



## CASE STUDY

# Uruguay: Capacity building for climate disaster risk management at local level in Pantanoso watershed in Montevideo

## Summary

The Pantanoso watershed in Montevideo has been identified as vulnerable to threats of intense rains and floods, posing risks to the human settlements. To combat the risks, action was taken by the local population and governmental authorities to engage in a project on Climate Related Disaster Risk Management. Strengthening vulnerable communities upon climate risks represents a key tool for the IWRM, since it contributes to empowering the population.

## Background

Montevideo is a region with the highest population density in Uruguay; with just over 1,3 mil. inhabitants (INE, 2011) and has the one of the smallest surface areas (530 km<sup>2</sup>). Severe meteorological events bring high water levels or floods in some urban watersheds which affect the local population such as strong winds or intense rains. Mildly undulated plains and reasonable water resources characterize its geography. There is a wide coastal strip by the River Plate with arches of beaches of great recreational and tourist value; Santa Lucía river in the west that supplies the region with drinking water and three urban watersheds similar to Pantanoso, Miguelete and Carrasco streams. From an economic point of view, it is the main industrial and commercial activities concentration in the country and has the highest rates of human development and per capita GDP.

The Pantanoso watershed in Montevideo was identified as the most vulnerable to threats of intense rains and floods and the area has the highest number of settlements on its banks. Strong winds and intense rains bring high water levels or floods in some urban watersheds and sporadically affect the local population.

Both the local population and governmental authorities have never had specific training in disaster risk management for floods. Therefore, they prepared the necessary skills to be able to handle disasters of the nature.

## Actions taken

A project for capacity building at a local level for Climate Related Disaster Risk Management was implemented. It aimed at strengthening the local communities in

Montevideo Department on climate change and variability adaptation. Cultura Ambiental carried out series of activities that significantly contributed to the expansion of knowledge on climate related disaster risk management.

The activities were carried out along with the Pantanoso stream watershed in Montevideo Department. The initiative sought to contribute to the creation of exchange networks between neighbours and decision makers, in order to have an effective implementation of local plans of disaster risk management as well as creating a platform for active participation of the local emergency commissions.

A forum to prevent risks for local referral agents was started in order to reduce social vulnerabilities at the municipalities associated to the Pantanoso stream watershed. A preliminary mapping of vulnerable or flood-prone areas and the analysis of issues was done together with the social area of the Zonal Community Centres (CCZs).

The initiative was supported by the disaster risk management agencies, the National Emergency System (SINAE) and the Coordinating Centre for departmental Emergencies (CECOED) of Montevideo. In the program, lack of shelters in the zone and the deficient conditions to lodge the evacuated population were identified as weaknesses, considering that the only available current facility is the Mercado Victoria which is insufficient regarding bathrooms, water supply and breakages.

Certain neighbours were identified for their capacities as referents in the zone by delivering information acquired through life experience on the effects of floods and “sudestadas” (heavy storms from the South), with fine knowledge of the families, issues and evolution of the settlements. This source of information is of great value at the time of defining local emergency plans and in order to count on implicated actors.

## **Outcomes**

This initiative started a process of implementation of participatory methodologies so as to identify the principal vulnerable areas, needs and capacities perceived by the community and local authorities. The initiative is a key in order to address the main climate threats of the Pantanoso watershed (intense rains, floods, and strong winds). In addition, the need to continue with this line of work, existing in the Municipal Plans for Development was identified the need to work co-ordinately with the community and the education was put forward. The technical staff analysed historical meteorological information about the department as well as identifying the patterns of rainfall and frequency of severe events. The capacity of departmental and local response to the most recent events in the Pantanoso was analysed with the interviewed referents. Two training workshops were carried out with neighbours, social organizations, local and departmental authorities. It focused on the basics of disaster risk management and the present-day framework of the water resources management in the country and at a local level.

## **Lessons Learned**

The civil society occupies a key place as a link to the community, a generator of local knowledge and support to the creation of instruments of management. Civil society should be involved in the program implementation as soon as possible.

Community participation: It is fundamental to identify current spaces for communal participation and to promote its action, encouraging its link to social organizations and the authorities for successful initiatives.

Strengthening the vulnerable communities upon climate risks represents a key tool for the IWRM, since it contributes to empower the population, engaging it in the different spaces of water management and in jointly defining the best strategies.

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