and the Environment. The purpose of this institution is to formulate national policies on water and sanitation. In the same act of creation of the DINAGUA, the Advisory Commission on Water and Sanitation (COASAS) is constituted in order to incorporate the different visions to the policies of the sector. It may provide advice and issue an opinion on all matters of competence of the National Directorate. It is made up of delegates from public and private organizations, representatives of civil society and users.

On the other hand, in compliance with the constitutional mandate, the **Water Policy Law**<sup>5</sup> establishes the guiding principles for the water resources management, which can be summarized as follows: a) water is an essential natural resource for life; b) access to drinking water and sanitation are fundamental human rights; c) water resources management must be sustainable and integrated; d) the management unit is

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<sup>3</sup> Decree No. 253/979 that has undergone subsequent modifications.

<sup>4</sup> Law No. 17,930 National Budget 2005-2009 promulgated on December 19, 2005.

<sup>5</sup> National Water Policy Law. Law No. 18,610 of October 2, 2009.

the river basin; e) users and civil society will participate in the planning, management and control instances; f) the main priority is the supply of drinking water.

It should be noted that in order to develop the guidelines, established in the National Water Policy, regarding the participation of citizens in the planning, management and control of water resources, the consideration of the watershed as the basic unit of management and the necessary transversality of water, environment and territory issues, within the MVOTMA the following areas of participation and articulation are created: **Regional Councils of Water Resources** and the **Commissions of Watersheds and Aquifers**. Areas with tripartite integration (civil society, users and government) with specific competences at the various levels (national, regional and local).

Specifically, with regard to the Uruguay River, **Law No. 15.845**<sup>6</sup> establishes that the property affected by extraordinary and discontinuous floods of the Uruguay River and its tributaries in the area of the Salto Grande Dam, are subject to administrative easement of temporary water occupation directly caused: a) by the execution of the Salto Grande project; b) by the management of the Salto Grande Dam and c) by special operations. It indicates that with the purpose of identifying the properties affected by those floods as well as to determine the amount of compensation that will be met with public funds, with a charge on General Rents, an Honorary Commission is created within the Ministry of Livestock, Agriculture and Fishing that will provide material and human resources for the fulfillment of its tasks.

The **law of Territorial Planning and Sustainable Development**, approved by **Law No. 18.308**<sup>7</sup> of 2008, establishes the general regulatory framework for territorial planning and sustainable development, including among its subjects: the identification of risk areas due to the existence of natural phenomena or installations dangerous for human settlements; the design and adoption of management instruments and procedures that promote territorial planning. It establishes that the elaboration and instrumentation of programs, projects and actions with territorial incidence should guide the future urban development towards non-flood zones identified by the state agency competent in water resources management. The National Committee of Territorial Ordering, was created by the Article 75 of this law, for the due coordination of national strategies with incidence in the territory. It is chaired by the Minister of Housing, Land Planning and Environment and is composed of the Minister of Transport and Public Works, the Minister of Livestock, Agriculture and Fisheries, the Minister of Industry, Energy and Mining, the Minister of Tourism and Sports, the Minister of National Defense, the Minister of Economy and Finance, the director of the Office of Planning and Budget and the President of the Congress of Intendants. Likewise, the Committee may request the temporary integration of other Ministers or Intendants when the matters to be discussed refer to their competence. The same, therefore, constitutes a hierarchical scope for decision-making on public policies, on the part of the National and Departmental Government in matters of territorial ordering.

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<sup>6</sup> See: <https://legislativo.parlamento.gub.uy/temporales/leytemp1557546.htm>

<sup>7</sup> See: <https://legislativo.parlamento.gub.uy/temporales/leytemp5773818.htm>

Another instance in the matter is the **Advisory Commission of Territorial Organization** (COAOT), which has its legal source in Article 73 of Law 18.308, regulated by Decree 400/009 of August 26, 2009, being its predecessor the Decree 310/1994, by which the Technical Advisory Commission on Land Management was created. The same, is based on the guiding principles of the Law, previously mentioned, referring to the coordination and cooperation between public entities involved in the processes of territorial planning, promotion of the agreement between the public, private and social sectors and the one referred to the promotion of citizen participation in the processes of elaboration, implementation and monitoring, evaluation and revision of the instruments of territorial ordering. It is chaired by the National director of Land Planning and integrated by delegates from public and private institutions and representatives of civil society. It includes the Ministries with competence in the matter, the Office of Planning and Budget, the Congress of Intendants, the Autonomous Entities and Decentralized Services, the University of the Republic, the unions of workers, businessmen and professionals, non-governmental organizations, other research and education institutions, the National Directors of Environment, Water and Housing.

#### 2.b.1 – Territorial Organization - Uruguay

The geographical component is detailed below, highlighting the most relevant characteristics of the territorial organization of Uruguay in order to provide complementary data for a complete understanding of the intervention areas.

According to the Constitution of the Oriental Republic of Uruguay, the territorial organization of Uruguay is made up by 19 departments, which are the main subnational entities. The departmental intendency is directed by an intendant, elected by direct universal suffrage for a term of five years; in addition, there is a departmental board consisting of councilors with a legislative role.

In accordance with article 262 of the Constitution in Section XVI called "Government and department administration", *"the Government and Administration of the Departments, with the exception of public security services, shall be exercised by a Departmental Board"*. In addition, *"the Intendant, with the agreement of the Departmental Board, may delegate to the local authorities the exercise of certain tasks in their respective territorial circumscriptions" (...). "The Departmental Governments may agree, among themselves and with the Executive Power, as well as with the Autonomous Entities and the Decentralized Services, the organization and provision of services and activities, both in their respective territories and at a regional or interdepartmental level"*.

Within the departmental competences, we find: comply and enforce the Constitution and Laws; present draft decrees and resolutions; ensure public health and primary, secondary, preparatory, industrial and artistic education, proposing to the competent authorities the appropriate means for their improvement, among others.

By law No. 18.567 of September 13, 2009, a third level of government and administration called municipality was created. Municipalities are used in two ways: as a local government body and as the territorial jurisdiction where these local governments are established. They are governed by organs of five members, composed of a mayor and municipal councilors. The members are elected by direct vote of the citizenship at the same time as the Intendants and Departmental Boards are elected.



### 3. Implemented methodology

For the present study, an integral and multiple approach methodology has been used, including quantitative and qualitative techniques, such as: document analysis, interviews/workshops, and actors mapping.

#### 3.a - Dimensions

To carry out this study, the following dimensions have been taken into account:

- I. **Institutional:** Personnel from the agencies involved were interviewed, whose preliminary list includes the MVOTMA (Uruguay), MAdS (Argentina), CAF, provincial delegations, the Uruguay River Commission, provincial secretariats and departmental governments, among other government agencies, provincial organizations and relevant civil society organizations.
- II. **Timeframe:** this study has been carried out after the presentation of the Pre-Concept Note, between September and October 2017. It includes both fieldwork and cabinet work.
- III. **Geographical:** Seven cities of the Argentine Republic and the Oriental Republic of Uruguay have been prioritized for this study, involved in Component 2 of the Regional Project "Adaptation to climate change in cities and vulnerable coastal ecosystems of the Uruguay River", namely: Concordia, Concepción del Uruguay, Colón, Paysandú, Salto, Fray Bentos and Bella Unión. Workshops in strategic sites were held, to gather information with the key actors of the territory.

#### 3.b – Analytics Tools

For the present study, the following **tools** have been used:

**Cabinet study:** institutional documents, public reports, censuses and other publications have been analyzed in order to assess in depth the socio-economic situation of the cities. Literature and materials were reviewed. Based on the cabinet study, a preliminary list of relevant actors was prepared.

**In-depth interview:** This qualitative method has allowed a deep exploration of the subjects. The interview always has two participants: interviewer and interviewee. In this case, face-to-face observers were not present, since they can significantly influence the climate and development of the interview. For this method, it is key: 1- the choice of the interviewee, -which has to be representative of the population/group to be surveyed; 2- to know how many interviews will be conducted in order to weigh the samples with respect to the study; 3- the elaboration of a questionnaire or guide with key questions to be carried out in order to thoroughly explore all the topics; 4- the framing of the interview, in a place of trust and comfort so that the interviewee can fully express. 22 interviews were conducted, by telephone, Skype and through e-mails. The minutes of the workshops of Concordia and Paysandú and the minutes of the meetings with the teams of both countries were used in order to complete the necessary information.

**Stakeholder mapping:** this technique allows identifying the people and organizations that may be important for the planning, design, and implementation of the Project. It allows the executors/decision

makers to identify who will support the initiative they are promoting and who will not, so that they can define specific strategies to get support for their proposal. A map of social actors should point out the people, groups and organizations that may affect or be affected by the project, and then classify them according to important characteristics, such as their power in decision-making, their interest in the problem, and the position they could adopt in regard of the initiative.

According to Antonio Pozo Solís<sup>8</sup>, the "stakeholder mapping" rests on the assumption that social reality is shaped by social relationships involving social actors and social institutions. As Martín Gutiérrez puts it, the approach to social networks is characterized by considering that society can be thought of in terms of structures that are manifested by different forms of relationships between social actors (be they actors, groups, organizations, classes or individuals<sup>9</sup>). The sets of links or social relationships form networks and according to the position that the different actors occupy in these networks, will define their values, beliefs and behaviors.

Through the stakeholder mapping, we seek to contribute to represent the social reality in which it will intervene, understand its complexity and design intervention strategies with more elements than just common sense or the sole opinion of a qualified informant. The use of the social map is fundamental in the design and implementation of any project, as well as when negotiating/building together the action program. The stakeholder mapping allows to know the alliances, the conflicts, the authorized spokespersons, and therefore, it allows to better select the actors that should be addressed.

It began by making a list of the different stakeholders with a positive or negative influence on the Regional Project. Then they were classified by groups, in order to make a recognition of the most relevant actors at the local, national and regional levels.

A breakdown of the actors was carried out, firstly, based on the type of organization or institution and, in turn, on the characteristic of **representation**:

- Governmental: governments, ministries, secretariats and dependencies of the governments (local, departmental, provincial, national and/or binational) were included.
- Non-Governmental: we included grassroots organizations, the private sector, the productive sector, foundations, corporations, universities, women's organizations, etc.

Then, from the category of governmental or non-governmental actors, it is broken down into **levels of incidence**:

- Local/Municipal
- Departmental/Provincial
- National
- Binational

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<sup>8</sup> Pozo Solís, Antonio. Mapeo de actores sociales. Lima, 2007.

<sup>9</sup> Martín Gutiérrez, Pedro. Mapas sociales: métodos y ejemplos prácticos.

Then the **role** and the **competence** of the actor were studied, both for their own institutional configuration and for their position in the project. This detail serves as a guide to facilitate the location of the actor within their tasks, both inside and outside the project.

Through the variable **Authority** is measured, by *high, medium or low weight*; the level of capacity to decide on different situations and what will be the obligatory nature of their decisions. In this sense, it is important to distinguish that the authority will always be given by the title or position held by the actor.

For each actor, the **Positioning** that posits with respect to the project is also analyzed, which can be: *in favor, indifferent, or against*. This positioning allows anticipating possible obstacles or allies for the project and/or its interests, as well as key actors in the definition of the agenda on that topic.

Depending on the interest and **concern** with the subject, a third category is established in which interested parties could also be classified as follows:

- **HIGH CONCERN:** groups that maintain a great involvement in the problem are mentioned due to their specific institutional, personal or community interests.
- **INDIFFERENT:** groups that are under some degree of direct influence or that may have some territorial competence, but they do not have a special concern in the subject.
- **LOW CONCERN:** groups that, due to their knowledge of some technical field, or management of projects and social activities, have a particular knowledge in relation to some environmental or project issues, but the effects of the problem do not affect them.

Finally, a double-entry summary matrix has been drawn up where each row (horizontal axis) details each of the identified actors and in each column (vertical axis) the category, level of incidence, authority, position, concern of each actor regarding the proposal are identified. The consolidation of these data is represented in different graphs by each of the categories, while the final map distinguishes the positioning of the actors and their influences.

This positioning map represents the actors identified as close to the project, placing them according to their greater or lesser affinity to the project or their greater or lesser power with respect to the issue. The relationship with the actors is projected in a graph with four quadrants, where the vertical axis measures affinity towards the project and the horizontal axis measures the power and incidence of the actor. The actors are arranged in the quadrants, with the upper right being those with greater power on the subject and more related to the project, with which the relationship should be strategic.

In summary, with the stakeholder mapping, it is sought not only to have a list of the different actors participating in an initiative, but also to know their actions and the objectives of their participation. In this sense, it is important to emphasize that the stakeholder mapping identifies roles and powers of the most relevant social actors.

For this intervention proposal, the objective is to recognize the main functions of the actors regarding the project, as well as to identify the possible actions that could be developed by social and institutional actors, shaping a network of inter-institutional alliances in relation to the proposal<sup>10</sup>.

The main developed activities were grouped around the following items:

- Survey on the availability of data from the universe of key actors/participants (stakeholder mapping, civil society organizations, private sector and academics, etc.).
- Update of contacts.
- Development of survey tools: questionnaires and interview guides.
- Review of documents.
- Workshops.
- Realization of socio-economic and gender diagnoses of the intervention sites.
- Stakeholder Mapping.
- Carrying out interviews with key actors and field visits.
- Analysis of field work and analysis of information through seven variables:
  1. **Name:** The nominal classification with which the actor involved is recognized.
  2. **Classification:** The legal status of the organization of the actor involved.
  3. **Role:** The mission that the organization must fulfill.
  4. **Competencies:** The specific actions that the actor is in charge of.
  5. **Authority:** The degree of influence that can be: *high, medium or low*; and that in turn can be: *formal or informal*.
  6. **Positioning:** The attitude that the actor takes with respect to the project, which can be: *in favor, indifferent, or against*.
  7. **Concern:** The type of expectation that you have regarding the project that can be: *high, medium or low*.
- Consolidation of information by crossing variables and final positioning map.
- Preparation of the report.
- Review and incorporation of comments.

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<sup>10</sup> Tapella, E. (2007) El mapeo de Actores Claves, documento de trabajo del proyecto Efectos de la biodiversidad funcional sobre procesos ecosistémicos, servicios ecosistémicos y sustentabilidad en las Américas: un abordaje interdisciplinario”, Universidad Nacional de Córdoba, Inter-American Institute for Global Change Research (IAI).

## 4. Stakeholder mapping

This section describes the main stakeholders, which in turn represent the human capital necessary for the viability of the project in terms of potential for the creation of networks, characteristics of the predominant relationships, power relations and their positions regarding the project. Thus, as previously stated, a file was prepared for each actor that details its qualities and territorial relevance, based on the competencies and decision-making at the community and territorial level.

### 4.a – State Actors

#### 4.a.1 - BINATIONAL - National Government of Argentina and Uruguay

<b>Name</b>	CARU - River Uruguay Executive Commission (Comisión Administradora del Río Uruguay)
<b>Classification</b>	Binational
<b>Role</b>	CARU is the Binational Commission for water and inland waterways. The floods are referred to the coastal population and are under the purview of the authorities of each territory, not CARU. They are invited to synergize and connect the early warning system that coordinates with CARU, and which focuses on water courses.
<b>Competencies</b>	It has competences in shared waters, not so on the coastal zone.
<b>Authority</b>	Medium
<b>Positioning</b>	In favor of participation in the Paysandú workshop, although its role is restricted to component 1 and 4 in Early Warning.
<b>Concern</b>	High. We will work together from both national ministries to coordinate

<b>Name</b>	Mixed Technical Commission of Salto Grande
<b>Classification</b>	Binational
<b>Role</b>	The Mixed Technical Commission of Salto Grande is a Binational Organization created by the Argentine Republic and the Oriental Republic of Uruguay in order to take advantage of the rapids of the Uruguay River in the area of Salto Grande. In the Binational Organism, made up of Delegations of both States that make up the Plenary of the Commission, the Organism coexists specifically with the areas that are in charge of the production and transmission of electric energy, as well as the administration and execution of political and administrative decisions of the Plenary.
<b>Competencies</b>	Its competences are: Produce and supply electricity through the use of the Uruguay River and an effective administration of the Salto Grande Hydroelectric Complex, preserving the environment, contributing to the socioeconomic development and integration of Argentina and Uruguay. Generate and transport energy in a clean, safe and economic way, attending to the requirements of the clients, preserving and improving the natural and labor environment. Manage any detectable risk that may affect the environment, the health of people or the provision of the service. It will contribute to the project in the early warning component.
<b>Authority</b>	Medium
<b>Positioning</b>	In favor

<b>Concern</b>	High
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#### 4.a.2 - ARGENTINA – National Government

<b>Name</b>	Ministry of Foreign Affairs and Worship. Undersecretary of Foreign Policy - General Directorate of Environmental Affairs. Secretariat of International Coordination and Cooperation. Directorate of International Cooperation Projects
<b>Classification</b>	National
<b>Role</b>	ORGANIC LAW OF THE MINISTRIES OF THE EXECUTIVE POWER - LAW 14.303 - Functions of the ministries of the Executive Power in general ARTICLE 3 - The ministries of the Executive Power will assist the President in the exercise of its attributions linked to the execution of the government and will have, in the matters of their competence, the following common functions: 1º Collect information related to their tasks execution. 2º Project and execute the works that lead to the best fulfillment of its specific functions. 3º Execute the resolutions and general plans of the Executive Power. 4º Inform the Executive Power about the fulfillment of the functions assigned to them by this law and, in particular, about the status of execution of resolutions and plans in force.
<b>Competencies</b>	The Ministry of Foreign Affairs and Worship (MREyC) is responsible for the foreign policy in environmental matters. It represents Argentina in international forums related to this issue, with the participation of the other areas of the State with concurrent competence in the subject. It also understands in the negotiation, interpretation and application of international instruments that regulate shared river basins and those issues related to bi and multinational environmental issues. By law, it is the responsibility of the Ministry of Foreign Affairs and Worship to assist the President, and the Chief of the Cabinet of Ministers, in everything inherent to the foreign relations of the Nation and its representation before foreign governments, the Holy See and the international entities in all fields, and in particular: Understand, from the point of view of foreign policy, in the negotiation of international cooperation in educational, cultural, environmental, economic, social, scientific, technical, technological, nuclear, space, labor and legal issues, in coordination with the respective ministries and with other national organizations that have competence in any of these areas; understand in international negotiations and participate, from the point of view of external relations in the formulation and execution of policies on environmental protection, and the preservation of the Argentine terrestrial and maritime territory and its adjacent areas, as well as of airspace; among others.
<b>Authority</b>	High
<b>Positioning</b>	In favor of all adaptation issues, this project has not been analyzed in particular
<b>Concern</b>	When the final structure of the project is decided, it will probably be part of an advisory council. It reviews and validates implementation decisions

<b>Name</b>	Ministry of Tourism (MINTUR). It includes the Federal Council of Tourism and the National Institute of Tourist Promotion IMPROTUR).
<b>Classification</b>	National
<b>Role</b>	ORGANIC LAW OF THE MINISTRIES OF THE EXECUTIVE POWER - LAW 14.303 - Functions of the ministries of the Executive Power in general

	<p>ARTICLE 3 - The ministries of the Executive Power will assist the President in the exercise of its attributions linked to the execution of the government and will have, in the matters of their competence, the following common functions:</p> <p>1º Collect information related to their tasks execution.</p> <p>2º Project and execute the works that lead to the best fulfillment of its specific functions.</p> <p>3º Execute the resolutions and general plans of the Executive Power.</p> <p>4º Inform the Executive Power about the fulfillment of the functions assigned to them by this law and, in particular, about the status of execution of resolutions and plans in force.</p> <p>It favors the consolidation of financing strategies for protected areas with tourist-recreational use by positioning them in the international and national markets.</p>
<b>Competencies</b>	<p>The mission of the Ministry is to promote the optimal conditions of competitiveness that lead to the balanced and sustainable development of the Argentine tourism sector and to the improvement in the quality of life of residents and visitors. Its vision is to turn the Argentine Republic into the best touristically positioned country in South America for the quality and diversity of its offer, based on balanced territorial developments that respect the habitat and identity of its inhabitants.</p> <p>At the same time: it is responsible for the framework and strategic plan of the tourist activity at national level; it defines tourism policies at the national level; it is articulated with the Administration of National Parks in tourist aspects and with the tourism circuits of the municipalities.</p>
<b>Authority</b>	High
<b>Positioning</b>	In favor. It has not been consulted specifically, but its participation in the Adaptation Plan is presumed favorable.
<b>Concern</b>	High. Scheme of coordination with other tourism projects and other investments where there may be overlap

<b>Name</b>	Ministry of Environment and Sustainable Development (MAyDS). Undersecretary of Planning and Environmental Policy.
<b>Classification</b>	National
<b>Role</b>	<p>ORGANIC LAW OF THE MINISTRIES OF THE EXECUTIVE POWER - LAW 14.303 - Functions of the ministries of the Executive Power in general</p> <p>ARTICLE 3 - The ministries of the Executive Power will assist the President in the exercise of its attributions linked to the execution of the government and will have, in the matters of their competence, the following common functions:</p> <p>1º Collect information related to their tasks execution.</p> <p>2º Project and execute the works that lead to the best fulfillment of its specific functions.</p> <p>3º Execute the resolutions and general plans of the Executive Power.</p> <p>4º Inform the Executive Power about the fulfillment of the functions assigned to them by this law and, in particular, about the status of execution of resolutions and plans in force.</p> <p>In turn, it integrates the project implementation consortium, considers and validates implementation decisions, agrees criteria with other actors.</p> <p>MAyDS will have the role of coordinating the project. It will be responsible for its technical implementation, its monitoring and financial planning. MAyDS will articulate with the National Director of the Project, who will be the supervisor of the activities and achievements of the project, and of the technical specialists, as well as with the Uruguayan counterpart (MVOTMA) and with the provincial subunit.</p>
<b>Competencies</b>	The MAyDS, as the National Environmental Authority, is the focal point of the Adaptation Fund for Argentina and therefore it is responsible for coordinating the programming of the AF resources and the supervision of the portfolio of environmental projects in Argentina, in collaboration with the partners of the projects.



	<p>The Undersecretariat of Planning and Environmental Policy of the MArDS, through the National Directorate for Adaptation to Climate Change, carries out these issues and is informed of all the environmental projects that Argentina presents to funding organizations. It is responsible for the design and implementation of the national policy linked to the rational use of natural resources, conservation of biodiversity, development of instruments and implementation of policies aimed at social, economic and ecological sustainability, with strategies at the regional level.</p> <p>The Undersecretary of Planning and environmental policy assists MArDS in the implementation of its mission.</p>
<b>Authority</b>	High
<b>Positioning</b>	In favor
<b>Concern</b>	High. It is the key focal point of the project
<b>Name</b>	Administrative Commission of Salto Grande's Special Fund/ Comisión Administradora para el Fondo Especial de Salto Grande (CAFESG)
<b>Classification</b>	Binational
<b>Role</b>	<p>CAFESG was created by the Provincial Law of Entre Ríos N. 9.140 in 1998. It is in charge of administering the fund made up by the surplus derived from the exploitation of the Salto Grande Hydroelectric Complex.</p> <p>Created by provincial law, it has a double system of rigorous control: the budget, as its execution is approved in the legislature. The General Balance, the Result Account and the Annual Report for the year are published in the Official Gazette of Entre Ríos. Works plan must be approved by the Nation, within the Ministry of Economy.</p>
<b>Competencies</b>	<p>It was established in the agreement that the Nation, through the MINISTRY OF FOREIGN AFFAIRS, INTERNATIONAL TRADE AND WORSHIP, began consultations with the Oriental Republic of Uruguay to reformulate the Convention and Additional Protocol between the Argentine Republic and the Oriental Republic of the Uruguay for the use of the rapids of the Uruguay River in the area of Salto Grande. To this end, the MINISTRY OF FOREIGN AFFAIRS, INTERNATIONAL TRADE AND WORSHIP will be assisted by Representatives of the Governments of the Provinces.</p> <p>The agreement also establishes that the creation of a Special Fund of Salto Grande must be specified by each of the Provinces, in order to execute the complementary works contemplated in the Additional Protocol and Convention of 1946 for the use of the rapids of the Uruguay River in the area of Salto Grande, and those that are necessary to mitigate the negative effects of the exploitation of the complex, the use of water for domestic purposes, irrigation, navigation and everything that leads to the development of the region, as established in the original objectives.</p>
<b>Authority</b>	Medium
<b>Positioning</b>	In favor
<b>Concern</b>	High

<b>Name</b>	Federal System of Protected Areas/ Sistema Federal de Áreas Protegidas (SiFAP)
<b>Classification</b>	National

<b>Role</b>	<p>The Federal System of Protected Areas (SiFAP) was created in 2003 by the MAYDS, the NPA and the COFEMA. Its Statutory Framework states that the Protected Areas are zones of continental (terrestrial or aquatic) or coastal/marine ecosystems, or a combination thereof, with defined limits and under some kind of legal, national or provincial protection, that the competent authorities of the different jurisdictions register voluntarily, without affectation to the jurisdictional power. The management of SiFAP is in charge of an Executive Committee, made up of 3 members: The President, on behalf of COFEMA, the Coordinator, represented by the NPC and the administrative technical Secretariat in charge of the MAYDS representative.</p> <p>The SiFAP is the sum of all the protected areas (PA) of Argentina created and managed by national, provincial, municipal authorities, universities, private organizations, NGO or Foundations. The information of each PA is registered in the SiFAP only by the national and provincial organisms.</p>
<b>Competencies</b>	The fundamental mission of the Federal System of Protected Areas (SiFAP) is to conserve representative samples of the great environmental mosaic of Argentina. The project would relate to component 4 through the interventions in the region where the El Palmar park is located and the reserve La Aurora (department of Colón) and in the components 1 and 4 that integrate good practices in protected areas.
<b>Authority</b>	High
<b>Positioning</b>	In favor
<b>Concern</b>	High, focused on one component, very affected by erosion and floods

<b>Name</b>	Federal Council of the Environment/Consejo Federal de Medio Ambiente (COFEMA)
<b>Classification</b>	National
<b>Role</b>	The General Law of the Environment created the Federal Environmental System and established the Federal Environment Council (COFEMA) as a body for coordination and preparation of a joint environmental policy. It involves the national, provincial and local authorities of Buenos Aires. The competent Authority of the General Law of the Environment is the MAYDS of the JGM.
<b>Competencies</b>	<p>The General Law of the Environment places COFEMA as the axis of the environmental order of the country.</p> <p><i>"...The territorial environmental order will develop the structure of the global operation of the territory and of the Nation. It will be generated through the interjurisdictional coordination of the municipalities and the provinces, and among them, the city of Buenos Aires with the Nation ...",</i> through the Federal Council of the Environment (COFEMA); it must consider the concertation of interests of the different sectors, among themselves and with the public administration (Art. 9).</p> <p>COFEMA is the basis of the Federal Environmental System. Environmental Education is also an articulating axis of COFEMA. "Environmental information is another element where COFEMA operates as coordinator and channeler ..." through a system of data collection on basic environmental parameters, establishing the necessary mechanisms for effective instrumentation ... "(Art. 17)" ... Then this object of coordination is ratified with the National Law 25.831 - REGIME OF FREE ACCESS TO PUBLIC INFORMATION ON ENVIRONMENT ... "</p> <p>"In Law 25.670, of PCBs (Polychlorinated Biphenyls) COFEMA is cited as a coordination area again ..." The same applies to Law 25.916 on Domiciliary Waste, in which COFEMA is the area of political consensus on the matter.</p>
<b>Authority</b>	High
<b>Positioning</b>	In favor, through the National representation and that of Entre Rios within COFEMA

<b>Concern</b>	High
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<b>Name</b>	National Parks Administration (NPA)
<b>Classification</b>	National
<b>Role</b>	<p>The National Parks are regulated by Law N° 22.351 (11/4/1980) and the competent Authority is the NPA, an autarchic entity of the National State that has competence and capacity to act respectively in the field of public and private law. The Law regulates the way Parks are created and their management categories, in addition to the powers of the authority. The NPA is a decentralized body, under the Ministry of Tourism. In addition to this Law, the Provinces have their own regulations for the creation of Protected Natural Areas.</p> <p>NPA integrates the project consortium, validates implementation decisions, articulates management criteria for its parks, provides experience in management issues, training, planning and financing</p>
<b>Competencies</b>	<p>The National Parks Administration aims to design, conduct and control the execution of the necessary policies to conserve and manage the National Parks, Natural Monuments and National Reserves, those currently existing and those that are eventually incorporated, in order to ensure the maintenance of their integrity in everything related to their particular physiographic characteristics, biotic associations, natural resources and environmental quality of human settlements and promote the creation of new areas within the framework of the National Network of Protected Areas.</p> <p>It is responsible for programming, analyzing, authorizing, auditing and rescinding the implementation of any public or private works project, exploitation of natural resources, recreational and sports activities, prioritizing without exception the maintenance of the integrity and identity of protected natural areas; on such activities, ensure the correct perception of the fees, contributions, patents, rights and other concepts that may correspond, in order to have a constant income from its own resources.</p> <p>In addition, the Administration encourages and establishes links of cooperation and assistance with public and private national, provincial, municipal and -with the authorization of the National Executive Power- international agencies and promote the dissemination of the general characteristics of the National Parks and other Protected Areas, in order to induce a harmonious coexistence with nature.</p> <p>It manages the National Parks and co-manages the inter-jurisdictional parks.</p> <p>The Eastern Regional Coordination Center (Buenos Aires, Santa Fe and Entre Ríos) of the NPA, is in charge of the technical activities of the national parks and the relationship with the conservation actors of those provinces.</p>
<b>Authority</b>	Medium, it depends on the Ministry although it has a high degree of autonomy
<b>Positioning</b>	In favor
<b>Concern</b>	High

<b>Name</b>	Ministry of Finance and Chief of the Cabinet of Ministers / Ministerio de Finanzas y Jefatura de Gabinete de Ministros de Nación (JGM)
<b>Classification</b>	National
<b>Role</b>	<p>It supervises all operations with multilateral credit agencies. They participate in supervision. The National Cabinet of Climate Change (GNCC) is within the scope of JGM, and is responsible for the formulation of the National Plan for Climate Change and the development of a portfolio of mitigation and adaptation to climate change projects that should be implemented in the framework of national and provincial policies.</p>
<b>Competencies</b>	They give priority to projects related to the OMC

	In 2016, the GNCC was created in the orbit of the Chief of the Cabinet Office in order to articulate policies on climate change and raise awareness about its relevance. The Cabinet is chaired and coordinated by the Cabinet of Ministers composed of 17 Ministries (Energy, Transport, Agro-industry, environment, among others).
<b>Authority</b>	High
<b>Positioning</b>	In favor, they analyze project profiles
<b>Concern</b>	High

<b>Name</b>	Unit for Rural Change/Unidad para el Cambio Rural (UCAR) – Implementing Agency in Argentina
<b>Classification</b>	National
<b>Role</b>	<p>The mission of UCAR is the coordination of all programs and projects co-financed (totally or partially) with external resources executed in the jurisdiction of the Ministry of Agribusiness. The objectives of these programs and projects cover broad profiles of public investment for development, which are specified in different financing dimensions and are applied with different technical and operational modalities.</p> <p>Within the UCAR, a permanent activity of exchange and cooperation is maintained.</p>
<b>Competencies</b>	<p>UCAR is the only organization in the Argentine Republic that has been accredited as a National Implementing Entity by the Adaptation Fund, which allows it to present proposals for the financing of mitigation and/or adaptation projects to climate change.</p> <p>As an Accredited Implementing Entity, UCAR can submit projects that it will execute itself or can present proposals to be executed by other institutions.</p>
<b>Authority</b>	Medium
<b>Positioning</b>	In favor in informal consultations
<b>Concern</b>	Medium

<b>Name</b>	Ministry of the Interior of the Argentine Republic, National Directorate of Drinking Water and Sanitation, Undersecretary of Water Resources/ Ministerio del Interior de la República Argentina, Dirección Nacional de Agua Potable y Saneamiento, Subsecretaría de Recursos Hídricos
<b>Classification</b>	National
<b>Rol</b>	<p>ORGANIC LAW OF THE MINISTRIES OF THE EXECUTIVE POWER - LAW 14.303 - Functions of the ministries of the Executive Power in general ARTICLE 3 - The ministries of the Executive Power will assist the President in the exercise of its attributions linked to the execution of the government and will have, in the matters of their competence, the following common functions: 1º Collect information related to their tasks execution. 2º Project and execute the works that lead to the best fulfillment of its specific functions. 3º Execute the resolutions and general plans of the Executive Power. 4º Inform the Executive Power about the fulfillment of the functions assigned to them by this law and, in particular, about the status of execution of resolutions and plans in force.</p>
<b>Competencies</b>	It is the specific competence of the Ministry of the Interior, Public Works and Housing, to assist the President of the Nation, and the Chief of the Cabinet of Ministers, in accordance with their competencies, in everything inherent to the internal political government and to the full exercise of the constitutional guarantees, ensuring and preserving the republican,

	<p>representative and federal regime, and in relation to the policy of public works, housing and habitat.</p> <p>Understand the relationships and development with the governments of the provinces and the City of Buenos Aires, and interjurisdictional relations and issues and coordinate policies that contribute and encourage the formation of regions in the national territory, for the established purposes in article 124 of the National Constitution.</p> <p>The Undersecretariat of Water Resources intervenes in the preparation and execution of the national water policy and the policy regarding public services for the supply of drinking water and sanitation. It also proposes the regulatory framework for the management of water resources and the organization and strengthening of the drinking water and sanitation sector. It links and coordinates the action of other jurisdictions and agencies in the provision and expansion of these services.</p> <p>The Undersecretariat designs, coordinates and implements the National Water Plan based on four axes of water policy focused on the need to achieve regional development, contribute to the generation of employment and decrease the percentage of the population in situation of poverty.</p> <p>The Undersecretariat oversees and coordinates the actions of the National Water Institute (INA), of the Dam Safety Regulatory Agency (ORSEP), of the Water and Sanitation Regulatory Entity (ERAS), of the Planning Agency (APLA), of the National Entity of Water Works of Sanitation (ENOHSA), and of the remaining decentralized and deconcentrated organisms that are within its influence. Likewise, it is the enforcement authority in the potable water and sanitation concession contracts (AYSA).</p> <p>It also exercises the control of the actions of the Regional Commission of the Bermejo River (COREBE); of the Interjurisdictional Committee of the Colorado River (COIRCO); of the Interjurisdictional Authority of the Limay, Neuquén and Negro River Basins; as well as of any other watershed management organization in representation of the State.</p> <p>It is the function of the Undersecretariat to evaluate the country's water resources through networks, observation systems and continuous monitoring, and to administer the water resources information system. In addition, it participates in the national and international agenda of climate change in matters related to water.</p> <p>They carry out the sanitation work for the area of all the purification areas in the basin and sewage networks. They have worked with the Uruguay River plan for the Argentine side.</p>
<b>Authority</b>	High
<b>Position</b>	In favor
<b>Concern</b>	Medium. At this moment, they are working on floods in large infrastructure works and in a national hydrological plan, it is necessary to coordinate possible overlaps.

<b>Name</b>	Federal Water Council/ COHIFE - Consejo Hídrico Federal
<b>Classification</b>	National
<b>Rol</b>	It provides guidelines that allow integrating technical, social, economic, legal, institutional and environmental aspects of water in a modern management of water resources.
<b>Competencies</b>	It facilitates the exchange of ideas and experiences between provinces that are not part of the same basin, which gives them a broader and more related perspective. It helps them perceive that many problems and solutions are common to all basins. It contributes to the

	coherence in the formulation and implementation of the National Water Policy and provincial water policies.
<b>Authority</b>	Low
<b>Position</b>	In favor
<b>Concern</b>	High

<b>Name</b>	Ministry of National Security Civil Protection and Comprehensive Approach to Emergency and Catastrophes Civil Protection Secretariat National Directorate of Institutional Relations
<b>Classification</b>	National
<b>Rol</b>	The agency would have a role of articulation between the different components of an early warning system, taking into account that they are necessarily inter-institutional in their conformation and interdisciplinary in terms of the use of the information they generate. It assists the Minister of Security in the implementation of actions aimed at preserving the life, assets and habitat of the population in the event of natural or anthropogenic disasters, coordinating the use of human and material resources in the stages of mitigation, response and reconstruction.
<b>Competencies</b>	<p>From the Secretariat of Civil Protection of the Ministry of National Security, through the National Direction of Risk Analysis, the Monitoring of Threats is generated daily, which includes volcanic activity, heat sources, earthquakes and meteorological warnings.</p> <p>The primary responsibility falls on the local level and when this level is exceeded, the resources of the province are activated, and so on. Likewise, the Federal Council of SINAGIR created by law 27.287, is made up of representatives of the provinces, with the purpose of promoting regional integration. The National Council is also created to articulate the use of State resources in all stages of Comprehensive Risk Management.</p> <p>The Secretariat of Civil Protection of the Ministry of National Security works hard with the countries that make up UNASUR and MERCOSUR. The objective is the joint construction of a shared and coordinated agenda among those working in risk management. Understanding the importance of prevention, UNASUR has made progress in creating a permanent discussion space through the High-Level Working Group for the Comprehensive Risk Management (GTANGRD).</p> <p>Carry out the coordination of the Federal Emergency System (SIFEM) created by Decree No. 1.250 of October 28, 1999. Understand the development of training policies and planning of activities related to civil protection to safeguard life, property and environment. Understand the integration, coordination and coordination of Civil Protection activities with federal, provincial and municipal agencies of the AUTONOMOUS CITY OF BUENOS AIRES and civil society.</p>
<b>Authority</b>	Low
<b>Position</b>	In favor
<b>Concern</b>	High

<b>Name</b>	National Institute of Agricultural Technology/ Instituto Nacional de Tecnología Agropecuaria (INTA)
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<b>Classification</b>	Nacional
<b>Rol</b>	<p>The National Institute of Agricultural Technology is a decentralized public body with operational and financial self-sufficiency, which is under the Ministry of Agribusiness. INTA's contributions allow the country to achieve greater potential and generate new opportunities to access regional and international markets with products and services with high added value.</p> <p>The institution is present in the five ecoregions of Argentina (Northwest, Northeast, Cuyo, Pampeana and Patagonia).</p>
<b>Competencies</b>	Its objectives and efforts are aimed at innovation as the engine of national development. As a member of the National System of Science, Technology and National Innovation, it develops capacities for the agroindustrial sector and participates in networks that foster inter-institutional cooperation; it generates knowledge and technologies that puts at the service of different sectors of society, through its extension, information and communication systems.
<b>Authority</b>	Low
<b>Position</b>	In favor
<b>Concern</b>	High

<b>Name</b>	National Meteorological Service (NMS) of the Ministry of National Defense
<b>Classification</b>	Nacional
<b>Rol</b>	The NMS is a decentralized body that develops its action within the scope of the Secretary of Planning of the Ministry of Defense, with economic and financial self-sufficiency, its own legal personality and with the capacity to act in the field of public and private law.
<b>Competencies</b>	Observe, understand, predict weather and climate in the national territory and adjacent ocean areas in order to contribute to the protection of the life and property of its inhabitants and to the sustainable development of the economy; represent the country before the international meteorological organisms and the fulfillment of the obligations assumed by the country before them.
<b>Authority</b>	Low
<b>Position</b>	In favor
<b>Concern</b>	High

<b>Name</b>	National Water Institute (INA) Directorate of Information Systems and Hydrologic Warning (SIyAH)
<b>Classification</b>	Nacional
<b>Rol</b>	It is a decentralized scientific and technological organism whose objective is to satisfy the requirements of study, research, development and provision of specialized services in the field of water use and preservation. It depends on the Undersecretariat of Water Resources of the Nation.
<b>Competencies</b>	Cooperate with other entities of the national Executive Power, the National Congress and the Judicial Power in the fulfillment of the non-delegable functions of the State, in the matters that make their competence.



	<p>Provide advice and highly specialized technical services to public and private, municipal, provincial, national, international and foreign entities in programs and projects related to water issues.</p> <p>Promote the training of human resources in their sector to intensify the training of professionals, specialists and researchers in the thematic areas related to water resources. Collaborate in the dissemination of programs and projects in search of a greater awareness on water problems, in coordination with the competent departments.</p> <p>The main objective of SlyAH is to develop and operate the hydrological warning and forecasting service of the River Plate Basin and coordinate the numerical and documentary information related to water resources. Located in the Ezeiza Research Complex, its main objective is to develop and operate the hydrological warning and forecast service of the River Plate Basin and coordinate the numerical and documental information related to water resources.</p>
<b>Authority</b>	Medium
<b>Position</b>	In favor
<b>Concern</b>	High

<b>Name</b>	National System for Comprehensive Risk Management/ Sistema Nacional para la Gestión Integral del Riesgo (SINAGIR)
<b>Classification</b>	National
<b>Rol</b>	Its purpose is to integrate the actions and articulate the functioning of the national government agencies, the provincial governments, the Autonomous City of Buenos Aires and municipalities, non-governmental organizations and civil society, to strengthen and optimize actions aimed at risks reduction, crisis management and recovery.
<b>Competencies</b>	<p>The National System for Comprehensive Risk Management and Civil Protection has the purpose of the integral protection of people, communities and the environment in the presence of risks. Promote the joint response of all State agencies to various crisis and emergency situations. Prioritize risk prevention and the recovery process. Climate change has increased the number of severe storms, which means a greater frequency in the number of severe weather events. For this reason, we must be more attentive and prepared for the episodes that may arise. From the Secretariat of Civil Protection of the Ministry of National Security, through the National Direction of Risk Analysis, the Monitoring of Threats is generated daily, which includes volcanic activity, heat sources, earthquakes and meteorological warnings. The relationship between these systems is subsidiary, which implies that the primary responsibility falls on the local level and when this level is exceeded, the resources of the province intervene, and so on.</p> <p>Likewise, the Federal Council of SINAGIR is made up of representatives of the provinces, with the purpose of promoting regional integration. The National Council is also created to articulate the use of State resources in all stages of Comprehensive Risk Management.</p> <p>The Secretariat of Civil Protection of the Ministry of Security works with the countries that make up UNASUR and MERCOSUR. The objective is the joint construction of a shared and coordinated agenda among those working in risk management. Understanding the</p>

	<p>importance of prevention, UNASUR has made progress in creating a permanent discussion space through the High-Level Working Group for the Integral Management of Disaster Risk (GTANGRD).</p> <p>Regarding the project, the agency would have a role of articulation between the different components of an early warning system, taking into account that they are necessarily inter-institutional and interdisciplinary.</p>
<b>Authority</b>	Medium
<b>Position</b>	In favor
<b>Concern</b>	High

#### 4.a.3 - URUGUAY – National Government

<b>Name</b>	Secretariat of Environment, Water and Climate Change (SNAACC) and National Environmental System/Sistema Nacional Ambiental (SNA)
<b>Classification</b>	National
<b>Rol</b>	<p>In 2015, Article 33 of Law No. 19.355 created the National Secretariat for Environment, Water and Climate Change of the Presidency of the Republic (SNAACC) and in 2016 the National Environmental System (SNA) was established with the purpose of strengthening, articulate and coordinate Uruguay's public policies to protect the goods and services provided by ecosystems and increase adaptation to climate change, among others. The SNA led by the President of the Republic or whoever he designates as its delegate, brings together the National Environmental Cabinet, OSE, the Uruguayan Institute of Meteorology (INUMET), the National Response System to Climate Change and Variability (SNRCC), the National Secretariat of Environment, Water and Climate Change of the Presidency of the Republic (SNAACC) and the National Emergency System (SINAE). In turn, the National Environmental Cabinet integrates the President of the Republic together with the Ministers of Housing, Land Planning and Environment, Livestock Agriculture and Fisheries, Energy and Mining Industry, National Defense, Public Health and Economy and Finance. The Congress of Intendants and other organizations may participate in the design and implementation of specific activities.</p> <p>Its role is to articulate institutional plans and programs for the consideration of climate and the hydrological cycle, with particular attention to the protection and sustainable use of shallow and underground water courses and bodies, and to prepare a strategic National Environmental Plan for the Sustainable Development.</p>
<b>Competencies</b>	Strengthen, articulate and coordinate national public policies on the issues of environment, water and climate change, as a boost to environmentally sustainable development that conserves the goods and services provided by natural ecosystems, promotes the protection and rational use of water and response and increase resilience to climate change.
<b>Authority</b>	Medium
<b>Position</b>	In favor
<b>Concern</b>	High

<b>Name</b>	National Response System to Climate Change and Variability (SNRCC)
<b>Classification</b>	National
<b>Rol</b>	The governing body and coordinator is the MVOTMA, in compliance with the decree that published the National Plan, synthesis of the work of more than a hundred technicians

	<p>from public and private organizations, which includes the main lines of action to follow to address the effects of this global phenomenon.</p> <p>In 2009, by Decree of Executive Power number 238, the National Response System to Climate Change and Variability (SNRCC) was created, in order to coordinate and plan the public and private actions necessary for the prevention of risks, mitigation and adaptation to climate change. It is the SNRCC that draws up the National Climate Change Response Plan published in January 2010 and the National Climate Change Policy during 2016. The SNRCC has two areas: the Coordination Group and the Advisory Commission. The Chair of the Coordination Group is exercised by the Ministry of Housing, Land Planning and the Environment and the vice presidencies are exercised by the Ministry of Livestock, Agriculture and Fisheries and the Office of Planning and Budget. The Coordination Group is also composed of the Ministry of Industry, Energy and Mining, the Ministry of Foreign Affairs, the Ministry of Public Health, the Ministry of Tourism and Sports, the Ministry of National Defense, the Ministry of Economy and Finance, the Congress of Intendants and the National Emergency System. The Ministry of Social Development, the Ministry of Education and Culture, the Ministry of Transport and Public Works and the Uruguayan Meteorological Institute participate as guests of the Coordination Group. The Advisory Commission is organized in working groups in which technicians from the coordination group, the academy, private sector and organized civil society participate.</p> <p>The National Plan of Response to Climate Change (PNRCC), approved and presented by the Executive Power on February 24, 2010, is the main instrument of the SNRCC. It constitutes a system of agreements and commitments on a set of orientations and guidelines developed in an inter-institutional and participatory manner, as a result of the work carried out among technicians, national and departmental leaders, representatives of the productive sectors and civil society. It is fundamentally a strategic framework that identifies the lines of action and necessary measures to mitigate greenhouse gas emissions in Uruguay and to achieve the adaptation of society and its main development sectors to the impacts derived from the variability and climate change.</p>
<b>Competencies</b>	Coordinate and plan the public and private actions necessary for the prevention of risks, mitigation and adaptation to climate change.
<b>Authority</b>	Medium
<b>Position</b>	In favor
<b>Concern</b>	High

<b>Name</b>	Ministry of Housing, Land Planning and Environment (MVOTMA), and its Directorates: Division of Climate Change (DCC); National Water Directorate (DINAGUA), National Land Management Directorate (DINOT), National Environment Directorate (DINAMA); National Housing Directorate (DINAVI)
<b>Classification</b>	National
<b>Rol</b>	It is the executing agency of the Project. Chair of the Project Monitoring Committee.
<b>Competencies</b>	The <b>MVOTMA</b> is the governing body and benchmark of environmental policy, and its mission is to design and implement participatory and integrated public policies on housing, environment, territory and water, to promote equity and sustainable development, contributing to the improvement of the quality of life of the inhabitants of the country. Its competences are framed in the National Climate Change Policy and in Law No. 17.283 <sup>11</sup> on environmental protection and national Policy of Climate Change.

<sup>11</sup> <https://legislativo.parlamento.gub.uy/temporales/leytemp5631576.htm>

	<p>The <b>Climate Change Division</b> is the operational and executing body in relation to climate change in the country, promoting mitigation and adaptation actions. It coordinates the Climate Change Response System, articulating among key actors. As part of MVOTMA, it fulfills the role of competent national authority for the implementation and application of the United Nations Framework Convention on Climate Change.</p> <p>The <b>DINAVI</b> aims to make effective access and permanence to adequate housing for all sectors of the population, generating a comprehensive housing policy articulated with all social policies. Among its objectives: rehabilitate degraded areas contributing to the improvement of the habitat (from the scale of housing to the urban space) in accordance with the local plans of territorial ordering; promote quality, research and technological innovation in housing solutions and promote innovation in the management of housing programs; and relocate homes settled in floodplain or contaminated land.</p> <p>The mission of <b>DINAMA</b> is to achieve an adequate protection of the environment, fostering sustainable development through the generation and application of instruments aimed at improving the quality of life of the population and the conservation and environmentally responsible use of ecosystems.</p> <p>The <b>DINOT</b> has competences in the promotion and development of planning processes and environmental management of the territory. Among its objectives, the formulation, execution, supervision and evaluation of the instruments of Territorial Regulation and sustainable development, in its different scales and areas, within the framework of the Law No. 18.308 previously mentioned.</p> <p>The <b>DINAGUA</b> aims to improve the quality of life of the inhabitants and ensure the sustainable use of the country's water resources, through the formulation of national water and sanitation policies, contemplating the participation of the various actors involved and coordination with the other policies public. Among its objectives, the formulation, implementation and follow-up of the Integrated Water Resources Management Plan, promoting watershed management, in particular the strategic basins.</p> <p>It also has the responsibility of evaluating HR through the operation of the network of hydrometric stations; defining national policies to manage hydrometeorological risks such as droughts and floods, especially considering the scenarios of climate change and variability. The Regional Councils and the Basin Commissions are consultative, deliberative, advisory and support bodies for the management and planning of water resources at the Regional level.</p>
<b>Authority</b>	High
<b>Position</b>	In favor
<b>Concern</b>	High
<b>Name</b>	National Emergency System (SINAE)
<b>Classification</b>	National
<b>Rol</b>	<p>Role in disaster risk management. The Law for the Creation of the National Emergency System (SINAE) (N°18.621/09) shows that disaster management does not only mean acting at the time of the event, but also generating the necessary actions to prevent, anticipate and mitigate its impacts. In article 1, the National Emergency System is defined as "a permanent public system whose purpose is the protection of people, property and the environment, before the eventual or actual occurrence of disasters ...". The SINAE is permanent and is responsible for risk management in all its stages. In 2016, the National Emergency and Risk Reduction Board was created. This is the scope of coordination of the Executive Power, for the definition of public policies of risk reduction and attention to emergencies and disasters.</p>

	<p>The SINAE has a decentralized form of action in the territory through the Departmental Emergency Coordinating Centers (CECOED). Each CECOED is in charge of centralizing the material, human and institutional resources, developing prevention strategies and implementing risk management measures in the different stages.</p> <p>It will be a key player in components 1, 2 and 4, contributing to component 3.</p>
<b>Competencies</b>	<p>The objective of the SINAE is to protect people, property and the environment from adverse phenomena that derive, or may derive, in situations of emergency or disaster, generating the conditions for sustainable development. The SINAE is specified in all the actions carried out by the State to manage the risk of emergencies and disasters in its different phases: prevention, mitigation, preparation, response, rehabilitation and recovery. It is an inter-institutional space of vertical and horizontal articulation.</p>
<b>Authority</b>	High
<b>Position</b>	In favor
<b>Concern</b>	High

<b>Name</b>	Uruguayan Agency for International Cooperation/ Agencia Uruguaya de Cooperación Internacional (AUCI)
<b>Classification</b>	National
<b>Rol</b>	<p>The Uruguayan Agency for International Cooperation operates within the Presidency of the Republic and has a Board of Directors composed of the Chancellor, the Director of the Office of Planning and Budget and a member appointed by the President of the Republic, who chairs the Council. It is a decentralized body, with technical autonomy.</p>
<b>Competencies</b>	<p>Among the tasks of the AUCI: planning, design, supervision, administration, coordination, execution, evaluation, monitoring and dissemination of activities, projects and international cooperation programs, received and granted by Uruguay, to comply with the national development priorities of the country.</p>
<b>Authority</b>	Medium
<b>Position</b>	In favor
<b>Concern</b>	High

<b>Name</b>	Ministry of Economy and Finance/Ministerio de Economía y Finanzas (MEF)
<b>Classification</b>	National
<b>Rol</b>	<p>The MEF is responsible for the conduct of the national policy in economic and financial matters and must adopt the measures aimed at achieving the strategic objectives of the government, to modify the existing situations, in order to achieve, through the efficient use of resources, the growth of the economy and the fairest distribution of income.</p> <p>It is in this general framework that the Ministry must fulfill its substantive tasks, carrying out the necessary activities for the formulation of policies, regulation and control in its field.</p>
<b>Competencies</b>	<p>The Ministry of Economy and Finance is responsible for the conduct of the national economic, financial and commercial policy; It coordinates the fiscal policy, its planning and carries out the programming and control of its execution, as well as the administration of public resources according to established priorities, promoting the economic and social development of the country.</p> <p>It Integrates the Coordination Group of the National Response System to Climate Change and Variability (SNRCC).</p>

<b>Authority</b>	High
<b>Position</b>	In favor
<b>Concern</b>	High

<b>Name</b>	Ministry of Livestock, Agriculture and Fisheries (MGAP) - and within it, in particular, the Office of Planning and Agricultural Policies (OPyPA), the General Directorate of Renewable Natural Resources (DGRNR), the General Forest Directorate (DGF), the General Directorate of Rural Development (DGDR) and the National Directorate of Aquatic Resources (DINARA).
<b>Classification</b>	National
<b>Rol</b>	Agricultural production is one of the main alternative uses of the lands in which PAs are developed. It is important for the Project to coordinate actions in relation to component 3, through coordination with the SNAP in Esteros del Farrapos. Participation in the design of the SNAP and management plans. Participation in the definition of priority species for conservation or restoration.
<b>Competencies</b>	It promotes agricultural development and is responsible for the conservation of natural resources directly involved in production (soils, waters). It controls agrochemicals and transgenic events; promotes forestry production and the care of the native forest.
<b>Authority</b>	Medium
<b>Position</b>	In favor
<b>Concern</b>	Medium

<b>Name</b>	Ministry of Tourism/Ministerio de Turismo (MINTUR)
<b>Classification</b>	National
<b>Rol</b>	It is responsible for setting and directing the national tourism policy considering its economic, cultural and social relevance. It will contribute in training and valuation of protected natural areas and green spaces for public use. It integrates the Coordination Group of the National Response System to Climate Change and Variability (SNRCC).
<b>Competencies</b>	The effects of climate change have an impact on the wellbeing of the population, on the opportunities of tourism entrepreneurs and on tourism. MINTUR develops strategies to incorporate the perspective of adaptation and mitigation to climate change in the strategies of investors and tourists, as well as strategies for valuing green spaces for public use and in protected areas.
<b>Authority</b>	High
<b>Position</b>	In favor
<b>Concern</b>	Medium

<b>Name</b>	Ministry of Industry, Energy and Mining/ Ministerio de Industria, Energía y Minería (MIEM)
<b>Classification</b>	National
<b>Rol</b>	The Ministry of Industry, Energy and Mining has among its strategic guidelines 2015-2020: a) Strengthen the national industry, supporting its development and actively participating in its promotion, acting as an articulator between different actors of the productive chains (regardless of its size and status of public or private actor); b) Promote and develop micro, small and medium enterprises, with special emphasis on the territorial and the promotion of entrepreneurship; c) Expand the productive matrix, increasing the proportion of knowledge-intensive industries or with medium or high technology content; d) Incorporate

	<p>knowledge and technological value to all sectors of the productive matrix, and promote the acquisition of transversal skills (abstract, computational or scientific thinking) in students and young workers; e) Continue with the development of telecommunications, energy and public digital infrastructure.</p> <p>It integrates the Coordination Group of the National Response System to Climate Change and Variability (SNRCC).</p>
<b>Competencies</b>	<p>The Ministry of Industry, Energy and Mining is responsible for designing and implementing the Government's policies related to the industrial, energy, mining, telecommunications, micro, small and medium enterprises sectors, aimed at transforming and strengthening the national productive apparatus, its energy matrix and communications system, for sustainable development with social justice, within the framework of regional integration and insertion in a globalized world.</p>
<b>Authority</b>	High
<b>Position</b>	In favor
<b>Concern</b>	High

<b>Name</b>	Ministry of Social Development/Ministerio de Desarrollo Social (MIDES)
<b>Classification</b>	National
<b>Rol</b>	<p>The Ministry of Social Development is responsible for national social policies, as well as coordination - both at sectorial and territorial levels -, articulation, monitoring, supervision and evaluation of plans, programs and projects, in the areas of its competence, tending to the consolidation of a progressive redistributive social policy. Likewise, it is the mission of this ministry to contribute to the development of social participation scenarios that allow the strengthening of the active citizenship of the Uruguayans.</p> <p>It acts through CECOED and in coordination with Intendencies, in severe events, both in the attention to the vulnerable population and in the generation of information and registration of those affected.</p> <p>In addition, through the National Institute of Women (Inmujeres), it has competence in gender policies, it is responsible for the promotion, design, coordination, articulation and implementation of public policies from the perspective of gender and promotes equal opportunities for access to services and resources that contribute to eradicating poverty and the exclusion of women.</p> <p>It integrates the Coordination Group of the National Response System to Climate Change and Variability (SNRCC).</p>
<b>Competencies</b>	<p>The MIDES is responsible for, among others: advise the Executive Power and propose national policies in matters of its competence; formulate, execute, supervise, coordinate, program, monitor and evaluate policies, strategies and plans in the areas of youth, women and family, elderly, disabled and social development in general; coordinate intersectoral actions, plans and programs, implemented by the Executive Power to guarantee the full exercise of social rights to food, health, housing, the enjoyment of a healthy environment, work, social security and non-discrimination.</p> <p>It integrates the Coordination Group of the National Response System to Climate Change and Variability (SNRCC).</p>
<b>Authority</b>	High
<b>Position</b>	In favor
<b>Concern</b>	High

<b>Name</b>	Ministry of Education and Culture
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<b>Classification</b>	National
<b>Rol</b>	National education and culture policies
<b>Competencies</b>	It will contribute to the development of component 4 through non-formal education spaces and decentralized spaces
<b>Authority</b>	Low
<b>Position</b>	In favor
<b>Concern</b>	low

<b>Name</b>	Ministry of National Defense (MDN), National Naval Prefecture (PNN).
<b>Classification</b>	National
<b>Rol</b>	<p>The <b>MDN</b> is part of the Framework Law of National Defense (Law No. 18.650<sup>12</sup>), which states that the National Defense comprises the set of civil and military activities aimed at preserving the sovereignty and independence of the country, the integrity of the territory and its strategic resources, as well as the peace of the Republic, within the framework of the Constitution and the laws; contributing to generate the conditions for the current and future public welfare.</p> <p>The <b>PNN</b>'s mission is to maintain public order, ensure the safety of navigation as a Police Authority in the areas: Maritime, Fluvial and Lacustrine in the jurisdiction of the Navy and intervene in the flagging of ships and perform registry functions.</p> <p>It integrates the Coordination Group of the National Response System to Climate Change and Variability (SNRCC).</p>
<b>Competencies</b>	<p>The National Defense policy, as a public policy, must comply with the general principles of domestic and international law, in coordination with the State's foreign policy; it should respect, in particular, the principles of self-determination of peoples, preservation of peace, non-intervention in the internal affairs of other nations, peaceful settlement of disputes and cooperation among States.</p> <p>The National Navy through its different components and especially with its NNP, acts to protect the interests of the State, transcending the simple defense of sovereignty and territorial integrity, in order to favor the economic development of the country and its social welfare, exercising by delegation of the Executive Power, the functions of Flag State, Port State and Coastal State, obligations, rights and responsibilities conferred to the States, through the Convention on the Law of the Sea of which the Oriental Republic of Uruguay is a party. Other functions are contributing to the safeguarding of human lives in the sea and in the rest of the aquatic environments under its jurisdiction, that extends over 2,000 kilometers of river banks and maritime coasts. In addition, the Directorate of Maritime Traffic of the Prefecture, in coordination with its 10 zonal control centers and 11 port entry and exit, works with the Hydrography, Oceanography and Meteorology Service of the Navy dependent on the Directorate of Naval Material, disseminating information to navigators, 24 hours a day, 365 days a year.</p> <p>It is integrated into the project through the SINAE</p>
<b>Authority</b>	High
<b>Position</b>	In favor
<b>Concern</b>	High

<sup>12</sup> Ver en: <http://www.impo.com.uy/bases/leyes/18650-2010>

<b>Name</b>	Ministry of Public Health/Ministerio de Salud Pública (MSP)
<b>Classification</b>	National
<b>Rol</b>	Promote the health of the population, through a transparent, effective and integrating institutional structure, for the proper promotion of health, achieving a model of care based on prevention, which promotes a proper health care (with levels of excellence) that contributes to a better quality of life. It integrates the Coordination Group of the National Response System to Climate Change and Variability (SNRCC) and the National Emergency System.
<b>Competencies</b>	Establish the policies and strategies for the fulfillment of the Essential Public Health Functions, in order to ensure collective health as a basic human right and a public good, guiding the National Integrated Health System (NHIS) according to a model of care and management based on the principles of Primary Health Care (PHC). It is integrated into the project in component 1 and 4
<b>Authority</b>	High
<b>Position</b>	In favor
<b>Concern</b>	Medium

<b>Name</b>	Uruguayan Institute of Meteorology/Instituto Uruguayo de Meteorología (INUMET)
<b>Classification</b>	National
<b>Rol</b>	Provide meteorological and climatological public services, in order to contribute to the security of people and their goods, as well as to the sustainable development of society, acting as a meteorological authority in the national territory. Coordinate the meteorological activities in the country and represent the Oriental Republic of Uruguay before the international organisms in the matter. Participates as a guest of the Coordination Group of the National Response System to Climate Change and Variability (SNRCC).
<b>Competencies</b>	It is actively involved with different sectors of society at the local, national and international levels in order to contribute to the development of meteorological knowledge and its application for the good of society. It leads the development of a national meteorological data base whose objective is to provide timely, free and reliable information. It contributes, in collaboration with the responsible entities, to the management of meteorological and climatic risks that affect the various sectors. It integrates the Coordination Group of the National Response System to Climate Change and Variability (SNRCC).
<b>Authority</b>	Medium
<b>Position</b>	In favor
<b>Concern</b>	High

<b>Name</b>	Ministry of Transport and Public Works (MTOP)
<b>Classification</b>	National
<b>Rol</b>	Works in adjacent areas or within protected areas. Participation in control of the management of maritime areas, in port issues.
<b>Competencies</b>	Responsible for road infrastructure and regulating the use and management of water resources through the National Directorate of Hydrography (DNH) and the national policy of public works through the National Directorate of Architecture (DNA)
<b>Authority</b>	High

<b>Position</b>	In favor
<b>Concern</b>	High

<b>Name</b>	National Ports Administration (ANP)
<b>Classification</b>	National
<b>Rol</b>	The ANP's mission is to position Uruguay as a logistics node between the region and the world in terms of the country's sustainable productive development. It is in charge of the control of the implementation of the Ports Act, the promotion of decentralization of national ports, ensuring the coordination of activities carried out, and ensuring that services are provided in a regime of free competition.
<b>Competencies</b>	The National Ports Administration is a decentralized agency, which is linked to the Executive Power through the Ministry of Transport and Public Works. It has the competence of the administration, conservation and development of public ports. In particular, in the project area, in Fray Bentos and Paysandú.
<b>Authority</b>	High
<b>Position</b>	In favor
<b>Concern</b>	High

<b>Name</b>	Sanitary Works (OSE)
<b>Classification</b>	National
<b>Rol</b>	It is the state agency responsible for the supply of drinking water throughout the Oriental Republic of Uruguay and the sewerage service in the interior of the country.
<b>Competencies</b>	Within the framework of the Millennium Development Goals - established at the Millennium Summit of the United Nations in 2000 - the objective set for Uruguay (to be reached in 2015) was to provide sustainable access to drinking water for the vulnerable population from the health point of view. On the other hand, through the reform of the Constitution of 2004, Uruguay becomes the first country in the world to declare access to drinking water and sanitation as a fundamental human right. The objective that OSE set itself, to accompany those MDG and Art. 47 of the Constitution, was to reach 100% of the vulnerable population with health risk. The dispersed rural environment is the place where there is a need to increase service coverage. Therefore, since the end of 2008 and until 2014, OSE will be implementing the Supply Program for Small Towns and Rural Schools, dedicated to bringing potable water service to rural schools and their surrounding villages. It will follow the implementation of components 1, 2 and 4 of the project.
<b>Authority</b>	High
<b>Position</b>	In favor
<b>Concern</b>	High

<b>Name</b>	Movement for the Eradication of Rural Unhealthy Housing (MEVIR)
<b>Classification</b>	National
<b>Rol</b>	Its objective is to eradicate the unhealthy housing of the rural inhabitants. Over the years, MEVIR expanded its original objective, going on to work in a comprehensive manner both with rural employees and small family producers, facilitating not only the construction or renovation of housing but also productive buildings, community services, infrastructure (water, electricity, sanitation), training and technical assistance.

	<p>The mission of MEVIR is to contribute to the construction of a sustainable habitat for the population that lives and/or works in the rural environment, within the framework of integral development policies (productive, social, environmental, territorial) of the five-year period. In this sense, it implements a system of access to adequate housing for the rural environment and based on an integral concept of habitat, according to which housing is an element within a complex system where several factors interact in a balanced way: the territory, the production of goods and services, the human being, community services and physical infrastructure.</p> <p>It was created by law in 1967, with the aim of eradicating the unhealthy housing of the rural inhabitants.</p> <p>The functioning of MEVIR is possible thanks to the joint commitment of participants, institution and society. The society, through the National Housing Fund instrumented by the Ministry of Housing, Land Management and the Environment; taxes on rural transactions; national budget items; donations and legacies, makes its contribution. The participants make their contribution during working hours in the works and through the payment of the monthly installments (to which the subsidy established for each family unit awarded based on a social criterion is deducted).</p>
<b>Competencies</b>	<p>The system of building by mutual aid and assisted self-construction works with the participation of the target families, guided by a technical team (architect, social worker, agronomist) and specialized personnel. This contribution is considered an essential requirement to participate in the MEVIR programs; besides taking advantage of a popular knowledge and existing resource in the population (self-construction capacity) it favors a greater involvement and appropriation of the constructed habitat, as well as a greater organization and citizen participation in the solution of a problem and the exercise of a right.</p> <p>The policies applied by MEVIR are not limited to families, but seek to target the community. In that sense, there is a relationship with the construction of the social capital of that population through organization or institutional strengthening. The intervention of MEVIR in the construction of community premises generates the opportunity for people to have a space to interact, to develop activities; as long as these spaces exist, seeds of organization can be generated.</p> <p>MEVIR in the territories articulates through local organizations that can support a better application of the available instruments. According to this, specific measures have been taken to promote the strengthening of organizations, in some cases, very incipient. It is noteworthy that the rural development tables, supported by the Ministry of Livestock, Agriculture and Fisheries, have been important sources of demand.</p>
<b>Authority</b>	Medium
<b>Position</b>	In favor
<b>Concern</b>	High

<b>Name</b>	Planning and Budget Office (OPP)
<b>Classification</b>	National
<b>Rol</b>	<p>The Planning and Budget Office advises the Executive Power in the following thematic areas: a) definition of the economic and social strategy of the Government and in the formulation of the national and departmental plans, programs and policies; b) preparation and evaluation based on performance indicators of the National Budget and Accountability projects; c) analysis and evaluation of the budgets, investment plans and tariffs of the organisms by article 221 of the National Constitution; d) modernization and state reform processes; and, e) planning of decentralization policies.</p>

<b>Competencies</b>	It will participate in advising on national and departmental plans and policies. Monitoring of project performance indicators.
<b>Authority</b>	High
<b>Position</b>	In favor
<b>Concern</b>	High

<b>Name</b>	Power Plants and Transmissions (UTE)
<b>Classification</b>	National
<b>Rol</b>	Relationship with infrastructure works and other awareness and information activities related to their area of responsibility.
<b>Competencies</b>	The National Administration of Power Plants and Transmissions (UTE), is a state-owned company that is dedicated to the generation, transmission, distribution and commercialization of electricity, services and consulting services.
<b>Authority</b>	High
<b>Position</b>	In favor
<b>Concern</b>	High

<b>Name</b>	National Housing Agency (ANV)
<b>Classification</b>	National
<b>Rol</b>	Its mission is to promote and facilitate universal access to housing, contributing to the development and implementation of public policies on urban habitat set by the MVOTMA and the departmental governments in their respective areas. Contribute with public entities, in the definition of their policies and programs through the knowledge and experience gained in their implementation.
<b>Competencies</b>	The National Housing Agency (ANV) was created in 2007 as a decentralized agency. Its purpose is to promote and facilitate access and permanence in housing, as well as contribute to the development and implementation of public housing policies, addressing economic, social and environmental aspects. It implements and executes various policies and programs that facilitate access to credit (generation of more houses, marketing of empty properties, management of cooperatives, recovery of abandoned structures and opportunities through public auctions).
<b>Authority</b>	High
<b>Position</b>	In favor
<b>Concern</b>	High

#### 4.b - Provincial, municipal and departmental governments

##### 4.b.1 ARGENTINA - Provincial, municipal and departmental governments

<b>Name</b>	Government of Entre Ríos Province
<b>Classification</b>	Provincial
<b>Rol</b>	The National Constitution of 1994: "Art. 123: Each province dictates its own Constitution, in accordance with the provisions of Article 5, ensuring municipal autonomy and regulating

	its scope and content in the institutional, political, administrative, economic and financial order ".
<b>Competencies</b>	<p>The Provincial Strategy for Low Carbon and Resilient Climate Change development is being implemented, involving different areas of government, and aiming to develop provincial capacities to integrate environmental issues into development plans and strategies, establishing effective public and private, local and international alliances, securing resources and implementing programs to support sustainable development, low in carbon and resilient to climate change.</p> <p>The Project has prioritized the following departments and cities of the Entre Ríos Province: Federación (Federación Villa del Rosario y Chajarí), Concordia (Concordia, Puerto Yerúa), Colón (Colón, San José, Villa Elisa and Liebeg), Uruguay (Concepción del Uruguay), Gualegaychú (Gualeguaychú), Islas del Ibicuy (Villa Paranacito and Ceibas).</p>
<b>Authority</b>	High
<b>Position</b>	In favor
<b>Concern</b>	High

#### 4.b.2 - URUGUAY - Municipal and departmental governments

<b>Name</b>	Departmental Intendancy of Artigas, Departmental Intendancy of Salto, Intendancy of Departmental of Paysandú, Departmental Intendancy of Rio Negro.
<b>Classification</b>	Departamental
<b>Rol</b>	<p>They will participate in the project from the design, definition and implementation of all the activities at the territorial level. As well as their supervision and monitoring.</p> <p>Each Intendancy will have specific roles for the four components of the project according to the priorities defined for their departments.</p>
<b>Competencies</b>	<p>The departmental government in Uruguay is exercised by the Intendant and the Departmental Board. In the organizational charts of the Departmental Intendencies involved in the project, there are different directorates to address sectoral policies in their territory: General Directorate of Works, Tourism Directorates, Social Development, Hygiene and/or Environmental Management and/or Health, Communications, Territorial Planning.</p> <p>Departmental Intendencias have competence over territorial planning, planning and execution of road works, storm drainage, infrastructure and equipment, as well as environmental management and health at the territorial level.</p> <p>They are co-executors of housing programs of the MVTOMA such as the National Relocation Plan of population settled in flood areas or contaminated soil, the Neighborhood Improvement Program, among others.</p> <p>For their financing, they receive funds from the central government, and collect various taxes, the two most relevant being the property tax (Real Estate Contribution) and the automotive tax (Rollover Patents).</p> <p>The Departmental Board is responsible for the legislative and oversight functions of the Departmental Government (articles 273 of the Constitution and 19 of Organic Law No. 9515). It dictates decrees that constitute legislative acts with force of law in its jurisdiction (Department), and resolutions, which are acts of individual and administrative nature. The</p>

	decrees sanctioned by the Departmental Board require the prior enactment by the Intendant to enter into force. The Project will involve the departments of Artigas (Artigas, Bella Union), Salto (Salto), Paysandú (Paysandú), Río Negro (Fray Bentos, San Javier, Nuevo Berlin).
<b>Authority</b>	High
<b>Position</b>	In favor
<b>Concern</b>	High

<b>Name</b>	Municipal Governments
<b>Classification</b>	Municipal
<b>Rol</b>	Participate in the project design and in the definition of the activities. Collaborate with the supervision and monitoring of all activities. Focus in the cases of the municipalities participating in component 2, the works with the society and the consultation processes that require dissemination of information and awareness. Offer a meeting point for the coordination of the different stakeholders.  In general, the municipality is the level of government closest to citizens, hence the role of communication and involvement of the population is central in the transmission of project progress.
<b>Competencies</b>	Government and municipal administration in localities of less than 5000 inhabitants. The Municipalities have responsibilities for inspective services and fines, among others in: inspection of premises and barriers, occupation of public spaces for housing, exercise of territorial police powers. They receive resources from the Incentive Fund for the Management of Municipalities, an instrument that is part of the national decentralization strategy, aimed at institutional strengthening of the third level of government. It was created through the Law of Decentralization and Citizen Participation (Nº 19.272). The Project will involve the municipalities of Bella Unión in the department of Artigas, San Javier and Nuevo Berlín in the department of Río Negro.
<b>Authority</b>	Medium
<b>Position</b>	In favor
<b>Concern</b>	High

<b>Name</b>	Departmental Bureau of Urban Waters Río Negro
<b>Classification</b>	Departamental- Local
<b>Rol</b>	The Departmental Bureau of Urban Water of Río Negro, is the coordination area of all urban water issues in the cities of the department
<b>Competencies</b>	There are coordination areas where the following bodies participate: Departmental Intendancy, DINAGUA, OSE and the Municipalities of Young, Nuevo Berlin and San Javier. The following competences were established: analysis and compatibility of planning of the participating institutions, projects' monitoring and follow-up. Participation in the Water Resources Regional Council of the Uruguay River in order to promote the incorporation of urban waters in the water resources' general planning in the



	region. Monitoring, review and updating of the indicator system in urban areas. Realization of annual accounts reports of the Integrated Management of Urban Waters.
<b>Authority</b>	High
<b>Position</b>	In favor
<b>Concern</b>	High

<b>Name</b>	Departmental Emergency Committee (CDE) - Coordinating Center for Departmental Emergencies (CECOED)
<b>Classification</b>	Departamental
<b>Rol</b>	They are the decentralized areas of the SINAE in each department
<b>Competencies</b>	<p>CDE's tasks are:</p> <p>Approve policies, strategies, standards, plans and departmental programs on risk reduction and emergency and disaster management, formulated by the respective Intendancy; declare the departmental alert situation, communicating it to the National Directorate of the System; request the National Directorate to declare the disaster situation; establish advisory commissions for the functioning of the departmental subsystem; promote and articulate that each entity, national or departmental, that operates in the respective department complies with the law that governs the System, in its area of competence.</p> <p>The CECOED's roles are:</p> <p>Coordinate the actions of the different institutions in: prevention, mitigation, disaster relief and rehabilitation that correspond to the National Emergency System; receive, systematize and transmit to the Departmental Emergency Committee and the National Emergencies Directorate of the System the necessary information for the identification of phenomena that could determine its operative activation; organize training activities at the departmental level in coordination with the National Emergency Management, the National Advisory Commission for Risk Reduction and Disaster Assistance, and the Departmental Emergency Committees; periodically establish meetings and extraordinarily in emergency situations.</p>
<b>Authority</b>	High
<b>Position</b>	In favor
<b>Concern</b>	High

#### 4.c – Civil Society Stakeholders

##### 4.c.1 - ARGENTINA – Civil Society Organizations

<b>Name</b>	Environmental Organizations: Wildlife Conservation Society, Vida Silvestre Foundation/WWF, Aves Argentinas/Hábitat y Desarrollo Foundation
<b>Classification</b>	National and local
<b>Rol</b>	Environmental organizations work on conservation and biodiversity. Based on this expertise, they will bring the project the contribution of their organizations in order to broaden the support for the interventions to be carried out.
<b>Competencies</b>	They support local initiatives tending to the organization of activities and zoning of the eastern part of the continental shelf. They are dedicated to the development and operation

	<p>of the Argentine Network of Private Natural Reserves, of recent creation, and management of its registry. Aves Argentinas is a non-profit civil organization that works to revalue the bond of people with their natural environment, providing a space for nature lovers and developing projects and conservation activities, research, education and dissemination.</p> <p>Promotion of natural reserves in private properties and providing advice on the private reserves of Corrientes and Entre Ríos.</p>
<b>Authority</b>	Low
<b>Position</b>	In favor
<b>Concern</b>	High

<b>Name</b>	Humanitarian Aid Organizations: Caritas Argentina – Red Solidaria
<b>Classification</b>	National and local
<b>Rol</b>	They provide assistance to the population in the case of floods, promoting awareness campaigns and mobilization of funds and resources. Caritas Argentina is the official organism of the Catholic Church that carries out the charitable pastoral to achieve the integral development of all men, with special preference for the poorest and most marginalized people and communities.
<b>Competencies</b>	<p>The main beneficiaries of the Caritas mission are the poorest and the most excluded, ensuring that they grow in dignity and are protagonists of their own personal and community development.</p> <p>Cáritas seeks to carry out effective actions, seeking to influence a cultural transformation without replacing the action of other public institutions.</p>
<b>Authority</b>	Low
<b>Position</b>	In favor
<b>Concern</b>	High

<b>Name</b>	Red Cross Argentina
<b>Classification</b>	National - International
<b>Rol</b>	<p>Red Cross Argentina is a civil, humanitarian and voluntary association, and an integral part of the International Red Cross and Red Crescent Movement, the largest humanitarian network in the world, which has 97 million of volunteers, collaborators and personnel employed in 189 countries. Its objective is to contribute to improving the lives of vulnerable people.</p> <p>Red Cross Argentina carries out, through its subsidiaries throughout the country, activities aimed at reducing the risks and impact of emergencies and disasters.</p> <p>It supports the institutional preparation of the competent actors, focusing on strengthening the resilience of people and their communities.</p> <p>In the face of humanitarian crises, it intervenes mobilizing local, national and international resources, according to the magnitude of the situation. The response prioritizes the coverage of basic needs, the provision of First Aid, health aspects and early psychosocial recovery. It articulates and coordinates with the State, the business sector and other non-governmental organizations.</p> <p>Periodically, it holds public awareness campaigns in order to contribute to a social culture of self-care, prevention and preparation. This type of actions highlights specific problems for</p>

	<p>the inclusion and worthy attention of groups of people in different situations of vulnerability and exposure to disasters.</p> <p>It also participates in different platforms, spaces and institutional processes led by government agencies or civil society, with the aim of analyzing and proposing public policies and regulatory frameworks in relation to Risk Management in Argentina.</p>
<b>Competencies</b>	<p>It works through 63 subsidiaries, 35 Educational Services and its Headquarters, in conjunction with the community and donors. It develops humanitarian actions together with the communities, promoting the reduction of risks and the integral development of the people, building and strengthening the local capacities, promoting the inclusion and participation of all the groups without any distinction or discrimination. Through its different educational programs and services, it seeks to build a fairer and more inclusive society, ensuring access to sources of well-being, security and equal opportunities.</p> <p>It has been present in Argentina since 1880, and in Entre Ríos its subsidiaries are in: Concepción del Uruguay, Concordia, Paraná and Gualaguay.</p>
<b>Authority</b>	Low
<b>Position</b>	In favor
<b>Concern</b>	High

<b>Name</b>	Grassroots organizations: Asamblea Ciudadana de Concordia, Asamblea Ciudadana Ambiental de Concepción del Uruguay, Asamblea Popular Ambiental Colón – Ruta 135
<b>Classification</b>	Local
<b>Rol</b>	They promote actions of social organization for the most vulnerable populations.
<b>Competencies</b>	<p>With an exclusively local scope, they conform as self-appointed neighbors who fight for water and life, taking action against the pollution of the area. They also offer information and publish data on pollution levels and voluntary actions.</p> <p>The Environmental Assemblies carry out "concrete actions for the preservation of natural commons, against looting, pollution, the foreignization of the land, in favor of sustainable development, the dignity of work and a better quality of life for all"</p>
<b>Authority</b>	Low
<b>Position</b>	In favor
<b>Concern</b>	High

#### 4.c.2 - URUGUAY – Civil Society Organizations

<b>Name</b>	Non-governmental social and environmental organizations at national or departmental level, and their networks, which work on the issues addressed in the project: Group for active environmental protection, Paysandú Nuestro, Save the Coast Organization, Civil Association of Environmental Culture, Institute of Social Economic Promotion of Uruguay, Red Cross Uruguay, Scout Movement of Uruguay, Rotary, Rural Development Society of Nuevo Berlin.
<b>Classification</b>	National and local
<b>Rol</b>	They contribute with their experience in territorial intervention, in the deepening of governance, participatory processes, humanitarian aid and the development of projects in risk management, climate change and environmental management. At the same time, they contribute to support the implementation of public policies in the social, environmental and territorial planning areas of municipalities for sustainable local development.

<b>Competencies</b>	They are key partners in the definition of local priorities of environmental management and local development with citizen participation, in the social management of disaster risks and adaptation to climate change, in the participatory management of protected areas, in the support of local governments for the definition of priorities that include society.
<b>Authority</b>	Low
<b>Position</b>	In favor
<b>Concern</b>	High

<b>Name</b>	Grassroots social organizations
<b>Classification</b>	Local
<b>Rol</b>	They contribute with their experience in territorial intervention, in the deepening of governance, participatory processes and in the support for the implementation of public policies in the social, environmental and territorial planning areas of the intendancies.
<b>Competencies</b>	In the Department of Salto, the Neighborhood Commissions of the city of Salto stand out, who are the interlocutors of the Departmental Intendancy in their relationship with society. In the coastal neighborhoods of the Uruguay River, there are commissions in the neighborhoods Cerro Norte, La Humedad, Baltasar Brum, Cerro 1, Ayuí, La Rinconada, Parque José Luis, Barrio Saladero, Barrio Arenitas Blancas, Cien Manzanas Sur, Corralito, Nueva Hespérides and Colonia Williams and the Save the Coast (Salvemos la Costa) organization. In Paysandú, neighborhood organizations contribute to the processes of citizen participation, environmental care and prevention of disaster risks promoted by the departmental government and non-governmental organizations. Among them: CAIFs; Children's Clubs, Youth Centers and Neighborhood Commissions as well as sports and religious centers in the vulnerable areas of Unión Portuaria and Ledesma.
<b>Authority</b>	Low
<b>Position</b>	In favor
<b>Concern</b>	High

<b>Name</b>	Regional Council of Water Resources (CRRH)
<b>Classification</b>	Regional - Uruguay River Basin
<b>Rol</b>	The CRRH of the Uruguay River Basin was constituted by the Decrees of the Executive Power Nos. 262, 263 and 264/2011, regulations of the Law N° 18.610 of the National Water Policy. It is integrated in a tripartite and equitable manner by government delegates, users and civil society, in accordance with the mandate of Art 47º of the Constitution of the Republic, in order to sustainably manage the water resources shared by several States and as a strategy of decentralization.
<b>Competencies</b>	The powers of the Regional Council are those that arise expressly from the Article 2 of Decree No. 262/2011, namely: a) Formulate the Regional Plan of Water Resources, b) Accompany the execution of the Water Resources Plans adopting the necessary decisions for the fulfillment of its goals, c) Link the Executive Power with the other actors involved in the formulation and execution of plans and other instruments of the National Water Policy, d) Promote and coordinate the creation of Basin and Aquifer Commissions, providing support through its Technical Secretariat, e) Advise

	and support the management of the Water Authority, f) Formulate guidelines for the Local Water Resources Plans, g) Promote the strengthening and effective exercise of the Right of Citizen Participation recognized in Chapter VI of the National Water Policy Law, h) Propose general criteria for the granting of rights of use and collection of water resources, i) Articulate actions with actors involved in drinking water supply, floods and drainage, fishing, river transport, hydroelectric use, land use, environment, hydrology, meteorology, among others, j) When required, advise on water resource development projects, seeking their sustainability and efficiency, k) Understand matters raised by the Basin or Aquifer Commissions proposing dispute resolution mechanisms, linked to use of water resources.
<b>Authority</b>	High
<b>Position</b>	In favor
<b>Concern</b>	High

#### 4.d - Business Chambers, private sector

##### 4.d.1 - ARGENTINA - Business Chambers

<b>Name</b>	Entre Rios Entrepreneur Council (CEER)
<b>Classification</b>	Provincial
<b>Rol</b>	The Entre Rios Entrepreneur Council is a work environment made up of businessmen and managers of companies representing different productive sectors and places in the province.  The entity is formed by the association of companies generating thousands of direct and indirect jobs, which gives the entity a real and complete vision of Entre Ríos economic activity.
<b>Competencies</b>	The CEER promotes cooperation between the different private economic sectors, contributing with proposals and ideas that tend to economic growth and improvement of the quality of life of the inhabitants. It represents industry (paper, plastic, food, wood, metalworking, construction, mining, furniture), agroindustry (dairy, poultry), trade, services (tourism, financial, banking, health, telecommunications, transport, insurance and port services), and agricultural activity (livestock, cereals).
<b>Authority</b>	Low
<b>Position</b>	In favor
<b>Concern</b>	Low

<b>Name</b>	Business Chamber of Environment
<b>Classification</b>	National
<b>Rol</b>	The Business Chamber of Environment (CEMA) is made up of companies that provide goods and services for the environmental preservation and the improvement of the quality of life. The companies are representative of the whole environmental services of the country. They stand out for providing products and services with modern and efficient technologies according to the needs of industries and public bodies and for their strong commitment to the community.

<b>Competencies</b>	The Chamber also develops experiences of Corporate Social Responsibility, with the aim of achieving positive attitudes and behaviors in the community that contribute to the care and protection of the environment.
<b>Authority</b>	Low
<b>Position</b>	In favor
<b>Concern</b>	Low

<b>Name</b>	Industrial Union of Entre Ríos (UIER)
<b>Classification</b>	Provincial
<b>Rol</b>	The UIER's mission is to promote the consolidation of the industry, encouraging the development of education, innovation, added value, technological development and the care and preservation of the Environment. It seeks to ensure respect for the role of the employer in the generation of employment, progress and social welfare, and promote the unity of the entire industrial sector for the defense and promotion of their legitimate interests. It encourages regional integration and the establishment of industries in Entre Ríos.
<b>Competencies</b>	The UIER seeks to promote and strengthen the industrial sector of the Entre Ríos Province, with active participation in the generation of public policies and the improvement of competitiveness.
<b>Authority</b>	Low
<b>Position</b>	In favor
<b>Concern</b>	Low

<b>Name</b>	Argentine Agrarian Federation (FAA) -Delegación Entre Ríos
<b>Classification</b>	National/Provincial
<b>Rol</b>	The Argentine Agrarian Federation is a private trade union that brings together small and medium producers. It is a member of the Entre Ríos Liaison Committee, and in relation to the floods they have held meetings with the governor and other organizations to set up a crisis committee to make constant assessments and manage joint solutions for the affected sectors.
<b>Competencies</b>	The struggle for land tenure and use, and sustainable and inclusive rural development, are the fundamental principles that animate the actions of the FAA, with the aim of trade union defense and the socio-economic and technical-cultural development of family farmers, with a project of a more equitable, sovereign, democratic country with integral development. Currently, the Agrarian Federation is composed of family farmers organized in branches, Youth Centers, Affiliated Entities, Associations of Women and Adhering Entities distributed throughout the country. The subsidiaries are local organizations made up of partners that make up a Board of Directors. The Youth Centers pursue the objective of organizing and training young people, between 15 and 30 years. The Affiliated Entities are civil associations, cooperatives, chambers, movements that feel identified with the union. The Women's Groups are made up of rural women who share the federated ideology with the decision to participate in the union policy and influence public policies promoting the gender approach. All these entities have direct participation with voice and vote within the annual ordinary congress where the guild policies are defined. There are also adhered entities, which have a voice in the Congresses although they do not vote.
<b>Authority</b>	Low
<b>Position</b>	In favor

<b>Concern</b>	High
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#### 4.d.2 - URUGUAY – Business Chambers

<b>Name</b>	Chamber of Industries of Uruguay (CIU)
<b>Classification</b>	National
<b>Rol</b>	Use of coastal area as a key promotional material for the marketing of its products (green label).
<b>Competencies</b>	Activities oriented to the generation of profits that can contribute in the strengthening of the initiatives that are supported by the project in component 3.
<b>Authority</b>	Medium
<b>Position</b>	In favor
<b>Concern</b>	Medium

#### 4.e - Universities, and other educational centers

##### 4.e.1 - ARGENTINA - Academic centers

<b>Name</b>	National University of Entre Ríos
<b>Classification</b>	National and local
<b>Rol</b>	The National University of Entre Ríos is a public institution whose mission is to train qualified and responsible professionals and technicians in various disciplines related to Health Sciences, Humanities, Legal, Administrative and Systems, Economics, Social Sciences, Engineering and Natural Resources, through relevant academic activities, extension, links and services, which encourage individual and collective development. Its vision is to be an institution of academic excellence in the development and management of knowledge. Focused on the training of professionals, to the service and transformation of the social and economic reality, to the scientific and technological advance of the region, the country and the world.
<b>Competencies</b>	It carries out academic and research activities.
<b>Authority</b>	Low
<b>Position</b>	In favor
<b>Concern</b>	High

<b>Name</b>	National Technological University (NTU)
<b>Classification</b>	National and provincial
<b>Rol</b>	National University with the specific function of creating, preserving and transmitting technology and universal culture in the field of technology, being the only National University of the country whose academic structure has engineering as its central objective.

<b>Competencies</b>	It currently has 29 Regional Faculties, a Higher Institute and a Study Center, distributed in all regions of the Argentine Republic.
<b>Authority</b>	Low
<b>Position</b>	In favor
<b>Concern</b>	Medium

<b>Name</b>	Order of Architects/ Colegio de Arquitectos
<b>Classification</b>	Provincial
<b>Rol</b>	The Order of Architects of the Entre Ríos Province, a non-state actor, is constituted by the architects of the Province and has regional headquarters to achieve a better fulfillment of the objectives.
<b>Competencies</b>	Realize the control of the professional activity in any of its modalities. Advise public authorities, especially technical departments, in matters of any nature related to the exercise of the architect's profession. Participate in the defense, valorization and cataloging of the historical environmental and cultural architectural heritage. Integrate national and provincial professional organizations, as well as maintaining links with professional institutions in the country or abroad.
<b>Authority</b>	Low
<b>Position</b>	In favor
<b>Concern</b>	High

<b>Name</b>	Autonomous University of Entre Ríos (UAER)
<b>Classification</b>	National and provincial
<b>Rol</b>	The Autonomous University of Entre Ríos (UADER) was created in 2000. In 2001, the National Executive Branch granted national recognition to UADER, subject to compliance with an Institutional and Academic Reconversion Plan, which was completed in 2008. The UAER has branches in: Concepción del Uruguay, Concordia, Gualaguaychú, Federación/Chajarí.
<b>Competencies</b>	The headquarters of the university is the Rectorate, which is located in the city of Paraná. To optimize the administrative and academic functioning, the UADER has a branch of the Vice-rectorate in Concepción del Uruguay, and two Coordinations, in Gualaguaychú and Concordia. Likewise, three of the four Faculties have their Deanship in Paraná, with the exception of Science and Technology, which is in Oro Verde.
<b>Authority</b>	Low
<b>Position</b>	In favor
<b>Concern</b>	Medium

#### 4.e.2 - URUGUAY – Academic centers and other educational centers

<b>Name</b>	University of the Republic (UDELAR) through decentralized units, faculties and interdisciplinary centers, technical work groups and thematic networks. University Center Litoral Norte Salto (CENUR) and University Center Litoral Norte Paysandú of UDELAR
<b>Classification</b>	National- Regional



<b>Rol</b>	They contribute to the development of human resources and knowledge at the local level, generation of relevant research activities for the project.
<b>Competencies</b>	They carry out academic, research and extension activities. Research and education in environmental, social, and economic issues. Collaboration through students and interns. Interdisciplinary Center of CCyV, Comprehensive Risk Management Group, Environmental Thematic Network, Development Network, etc. Specifically in the CENUR Salto, linked to the object of this project, they teach two careers: Bachelor of Applied Water Sciences and the Integrated Design Degree.
<b>Authority</b>	Low
<b>Position</b>	In favor
<b>Concern</b>	High

<b>Name</b>	ANEP National Administration of Public Education
<b>Classification</b>	National
<b>Rol</b>	Development of education and awareness strategies in primary and secondary schools
<b>Competencies</b>	Development of initial, primary and secondary formal education
<b>Authority</b>	Medium
<b>Position</b>	In favor
<b>Concern</b>	Medium

<b>Name</b>	Professional Technical Education Council – University of Labor of Uruguay (CETP-UTU)
<b>Classification</b>	National
<b>Rol</b>	Studies for different departmental and national institutional users in support of the Project.
<b>Competencies</b>	It also works in rural areas with alternative education, rural schools and professional training.
<b>Authority</b>	Low
<b>Position</b>	In favor
<b>Concern</b>	Low

<b>Name</b>	Catholic University University of Montevideo
<b>Classification</b>	National
<b>Rol</b>	Ability to develop research.
<b>Competencies</b>	Research and education in environmental, social, and economic aspects.
<b>Authority</b>	Low
<b>Position</b>	In favor
<b>Concern</b>	Low

#### 4.f - Summary table

The following summary table has been constructed on the basis of the data of each stakeholder, described in point 3.a and all its paragraphs.

This table summarizes the following information: name, category, level of incidence, authority, position and concern.

##### BINATIONAL

Name	Incidence	Authority	Position	Concern
CARU – River Uruguay Executive Commission (Comisión Administradora del Río Uruguay)	Binational	Low	In favor	High
Mixed Technical Commission of Salto Grande	Binational	Medium	In favor	High

##### ARGENTINA

Name	Incidence	Authority	Position	Concern
NPA – National Parks Administration (Administración de Parques Nacionales)	National	Medium	In favor	High
Business Chamber of Environment	National	Low	In favor	Low
CEER - Entre Rios Entrepreneur Council (Consejo Empresario Entre Ríos)	Departmental-Provincial	Low	Indiferente	Low
COFEMA – Federal Council of the Environment (Consejo Federal de Medio Ambiente)	National	High	In favor	High
COHIFE - Federal Water Council (Consejo Hídrico Federal)	National	Low	In favor	High
Order of Architects	Departmental-Provincial	Low	In favor	High
Red Cross Argentina	National	Low	In favor	High
Administrative Commission of Salto Grande's Special Fund (Comisión Administradora para el Fondo Especial de Salto Grande - CASFEG)	National	High	In favor	High
FAA - Argentine Agrarian Federation - Entre Ríos (Federación Agraria Argentina – Delegación Entre Ríos)	Departmental-Provincial	Low	In favor	High
Provincial Government of Entre Ríos	Departmental-Provincial	High	In favor	High
INA - National Water Institute (Instituto Nacional del Agua) SlyAH - Directorate of Information Systems and Hydrologic Warning (Dirección de Sistemas de Información y Alerta Hidrológico)	National	Medium	In favor	High
INTA - National Institute of Agricultural Technology (Instituto Nacional de Tecnología Agropecuaria)	National	Low	In favor	High
Ministry of Finance and Chief of the Cabinet of Ministers	National	High	In favor	High

Ministry of Foreign Affairs and Worship. Undersecretary of Foreign Policy - General Directorate of Environmental Affairs. Secretariat of International Coordination and Cooperation. Directorate of International Cooperation Projects	National	High	In favor	High
Ministry of National Security Civil Protection and Comprehensive Approach to Emergency and Catastrophes Civil Protection Secretariat National Directorate of Institutional Relations	National	Low	In favor	High
Ministry of the Interior of the Argentine Republic, National Directorate of Drinking Water and Sanitation, Undersecretary of Water Resources	National	High	In favor	Indifferent
Ministry of Tourism (MINTUR). It includes the Federal Council of Tourism and the National Institute of Tourist Promotion IMPROTUR).	National	High	In favor	High
MSAyDS - Ministry of Environment and Sustainable Development, Undersecretary of Planning and Environmental Policy	National	High	In favor	High
Environmental Organizations: Wildlife Conservation Society, Vida Silvestre Foundation/WWF, Aves Argentinas/Hábitat y Desarrollo Foundation	National	Low	In favor	High
Humanitarian Aid Organizations: Cáritas Argentina – Red Solidaria	National	Low	In favor	High
Grassroots organizations: Asamblea Ciudadana de Concordia, Asamblea Ciudadana Ambiental de Concepción del Uruguay, Asamblea Popular Ambiental Colón – Ruta 135	Local	Low	In favor	High
SiFAP - Federal System of Protected Areas (Sistema Federal de Áreas Protegidas)	National	High	In favor	High
SINAGIR – National System for Comprehensive Risk Management (Sistema Nacional para la gestión integral del riesgo)	National	High	In favor	High
NMS - National Meteorological Service (NMS) of the Ministry of National Defense	National	Low	In favor	High
UAER - Autonomous University of Entre Ríos	Departmental-Provincial	Low	In favor	Media
UCAR - Unit for Rural Change (Unidad para el Cambio Rural)	Nacional	Medium	In favor	Indifferent
UIER - Industrial Union of Entre Ríos	Departmental-Provincial	Low	In favor	Low

National University of Entre Ríos	Departmental-Provincial	Low	In favor	High
NTU - National Technological University	National	Low	In favor	Medium

#### URUGUAY

Name	Incidence	Authority	Position	Concern
AUCI – Presidency of the Republic	National	Medium	In favor	High
ANEP- National Administration of Public Education	National	Low	In favor	Medium
National Ports Administration (ANP)	National	High	In favor	High
National Housing Agency (ANV)	National	High	In favor	High
CIU – Chamber of Industries of Uruguay	National	Medium	In favor	Indifferent
CETP-UTU - Professional Technical Education Council – University of Labor of Uruguay	National	Low	In favor	Low
Departmental Intendancy of Artigas, Departmental Intendancy of Salto, Departmental Intendancy of Paysandú, Departmental Intendancy of Rio Negro, Municipality of Bella Union, Municipality of San Javier, Municipality of Nuevo Berlin. Congress of Intendants (CI), General Directorates of Works, Tourism, Social Development, Hygiene and/or Health and/or Environmental Management.	Departmental-Municipal	High	In favor	High
INUMET - Uruguayan Institute of Meteorology (Instituto Uruguayo de Meteorología)	National	Medium	In favor	High
MDN – Ministry of National Defense, PNN/NNP - National Naval Prefecture. SNE/NES - National Emergency System, CECOED - Departmental Coordinating Center	National	Medium	In favor	High
MEC Ministry of Education and Culture	National	Medium	In favor	Medium
MEF- Ministry of Economy and Finance	National	High	In favor	High
MIDES – Ministry of Social Development (Ministerio de Desarrollo Social)	National	High	In favor	High
Movement for the Eradication of Rural Insufficient Housing (MEVIR)	National	Medium	In favor	High
MIEM-Ministerio de Industria, Energía y Minería	National	High	In favor	High
MINTURD – Ministry of Tourism	National	Medium	In favor	Medium

MSP- Ministry of Public Health	National	High	In favor	Medium
Ministry of Housing, Land Planning and Environment (MVOTMA), and its Directorates: Division of Climate Change (DCC); National Water Directorate (DINAGUA), National Land Management Directorate (DINOT), National Environment Directorate (DINAMA); National Housing Directorate (DINAVI)	National	High	In favor	High
Ministry of Transport and Public Works (MTOP)	National	High	In favor	High
Non-governmental social and environmental organizations at national and/or departmental level: Paysandú Nuestro, Salvemos la Costa, Environmental Culture, Red Cross, Scout Movement of Uruguay and Rotary.	National	Low	In favor	High
Social Grassroots Organizations	Local	Low	In favor	High
National Emergency System (NES)	National	High	In favor	High
SNRCC - National Response System to Climate Change and Variability (Sistema Nacional de Respuesta al Cambio Climático y Variabilidad)	National	Medium	In favor	High
UDELAR	National	Low	In favor	High
Catholic University, University of Montevideo	National	Low	In favor	Low
Sanitary Works	National	High	In favor	High
Planning and Budget Office (OPP)	National	High	In favor	High
Power Plants and Transmissions (UTE)	National	Medium	In favor	High

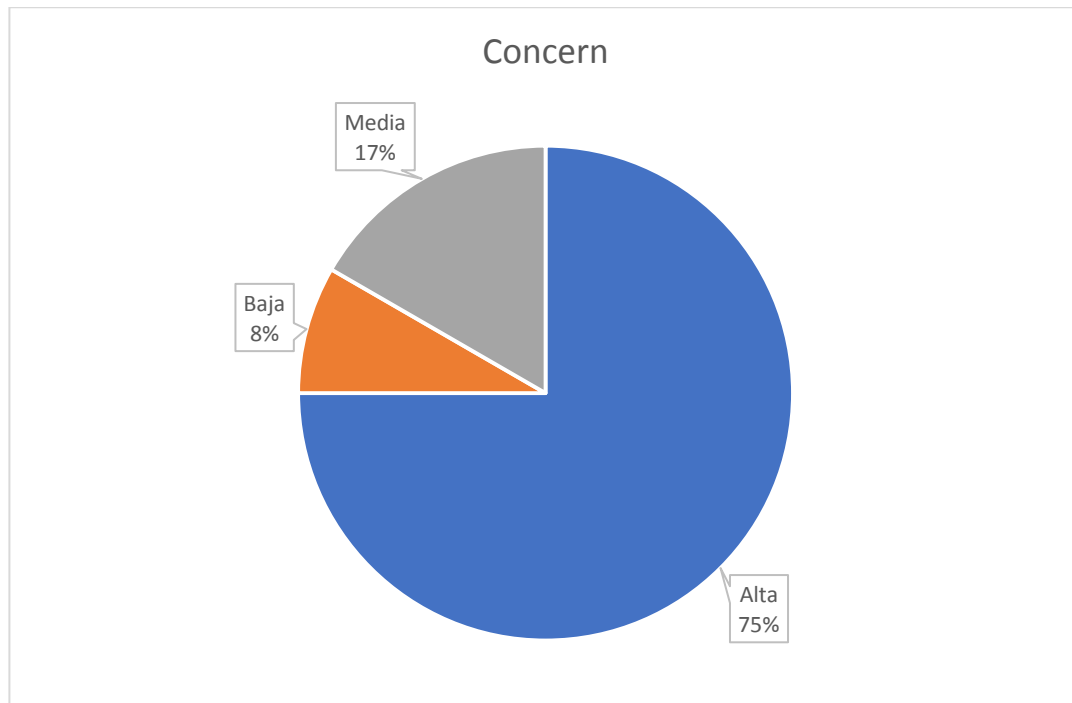
## 5. Characterization of the identified actors

### 5.a. - Position

In absolute terms, 100% of the actors involved (N = 50) are positioned in favor of the objectives and the realization of the project. This shows that the acceptance of the project is unanimous.

### 5.b. - Concern

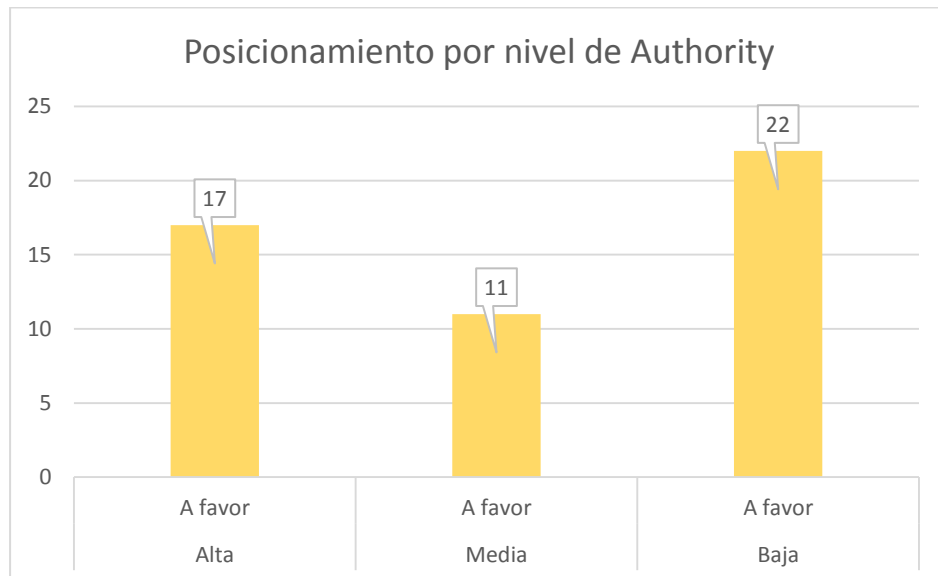
The 36% of the 50 actors involved hold a high level of concern regarding the vulnerabilities identified by the project, this represents 75% of the total. At the opposite extreme, only 4 of the 50 actors have a low concern, which is 8% of the total. For 8 actors, the concern regarding the project is average. In general terms, the concern is high and there are expectations on the subject.



### 5.c. – Crossing of variables - Positioning by level of authority

The crossing of variables gives us new information on cross-cutting aspects. As previously stated, the support is total, for this reason the crossing of authority level of each actor with its positioning with respect to the project shows that all the actors (of high, medium and low authority) are in favor of the proposals raised by the project.

Authority Position	Cantidad
<b>Alta</b>	<b>17</b>
A favor	17
<b>Media</b>	<b>11</b>
A favor	11
<b>Baja</b>	<b>22</b>
A favor	22
<b>Total general</b>	<b>50</b>

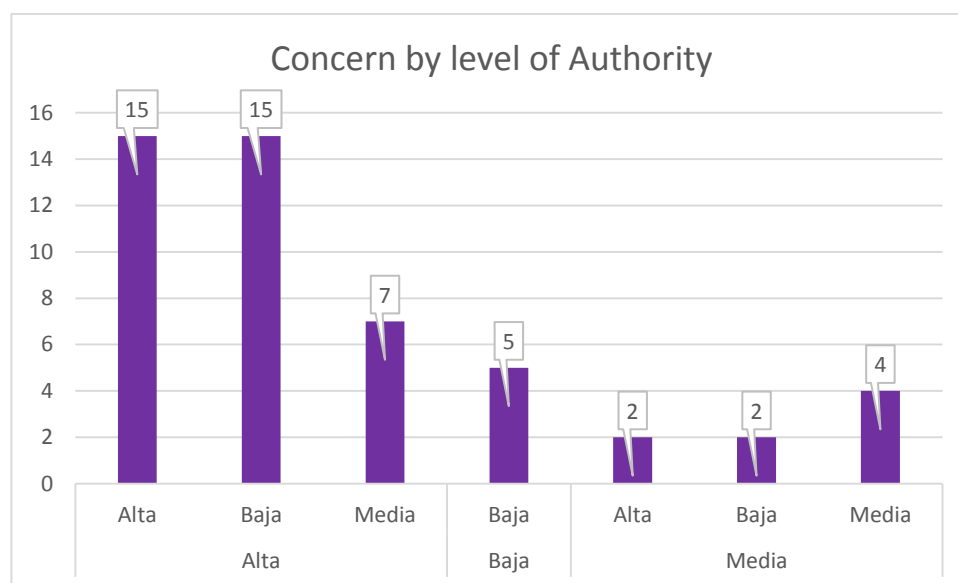


#### 5.d. – Crossing of variables - Concern by level of authority

In the latter case, the crossing between concern and level of authority of each actor is reflected. The results show that of the 37 actors with a high level of concern on the subject, 15 of them have high authority, 15 have low authority and 7 have medium authority. The low concern occurs in 5 actors of low level of authority. And the average concern corresponds to 2 high-level authority actors, 2 low-level authority actors and 4 medium-level authority actors.

Concern Authority	Number
<b>Alta</b>	<b>37</b>
Alta	15
Baja	15
Media	7
<b>Baja</b>	<b>5</b>

Baja	5
<b>Media</b>	<b>8</b>
Alta	2
Baja	2
Media	4
<b>Total general</b>	<b>50</b>



## 6. Socio-economic characterization

### 6.a Socio-economic characterization of the Uruguay River Basin

River floods are natural processes that have been produced periodically and have formed the plains in the river valleys, lands where agriculture has traditionally been developed in fertile plains and riverbanks. The main cause of fluvial floods are usually heavy rains, which - depending on the region - occur under various meteorological factors.

With the exception of cases of severe flooding, the ecosystems and human communities have adapted in many areas, and depend on the periodic flooding for their subsistency. Ordinarily, flooding becomes a problem only if natural events or human activities increase its intensity or frequency, or if man invades flooded areas.

"El Niño - Southern Oscillation" (ENSO) is a cyclic meteorological phenomenon that is characterized by the rise in sea temperature in the Equatorial Pacific and an inversion of the atmospheric circulation over the ocean. When the changes in winds and water temperatures exceed certain thresholds, El Niño triggers its cycle, which can last more than a year and spreads its effects over a very wide geographical spectrum, altering local climatic regimes and causing



regional floods, droughts and large rural fires. The strength of an ENSO event is characterized by two indices: the Southern Oscillation Index (SOI), whose current value is -20 (the more negative, the greater the force of the event); and the Oceanic Niño Index (ONI), whose value corresponding to the quarter December 2015 - February 2016 is 2.2. For comparison, in the last ENSO events, the ONI for the same quarter of the years 1982/3 and 1997/8 were 2.1 and the 1991/2 was 1.6.

The ENSO event in the **Argentine Republic** begins in September of year one and ends in the first half of year two, producing extraordinary floods in the rivers of the River Plate Basin. This generates regional floods of long duration and high social and economic impact, mainly in the provinces of Formosa, Chaco, Santa Fe, Buenos Aires, Misiones, Corrientes and Entre Ríos, where 90% of the population lives and more than 70% of the Gross Domestic Product (GDP) of the country is generated.

Although today it is not possible to know the final economic impact of this phenomenon since the recurrence of the rains has not ended, in the last two events the losses were more than USD 1.2 billion in the 1982/3 and more of USD 1.1 billion in the 1997/8, and a similar impact is expected for this period.

Towards the end of December 2015, extraordinary rains over the basin of the Uruguay River generated flood peaks that affected the localities located downstream of Salto Grande: Concordia, Colón and Concepción del Uruguay. As of the second week of January 2016, the emergency moved westward, affecting especially the riverside towns of the Paraná and Paraguay rivers, as well as the interior sub-basins of the provinces of the Litoral Region, reaching a first peak by the end of January, above the level of evacuation in all riverine localities.

In the last report received from SIFEM as of April 17, 2016, the number of affected people amounts to 28.000.

The problem of risks and disasters in Argentina is significant. In the period 1970-2015 the country was affected by 97 major disasters (EM-DAT, 2016): 93% were of hydro-meteorological origin (floods and landslides due to heavy rains), and caused 14 million people affected and USD 10 billion in economic losses; and the remaining 7% were of geological origin (earthquakes and volcanic activity), responsible for 110.000 people affected and USD 180 million of economic losses. In recent years, the disasters have become increasingly frequent.

The impact of future disasters in the country could be even more serious than what has been recorded to date, according to a study of the risk profile in Argentina prepared by the Bank (ATN/MD-14209-RG). It should be noted that this figure of direct probable losses could increase due to the effects of climate change, a factor that aggravates the risk of disasters such as droughts and floods, affecting, among others, the agricultural sector.

The **Oriental Republic of Uruguay** is a country with about 3.200.000 inhabitants, characterized by a predominantly urban population. The main urban centers developed on the banks of important rivers and streams, determining several modalities of land occupation, often

irregularly, of the floodplains of the rivers and streams on which the cities settle. The overflow of rivers is a frequent phenomenon in Uruguay, a country with relatively abundant and irregular rains. However, in recent decades, an increase in rainfall has been observed, due to factors not yet clear, presumably related to climate changes or cycles of climatic variability.

Hydrometeorological events represent 73% of the actions of the National Emergency System (SINAE). Riparian floods are the main problem affecting the country in relation to hydrometeorological events. According to data from the SINAE, more than 65.000 people have been evacuated in the last ten years due to various flood events.

Studies of climatic variability have shown a strong relationship of these changes with El Niño. So much so that between November and December 2009, the region was affected by this phenomenon, producing a major flood centered in the basin of the Uruguay River that affected the coast and north of the country.

#### 6.b. Socio-economic characterization of the locations involved - Component 2 and 3

This section presents a socio-economic characterization of the locations where Component 2 and 3 will be implemented, which includes the resignification of vacant spaces and targeted protected areas. Namely: Concepción del Uruguay, Colón, Concordia in Argentina, Paysandú, Salto and Río Negro in Uruguay.

##### 6.b.1 Argentina

The **Entre Ríos Province** is located in the center-east of the country, in the *Mesopotamia Argentina* bordering to the South with the province of Buenos Aires, to the North with Corrientes, to the West with Santa Fe and to the East with the Oriental Republic of Uruguay. Its area is 78.781 km<sup>2</sup>, which represents 2.8% of the total area of the country.

Its population - based on the 2010 census- is approximately 1.235.994 inhabitants with a density of 15.7 inhabitants/km<sup>2</sup>, representing 3.1% of the country's total population. It is divided territorially into 17 departments called: Paraná, Diamante, Victoria, Gualeguay, Gualeguaychú, Uruguay, Colón, Concordia, La Paz, Villaguay, Tala, Nogoyá, Feliciano, Federación, Federal, Islas del Ibicuy and San Salvador. Of these departments, Paraná, Concordia and Gualeguaychú are the most populated, with 27.5%, 13.8% and 8.9% of inhabitants of the province, respectively.

The most dynamic area is concentrated on the Uruguay River and reinforced by the Zárate-Brazo Largo Bridge (on the Paraná de las Palmas and Paraná Guazú rivers); Libertador General San Martín Bridge (on the Uruguay River, it connects the areas of Puerto Unzué with Fray Bentos); General Artigas Bridge (over the Uruguay River, it links the cities of Colón and Paysandú) and the Concordia-Salto International Bridge. The last three bridges connect the province with the Oriental Republic of Uruguay.

Its geographical position is very strategic, since it is located in the heart of Mercosur and through it the South American bi-oceanic corridor connects Chile, Argentina, Uruguay, the south of Brazil

and the Paraná-Paraguay waterway that allows the navigation of big ships. In addition, it has important roads, rail and port connections that communicate with the major consumption centers in the region, the country and the world.

Also, together with the provinces of Santa Fe and Córdoba, it forms the Central Region, which arises from a regional integration agreement, enabling the development of actions on common issues, such as: infrastructure improvement, education, health, environment, tax harmonization, all associated with an active participation of civil society.

The “*entrerriano*” territory occupies an extension of the eastern end of the pampas plain, with gentle undulations, with a slope that gradually rises to the west and north. It is characterized by a marked heterogeneity in its topography, soils and vegetation. It is made up of: 77% of the mainland: approximately 6.066.137 hectares. 20% of islands, delta, pre-delta and floods: around 1.575.620 hectares. 3% water, Paraná, Uruguay and other rivers: about 236.343 hectares.

The Province of Entre Ríos initiated the formulation of its Strategic Territorial Plan (PET) in 2008, whose foundations were drawn up following the PET Argentina 2016 guidelines. Throughout these years, the very dynamism that characterizes the territories has left as a result: the achievement of goals, the deepening of trends and the emergence of new opportunities towards the desired model. The latter presents the province of Entre Ríos as the axis of regional connectivity, based on proposals for corridors for the flow of people, transport and goods, with the inclusion of new links for the Paraná-Santa Fe Metropolitan Area, the Concordia –Salto connection, and the re-operation of the Paraná-Paraguay Waterway, with its central node: the Port of Ibicuy. Likewise, there is possibility for an axis of integration of the regions of the center and north-south through the Axis of Gualeguay (Feliciano-Ibicuy), which would complement these influences towards the interior of the Province and the region. Regarding the region of Uruguay, it is made up of two subregions. The first, Salto Grande, includes the departments of Federacion, Concordia and San Salvador; the second, from Uruguay, has the departments of Colón, Concepción del Uruguay and Gualeguaychú. The aim is to strengthen the tourist centers and the integration with the Oriental Republic of Uruguay.

From the productive point of view, it has one of the most fertile soils in the country, which added to the predominantly humid temperate climate, favors agricultural and livestock development. The soil can be calified as: a) Very suitable, suitable and potentially suitable for agriculture (with limitations due to mountains, floods, etc.) which together represent 53% of the total. B) Lands that can be used for livestock, grazing, occasional afforestation and other minor activities (they represent the rest of the territory).

The productive system of Entre Ríos has been changing in the last decades, from being predominantly livestock-agricultural, to agricultural-livestock, due to the expansion, intensification and modernization of the agro-industrial complex and the technological leap in

recent years. Important innovations in agriculture have modified the agrarian and agro-industrial panorama of the province<sup>13</sup>.

Entre Ríos has a wide range of environmental and economic conditions that enable the development of different activities such as cattle and sheep, agriculture, poultry, forestry, citriculture, among others.

#### 6.b.1.1 - Concepción del Uruguay - Socio-economic assessment

The **Uruguay Department** is reclining on the right bank of the Uruguay River. With an area of 5.855 km<sup>2</sup>, it is the fourth most populated department of Entre Ríos: 100.728 inhabitants. In addition to the **capital city, Concepción del Uruguay**, it has the cities of Basavilbaso, Caseros, Colonia Elía, Herrera, Primero de Mayo, Pronunciamiento, San Justo, Santa Anita and Villa Mantero. Concepción del Uruguay is the international boundary between the Republic of Argentina and the Oriental Republic of Uruguay. It combines culture, nature, beaches and a rich history. It integrates the microregion of Palacio San José, where General Justo José de Urquiza lived and was assassinated, and is the seat of government agencies and universities.

The total population of the city in 2010 was 72.528 inhabitants (INDEC Census), of which 51.7% are women and 48.3% are men. The population of the municipality -including rural population- amounted to 73.729 inhabitants, while the entire department was inhabited by 100.821 people. Among the main activities of this “*entrerriano*” department we can find tourism, thanks to its beaches, walks and monuments, poultry with facilities for the slaughter of birds, agriculture, dairy and cattle farming, the industrial parks and the presence of the port on the Uruguay River, besides a very important offer of educational services with four universities and three higher level institutes.

The poultry cold storage stands out as an industrial activity, with three slaughtering and poultry processing plants that employ more than 2.500 people only in the town center. Most of the production goes to export. Agribusiness is important because of its rice fields, flour mills, vegetable oil processing plants and others. The wood industry, the car body industry and the metallurgical industry are also remarkable.

The city of Concepción del Uruguay is located in a natural environment that allows it to develop an internationally recognized agricultural-livestock primary production: rice (Entre Ríos is the main producer of the country), citrus, wood, products of beekeeping and cuniculus, in addition to the meat and poultry packing industry.

A significant portion of this production is exported through the Port of Concepción del Uruguay. The port of Concepción del Uruguay is the only Argentine port operating with overseas ships on the Uruguay River.

In its environmental characterization, the Territorial Strategic Plan of the City of Concepción del Uruguay identifies the strip of land parallel to the Uruguay River as of low environmental

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<sup>13</sup> Entre Ríos Province, Institutional, Economic, Tax Report  
[https://www.entrerios.gov.ar/minecon/userfiles/files/otros\\_archivos/2015\\_inf\\_min.pdf](https://www.entrerios.gov.ar/minecon/userfiles/files/otros_archivos/2015_inf_min.pdf)

criticality in relation to other areas of the country, but points out some problems and restrictions. Such is the case of vulnerability in sectors built under the floodplain; and environmental conflicts related to imbalances of the city's infrastructure.

It is located in the most important railway corridor of MERCOSUR, it has direct access from the National Route 14 and a railroad network that includes Mesopotamia and bordering countries. It is located 320 km from the port of Buenos Aires (Entre Ríos Entrepreneur Council, 2004).

The main communication route is the National Route 14 that connects Concepción del Uruguay with the city of Colón in the north and Gualedaychú in the south, and the latter with the town of Ceibas<sup>14</sup>. On the other hand, Provincial Route N. 6 east-west, connects the city of Concepción del Uruguay with Larroque and then with Gualeday. Another important route is the Provincial Route No. 36 linking Concepción del Uruguay with Rosario del Tala.

An important infrastructure work in this area is the International Bridge Gral San Martín Puerto Unzué-Fray Bentos that connects this area with the Oriental Republic of Uruguay.

Likewise, the economic development of Concepción del Uruguay is based on commercial, industrial and service activities. The city has an Industrial Park with capacity to absorb investments, and a prosperous future. INTI gives a dynamic advantage to generate technology and studies in favor of local industries. The Province expects the future creation of a technological hub articulating INTI, the universities and the industrial sector, the creation of an incubator and the empowerment of the free zone.

Among the companies located in the municipality, we can mention those dedicated to the following activities: manufacture of corrugated cardboard boxes, agglomerates, sawmill, metallurgical, production of organic pigments and vitamin nuclei, rice mills, fertilizers, cardboard sheets, distribution and packaging of gas, cargo, freight and fractionation of rice.

According to the data released by the INDEC in 2010, Uruguay Department shows the best levels of relative activity together with the departments of Concordia and Paraná. However, unlike the latter, the department has an unemployment rate of 4.1%, lower than the provincial.

Regarding basic services, 93% of homes in Concepción del Uruguay have water from the network, 83% have sewage, and natural gas service is provided in only 29% of households. The cities with the best provision of basic services are Basavilbaso and Concepción del Uruguay, the latter is the only one that exceeds 15.000 inhabitants.

The largest locality has the highest activity rate (Concepción del Uruguay). It concentrates more than 70% of the working age population of the department and has 35.005 jobs.

According to data from the same census, of the total working age population older than 14 years, 40% have employment, 13.4% seek work and 46.6% are economically inactive.

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<sup>14</sup> General Directorate of Statistics and Census of Entre Ríos, population census 2010.

Of the total population, 65.4% are between 15 and 64 years old. In this age range, 14% have not completed primary school, 8.5% have incomplete university or tertiary studies and 8.9% complete studies. Likewise, 2.1% have no formal education.

Of the total of the population without formal education and who have not completed their primary studies, 2.7% and 27.5% respectively work in Sector A.

88.3% of the households of the area cover their basic needs and 62.2% do not present deprivations or current material or patrimonial resources. This last condition amounts to 75.5% when considering the households of the population with employment and is 65.3% in the case of those employed in Sector A. In the latter case, 12.4% suffer deprivation of material resources, 16.2% patrimonial and 6.1% presents both types of deprivation<sup>15</sup>.

#### 6.b.1.2 - Colón - Socio-economic assessment

The Department of Colón is located in the east of the province on the banks of the Uruguay River. With an extension of 2.893 km<sup>2</sup>, according to the last census conducted by the INDEC in 2010, it has a population of 62.160 people, 30.860 males and 31.300 females, distributed in cities such as San José, Ubajay and Villa Elisa, as well as of government boards and centers that constitute a micro-region with tourism as its main development vector<sup>16</sup>. The city of Colón registers 24.835 residents.

The José G. Artigas international bridge was built on the Uruguay River and connects the cities of Paysandú (in the Oriental Republic of Uruguay) and Colón (in Entre Ríos).

The city of Colón is in the very center of Mercosur, which makes it easy to access the town from any point in the country and other neighboring countries. National Route No. 14 favors its accessibility, as well as Route No. 26 and Route No. 39 (from Rosario); and National Route 18 and 130 (from Santa Fe).

The natural gas network exists in only 3 of the 11 urban centers of the department. The largest coverage of the service is in Villa Elisa, which supplies 43% of households. Next, Colón and San José appear with 31% and 15%, respectively (the only ones that exceed 15.000 inhabitants).

The sewage network is installed in the same three locations mentioned above, including Arroyo Barú, Pueblo Liebig and Ubajay. Villa Elisa is again the one that best supplies households (93% of households), followed by Arroyo Barú with 92% coverage. Immediately after, Pueblo Liebig and Colón, with the network installed in 187 and 5.936 households (83% and 80% of the total). Finally, San José and Ubajay.

Although a large part of the urban plant in the city of Colón has basic infrastructure coverage, and only a few sectors do not have a sewer or a potable water network, the lack or collapse of services and infrastructures in the city in high season, is a serious problem. With the peak of tourists, the population quadruples. In this context, problems arise especially with the sewerage

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<sup>15</sup> INTA [https://inta.gob.ar/sites/default/files/script-tmp-inta\\_zonas\\_agroeconomicas\\_homogeneas\\_entre\\_ros.pdf](https://inta.gob.ar/sites/default/files/script-tmp-inta_zonas_agroeconomicas_homogeneas_entre_ros.pdf)

<sup>16</sup> [www.entrierios.gov.ar](http://www.entrierios.gov.ar)

infrastructure, leading to a saturation of the sanitation system, with multiple environmental implications in the rivers and streams.

Tourism is the most developed activity in this city, mainly due to the thermal waters. The whole city works around tourist demand in high season.

In terms of tourism, the extensive natural beaches, the thermal resorts, the El Palmar National Park (created to take care of the Yatay palm tree, in danger of extinction), the nautical excursions around the islands, the bird watching, the photographic safaris and the Historical sites such as the Forclaz Mill and Liebig Village are the extense offer for the visitors.

The department of Colón in 2010 presented an activity rate of 48%, above the provincial average, with 29.704 assets. Employment and unemployment rates are 46% and 3.7%, respectively, higher than the provincial average.

There is recurrence of floods of the Uruguay River, although the permanence of this natural phenomenon is relatively short; it usually occurs in summer, causing the summer facilities to be disabled for their use and enjoyment.

The Port of Colón is no stranger to this phenomenon, being that much of the beach, the subsoil of tourist offices, some heritage buildings and connecting streets, are under water, putting at risk the architectural heritage and the urban area.

Regarding its climatic characteristics, described in the report of the General Development Plan of the Coastal Area of the Port of Colón<sup>17</sup>, "the average cloudiness is 3.8 with a fairly regular monthly distribution. The average annual rainfall is about 1.100 mm. Humidity is abundant due to the precipitations, which are more intense in summer and fall harmoniously and regularly throughout the year.

The annual precipitations oscillate between 1.000 and 1.120 mm, although the annual average follows in continuous growth, until 1.260 mm.

In the area occupied by the Uruguay River the channel appears deep, with high margins, higher on the Uruguayan coast, and with exceptional beach areas with abundant sand, and covered by thick vegetation on the Argentine shore.

The regime of the Uruguay River, presents two seasonal periods of annual floods, from October to December-January and from March to June approximately. In this sense, we consider the statistical data of the ordinary and extraordinary floods registered on the Uruguay River during

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<sup>17</sup> **"Plan General de Desarrollo del Área Costera del Puerto de Colón" Tomo 1.** Programa Multisectorial de PREINVERSIÓN III. PRÉSTAMO BID 1896/OC-AR. ESTUDIO N°1.EE.457. Ministerio de Economía y Finanzas Públicas, Secretaría de Política Económica, Unidad de PREINVERSIÓN (UNPRE). Decreto N° 1022/93 y la Resolución N° 111/93.

its passage in front of the city of Colón during the last years, provided by the Argentine Naval Prefecture of Puerto Colón.

Likewise, the Prefecture informed that the Flood Plan is put into execution in its Alert Stage when the waters reach a height of 7.10 m and Evacuation Stage at 7.90 m. The average of the annual maximum floods for the period 1998-2008 gives a height of 6.98 m. Only on two occasions it exceeded the 7.90 m: January 1998 with 9.48m and October 2002 with 9.18m. It exceeded the 7.10 m on three more occasions: October 2001 with 7.32 m; June 2005 with 7.64 m. and November 2008 with 7.19 m.

A management plan for the city of Colón aims to be a procedural guide in which the management model promotes the realization of the programs' objectives. Specifically, the environmental management plans are aimed at mitigating, preventing, protecting and compensating the impacts caused by the critical and adverse effects of the projects activities. The management plans that make up this sustainable city program are: Sub-Program Management Plan for the Urban and Suburban Coast of the Uruguay River, Sub-Program Management Plan for the Arroyo Artalaz and La Leche Basins, Sub-Program Plan of sustainable management of the peri-urban area with non-permanent residential and tourist accommodation and Sub-Program Management Plan for Urban Solid Waste and Domiciliary Effluents and Productive Activities.

El **Palmar National Park** is located in the center-east of the province, between the National Route No. 14 and the Uruguay River, 45 km from the City of Colon and 365 km from the Federal Capital (being the National Park closer to this). It was created with the aim of protecting Yatay palms that, at the end of the last century, flourished on the east of Entre Ríos.

El Palmar National Park covers an area of 8.500 hectares, with a predominant presence of Yatay palms and pastisales. In addition to this, you can find species such as the espinillo, tala, ñandubay, molle, carob and white quebracho (typical species of the xerophilous mountain); and species of jungle as arrayan of the north, laurel, matajojo, lianas and multiple vines.

The protected area belongs to the Espinal eco-regions, with some communities and species typical of the Pampa pasture, and Paraná jungle. The Espinal eco-region is characterized by a landscape of flat and gently rolling plains, with very variable soils. Its climate is also variable: warm and humid in the North, and temperate and dry in the West and South. The vegetation is formed by low xerophilous forests and savannas, alternating with pure pastures.

#### 6.b.1.3 - Concordia - Socio-economic assessment

The **Concordia Department** is located in the northeast of Entre Ríos, on the Uruguay River. It has 3.259 km<sup>2</sup> of extension, with a population of 170.033 inhabitants, which makes it the second most populated department of the province. Of the total population, 83.829 are males and 86.204 females. 70% are under forty years old, with a total of 49.633 inhabitants who are



between 0 and 14 years old; 106.783 who are between 15 and 64 years old and 13.617 over 65 years old. The city of Concordia has one of the lowest aging rates in the province, being 27.4%.

The birth rate started a growing trend, in 2010, so a larger number of children in the range of 0 to 4 years is expected in the coming years.

There is 49.4% of the population over 3 years old that use computers. The percentage of illiterate population reaches 2.3 percent.

The department of Concordia currently has 12.1412 inhabitants over 14, of which 11.205 are economically active. Within this last category there are 3.627 unemployed, determining an unemployment rate of 4.6% and occupation rate of 44%. The activity rate is 46%, equal to the provincial rate.

Concordia presents an important university activity, with the presence of the National University of Entre Ríos (UNER) and the Autonomous University of Entre Ríos (UADER).

The calculation of housing by inhabitants is 307 private homes per 1.000 inhabitants. 167.257 people live in private homes. There is a total of 51.372 private homes in the city. With respect to the services available to the population, 94.9% of the total households have water network and 5.1% are without water network, 10.2% are without water provision inside the house. 75.3% of households have sewage, 87.7% have sanitary installations with water discharge.

The percentage of homes with gas service is 16.6%. The total number of households with gas from the network is 7.983 and 39.999 are without gas. 92.6% of households have a refrigerator; 48% have fixed telephone line; 84.4% have a cell phone; and 43.1% have a computer. (INDEC, 2010, s/p).

In 2003, with 80% of inhabitants below the poverty and indigence line and 18% of the unemployed, in the midst of the economic and social meltdown, Concordia became the poorest city in the country. Currently, according to data from the INDEC, Concordia has descended a step to become the second poorest city in Argentina behind Santiago del Estero.

According to the Permanent Household Survey prepared by the General Directorate of Statistics and Census of the Province of Entre Ríos, in the third quarter of 2014, in the city of Concordia, the total activity rate was 45.2%. The total employment rate was 43.2% and the unemployment rate was 4.4% (S/A, 2014).

If the numbers are analyzed, differentiating them by sex, among men the activity rate was 57.2%, the employment rate was 53.7% and the unemployment rate was 6%, while among women, the activity rate was 34.4%, the employment rate 33.6% and the unemployment rate 2%. The numbers highlight the great difference between the activity of men with respect to women, a fact of great importance to take into account in the research.

The city of Concordia is located in a fertile territory, with agrarian, livestock, forestry and fruit resources, where factories and developed institutions are not lacking. In spite of the wide variety of productive activities, the 43.6% of people are poor.

The identity of Concordia is closely linked to citrus production, which is why it holds the title of National Capital of Citriculture, to which an intense production of blueberries was added. It is also characterized by forestry-industrial activity.

The beaches on the edge of the lake, formed by the hydroelectric dam of Salto Grande, positioned the city as a tourist destination, with the added value of water sport and activities related to nature, sport fishing and, of course, the thermal tourism.

Thanks to its location in the geographical center of Mercosur, Concordia is one of the most dynamic cities in the region, home to numerous industries and a thriving commercial and cultural activity.

Concordia is the main urban center of the entire Uruguay River basin due to its commercial and industrial importance as well as its population index.

The floods generate impacts in different aspects, firstly, for the population and their lifestyle; economic impacts since the productive damages are devastating. Agricultural and livestock production, together with tourism, are the most affected activities.

Repairs, expansion and adjustment of the Defensa Sur have been carried out, since it was affected by the floods of the Uruguay River. It will benefit 25.000 inhabitants. According to the statement of the head of the Interior, Public Works and Housing portfolio, this work allows hundreds of families in Concordia to be protected by the river's growth. It still remains to relocate inhabitants, but they are signing agreements for the construction of another 250 homes.

The "defensa" suffered, in the absence of maintenance, leaks in some areas of the embankment. In this context, the National Government allocated more than 85 million pesos to carry out works to improve its operation and prevent floods.

From the environmental analysis, it is important to mention the deterioration of the infrastructure networks (sewage network, running water, among others), as well as the crisis with the natural environment due to the inadequate treatment of garbage, the care of the streams, the riverbank of the Uruguay River and the evacuation of surplus water. This last issue is linked to the problems caused by floods, especially in urban areas, where the corrective measures adopted did not reach the expected results.

## 6.b.2 – Uruguay- Characterization of the Coast

### 6.b.2.1 - Paysandú - Socio-economic assessment

The Paysandú Department covers 13.922 km<sup>2</sup>, located on the west coast of the country whose geographical composition highlights the ecosystems of northwestern prairies, southwest coast and fluvial plains. As usual in Uruguay, the department of Paysandú has a large number of water courses.

It has 807 km of solid road network (21% concrete, 28% bitumen, 51% coarse), and it is one of the eleven border crossings that Uruguay has, which means that there is a great movement of loads.

Its main urban center is the capital where 76,412 people live with an important endowment of public services. Of the total population of the department (51% women, 49% men) 96% is urban. For the households as a whole, 63% are headed by men and 37% are female, with an average size of 3-member households.

The total number of homes in urban areas amounts to 39,729 (57% of homeowners and land owners, 24% occupants, 13% of tenants and 6% of home-only owners located in the settlements). The housing structural situation in Paysandú, according to the construction materials, is mostly medium to good (87%) while the precarious ones represent 13%.

Agricultural activity in the department is predominant, with a 60% activity rate. Of the total working age population there is a greater number of assets among men (72%) than among women (49%).

The population living in irregular settlements<sup>18</sup> is predominantly young in comparison with the rest of the population. For example, children from 0 to 9 years old who live in settlements almost double the rest of the children, this shows that there is a high percentage of children living in conditions not suitable for their development. In the case of adolescents and young people a similar relationship is observed.

According to the interviewees, currently the most outstanding problem in terms of climate change in Paysandú, are the floods "which are more and more frequent".

In Paysandú, the height of the river is 9.10 m, more than 3 meters above the safety level, which is 5.5 meters. The most affected households are those below the 6.50 mark.

According to the report "Impact of the floods of November 2009 in Artigas, Salto and Paysandú<sup>19</sup>", the city of Paysandú was affected by an extraordinary flood event in November 2009. An event of heavy rains that lasted a month where the Uruguay River increased 18mts, the water exceeded the dike of the Rincón de Bonete Dam. Various urban sectors were affected, from informal settlements such as La Chapita to consolidated neighborhoods such as the port area. The closest similar precedent was registered in October-November 2002, where 1.307 were affected, and in 2009, 4.355 people in Paysandú.

The rains registered in the stations are well above the average, in addition to the heavy rainfall registered in the upper basin of the Uruguay River that directly affects this city. As a result of these precipitations, the Uruguay River reaches a maximum height at the end of November of 9.07 meters in front of Paysandu.

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<sup>18</sup> Irregular settlements, is denominated the set of houses made in properties of which the residents are not owners, invading state or private property. In addition, these homes are characterized by precariousness and lack of basic services.

<sup>19</sup> Agreement GGIR-UDELAR-UNDP.

The trends registered in recent decades point to a significant increase in average rainfall as well as an increase in intense precipitation events. These phenomena are reaffirmed in the scenarios designed by the IPCC for the next decades in the region. In this context, even if the situations of social vulnerability associated with flood events do not worsen, the impacts produced by future events will be amplified. Generating policies to adapt these locations to these future scenarios, handling the uncertainties inherent in these processes and integrating different public policies is to be considered.

The city of Paysandú is framed (at least the main nucleus of the urban plot) by two tributaries, the Sacra stream in the South and La Curtiembre stream in the North. This implies a more extensive effect of the flood event.

Table: Population affected by location

CUADRO DE POBLACIÓN MÁXIMA AFECTADA POR LOCALIDAD				
DEPARTAMENTO	LOCALIDAD	Fecha	Evac_08dic	Altura
PAYSANDÚ	PAYSANDÚ	07 dic. 2009	4355	9,07
	SALTO	13 dic. 2009	3230	15,75
ARTIGAS	ARTIGAS	27 nov. 2009	2000	11,40
ARTIGAS	BELLA UNIÓN	07 dic. 2009	299	8,94
CERRO LARGO	RÍO BRANCO	23 nov. 2009	104	4,80
COLONIA	NUEVA PALMIRA	26 nov. 2009	30	-
DURAZNO	DURAZNO	26 nov. 2009	188	9,00
RIVERA	RIVERA	25 nov. 2009	2	-
SORIANO	MERCEDES	09 dic. 2009	173	6,90
SORIANO	VILLA SORIANO	09 dic. 2009	65	3,80
TACUAREMBO	TACUAREMBO	24 nov. 2009	11	-
TACUAREMBO	PASO DE TOROS	01 dic. 2009	83	58,25
TACUAREMBO	SAN GREGORIO	30 nov. 2009	28	83,18
TREINTA Y TRES	TREINTA Y TRES	24 nov. 2009	192	6,90
TREINTA Y TRES	VERGARA	24 nov. 2009	5	-
	TOTAL		10765	

Source: SINAIE<sup>20</sup>

In the city of Paysandú, the locations selected for the execution of components 2 and 3 of the project are: the Unión Portuaria settlement and the Barrio Ledesma settlement, both characterized by a population of great social vulnerability.

The settlement of the area called *Unión Portuaria* (the name of the local Sports Club) is located

<sup>20</sup> Quoted in the Report "Impact of the floods of November 2009 in Artigas, Salto and Paysandú" Part I, Convention GGIR, UNDELAR, UNDP.

in the western periphery of the city. According to the data collected by local institutions, economic income comes from: seasonal work, productive activities (breeding of chickens, pigs and brickmakers) and classifiers. On the other hand, most families receive social benefits.

At the territorial level, 27 informal lots have been identified, whose situation is very irregular. The type of building is precarious, using materials from the waterfront, sheets and scrap. Interventions of the Civil Society Organization (OSC) "El Techo Uruguay" have been detected.

Although there is coverage of urban infrastructure services (sanitation, potable water, electric power) in the area, all the houses in the settlement are not connected. The settlement does not have a road network or storm drains.

Currently, Uruguay Crece Contigo (UCC) and Cercanías programs are involved in the area. On the other hand, the area has a table called Coexistencia Ciudadana, which addresses issues of interest to the neighborhood.

The settlement called *Barrio Ledesma* (responding to the name of the street that runs through the entire area) is located on the western outskirts of the city of Paysandú.

According to the data gathered in the aforementioned Report<sup>21</sup>, the economic income comes from: classifiers, productive activities (chickens, pig and brick) and seasonal work; on the other hand, most families receive social benefits.

At the territorial level, 67 informal lots were identified, most of them irregular.

As in the Union Portuaria, the type of building is precarious using coastal materials, sheets and scrap. Interventions of the Civil Society Organization (OSC) "El Techo Uruguay" were also detected.

Although there is coverage of urban infrastructure services (sanitation, potable water, electric power) in the area, all the houses in the settlement are not connected. The settlement does not have a road network or storm drains.

The area has been operated by programs such as Uruguay Crece Contigo (UCC), Amanecer de Gurises and Cercanías. In addition, the Service of Orientation, Consultation and Territorial Articulation (SOCAT) works.

In productive terms, in both settlements, there are a total of 200 families registered, of which about 30 families are engaged in productive activities. In this sense, according to information provided by Paysandú officials, 27 houses are used for economic activities, namely: recyclers: 6 houses; brickworkers: 4 houses; breeding of pigs: 1 house; breeding of chickens/ducks: 8 houses; horse breeding: 4 houses; dairy farmers: 1 house.

The productive activities linked to the river are a constant in the city. Water excesses affect agricultural activity by saturation of soils that generate hypoxia or radical anoxia in plants and that affect to varying degrees depending on the sensitivity of the different species and even the

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<sup>21</sup> Op. Cit.

phenological stages in the same species. They also generate humid environments that favor the appearance of diseases in both plants and animals. During the 2009 floods, the rivers that presented the most problematic situations were Uruguay and Cuareim. The productive undertakings suffered the consequences of the floods, and several of these families moved to shelters and had to stop their activity. Therefore, each flood represents great economic losses.

The Departmental Emergency Coordinating Center (CECOED) is coordinated by the Intendency and integrated by several institutions such as Fire, Police Headquarters, Prefecture, Army, UTE, Red Cross, OSE, CARU, ANCAP, MSP, MIDES. The local CECOED was inaugurated 15 days before the 2009 event, so it had no operational experience in previous events, but was able to articulate inter-institutionally.

In Paysandú, shelters are used for men, on the one hand, and for women and children on the other. They are managed by the Intendency, which intervenes through the accompaniment in the territory and giving notice of the measures to be taken in flood situations, and informing where they can attend (for example: register in the CECOED, and move to shelters where you will be provided with a basket of personal care products, bedding, mattresses, food, among others).

Before the floods of 2009, 386 people were housed in shelters, 250 of which in the stadium, more than half were children. In Paysandú, daily medical assistance was provided in each shelter and camp, through visits made by a doctor and nurse. In all the shelters were given diapers, female adherents and condoms. Although the protection of sexual intimacy was raised as a concern, there was no practical resolution in Paysandú.

The most general principle that was used during the 2009 floods by the Emergency Committees of Salto and Paysandú to define who to help (and therefore also to whom not to help) was that they should provide goods to the "affected" by the flood; the affected person was called "flooded", thus defining who resided in a dwelling where the water entered and which, therefore, was evacuated as a consequence of the flood, either by the authority or on its own initiative, either to a shelter, to a camp or family home. If we consider that the two-main potential direct and immediate impacts of the floods were the affectation of housing and livelihoods, it is clear that associating the situation of "affected" only with the affectation of housing, is partial. It leaves outside the category of affected by the flood, the fishermen, beekeepers, brickmakers, etc. who were seriously affected in their undertakings.

From the territorial point of view, the particularities of the different zones were analyzed, characterizing in each of them the magnitude of the impact, the main effects on the livelihoods of the population and the functioning of the social services and facilities existing during the event. From south to north, the six zones identified for analysis were: San Felix (approximately 150 victims), south of Soriano Avenue (approximately 1.330 victims), north of Soriano Avenue to Puerto (approximately 2.400 victims), beach and Costanera (approximately 711 victims), north to Ao. Curtiembre (approximately 750 victims) and Nuevo Paysandú (approximately 360 victims).

From the psychological point of view, the fact of having to leave and losing part of their belongings was added to having to live with a large number of people in shelters, where spaces could not always be sectorized to preserve family intimacy. The impact of the evacuation was less in those families with high mobility, while in the population with greater rootedness the anguish due to the loss of their belongings made even the evacuation difficult, increasing risks when leaving at the last minute.

Among the registered impacts, it is observed the affectation of a significant number of population settled in flooded areas whose subsistence depends mainly or exclusively on the goods and ecosystem services contained there (extraction of vegetable fuel, sediments for brick making, crops and domestic animals, among others). There is also an affectation of the urban residential area adjacent to the port. This area possessed an important architectural and cultural patrimonial value. As well as the loss of recreational spaces (beaches, coastal parks) that have been detrimental to local and regional tourism. Public infrastructures (Port, Grain Deposit and Fertilizer-ANP/MTOP, Humanitarian NGOs, Public Schools, National Roads Department-MTOP) were also affected.

In sum, both settlements are located in public property with high urban quality, close to the downtown area of Paysandú.

From the urbanistic point of view, the main aspects to be solved are the relocation of the houses located on the strip near the Uruguay River, however, the settled population presents a high consolidation, where the rehousing is not entirely the solution for the feeling of belonging of the inhabitants.

#### 6.b.2.2 – Salto - Socio-economic assessment

The *Department of Salto* is located in the NW of Uruguay. It limits to the north with the department of Artigas, to the east with those of Rivera and Tacuarembó and to the south with the department of Paysandú. The Uruguay River, to the west, constitutes the natural border with the Argentine Republic. It has an area of 14.163 km<sup>2</sup>, being the second largest department in Uruguay.

In Salto, there is a large number of water courses, the main course being the Uruguay River. Salto has an extension of 639 km of solid road network (18% concrete, 31% bitumen, 51% coarse) but scarce and with an almost nonexistent interconnection, which makes the accessibility level very low and internal transfers very difficult. Its main urban center is its capital, the city of Salto, where 104,011 people reside.

The city of Salto has an important endowment of public social services, among which those referred to health and education stand out. For all households in the department (Continuous Household Survey, 2011), 63% are headed by men and 37% are female, with an average household size of 3.4 members. The population pyramid of the department shows a distribution by age groups, which accounts for a young population structure.

According to the last census (2011), the percentage of people who are below the poverty line is 16%, with 11% of poor households and 22% of young people between 15 and 29 years old. They study or work (29% women, 15% men) which may be associated with a greater weight of household responsibilities on women. The activity rate in the department has remained stable (2006-2011) at around 60%, with the percentage of assets among men being higher (73%) than among women (50%).

The total number of homes amounts to 37,957 (62% of homeowners and land, 22% occupants, 12% of tenants and 5% of homeowners only, located in the settlements) and their structural situation is mostly medium and good, representing 80%, while the precarious ones represent 20%. In the periphery of the city, many of the houses are flooded.

There is an important network of social organizations in the Department of Salto whose objectives serve a series of public issues and cover needs felt by the population.

The Local Plan for Territorial Planning and Sustainable Development of the City of Salto and its Microregion DD 6958/2016 establishes: a) within the "General Guidelines for the Uruguay River area" the flood zones for the city are established in accordance with other departmental decrees (Art 63 and 64); b) within the plan, "Local zoning guidelines for the Uruguay River Zone" are established (Art 65), which highlights the completion of the Flood Risk Map (subsection "i") and the non-qualification of new buildings in flood zones (subsection "k"); c) within the "Derivative Planning" (Art 122), it is proposed the realization of a "Urban Water Sector Plan" (subsection "a") and the realization of a "Sectorial plan for the Uruguay River Zone (subsection "D") in which the promotion of a "Partial plan of territorial ordering for the Ceibal and Sauzal stream areas" stands out.

The city of Salto, has also suffered the floods of November 2009, as the highest impact recorded after the commissioning of the Salto Grande Dam. In the antecedent of October - November 2002, 1.067 people were affected in Salto. As in the case of the city of Paysandú, the rainfall registered surpasses widely the average, to which the strong precipitations registered in the high basin of the Uruguay River are added.

In the framework of the support provided by the University of the Republic to the management of floods, a damage assessment coordinated by the Comprehensive Risk Management Group (GGIR) was carried out, from the surveys of the affected cities (Artigas, Paysandú and Salto). In Salto, flooded areas were surveyed over the streams, and the river front of the Uruguay River was not fully surveyed.

As a result of these precipitations, the Uruguay River reached a maximum height at the end of November 2009 of 15.75mts in front of Salto. In 2015, the river level was at 16.5 meters, more than 4 meters above the safety level which is 12 meters.

In the last flood of 2017, families living in areas below 13,80 m were affected, many of which have been included as beneficiaries of the "Salto al Desarrollo" Project, and for the second stage



of its execution it was agreed to prioritize the intervention, in the areas called "CEIBAL" and "CIEN MANZANAS NOROESTE", "PASO DEL BOTE", benefiting approximately 58 families.

In Salto, residential areas of the middle sectors, and housing with a higher construction level and better termination conditions were affected. As indicated in the report of the flood damage assessment of 2009, an important number of black wells were found in poor condition, an aspect that at the time of the flood constitutes a critical situation from the sanitary point of view. Of the dwellings surveyed in Salto, 57 of them presented this characteristic. Likewise, 71 houses in Salto have a bathroom outside the house.

Evaluation system of sanitary service in Salto and Paysandú

	Salto	Paysandú
General Network	63%	55%
Septic Tank/Black Well	34%	42%
Other solution	3%	2%

Fuente: Relevamiento GGIR –fragmento del Informe-

Regarding the social vulnerability and educational level of the affected population, it is observed that 58% in Salto do not exceed primary levels of education. In the labor aspects, less than a third of those over 18 years old have a permanent job, with one third of those employed performing "changas". In this aspect, most of the victims perform temporary activities.

According to the reports analyzed, among the proposed actions as a solution to the problem of floods, 27% of the responses are associated with infrastructure actions and management of the dam.

It is important to point out that the floods in Salto involve both the river front on the Uruguay River, and the Sauzal and Ceibal streams, its main tributaries. The actions must recognize these different realities: a coast on the river that integrates the social "imaginary", a stream with a high degree of anthropization such as El Sauzal and an area in the Ceibal stream, where most of the brickyards are located, the main extractive activity linked to water. This implies that the flood event affected a larger area by adding to the floodplain of the river, those of its tributaries. Another particular feature is the presence of the Salto Grande Dam, which, by controlling the level of the reservoir, gives certain "predictability" to the event. Although the ability to defer the effect over time is finite, it provides a contingency management capacity (evacuation of residents, transfer of goods, cessation of services) with which a locality located in a course without this type of infrastructure does not count. However, in 2009 the drainage of the tributaries was a difficulty, noting the partial collapse of the storm drain network, which meant the amplification of the flood effect.

In relation to the operation of response to the floods of 2009, six shelters were organized (club Nacional, club Saladero y Tigre, el local del Hipódromo, el local de Santa Filomena – Capilla de la Iglesia Católica y en la denominada Casa Verde) and camps near the affected area. The latter

were made up of entire families or groups of neighbors and families. The Departmental Coordinating Center was in charge of centralizing the material, human and institutional resources, as well as enabling the return by delivering a cleaning kit to the victims. The permanent members of the CECOED are: the Intendant, Ministry of the Interior, Ministry of National Defense, Ministry of Social Development and Ministry of Public Health. However, other institutions and/or agencies are also invited to participate according to the problem, such as the National Administration of Public Education (ANEP), Sanitary Works (OSE), National Power and Transmission Electricity Administration (UTE), National Telecommunications Administration (ANTEL), Institute of Children and Adolescents of Uruguay (INAU), Ministry of Education and Culture, Ministry of Livestock, Agriculture and Fisheries, civil society organizations.

Among the actions carried out in 2009, "cohabitation workshops" were carried out in the shelters, under the responsibility of the Family Office and the Department of Human Development of the Municipality, which was well evaluated by the affected population as it helped to minimize the conflicts that emerge after several days of coexistence.

The family leadership in the shelters was carried out by the women, with a large presence of children and little male presence, according to the report "Impact of the floods of November 2009 in Artigas, Salto and Paysandú".

Among the impacts, we can also include the loss of recreational spaces (such as beaches and coastal parks) and the loss of cross-border connectivity (informal economy and/or subsistence), mainly carried out by small boats.

Below the table summarizes the direct, indirect and total costs of the floods in Salto and Paysandú<sup>22</sup>:

#### Direct costs in dollars

Asset Damages	Salto	Paysandú
Households		
Buildings	3.073.347	6.029.583
Equipment	922.004	819.086
<i>Subtotal Households</i>	3.995.351	6.848.669
Infrastructure	1.281.121	2.856.900
Others	263.824	485.278
<b>Total</b>	<b>5.540.296</b>	<b>10.190.848</b>

Source: several. Prepared by the technical team that prepared the Report "Impact of the floods of November 2009 in Artigas, Salto and Paysandú" Part I, GGIR Agreement, UNDELAR, UNDP.

#### Indirect costs in dollars

Damages	Salto	Paysandú
Evacuation and return	114.798	200.230

<sup>22</sup> Op. Cit

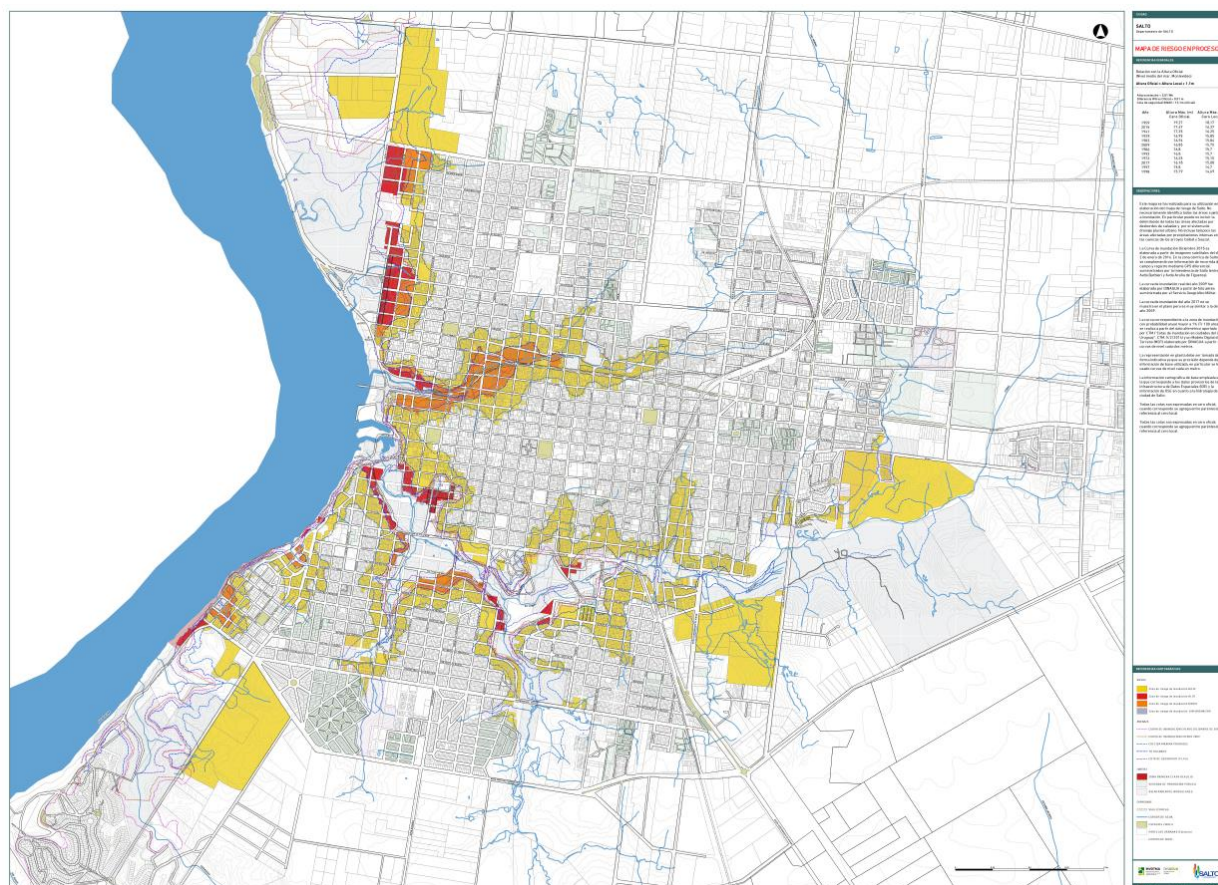
Works in the zone	338.511	1.303.293
Accommodation	387.812	592.735
Feeding	104.823	195.866
Health care	27.093	25.734
Other assistance	108.316	107.833
Loss of profits Business	116.500	409.323
Loss of profits Households	10.402	13.873
Loss of profits Agricultural Sector	60.413	142.444
Total	1.268.669	2.991.331

Fuente: varias. Elaboración del equipo técnico que elaboró el Informe "Impacto de las inundaciones de noviembre de 2009 en Artigas, Salto y Paysandú" Parte I, Convenio GGIR, UNDELAR, PNUD.

Events of the magnitude of the floods of 2009, would result in costs in the order of USD 100 per day and per person evacuated, whose difference depends on the duration of the event and the damage to infrastructure in the affected area.

The Flood Risk Map for the City of Salto is currently being prepared, which is being worked jointly by the Intendencia de Salto and the DINAGUA-MVOTMA through its office of Floods and Urban Drainage. Progress has been made in the preparation of the cartography that constitutes the Flood Risk Map.

## Flood Risk Map in development process



Source: DINAGUA – Municipality of Salto.

### 6.b.2.3. Artigas

The Artigas department with an area of 11,928 km<sup>2</sup> has a triple border location, unique in the national territory; it borders Brazil through the south Rio Grande do Sul and with Argentina through the coastal corridor of the Uruguay River.

It is located on the basaltic slope in whose litoral the basalt layer is arranged as a large inclined slab sloping towards the Uruguay River. This substrate determines the hydrographic conditions with torrential rivers, carved in the rock, implying that in case of flow growth these water courses tend to generate floods very quickly.

The dominant vegetation is prairie, with a native mount - humid forest -with arboreal species of great bearing absent in the rest of the country.

It has two important cities, Artigas, the capital located in the northeast of the Department on the Cuareim River, and Bella Unión on the northwest on the Uruguay River. Of the 78,000 inhabitants, 56% reside in the capital and 24% in Bella Unión. The road network is 394 km with a 66% average quality. The population of the Department presents a similar proportion between men (50.1%) and women (49.9%), its population pyramid presents an atypical structure for the country, since it is characterized by concentrating most of its population in the stretches of younger age, however, the loss in the age range between 20 and 39 years is observed. The

average size of the household varies by location varying between 3 and 5 people per household (80%) and the head is predominantly male (72%).

In the last twenty years, the proportion of households under the poverty and indigence line has been located at 10% above the figure for the total of the country. This situation has been reversed since 2006, with 26% of households living below the poverty line in 2009.

The degree of urbanization of Artigas has been increasing, reaching 91% in 2004, the reasons being the migration from rural to urban areas. The number of homes amounts to 24,970 with sanitation coverage below the national registry. The sanitation coverage of Bella Unión is 42% with 21 km of networks and a treatment plant composed of a lagoon system. In this locality, the vulnerable zones are located in the margins of the Uruguay River whose houses are precarious are not equipped to cope with floods and the families lack resilient capacity.

The economy of the Department is mainly based on agriculture, which participates with 42% of the departmental gross added value.

The department has been fostering a process of strong activation of social organizations, in a feedback dynamic where public policies are increasingly supported by civil society actors. The result has been the progressive expansion of the CAIF centers, the creation of the Social Councils, the policies of stimulation to the social cooperatives developed by the MIDES. The articulation of groups of women aimed at promoting female employment is also important.

#### 6.b.2.4. Río Negro

The Río Negro department is located in the west coast of the country, occupying an area of 9,282 km<sup>2</sup> whose soil is characterized by the undulations of the Cuchillas de Haedo and very fertile land on which a traditional agricultural economy is based. In terms of its hydrography, the Uruguay River creates an environment of important biodiversity between natural landscapes, highlighting the Esteros de Farrapos and Islas de Río Uruguay with 6,300 ha of coastal marshes where it is possible to observe a great variety of native birds.

It has 455 km of firm road network (50% concrete, 20% bitumen, 31% tosca), in the department there is the international bridge Fray Bentos - Puerto Unzué that allows the connection with the Province of Entre Ríos, Argentina.

In Río Negro 54,765 people live (50.4% men, 49.6% women) 45% of the population of the department resides in its capital Fray Bentos, households headed by women represent 44% and the average size of households is 3.1 members in non-poor households and of 5.1 in the poor ones.

According to data from the 2011 Census, there are 20,975 homes in Río Negro, of which 86% are in an urban area and 91% of their structural situation is medium to good and 9.1% precarious and modest. There is an unsatisfied demand for housing, especially for the population in a situation of socio-economic vulnerability, Nuevo Berlín being one of the most affected.

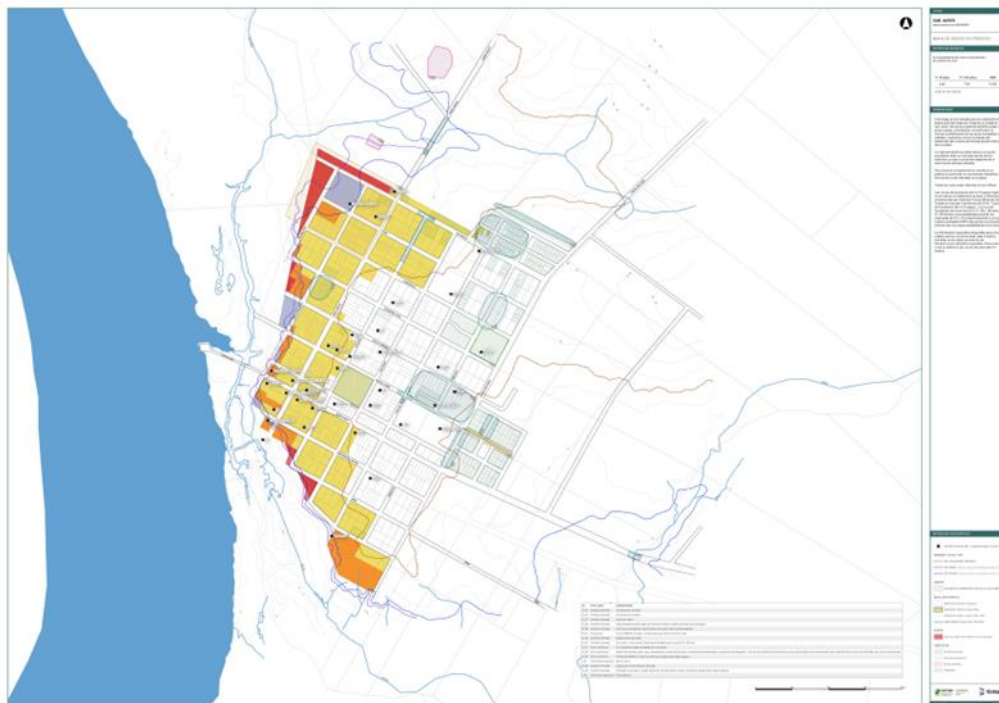
The main economic sector is social services, education and health (67%, Continuous Household Survey 2012), followed by agriculture (17%) and industry (16 %). The department has a diversified economic structure, with high specialization in the agricultural and forestry sector. Within the framework of the project, the target cities are the capital city of Fray Bentos and San Javier and Nuevo Berlín.

*San Javier and Nuevo Berlin Area.* The area has an important ecosystem value recognized by international and national protection figures: the "Estero de Farrapos and Islas del Río Uruguay" site included in the List of Wetlands of International Importance of the Ramsar Convention, and declared an Area of importance for the birds and biodiversity and as a national protected area. In this area, there are two small-scale towns, rich in history such as San Javier and Nuevo Berlin, close to each other but with particular origins and realities. The rural area of this zone has presented strong changes in the last decade given by the productive chains of the agro business, linked on the one hand to the intensive cultivation of rainfed grains and on the other stressed by the forest chain, given the proximity to the cellulose plant. They have a river front on the Uruguay River, which generates a water connection; the road connections (Route 24 and 25) and the railroad (currently inactive).

San Javier, with an original layout of urbanization grid, irregular contour of 7 blocks by 9 approximate blocks, forming about 60 blocks, on a very flat natural soil, similar to the adjacent Estero.

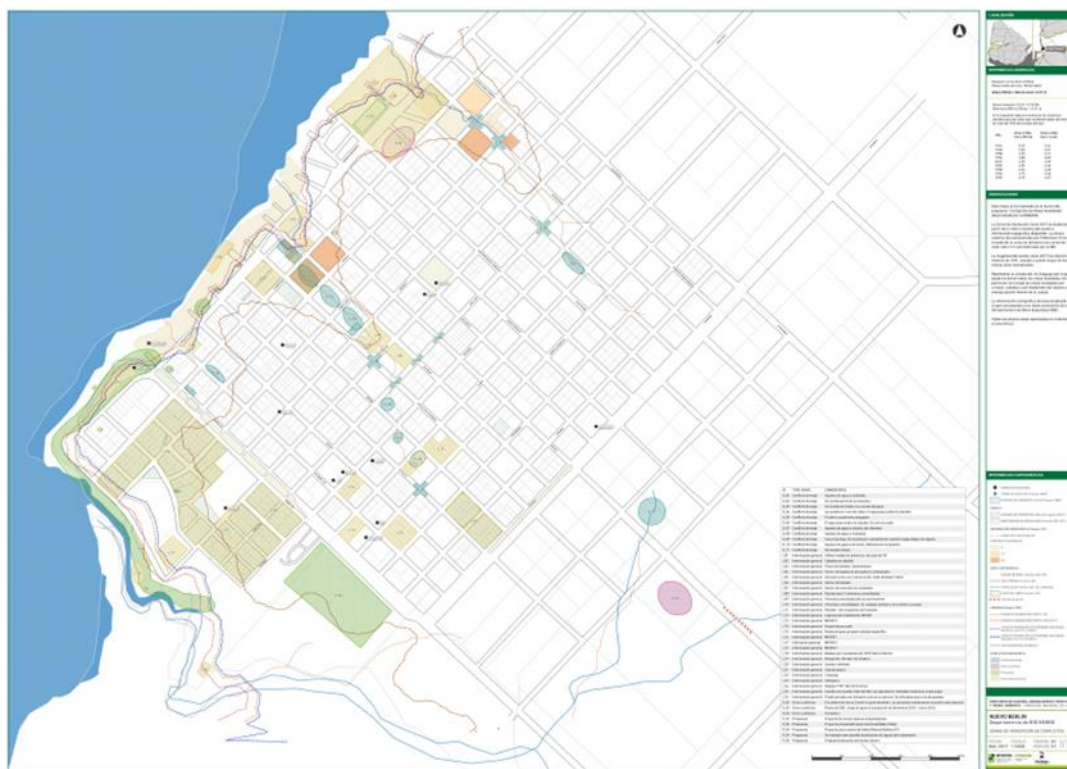
New Berlin, with an original layout of urbanization grid, straight defined contour of 12 blocks x 15 blocks, forming 180 manzanas, extended in an undifferentiated way on areas of high and low natural soil, which determines central areas of several uninhabited blocks by casualties and floods. While the territorial area considered is in the process of study, the proposals and projects are still in an emerging phase, as result of participatory work with residents. But aligned also, with the technical - political posture of the departmental government that has prioritized the urban and natural environmental requalification of its different localities.

In the current year in the towns of San Javier and Nuevo Berlin, there have been evacuations and self-evacuations due to floods, so that in San Javier four families were evacuated and there was a self evacuation of a family; and in New Berlin, only one family was evacuated (Source: CECOED, IRN, 2017)





Map of Risk and Conflict Perception zones, San Javier. In the process of development. Source: DINAGUA, 2017

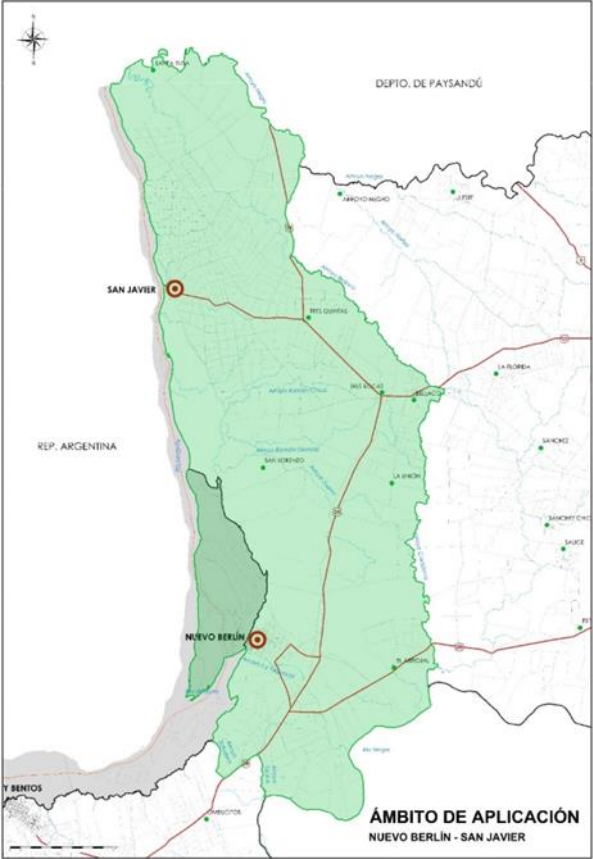


Map of Conflict Perception Zones, Nuevo Berlin. In the process of development. Source: DINAGUA, 2017

In this area of the Department, the study and elaboration of two separate Local Plans were planned, one for San Javier and the other for Nuevo Berlin; however, we can see the impossibility of elaborating two independent plans, because they are clearly a single territory, composed of a protected area, and two prospicient localities. This is how its scope of application was defined, bearing in mind the rural area that influences the localities and the Esteros, the hydrological basins, the land uses, the ecosystem services and the connectivity of the defined territory.

A collaborative territorial project is being prepared, to define operative joint strategies, projects and actions, so that since their conception are flexible to the changes and uncertainties of a complex system. We understand that the adoption of participatory methodologies are the best for territorial planning, since planning applied to a territory and framed in a process of territorial public management, becomes one of the most important tools for the administration and government of a society, generating consensus and partnerships in the establishment of agreements. The aim of the territorial project is to revalue existing forms of work and sustenance that contribute to a sustainable use and at the same time resignify and value existing ways of life, such as: fishing, beekeeping, gastronomy, among others; those that mix with other activities can constitute forms for local development strengthening the resilience of the local community. This strengthening of local resilience is through the re-valorization of existing labor systems in the communities, with the search for possible alternatives of sustenance, so that the local population value their wealth, essential for the development of this territory.

Scope of the Nuevo Berlin Plan - San Javier. Elaboration: Ana Lia Giganda, SNAP, 2017







## Request for Project Formulation Assistance to undertake special technical assessments

Submission Date: January 15<sup>th</sup>, 2018

Adaptation Fund Grant ID:  
Countries: Argentina and Oriental Republic of Uruguay  
Title of Project/Programme: Climate change adaptation in vulnerable coastal cities and ecosystems of the Uruguay River.  
Implementing Entity: CAF Corporación Andina de Fomento  
Executing Entity/ies: MVOTMA | Ministry of Housing, Territorial Planning and Environment & MAyDS | Ministry of Environment and Sustainable Development

### A. Timeframe of Activity

Expected start date of activity	<b>March 23<sup>th</sup>, 2018</b>
Completion date of activity	<b>July 23<sup>th</sup>, 2018</b>

### B. Type of support requested

Describe the technical assessment(s) the implementing entity will undertake to support the design and development of adaptation projects and programs

Type of Technical Assessment requested*.	Duration (months)	Type/name of provider for the requested support <sup>1</sup>	Requested budget (USD)
Vulnerability Assessment, Institutional Capabilities Analysis and identification of initiatives on CCA and DRR particularly in coastal cities of the Uruguay River.	4	(1) Individual consultant	USD \$15.000
Technical Assessment for updating shoreline in the coast of Uruguay River.	4	(1) Individual consultant and (1) technician referents from Direction of Hydraulics of Entre Ríos Government	USD \$25.000
Technical Environmental and Social Impact Assessment with Environmental and Social Management Plan for each	4	(1) Environmental and (1) Social Consultant with gender expertise	USD \$20.000


<sup>1</sup> Specify if it is an institution, consulting firm or individual consultant. When possible, provide the name of the institution, firm or individual identified or selected.

of the interventions described in the Concept Note, to complete assessment in each country complying with the Adaptation Fund ESP.			
Subnational comprehensive technical appraisal for the incorporation of CCA and DRR measures in housing, land planning and risk plans.	4	(1) expert in climate change	USD 20.000
A prospective analysis focused on climate scenarios for the implementation of community-based adaptation measures.	2	(1) Social expert consultant	USD 10.000
Economic assessment of adaptation measures to reinforce the recovering of houses in vulnerable territories.	2	(1) Economic consultant	USD 10.000
<b>Total Grant Requested (USD)</b>			<b>USD \$100.000</b>

**\*Footnote: Technical assistance could include EIA, VA, technical studies, gender assessment etc.**

### C. Implementing Entity


This request has been prepared in accordance with the Adaptation Fund Board's procedures

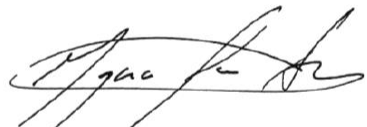
Head of Implementing Entity	Signature
Ligia Castro de Doens	
Date	
01 / 15 / 2018	

Implementing Entity Contact Person	Telephone	Email Address
Carolina Cortés	+593987883698	acortes@caf.com

**D. Record of endorsement on behalf of the government**

Provide the name and position of the government official, Designated Authority of the Adaptation Fund, and indicate date of endorsement. The endorsement letter must be attached as an annex to the request.

 <i>Lucas Di Pietro Paolo</i> <i>Adaptation to Climate Change Director</i> <i>Ministry of Environment and Sustainable Development – Argentina</i>	<i>Date: January, 15, 2018</i>
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<i>Ignacio Lorenzo</i> <i>Director of Climate Change</i> <i>Ministry of Housing, Land Planning and Environment Uruguay</i>	<i>Date: January 15, 2018</i> 
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