



## ADAPTATION FUND

# PRE-CONCEPT FOR A REGIONAL PROJECT/PROGRAMME

### PART I: PROJECT/PROGRAMME INFORMATION

Title of Project/Programme:	Climate change adaptation in vulnerable coastal cities and ecosystems of the Uruguay River.  <i>*Adaptación al Cambio Climático en ciudades y ecosistemas vulnerables costeros del Río Uruguay</i>
Countries:	Argentine Republic and Oriental Republic of Uruguay
Thematic Focal Area <sup>1</sup> :	Disaster risk reduction and early warning systems
Type of Implementing Entity:	Regional Implementing Entity (RIE)
Implementing Entity:	Latin American Development Bank (CAF)
Executing Entities:	Ministry of Environment and Sustainable Development of Argentina.  Ministry of Housing, Land Planning and Environment of Uruguay  <i>*Ministerio de Ambiente y Desarrollo Sustentable de la República Argentina y Ministerio de Vivienda, Ordenamiento Territorial y Medio Ambiente de la República Oriental del Uruguay</i>
Amount of Financing Requested:	13,999,996.80 USD (in U.S Dollars Equivalent)

#### Project / Programme Background and Context:

1. The implementation area of the Project is focused in the littoral area of the Uruguay River, including vulnerable coastal cities and ecosystems of the Argentinean and Uruguayan territories. The Uruguay River has a main role for being a territorial structurator for the region since in its margins we can find a number of cities, port-cities, and also with a direct physical relation through binational bridges communicating both Argentina and Uruguay (Fray Bentos – Gualeguaychú; Paysandú – Colón; Salto – Concordia). Uruguay River is a trans-boundary course and it's hydrographical basin forms part of Argentina, Uruguay and Brazil's territory occupying approximately a total area of 339.000 Km<sup>2</sup> and has an average flow of 4.500 m<sup>3</sup> s<sup>-1</sup>. It's origins are in Sierra do Mar (Brazil), and runs for 1.800 Km until it flows into the Río de la Plata estuary. A 32% of its course runs through Brazil, a 38% forms the border between Argentina and Brazil and a 30% forms the border between Argentina and Uruguay.

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



Figure 1: Rio de la Plata's basin and sub-basins. Modified by Arzamendia 2015<sup>1</sup>

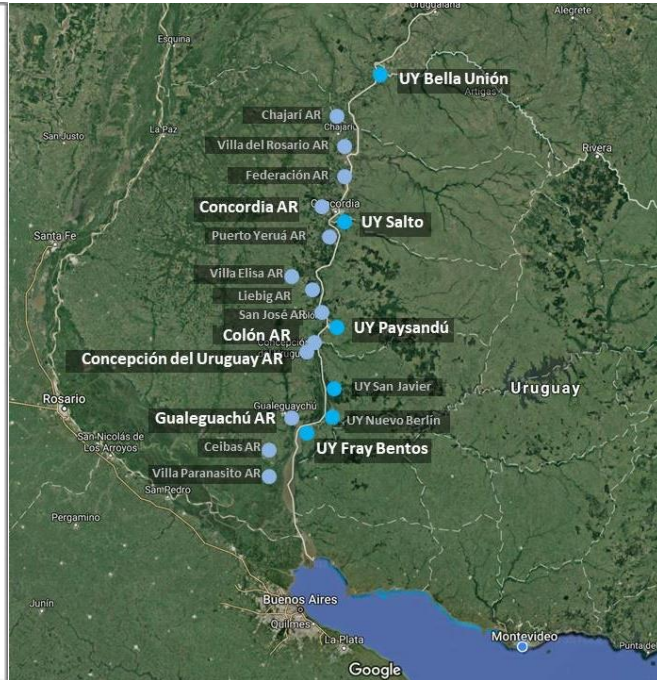


Figure 2: Vulnerable Coastal cities in the margins of the Uruguay River. (Source: Modified from Google 2017, Landsat, Copernicus, Data SIU, NOAA, US Navy, NGA, GEBCO)

2. The region's climate is mild and rainy; being the Uruguay's river big catchment area in zones where 2.000 mm of rain are concentrated mainly in Winter and Spring, with monthly values that vary between 70 and 132 mm in the study area, inciting delayed overflows of thirty and sixty days. Upstream of the Project area the river presents numerous rapids, waterfalls and high cliffs in its coasts. It is important to highlight the Salto Grande dam, a hydroelectric binational dam in the middle course of the river, approximately 15 Km North of Salto city (Uruguay) and 22 Km of Concordia (Argentina). The Project area's topography describes a uniform landform without big elevations, creating meanders and making the area very vulnerable to flooding as one of the main hydro climatic threats, aggravated by the effects of Climate Change (CC).
3. In both countries, nearly a 90% of the population lives in urban areas, and their main cities have mostly a coastal location which, although their original funding sites where set on high areas, later expansion has frequently occupied riverside areas. Highly vulnerable communities of very low income, precarious homes and scarce access to public services frequently inhabit such areas. Damages associated to intense precipitations and floods caused by the river's overflow have been often aggravated by the infrastructures inadequacy to the new climate conditions.
4. South America's tropical and sub-tropical areas are characterized by the South American monsoon which is a seasonal atmospheric circulating system in South America and surrounding Oceans, conditioned by seasonal solar radiation, which has an important influence on the hydro climatic regime of the Plata basin. One of its principal characteristics is a defined annual cycle of precipitations in most of the basin, registering maximum values in summer and minimums in winter.

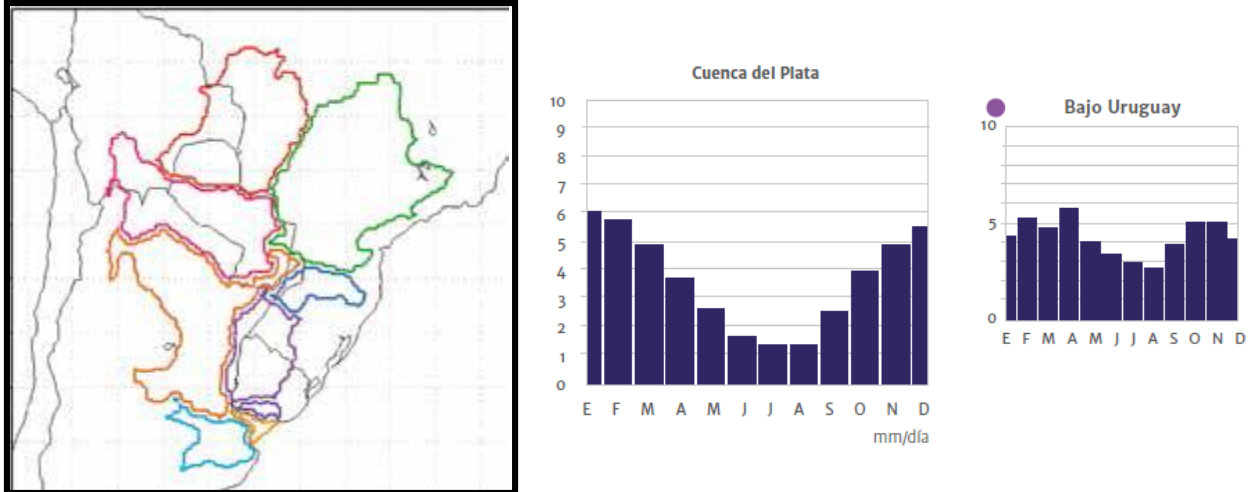


Figure 3: Climatological Precipitation on the Plata basin and low Uruguay's sub-basin- Period 1973 – 2013. Modified from CIC 2017

5. Due to the more frequent and severe storms and floods, exacerbated by CC, which bring stronger effects on the population, damages to infrastructure and great economic losses, it is utmost important to manage and orientate the adaptation process in the local and regional levels by policies and plans that consider the CC perspectives and the communities and ecosystem's vulnerability. Floods provoke important instability in the regional economies and in socio cultural development of the affected communities. Therefore it is relevant to empower risk and disaster management in pursuit of prevention and the improvement of early warning systems (EWS) and the adaptation of urban infrastructure (drinking water, drainage and sewerage, electricity, roads, etc.) and housing with sustainable and resilient characteristics to the new climate conditions.
6. There has been an increase in the annual average precipitations since the 70's in the study area, which partly facilitated the expansion of agriculture and, on the other hand, led to permanent or transitory flooding of most of the productive fields. Consistent with this situation, there has also been an important increase of the river's flow and, although this brought some benefits in the hydroelectric sector, it generated floods to be more frequent and important economic disruptions. It's been equally registered a raise in the severe precipitations frequency in the region which have been increasing since the 90s and have caused considerable damage from floods, destructive winds and hail.
7. In the Uruguay's margin, 13 of the last 18 main floods have been recorded in the last two decades. In addition, a series of changes in the hydrological system of the basin were due to the reduction of infiltration and water retaining capacity in the soil system, the reduction of the volume stored in underground layers by erosion or compaction due to urbanization, livestock over exploitation and inadequate agricultural practices, massive forestation with exotic species and native forest deforestation. As a result, floods increase in maximum precipitation moments and droughts increase in moments of low precipitations. Therefore, as result of these integrated factors, disasters related to floods have been recurrent in the region for decades, with a one to two year frequency register.

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

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.

8. The CC scenarios for this region are available on the Argentina's Third National Climate Change Communication (TCNCC Argentina, 20152). The tendency is to have more severe precipitations, which would generate an increase in the frequency of rivers' overflows and floods. This will cause non-planned migrations and relocations, effects on basic public services and environmental services, internal connectivity such as access to education and health establishments, a raise in health risks by vectors or contamination, effects on the primary economic activities in suburban areas, tourism activities, etc. The probable changes forecasted for the 2020/2040 period by the Argentinean's Sea and Atmosphere Investigation Centre (CIMA), estimate that the high frequency in extreme precipitations and floods will continue to grow in the affected regions, with the negative impacts they imply (physic, economic, social and environmental). In such communication (TCNCC Argentina, 2015), there are priorities identified for the design and application of adaptation measures such as the increase in the annual average precipitations in most of Argentina (especially in the northeast and peripheral zone of the original humid region), as well as the more frequent extreme precipitations in the East and Centre of the country.

<sup>2</sup> The Country Report for Argentina about the TCN CC to the UNFCCC (2015; 264 pp.), is available in: <http://unfccc.int/resource/docs/natc/argnc3s.pdf>.

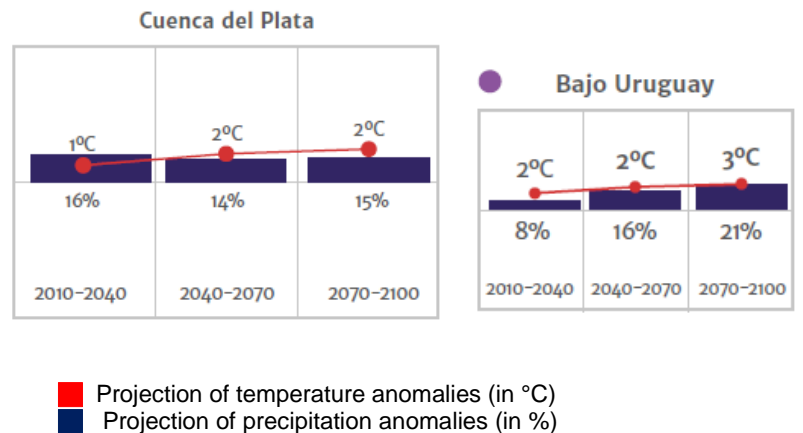
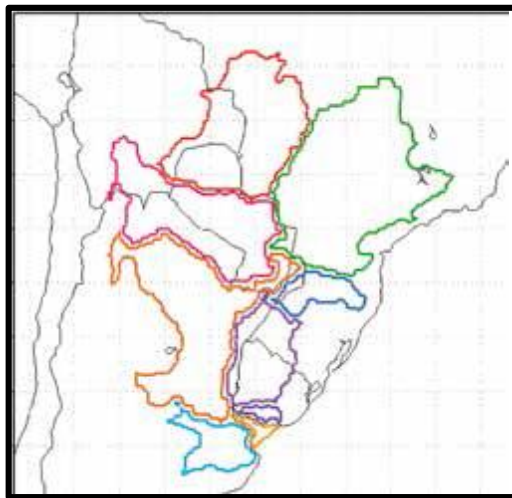


Figure 4: Average annual precipitation anomalies projections (%) and average annual temperature anomalies projections (°C), for three decades in the Plata and Low Uruquav basin. Modified from CIC 20173

9. Studies were developed based on the global climate models (CMIP5, IPCC 2013) in the Fourth National Climate Change Communication of Uruguay. These models were forced by the RCP socioeconomic scenarios and the generation of climate models AR5 IPCC 2013), for the historic period of 1979-2005 and 2001-2014 and conclude for the Uruguayan territory:
  - a. The evolution of the annual average temperature's change has a similar behaviour in surface until 2030 (+ 0.5 °C) for both scenarios (RCP 4.5; RCP 8.5), while for 2050 there were estimated raises of +1.0 °C by scenario RCP 4.5 and of +1.5 °C for scenario RCP8.5.
  - b. Regarding the evolution of the annual average precipitation, it is indicated that there will be light increases for scenario RCP 4.5 with raises of +0.10 a 0.15 mm day<sup>-1</sup> for 2030 and of +0.15 a +0.20 mm day<sup>-1</sup> for 2050 by scenario RCP8.5.
10. According to these studies, Uruguay will be specially affected by climate change. It is particularly sensible to extreme events such as droughts, floods, cold and hot waves, strong winds, hail, strong rains and severe storms. The El Niño affects mainly on the North and North East of Uruguay. It raises the probability of rains being of higher magnitude to those registered historically for the same period of the year. These natural threats, combined with exposure and social vulnerability have caused multiple impacts on people, infrastructure, ecosystems and biodiversity. In 2015 and 2016, Argentina suffered big floods in the Uruguay Basin in the Province of Entre ríos, the people affected by floods were in Concordia 10.240, in Colón 1.050, in Concepción del Uruguay 500, in Gualeguaychú 200, and in Villa Paranacito 6.000. In this period the estimated economic impact in agriculture, milk farms, fruits production was valued in approximately 427 million USD.
11. The Uruguay River and its coasts represent a binational ecological corridor that connects both countries. It is also a natural way for tropical species from Argentina and Brazil (Selva Misionera and Mata Atlántica) to disperse into more temperate areas in the low Uruguay basin, with its riparian forests and its wetlands. Hence, from the biodiversity point of view, this region is relevant for national and regional conservation. On the Argentinean side, the National Park Administration (APN) manages two protected areas (El Palmar National Park and Predelta National Park) with more than 10.000 hectares under conservation. On the other side, Uruguay manages the "Esteros e Islas de Farrapos" National Park with over 6.000 hectares. Both "El Palmar" and "Esteros e Islas de Farrapos" are part of the RAMSAR sites for their global relevance.

12. Erosive processes are occurring on both margins of the Uruguay River due to the pressure held on the riparian forest resources. Also, significant floods happen when extreme precipitations fall in the upper and lower Uruguay. In this context, restoration and adaptation actions based in ecosystems are fundamental to ensure the ecosystem services such as buffering and regulation of flood impacts as well as, natural and cultural recourses supply.
13. Projections indicate there will be a light decrease in the days with frosts, a significant increase in the number of warm nights, a raise in the length of heat waves and a significant in the intensity of precipitations. Extreme events (intense rain and winds, storms, hail, etc.) will continue to become more frequent. According to predictions made in a global and regional scale, it is also to be expected that these events become more frequent and intense with time.
14. The above mentioned is evidenced throughout the region, especially in the increase of the population's vulnerability in the littoral cities due to the exposure to river's overflow and their socioeconomic conditions with visible impacts in damaged housing and basic urban infrastructure. Between November 2009 and February 2010, the region has been affected severely by El Niño phenomena, producing considerable flood events, one between November and December 2009 which concentrated in the Uruguay's basin and affected the North and littoral parts of the country, especially the cities of Artigas, Salto and Paysandú. On summer 2014 (January-February) precipitations overcame monthly averages on a 150 % and a 350 %, activating an emergency situation on several aspects: social, sanitary, roads and agricultural which forced to provide 1% of public expenditure to attend such emergency. On 2015, between 5 and 15 % of the population of the Artigas, Paysandú and Salto departments (23,000 people approximately) had to be evacuated due to floods caused by the river overflow which required also economic and human recourses efforts for attending the emergency and early stage rehabilitation. In 2016, floods left thousands of displaced people in departments such as Paysandú and at this stage in 2017 4,292 people were already displaced from the Uruguay river's littoral
15. It is important to emphasize the importance of a regional mid and long term approach in the design of policies and planning, even though the project focuses on vulnerable coastal cities and ecosystems, so as to be able to adapt to changes that have those same characteristics. Considering that the Uruguay river has played an important role in both countries' development, but also with the changes presented rainfall regime has made territorial planning more complex, the countries find it necessary to present to the Adaptation Fund a regional project that relies in the implementation of adaptation measures that improve resilience in vulnerable coastalurban areas and ecosystems from the regional perspective. Considering their coastal location, the population characteristics and existing records, the following cities and two vulnerable ecosystems have been prioritized for this project:
  - For Oriental Republic of Uruguay: (i) Bella Unión city in the Artigas Department (with 18.406 residents for 2011); (ii) Salto city in the Salto Department (with 104.028 residents for 2011); (iii) Paysandú city in the Paysandú Department (with 76.429 residents for 2011); (iv) Fray Bentos city in the Rio Negro Department; (with 24.406 residents for 2011); (v) San Javier, city in the Rio Negro Department (with 1.781 residents for 2011), (vi) Nuevo Berlín city in the Rio Negro Department (with 2.4502 residents for 2011); (vii) Rincón de Franquía, Protected Area in Artigas Department, and (vi) Esteros de Farrapos, Protected Area in the Rio Negro Department.
  - In the Argentine Republic: (i) Federación (17,547 residents for 2010), Villa del Rosario (3,973 residents for 2010), and Chajarí (34,848 residents for 2010) in the Federación Department; (ii) Concordia (152,282 residents for 2010), and Puerto Yeruá (1,666 residents for 2010) in the Concordia Department; (iii) Colón, San José (18.178 residents for 2010), Villa Elisa (11.117 residents for 2010) and Liebeg (770 residents for 2010) in the Department of Colón; (iv) Concepción del Uruguay (82.729 residents for 2010) in the

homonymous department; (v) Gualeguaychú (102,421 residents for 2010) from the homonymous department and (vi) Villa Paranacito (4,215 residents for 2010) and Ceibas (1,773 residents for 2010) from de Islas del Ibicuy Department.

16. The Project will also support the fulfilment of obligations and contributions assumed by Argentina and Uruguay regarding the United Nations Framework Convention on Climate Change (UNFCCC)<sup>3</sup> as well as the Paris Agreement, focusing specially in national empowerment to face the impacts of CC and to increase resilience in the local and regional levels.
17. Uruguay's interest in approaching CC with transversal public policies has been manifested through different institutional measures, the public capacities and decision making empowerment. Particularly, since 1994 a CC Unit, now CC Division was created in the Ministry of Housing, Land Planning and Environment (MVOTMA) which acts as the operational and executive organ regarding CC. On the year 2000, MVOTMA was designated as the competent national authority for the implementation and application of the Convention by the General Protection of the Environment Law, N° 17.283. Another highly significant stage on institutional empowerment and development was the creation of the National CC and Variability Response System (SNRCC) created by the Executive by decree N° 238 in 2009. It's goal is to coordinate and plan the necessary public and private actions to prevent risks, mitigating and adapting to CC. The SNRCC was responsible for elaborating the CC National Response Plan published in January 2010 and CC National Policy during 2016. There are two areas in the SNRCC; the Coordination Group and the Advisory Commission. The presidency of the Coordination Group is carried out by the MVOTMA while the vice presidency is exercised by the the Ministry of Agriculture, Livestock and Fisheries and the Planning and Budget Office. The Coordination Group also includes several other Ministries as well as the Mayors Congress and the National Emergency System the Uruguayan Meteorological Institute, the Uruguayan International Cooperation Agency and the National Secretary for Environment, Water and Climate Change. The Advisory Commission is organized with thematic working groups, including one for Urban Adaptation, where technicians of the Coordinating Group institutions, academics, private sector and NGOs representatives participate. More recently, in 2015, the National, Environment, Water and Climate Change Secretariat of the (SNAACC) was created by Law 19.355. The Executive Decree N° 172 of 2016 regulates such Secretariat and establishes the National Environmental System (SNA) with the mission of empowering, articulating and coordinate Uruguay's public policies, to protect the ecosystems' goods and services and to increase adaptation to CC, amongst others. The SNA gathers representatives from the Environmental National Cabinet, created by the same Decree N° 172/16, the SNAACC, the Water and Sewage Public Company, the Uruguayan Meteorological Institute, the SNRCC and the National Emergency System. At the same time, the National Environmental Cabinet integrates the President of the Republic, along the MVOTMA; Agriculture. Cattle and Fishing; Industry, Energy and Mining; National Defence; Public Health and, Economy and Finance ministers and the National Secretary of Environment, Water and Climate Change.
18. Regarding conservation, Uruguay created a Natural Protected Areas National System (SNAP) by law N° 17.234 in the year 2000. The System's objective is to harmonize planning and management criteria in the protected areas, under certain conservation categories and with a unified regulation that fixes the planning rules. Amongst its specific objectives is the protection of biological diversity and ecosystems (...), protect natural habitats (...), especially those that are essential for the threatened species' survival, keep samples of singular natural and cultural landscapes. The Territorial Planning and Sustainable Development Law, N°1838 of 2008 establishes the regulating framework for territorial planning and sustainable development and includes the identification of vulnerable areas with risks because of natural phenomena or dangerous facilities for human

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<sup>3</sup> Approved by Law number 16.517 of 1994.

settlements. The design and implementation of management instruments and procedures that promote territorial planning; programs, projects and actions with territorial incidence and mentions that those territorial planning instruments should orientate future urban development towards non floodable areas which should be identified by the competent government's office regarding water resources. Finally, since 2009 Uruguay created a National Emergency System, which is a public system with permanent character, whose aim is the protection of people, significant goods and the environment from any eventual or real disaster situations by the State joint coordination with the adequate use of available public and private resources in order to create a national sustainable development conditions.

19. On its side, the Argentinean Republic has ratified the United Nations Framework Convention on Climate Change following approval by law N° 24.295 in 1994 and the Kyoto Protocol in 2001 following approval by law N° 25.438. The Argentinean Ministry of Environment and Sustainable Development was designated as authority of application of this law by Presidential Decree N° 2213/2002. On the year 2016, by Decree N° 891 the National Cabinet for CC (GNCC) is created within the National Cabinet of Ministries in order to articulate CC policies and create awareness in society about its relevance. The Cabinet is presided by 17 Ministries (Foreign Affairs, Energy, Transport, Agribusiness, and Environment, amongst others) and coordinated by the National Direction of Climate Change.
20. The GNCC is responsible for the formulation of the CC National Plan and a portfolio of adaptation and mitigation projects that should be implemented in the national and provincial policies framework. Therefore, based on its Nationally Determined Contribution ratified in 2016, Argentina has committed to articulate actions and initiatives related to CC adaptation by the means of a systematic and participative National Adaptation Plan. For all these, this Project contributes to the achievement of the compromises assumed by Argentina in its Nationally Determined Contribution and to the Climate Change National Cabinet's mandate.
21. On their side, Argentinian Provinces are represented within the Climate Change National Cabinet through the Environment Federal Council (COFEMA), considering that, natural resources are under provincial jurisdiction. Each government organism has designated a head member (no lower than National Director) and an alternate which represent their portfolio (national and provincial) in the Committees meetings. Also, in 2017, the National System of Risk Management (SINAGIR) was created to empower and optimize the actions that are destined to risk reduction, crisis management and reconstruction. This system's consolidation will contribute to the sustainability of the Project in Argentina.
22. Regarding the Province of Entre Rios' strategy, the Project is framed within de Province Strategy for a development that is low in carbon emissions and resilient to CC. Its purpose is to build capacity in the province so as to integrate environmental issues in development plans and strategies, establish local and international effective public-private alliances, ensure resources and implement programs that support sustainable development low in carbon emissions and resilient to CC.
23. Taking all this into consideration, this project pre-concept is the result of an active and comprehensive consultative and participative process engaging all the relevant stakeholders. It will also aim, through inter institutional and inter sectorial instances, to guarantee the participation of different public, private, academic and civil society institutions throughout all the Project's development.



## **Project / Programme Objectives:**

### **General Objective:**

24. The Project aims to build resilience in vulnerable coastal cities and ecosystems throughout the Uruguay River, both in Argentinean and Uruguayan territories by developing shared instruments, tools and experiences for CC and climate variability planning and management.

### **Specific Objectives:**

- i) Reduce vulnerability conditions and contribute to building resilience associated to climate change and variability in vulnerable communities and ecosystems throughout the Uruguay River by including -community based- and -ecosystem based- adaptation actions and while focusing in human rights, gender and generations.
- ii) Promoting institutional empowerment including mid and long term planning by the inclusion of CC and CC scenarios in territorial policies, plans and programs for the vulnerable cities and ecosystems identified for each country.
- iii) Promoting an integral Climate Risks Management in vulnerable cities and ecosystems identified for each country, facilitating the implementation of an Early Warning System (EWS)
- iv) Reduce vulnerability in coastal cities by implementing sustainable infrastructure which is adapted to the adverse effects of CC:
- v) Promote the adaptation to climate change deepening in both river's margins trough sharing urban, ecosystem and socio cultural managing knowledge and experiences.

<b>Project / Programme Components and Financing:</b>				
<b>Project Components</b>	<b>Expected Outcomes</b>	<b>Expected Outputs</b>	<b>Countries</b>	<b>Amount (US\$)</b>
<b>1. Territorial Planning and Risk Management</b>	i) Departmental and Provincial governments have been empowered by including CC scenarios in their planning and management instruments and also by the increase of their institutional capacities.	1. Land management plans were actualized by including the CC perspective and strategies of access to urban land have been empowered, considering river flows and return periods of the Uruguay river.	Uruguay - Argentina	USD 2,000,000.00
		2. Protected natural areas, housing, water and health plans, programs and sectorial protocols were designed or updated considering CCA.	Uruguay - Argentina	
		3. Damage and loss methodological guide were developed.	Uruguay - Argentina	
	ii) Argentinean and Uruguayan governments have updated and executed ACC measures in a coordinated way.	4. Communication strategies and resources in the EWS for vulnerable coastal cities in the Uruguay River are designed and developed.	Uruguay - Argentina	
		5. The implementation of regional Risk and Disaster Management plans in the litoral of the Uruguay river including ACC were supported.	Uruguay - Argentina	
		6. The implementation of Argentinean and Uruguayan National Determined Contributions through pilot experiences for national adaptation process were supported.	Uruguay - Argentina	
<b>2. Priority actions to increase urban resilience.</b>	iii) Litoral cities of the Uruguay river have increased their resilience to CC by implementing urban, environmental, social, economic and financial adaptation measures.	7. Vacant land from resettlement were restored including executive project, technical participative design and social validation. The implementation includes equipment and construction.	Uruguay - Argentina	USD 6,000,000.00
		8. Urban sustainable infrastructure for new resettlements' technical assistance, design and implementation, including water supply and sewage system were adapted to the new climate conditions.	Uruguay – Argentina	
		9. Financial (revolving funds, insurance, among others), normative and housing improvement instruments for medium and high risk zones for CCA were designed and implemented.	Uruguay – Argentina	
<b>3. CCA measures regarding vulnerable ecosystems</b>	iv) CCA measures have been implemented in both sides of the Uruguay river,	10. Ecosystem services and co benefits, contribution to CCA and connectivity of the Uruguay river's coast ecosystems' were evaluated and mapped.	Uruguay - Argentina	USD 3,062,960.00

<b>conservation throughout Uruguay river.</b>	based on ecosystems that increase resilience.	11. Coast intervention pilot experiences based on erosion / sedimentation and other impact studies and execution of new CCA strategies based on ecosystems were designed and implemented.	Uruguay - Argentina	
		12. River coasts were restored by revegetation in selected areas. Native species will be prioritized.	Uruguay - Argentina	
<b>4. Priority measures to increase social resilience.</b>	v) Local communities and organizations have increased their resilience by sharing CCA and climate risk management strategies.	13. Binational strategy on training and best adaptation practices experience were shared regarding climate change risk management and adaptation planning, field inspectorate, housing infrastructure adaptation and vacant land restoration.	Uruguay - Argentina	USD 1,400,00.00
		14. Social vulnerability analysis and monitoring tools were developed focusing on human rights, gender and generations.	Uruguay – Argentina	
		15. Social risk perception methodologies and participatory vulnerability reduction strategies were developed.	Uruguay – Argentina	
	vi) Civil society, local actors and the awareness actions carried out have improved the sustainability of the CCA measures and their appropriation by the community.	16. Social networks were empowered by CCA and local risk management strategies exchanges.	Uruguay – Argentina	
		17. Existing networks were empowered by sharing local experiences.	Uruguay – Argentina	
		18. Social vulnerability reduction by labour reconversion strategies for resettled families were developed.	Uruguay – Argentina	
		19. Communication and diffusion strategy for the reduction of social vulnerability were implemented.	Uruguay – Argentina	
		20. Information, instruments and best practices regarding the health aspect associated to CC was shared.	Uruguay – Argentina	
<b>6. Project/Programme Execution cost</b>			<b>USD 500,000.00</b>	
<b>7. Total Project/Programme Cost</b>			<b>USD 12,962,960.00</b>	

8. Project/Programme Cycle Management Fee charged by the Implementing Entity (if applicable)	8 %	USD 1,037,036.80
<b>Amount of Financing Requested</b>	USD 13,999,996.80	

**Project Duration:**

*The project will have five (5) years duration.*

## ART II: PROJECT / PROGRAMME JUSTIFICATION

25. The Project's implementation area is the Uruguay river litoral focusing in coastal vulnerable cities and ecosystems, specially regarding Uruguay river floods, on both Argentinean and Uruguayan sides. The productive profile is mainly agricultural in addition to a considerable high percentage of population living in coastal cities, and mostly socioeconomic vulnerable communities living in highest flood risk areas this present high vulnerabilities towards the intensification of extreme climate events due to CC.
26. Floods have already made important impacts on regional economies and sociocultural development in communities in the prioritized cities. CC scenarios present a tendency towards more extreme precipitations, with increases in the frequency and magnitude of overflows and floods, and therefore of the social and economic adverse effects. In addition to this, accumulated social changes increase impacts of floods and frequency of droughts in moments of scarce precipitations.
27. Considering these scenarios, it is utterly important to regulate and orientate the adaptation processes (regionally and locally in the mid and long terms) through adequacy of public policies that materialise in plans and strategies that consider climate change, regional communities and ecosystems' vulnerability, the empowerment of the risk management and EWS in complement with urban infrastructure adaptation making it more sustainable and resilient.
28. The Project's components and adaptation activities will contribute to CC resilience, specially to the extreme precipitation events intensification that generate floods, and its regional approach constitute an added value in contrast to the individual application of similar activities in each country. The project will enable an active interaction that will contribute to finding regional answers articulated with Uruguay's river impact scenarios, based on territorial planning, specially through updated Territorial Planning Plans that consider CC both in Argentina and Uruguay.
29. Additionally, valued and georeferenced risk identification, focusing on floods, combined with the development of hydrological models and risk maps, will enable to improve planning in both sides of the river generating territorial planning policies and legislation, implementation of risk management and EWS that allow interaction between the countries (as key tools to contribute to climate resilience).
30. Currently the Project's region does not count with an efficient system to record loses and damages originated by extreme climate events increased by CC. The Project will generate a methodological guide to quantify loses and damages in relation to urban floods in both countries.
31. For CCA actions, the Project will promote and test new approaches and mechanisms which are innovative for the region and for the intervention scenario prioritized in both countries. The binational effort to coordinate actions on both margins of the Uruguay river will be reinforced by this Project, the best practice exchange, the acquisition of existing mechanisms and tools and the development of new adaptation measures that can be implemented in both margins. This experience can also be very helpful in other shared basins such as the Low Plata Basin.
32. The Project will work on the development and implementation of sustainable neighborhoods focusing on public spaces through the design of CC adapted housing infrastructure. The Project also includes specific actions to recover and enhance the riverside vacant areas or affected public spaces and the design of climate change adapted public infrastructure. These interventions will contribute to significant urban resilience increases in prioritized coastal cities, with direct benefits to more than 600 thousand residents
33. Pilot adaptation programs will be designed for their implementation aiming to promote a useful adaptation methodology in areas with ecosystemic significance (Natural Protected Areas) in order to promote biodiversity conservation in the context of climate hazards. These programs should contemplate ecosystemic services mapping and valuation in a way that connection between

- ecosystems and human activities contribute to the reduction of climate risks in communities and economic sectors.
34. Complementing these interventions, the implementation of financial measures, such as revolving funds or insurances, will be carried out, so as to support the communities affected by extreme climate events, specially floods, to go along with other traditional actions. The regional approach of the Project doesn't contribute only to the sustainability and effectiveness of the proposed actions, but also enhances cost effectiveness by sharing economic and human resources as well as knowledge, best practices and experiences.
  35. This Project supports a process that has already started in the prioritized cities through resettlement of vulnerable population, the implementation of EWS, social communication actions and health risks intervention. On the other side, the costs of shelters during the flood months are higher than those that could be generated for supporting the restoration of vacant land after relocations and people adaptation to the new living location as well as protecting touristic areas that play an important role in regional economy. It is to be stressed that a merely non articulated, local approach will lead to efforts and resources duplication.
  36. Moreover, locally executed actions will probably find their effectiveness reduced if they lack a regional platform for its strengthening and support since they will offer partial solutions to a joint issue that affects the whole region which will lead in finding new future measures that imply higher costs and efforts both to governments and communities involved.
  37. The capitalization and exchange of best practices, lessons and experiences by governments (local and national) and the communities is a very important contribution to the present and future actions effectiveness towards CCA regarding costs and results. The Project is consistent with Argentina's and Uruguay's development strategies and is consequent with their Third and Fourth National Climate Change Communications made by each country, their Nationally and Intended Nationally Determined Contributions within the National scope and to the Paris Agreement, especially regarding empowerment of adaptation strategies, plans, agendas and measures.
  38. The Project can substantially contribute to regional developing plans for both countries, increasing the resilience of the most vulnerable groups and communities by providing specific actions in relation to poverty, social vulnerability reduction and the construction of socio territorial equity, and with empowerment and development of institutional capacities for CCA, articulating them in a nested system of local, provincial/departmental and national levels. As mentioned before the Project is aligned with National CC Policies for both countries, as well as all other strategic and legal instruments related to CC.
  39. All the activities proposed in this Project will meet all the technical and legal regulations for each country as well as regulations regarding environmental assessment, specific construction codes, amongst others. The Adaptation Fund's Environmental and Social Policy have been utterly considered in the design and formulation, as well as the expected results throughout a consultive process that was carried out in the preparation of this Project's pre-concept.
  40. Both countries' National Climate Change Communications describe a considerable amount of implemented or actual actions regarding CC adaptation and mitigation, as well as identified priorities and detected requirements. Amongst the most relevant we should highlight:
    - National CC and Variability Response System (SNRCC), Uruguay
    - Floods guidelines, Uruguay
    - Bases towards an education on risk and disaster National Strategy, Uruguay
    - Territorial Planning and Sustainable Development Law, Uruguay
    - General Mitigation and Adaptation to CC measures Plan (PMEGEMA), Uruguay
    - Adaptation National Plan, (NAP), Argentina
    - National Strategy for CC, Argentina
    - Vulnerability and Adaptation to CC Manual for Local Managing and Planning, Argentina
    - Vulnerability Atlas. Tendencies and Climate Extremes in Argentina.

- *Urban Floods and Climate Change Recommendations for local management, Argentina.*
41. Regarding the lessons learned and knowledge management components, several instances for best practices and planning and managing experiences in floods and relocations exchange spaces have been anticipated. The Project will record and systematize knowledge and experiences (case studies) in order to capture and disseminate lessons learned.
  42. These exchange spaces will be created locally involving government, civil society's organizations and local stakeholders. Regional and binational exchanges that reinforce existing networks will also be implemented.
  43. In this sense, the Project will aim to guarantee the engagement of different related institutions including private and public, academic and community organizations from both countries through inter institutional and inter sectorial spaces,
  44. In addition, communication campaigns focused on local communities will be implemented so as to create awareness about CC effects and the importance of adaptation and EWS and promote their participation.
  45. For this pre concept two workshops were held engaging national authorities from Argentina and Uruguay and other two were carried out in vulnerable cities from the Uruguay River with national, departmental, provincial and local authorities, one in Concordia (Argentina) and another one in Paysandú (Uruguay). In those workshops (see attached session plans for the four workshops, participants and photographic registers), representatives from the cities of Gualguaychú, Concordia, San José y Liebig, y Concepción del Uruguay on the Argentinean side, and the departments of Artigas, Salto, Paysandú and Río Negro on the Uruguayan side were involved. These workshops were organized with a first block of induction about FA characteristics, collaboration between AF and CAF and between AF and both countries and description of other AF projects as examples. Later working groups were organized focusing in issues already identified by each location that were considered eligible for this Project. More than 100 representatives of different technical and political areas from all the governments' levels and sectors participated in this workshops.
  46. Considering pre concept and concept stages altogether, the Project will promote different participation opportunities for the civil society with at least two workshops where NGO and OCS and academics related to the region will be involved. Presentation, socialization and validation of the Project are expected as well as gathering critical and first-hand information. The consulting process will have a gender approach, making sure that women are able to participate besides their family burden and distinguishing adaptation data between men and women.
  47. Particularly for Argentina, the activities conducted in the GNCC will be the main tool to involve stakeholders throughout the Projects duration. This process not only contemplates the government's agencies and ministries, but also municipalities, communities, private sector and CSO, amongst others. The COFEMA works in a similar manner, where provincial representatives in this area are involved. This Project will capitalize the described mechanisms, as well as other institutional arrangements so as to achieve participation and compromise from all the stakeholders. The National Risk Management System Project, from the Security Ministry is a successful example to highlight.
  48. Long term planning instruments will be prioritized contributing to the Project's sustainability, as well as adaptation measures based in ecosystems which are considered to be the most resilient. Besides increasing urban resilience, one of the main tools for the sustainability of results (considered during Project design), is institutional strengthening in both countries, the development and empowerment of the involved communities' capacities to face and adapt to CC effects, especially those generated by the more frequent and intense climate extreme events, such as floods.
  49. Sustainability is also essential for achieving results, as well as searching for long term solutions to focus and implement ecosystem based adaptation measures and climate adaptable infrastructure.

50. Taking this into account, aspects related to Uruguay's river ecological corridor connectivity and the design and implementation of sustainable infrastructure (such as restoring vegetation of riversides that serve as floods protection prioritizing the use of native species) will be considered.
51. Financial measures such as revolving funds and insurance will also contribute to the economic sustainability of the CCA, especially in low-mid risk areas of vulnerable cities.
52. One of the main Projects characteristics is its ecosystem and community based approach that will lead in environmental benefits for both, improving ecosystem connectivity, re signifying riverside spaces and prioritizing sustainable infrastructure and native species.
53. The fluvial natural's dynamic's recovery is promoted by the restoration strategies of the rivers borders and the protection of the ecosystem services it provides. The actual situation has generated important health and pollution problems that will be significantly reduced due to the proposed measures.
54. All projects will be designed and executed according to each city, department or province and country environmental regulations in compliance with all the permits, environmental assessments, environmental and social management plans (including mitigation measures), monitoring and contingency plans required. Adaptation Fund and CAF's environmental and social policies and the Adaptation Fund gender policy will be considered throughout the Project.
55. All the necessary construction work will be executed according to the occupational health and safety regulations applicable in each case.
56. The economic aspect ncludes the costs associated with sheltering affected citizens, housing recovery, damaged urban infrastructure and affected services (during suspension and rehabilitation).
57. Regarding the social aspect benefits are clear since the beneficiary population will increase its resilience and life quality, avoiding health risks and reducing psychosocial impact caused by floods. The Project also considers public space appraisal and participative definition of its use.
58. There is no duplication with other financing sources. All the proposed measures complement the efforts both countries are carrying out, especially that regarding the empowerment of the relocation program and the institutionalization of the current EWS.
59. Significant environmental or social negative impacts were not identified. Relevant risks are mainly associated to the needs of institutional articulation and financial risk regarding recourses availability from the counterparts so as to complete the necessary relocation aspects.
60. The requested funding is consistent with previous analysis done in the frame of the workshops held with public authorities from both sides of the river which have studies that support the relevance of these measures and, a preliminary budget considering that 600,000 people that live in the basin (both Argentina and Uruguay) will benefit directly. Nevertheless this budget should be adjusted in the concept note.

## PART III: IMPLEMENTATION ARRANGEMENTS

### I- Organizations involved in the Project:

#### i) Regional/binational level:

- Uruguay River Administrative Commission (CARU), Salto Grande Mixed Technical Commission (CTMSG)

#### ii) National level:

- Ministry of Environment and Sustainable Development of Argentina (MAyDS).



- Ministry of Housing, Land Planning and Environment of Uruguay (MVOTMA).

An early engagement was initiated with the Ministry of Foreign Affairs and Worship of Argentina and the Ministry of Foreign Affairs of Uruguay in order to assess their participation in the Governance of the Project, this issue will be resolved at Concept Note stage.

The frame document that supports this proposal is the “Memorandum of understanding for environment and sustainable development cooperation” subscribed May 4<sup>th</sup>, 2017 between MVOTMA and MAYDS. This document defines as priority cooperation areas CC, coastal areas, natural protected areas and biodiversity conservation.

iii) Sub national level, Provincial/Departmental and Municipal

- In Uruguay:  
Departmental Governments of Artigas, Salto, Paysandú and Río Negro.
- In Argentina:  
Provincial Government of Entre Ríos.  
Departmental Governments of Colón, Concordia, Gualeguaychú, Federación, Islas del Ibicuy and Concepción del Uruguay

**II- Expected Coordination System/Outlines**

61. A Binational Directive Committee (CDB) of the Project will be constituted, of executive nature 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. (The Ministry of Foreign Affairs and Cult of Argentina and the Ministry of Foreign Affairs of Uruguay could also join the CDB, as agreed at Concept Note stage).
62. The CDB will be maximum authority of the Project were decisions are taken by consensus and annual operative plans, procurement plans, etc. will be approved by consensus.
63. The CDB will invite representatives of National Executing Units and from Regional Coordination, who will have the roll of informing to the members of the CDB on the advances and proposals regarding the Project’s activities.

**Operative Structure:**

64. A Regional Office (OR) will be constituted for the binational Project’s components. It will submit the annual plans for the binational components to the CDR for it’s approval. The OR 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 CDR.
65. Both MVOTMA and MAYDS will each create a national executive unit (UEN) within their structure. Each UEN’s coordination will be under a National Coordinator (one for Uruguay and one for Argentina) that will report to the CDB. National coordinators will be elected by each country., Argentina will also create a provincial subunit based in Entre Rios , it will be coordinates by the Argentine National Coordinator
66. Each UEN’s coordination will be under a National Operational Officer (one for Uruguay and one for Argentina) that interacts with CAF, and both will be elected by the CDB.

67. 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 payments mechanisms.



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

**A. Record of endorsement on behalf of the government<sup>4</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 annexes to the project/programme proposal.*

<i>Ignacio Lorenzo Climate Change Director. Ministry of Housing, Land Planning and Environment Uruguay's Designated Authority to the Adaptation Fund. Uruguay</i>	<i>Date: 08/03/2017</i>
<i>Lucas Di Pietro Paolo Climate Change Director. Ministry of Environment and Sustainable Development. National Designated Authority to the Adaptation Fund Argentina</i>	<i>Date: 08/04/2017</i>

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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 this proposal has been prepared in accordance with guidelines provided by the Adaptation Fund Board, and prevailing National Development and Adaptation Plans of Argentina and Uruguay. Also it will be taken into account the; Climate change policies in Argentina, the National Policy on Climate Change and the National response system to climate change of Uruguay and the Land Use Planning Policies of both countries and local regions and subject to the approval by the Adaptation Fun Board commit to implementing the project "Adaptation to climate change in vulnerable cities and ecosystems of the Uruguay River Basin" 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**

*Environmental and Climate Change Chief Executive*

*CAF Latin American development bank. Implementing Entity Coordinator*

Date: *august 04, 2017*

Tel. and email: +57 (1) 7447355. Email: lcastro@caf.com

Project Contact Person: Carolina Cortés Cardona

Tel. And Email: 593 (2) 398-8437. Email: acortes@caf.com

## ANNEXES

1. ENDORSEMENT LETTERS
2. MEMORANDUM OF UNDERSTANDING ARGENTINA-URUGUAY
3. PHOTOGRAFIC REGISTER OF FIELD VISIT

### ANNEX 1 ENDORSEMENT LETTERS



*Ministerio de Ambiente  
y Desarrollo Sustentable*

"2017 - Año de las energías renovables"

#### ENDORSEMENT BY THE GOVERNMENT OF ARGENTINA

Buenos Aires, August 04, 2017

To: Adaptation Fund Board  
c/o Adaptation Fund Board Secretariat  
email: [secretariat@adaptation-fund.org](mailto:secretariat@adaptation-fund.org)  
Fax +1(202) 522 3240

Subject: Country Endorsement for the Regional Project "Adaptation to climate change in vulnerable cities and ecosystems of the Uruguay River basin" between Argentina and Uruguay.

In my capacity as designated authority for the Adaptation Fund in Argentina, I hereby confirm that the above regional project is in accordance with climate change national priorities, as identified in the development of the Nationally Determined Contribution to the UNFCCC, in order to advance in the implementation of adaptation measures to reduce the adverse impacts of climate change in the selected region.

Accordingly, I am pleased to endorse the above project with support from the Adaptation Fund. If approved, the regional project will be implemented by the Development Bank of Latin America (*Corporación Andina de Fomento*, CAF) and executed by the Ministry of Environment and Sustainable Development of Argentina and the Ministry of Housing, Territorial Planning and Environment of Uruguay

Sincerely,

Lucas Di Pietro Paolo  
Director of Adaptation to Climate Change  
Ministry of Environment and Sustainable Development

August 3, 2017

To: The Adaptation Fund Board  
c/o Adaptation Fund Board Secretariat  
Email: [Secretariat@Adaptation-Fund.org](mailto:Secretariat@Adaptation-Fund.org)

Subject: Endorsement for Regional Project "Climate change adaptation in vulnerable coastal cities and ecosystems in Uruguay River"

In my capacity as designated authority for the Adaptation Fund in Uruguay, I confirm that the above regional project proposal is in accordance with the government's national priorities in implementing adaptation activities to reduce adverse impacts of, and risks, posed by climate change in the region.

Accordingly, I am pleased to endorse the above project proposal with support from the Adaptation Fund. If approved, the project will be implemented by Corporación Andina de Fomento-Banco de Desarrollo de América Latina (CAF) and executed in Uruguay by the Ministry of Housing, Land Planning and Environment (MVOTMA).

Sincerely,



Arq. Ignacio Lorenzo  
Climate Change Director  
Ministry of Housing, Land Planning and Environment  
Uruguay's Designated Authority to the Adaptation Fund

## ANNEX 2 MEMORANDUM OF UNDERSTANDING ARGENTINA-URUGUAY



### **MEMORÁNDUM DE ENTENDIMIENTO PARA LA COOPERACIÓN EN MATERIA DE AMBIENTE Y DESARROLLO SUSTENTABLE ENTRE EL MINISTERIO DE VIVIENDA, ORDENAMIENTO TERRITORIAL Y MEDIO AMBIENTE DE LA REPÚBLICA ORIENTAL DEL URUGUAY Y EL MINISTERIO DE AMBIENTE Y DESARROLLO SUSTENTABLE DE LA REPÚBLICA ARGENTINA**

El Ministerio de Ambiente y Desarrollo Sustentable de la República Argentina y el Ministerio de Vivienda, Ordenamiento Territorial y Medio Ambiente de la República Oriental del Uruguay, en adelante las PARTES:

- I. En procura de profundizar la cooperación bilateral en materia de ambiente y desarrollo sustentable, sobre la base de los principios de igualdad, de reciprocidad, de beneficio mutuo y de pleno respeto a la soberanía; y
- II. Convencidas de que tal cooperación contribuirá a una mejor protección del ambiente a nivel local, regional y global, y fortalecerá los lazos entre ambos países.

Acuerdan suscribir el presente MEMORÁNDUM DE ENTENDIMIENTO PARA LA COOPERACIÓN EN MATERIA DE AMBIENTE Y DESARROLLO SUSTENTABLE, el cual se regirá por las cláusulas siguientes:

**Cláusula Primera: Objetivo.** Las Partes, en el marco del presente instrumento, apoyarán, alentarán y desarrollarán programas y actividades conjuntas de intercambio y cooperación en materia de ambiente y desarrollo sustentable.

**Cláusula Segunda: Áreas de Cooperación:** De acuerdo al objetivo del presente Memorándum de Entendimiento, las áreas de cooperación identificadas como prioritarias son las siguientes:

- Normativa ambiental;
- Conservación de la biodiversidad;
- Áreas naturales protegidas;
- Control y fiscalización;
- Evaluación de Impacto Ambiental y Evaluación Ambiental Estratégica;
- Cambio climático;
- Espacios marinos y costeros, sin perjuicio de los ámbitos de competencia propia de otras carteras ministeriales;
- Calidad del agua;
- Gestión integral de residuos sólidos;
- Calidad del aire.

### ANNEX 3 FIELD VISIT

FECHA	ACTIVIDAD	PARTICIPANTES
<p><b>Monday 17 de July</b></p> <p>CAF Oficina Bueno Aires</p>	<p><b>Start up workshop,</b> CAF presented the Project Chile – Ecuador, Argentina presented the</p> <ul style="list-style-type: none"> <li>• NDC. Results 2016 and advances 2017.</li> <li>• Internacional Positioning.</li> <li>• Work plan and progress 2017.</li> <li>• Adaptation national works: Platform for visualization de Risks Maps; National Observatory for Climate Change, National Adaptation Plan.</li> <li>• Entre Ríos case</li> <li>• Other experiencies with the Adaptation Fund</li> </ul> <p>Entre Ríos – Argentina</p> <ul style="list-style-type: none"> <li>• Entre Ríos its vulnerabilidad and floods.</li> </ul> <p>Uruguay</p> <ul style="list-style-type: none"> <li>• Public Policy Approach</li> <li>• National response system to cc</li> <li>• Dimensions of the proposal               <ol style="list-style-type: none"> <li>1. Territorial planning and housing strategies</li> <li>2. Comprehensive risk management in coastal cities</li> <li>3. Institutional and inter-institutional strengthening</li> <li>4. Social resilience</li> <li>5. Public space, landscape and environment</li> <li>6. Transboundary approach</li> </ol> </li> </ul>	<p>Jose Agustin Blanco – CAF Alejandro Miranda – CAF Andrea Rispo – CAF Franz Rojas – CAF Carolina Cortés – CAF Lucas di Pietro – MAyDS Sofia del Castillo – MAyDS Relaciones internacionales – MAyDS Paula – Entre Ríos Argentina Daniel Tomasino – Entre Ríos Argentina Mónica Gómez – MVOTMA Uruguay</p>
<p><b>Monday 17 de July</b></p>	<p>We met to present the Regional Argentina – Uruguay project “Climate Change Adaptation in Vulnerable Coastal Cities and Ecosystems of the Uruguay River” a Agustin Mai <a href="mailto:agustinmai@mfin.gob.ar">agustinmai@mfin.gob.ar</a> y a Héctor</p>	<p>Agustin Mai – Min Finanzas Héctor Dottore – Min Finanzas Lucas di Pietro – Min Ambiente</p>



<b>Offices</b> <b>Ministry of Finance of Argentina</b>	Dottore <a href="mailto:hdottore@yahoo.com.ar">hdottore@yahoo.com.ar</a> de la Dirección de Proyectos con Organismos Regionales de Crédito del Ministerio de Finanzas de Argentina.	Alejandro Miranda – CAF Andrea Rispo – CAF Carolina Cortés – CAF
<b>Monday 17 de july</b> Displacement in vehicle contracted by CAF and provincial vehicle. Is added a space to transport another participant of the mission to Concordia.		
<b>Tuesday 18 de july</b>  Concordia	<b>Initial Workshop Entre Ríos – Argentina.</b> CAF presented the Project Chile – Ecuador, Argentina presented the same presentation as in Buenos Aires. Entre Ríos presented the same presentation as in Buenos Aires.  Tables of work to evaluate the needs and expectations about the project: <ul style="list-style-type: none"> <li>• Concordia</li> <li>• Gualeguaychú</li> <li>• Liebig – San José</li> <li>• Concepción del Uruguay</li> </ul> Visit to Concordia. Relocalized neighborhoods, embankment to avoid the flood, resignification of the territory, flood quota, neighborhoods prone to flood.	Representantes de los diferentes municipios. <ul style="list-style-type: none"> <li>• Concordia</li> <li>• Paysandú</li> <li>• Liebig – San José</li> <li>• Concepción del Uruguay</li> </ul> Más de 50 participantes
<b>Wednesday 19 de julio</b>  Concordia  Hidroeléctrica Salto Grande  Paysandú	Displacement from Concordia to Paysandú passing through the Salto Grande Hydroelectric.  Arrivale to Paysandú 14.00 h.  Visit to Paysandú – Pilot projects and resource requirements for other projects.	Representantes del municipio de Paysandú.  Representantes CAF
<b>Thursday 20 de july</b>	<b>Initial Workshop Paysandú – Uruguay.</b> CAF presentó el Proyecto Chile – Ecuador	Representantes de CAF Representantes de ARG

<p>Casa de la Cultura Paysandú</p>	<p>MVOTMA Uruguay. Misma presentación que en Buenos Aires</p> <p>Tables of work to evaluate the needs and expectations on the projec</p> <p>Mesas de trabajo con:</p> <ul style="list-style-type: none"> <li>• Paysandú</li> <li>• Fray Bentos</li> <li>• Salto</li> <li>• Bella Unión</li> </ul> <p>Desplazamiento a Montevideo</p>	<p>Enlace locales de DINAVI DINOT DINAGUA DINAMA DCC</p> <p>Representantes de los diferentes municipios.</p> <ul style="list-style-type: none"> <li>• Paysandú</li> <li>• Fray Bentos</li> <li>• Salto</li> <li>• Bella Unión</li> </ul> <p>Más de 50 participantes</p>
<p><b>Friday 21 de July</b></p>	<p>Closing of Mission</p> <p>Trabajo de grupo sobre</p> <ol style="list-style-type: none"> <li>1. Marco Lógico del Proyecto.</li> <li>2. Gobernanza del proyecto</li> </ol> <p>Sala Subsuelo – MVOTMA Zabala 1432 Esquina 25 de Mayo</p>	<p>Representantes de MVOTMA Viceministro Jorge Rucks DINAVI DINAGUA DINOT DINAMA DCC</p> <p>Representantes de CAF</p>

## FIELD VISITS AND PUBLIC CONSULTATIONS REPORT

During the week of July 17<sup>th</sup> – July 24<sup>th</sup>, 2017, a consultative process was carried out with members of different government positions, through a series of workshop and meetings. The main ideas of the Project's pre-concept were discussed and a direct contact with the local situations of the prioritized cities was established. An outline for expected results was elaborated jointly between the participants which was shared later with all counterparts during the week July 24<sup>th</sup> – July 28<sup>th</sup>.

### BUENOS AIRES WORKSHOP

On July 17<sup>th</sup> a presentation workshop held 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 presented 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 presentations done 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 done to CAF in order to elaborate this pre-concept note.



Daniel Tomasini, Entre Rios' assessor made a brief introduction explaining the expected results for the Province and mentioned some CC effects identified on the Uruguay's basin.

Mónica Gómez, from the Ministry of Housing, Territorial Land 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.

## **CONCORDIA WORKSHOP**

On July 18th, the workshop was held out in Concordia, the Argentinean Uruguay's basin most populated city in the Uruguay's Riviera. 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 vulnerability 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 Yerúa 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 their 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 floods cause. She mentioned that last year and a half the city was flooded four times, fact that 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 actual management 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, with a very positive image regarding results. Some of the links to local press are detailed below:<sup>5</sup>

#### Work session presentation – Selected Regions

CAF, with de 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 workgroups were established with officers from Concepción, San José y Liebig, Gualaguaychú, Colón, Puerto Yerúa y Concordia, alongside CAF and Province representatives. Expectations for each component were discussed with focus on completing the pre-concept's note 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

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[https://www.google.com.ar/url?sa=t&rct=j&q=&esrc=s&source=newssearch&cd=3&cad=rja&uact=8&ved=0ahUK EwjpwK3\\_LLVAhULjpAKHSoyBxUQqQIILCgAMAI&url=http%3A%2F%2Fconcordiadiirecto.com%2Fla-provincia-realizara-en-concordia-el-primer-taller-sobre-adaptacion-al-cambio-climatico.html&usg=AFQjCNE69tdxVebx140xOudvG2nGE\\_ZV3A](https://www.google.com.ar/url?sa=t&rct=j&q=&esrc=s&source=newssearch&cd=3&cad=rja&uact=8&ved=0ahUK EwjpwK3_LLVAhULjpAKHSoyBxUQqQIILCgAMAI&url=http%3A%2F%2Fconcordiadiirecto.com%2Fla-provincia-realizara-en-concordia-el-primer-taller-sobre-adaptacion-al-cambio-climatico.html&usg=AFQjCNE69tdxVebx140xOudvG2nGE_ZV3A),  
<http://www.analisisdigital.com.ar/noticias.php?ed=1&di=0&no=258418> , <http://www.eldiaonline.com/gestionan-recursos-prevenir-los-danos-las-inundaciones/>

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 needs Proyecto: 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 term 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 for the population.

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 touristic impacts.

The problems for shelters for the emergency were also mentioned as a main problem.

#### San José y Liebig

Main Points were accessibility during floods periods, productive impacts (agricultural and tourism) and access to public services (health and education, sewerage and sanitation, alert systems and centers for evacuation

#### Gualeguaychú

Eradication of the people living in floodable areas. The Municipality's representatives identified deforestation of native ecosystems for agricultural land as a problem related to the increase of flood impacts. They also expressed the need of having an EWS in town.





## PAYSANDÚ WORKSHOP<sup>6</sup>

The workshop took place in Paysandú, Uruguay on July 20th with assistance from MVOTMA's and the 4 prioritized department's technicians and officers, representatives from DINAMA, DCC, DINOT, DINAVI, SNAP, DINAGUA, CARU, North Uruguay's litoral 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 Administration of Paysandú, Mario Díaz, Gabriela Pgnataro of 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 help 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 officers 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.

<sup>6</sup> <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>



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 flood area, is a matter of concern.

There are 22 houses being built.

Auto evacuees

50 m<sup>2</sup> houses

MEVIR land and 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/resettlements.

Barrio Piratas (Artigas) relocation/resettlement should have a previous plan before giving out 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 police. It is stated that a risk map is being elaborated, as well as relocation policies along the National Government.

A donations policy is being worked on for a 3 stages relocations. 400 relocations of lower Curupí and La Chapita neighborhoods.

It's also 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. There are families (aprox 100) that are reluctant to be moved out of their traditional locations

There was a Project presented to recover the coastal zone as a boardwalk.

Within the territory wetlands are planned and protected areas.

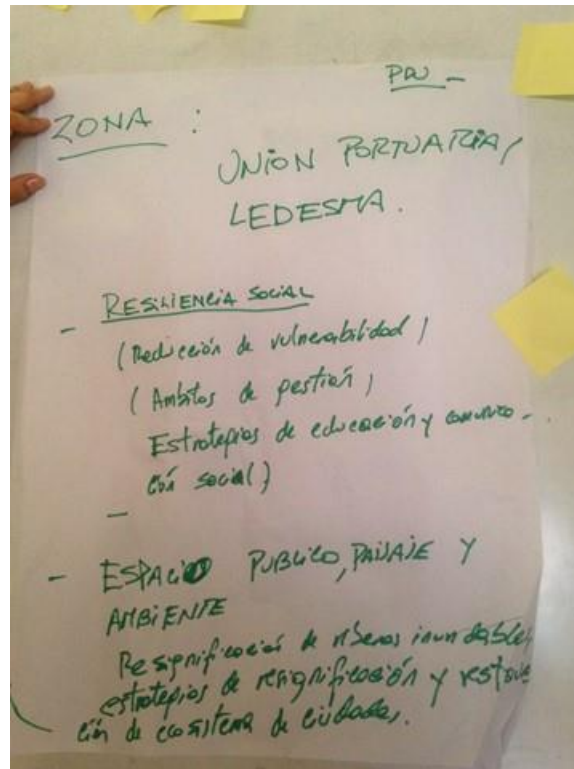
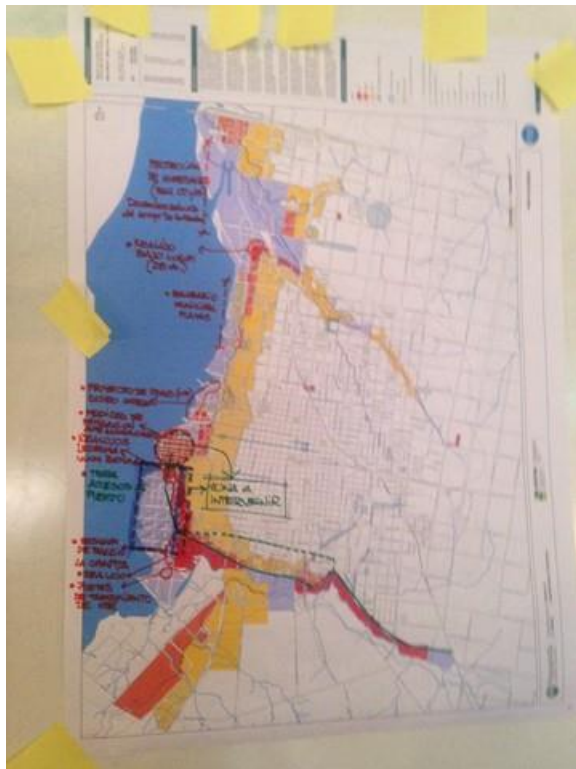
Main problems were detected in SACRAR and Curtiembre creeks

There's joint work carried out with CARU regarding native forest environmental restoration. Actually 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:

Working reinsertion for population affected by floods and job support for reconversion for resettled people who have a venture that should be readjusted b) Communication campaign. c) Re signification Project and management. 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 valuable movement.

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 on connectivity (such as bridges) during floods.

There is a new territorial planning , a territorial pólíce that control the áreas after a resettlement process

Monitoring, water flow and quality, land ownership and possession, vacant land should be regarded as tools for a better management.

### 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 they are undertaking different approach studies with the University in various stream 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) to 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 phisic, social, pluvial and housing registry is being executed.

It is estimated a total of 1000 families for relocationresettlement. It is based in an academic study by UDELAR (Universidad de la República).

In San Javier there were 50 evacuees, much of which were working in a MEVIR plan and moved. 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 (CSECOED) 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 Tourism 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 stressed out 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 a 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:***

Minister Director Lorenzo proposes diverse financial aspects of the housing stock adaptation and emphasized on the need to evaluate revolving funds implementation.

Finally the Director Minister thanks the workshop attendees for the obtained results and points out that these reinforce what has already been 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 Vice.Ministers, directors of different MVOTMA Areas: José Freitas DINOT, Guillermo Scarlato Ecosystems Direction, Daniel Greif DINAGUA This meeting was held to validate the main list of components and products. In this part of the meeting Carolina Cortés exposed the approaches and main products derived from the workshops and the authorities considered they adjusted the previous work done with the municipalities.

The authorities expressed the current collaboration process with Argentina and the needs to reflect this process in a shared project.

**The following scheduled was established:**

24/7 Sandra sent 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

3/8 sent for translation

5/8 English version sent for review

**MISSION'S BALANCE BETWEEN NATIONAL GOVERNMENTS 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.