

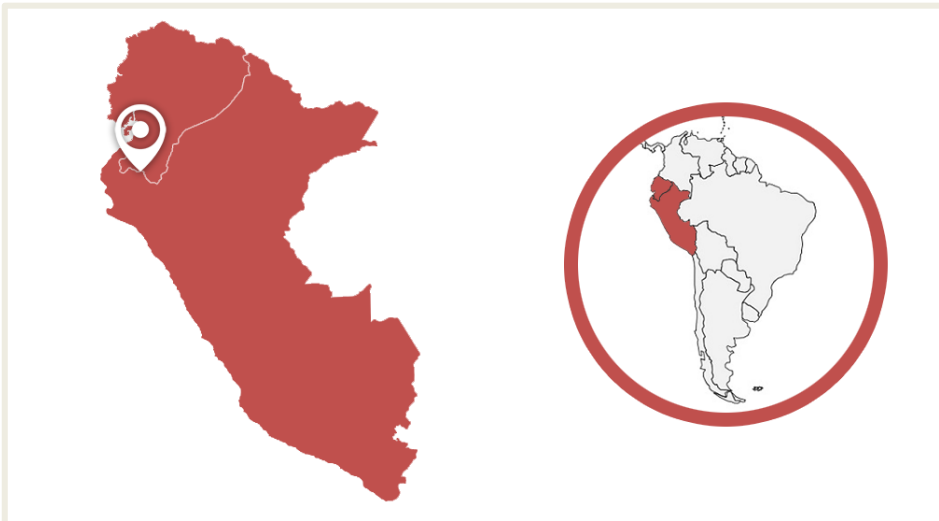


WATER WITHOUT BORDERS

Integrated and binational management of transboundary watersheds to engage in climate change mitigation and adaptation

OVERVIEW

- Organization data:
 - ✓ Name: **Loja Provincial Government**
 - ✓ Organization type: **Local government**
 - ✓ Year of foundation: **1956**
- Beneficiaries : **21,166 farmers, living in 6 communes of Loja in Ecuador and 4 districts of Piura in Peru**
- Donors and financing: **European Union, Waterclima LAC Fund, and associated authorities - €3,066,027**
- Location: **Binational subwatershed of Macara river, Loja province in Ecuador and Piura province in Peru**
- Beginning date: **February of 2015**
- Motivations: **Improve binational management of the hydrographic basins of the transboundary Equator-Peru area with measures for adaptation and mitigation to climate change**



CONTEXT AND ACTION

Summary | In the sub-basin of the Macara River, basin of Catamayo-Chira, the Water Without Borders project was born to develop the binational management of the transboundary basin between the provinces of Loja (Ecuador) and Piura (Peru), with the support of France and Italy. The European Commission approved the project and financed it with the Waterclima LAC funds, which aim to combat the consequences of climate change in socially vulnerable areas in Latin America.

The project took place over 3 years. It aimed to promote binational environmental governance, with exchanges of good practices for the recovery of traditional ancestral knowledge in agriculture.

In order to improve agricultural production and combat the effects of climate change in Loja province and Piura district, the project consisted of building on this traditional knowledge, in combination with modern and agro-ecological practices. The goal was to have permanent water to irrigate farms in indigenous communities. The work focused on the construction of "albarradas", which are ancestral techniques developed by pre-Inca civilizations to store water outside the rainy season. These tanks are constructed with an impermeable layer to prevent water from infiltrating and being lost. The construction of these irrigation reservoirs and the use of sprinkler and drip irrigation systems have proven to be essential for the preservation of the water resource. In addition, the reforestation carried out has made it possible to limit the erosion caused by increasingly heavy and recurrent rains in the catchment areas. With the establishment of such agroforestry systems, food security has improved rapidly. To ensure the sustainability of these actions, an environmental awareness campaign has been set up in the villages through education.

Local challenges |

- Fight against rain damage on mountain slopes;
- Major droughts;
- Social inequalities in access to water;
- Poverty;
- Lack of water resources for local agriculture in communities.

Local responses |

- Construction of 450 "albarradas" where water is easily retained, in the upper or middle parts of the micro-watersheds;
- Reforestation of 100 hectares of slopes with native species;
- 660 hectares of farms in agroforestry with coffee and Tara plants;
- Implementation of Payment for Environmental Services;
- Valuing community work through the "mingas", especially for environmental conservation.

BENEFITS

Environmental | The project demonstrated the existence of sustainable alternatives to preserve water supplies while adapting and integrating with community agricultural needs. In other words, these alternatives contribute to the conservation of the area's natural resources, biodiversity and environment.

Social | Active participation of men and women was encouraged, in order to share various environmental and water management experiences and to preserve water resources at the level of the upper part of the sub-basin.

Economic | By storing more water, farmers have been able to diversify their activities and increase agricultural yields through permanent irrigation, which has enabled them to improve their incomes.



« We would like to be able to transfer our actions into public policy, so that the activities of local governments reach the international level. »

Oswaldo CAMPOVERDE CELI

SUCCESS FACTORS

- Involvement of local authorities and support from European countries;
- Motivation to carry out a common project between different countries;
- Combination of ancestral and modern practices;
- Involvement of peasant communities in the upper parts of the basin who understood the importance of irrigation for the central and lower parts and felt motivated to participate.

OBSTACLES

- At first, the communities did not believe in the project;
- Lack of community knowledge and techniques in developed systems;
- The gap between the areas where the constructions are located (upper parts of the basin) and the areas that benefit from the project (central and lower parts of the basin).

▪ Contact:

- ✓ Name: **Oswaldo CAMPOVERDE CELI**
- ✓ Status: **Binational coordinator**
- ✓ E-mail: oswaldomcc@hotmail.com

▪ Related link(s) :

https://www.youtube.com/watch?v=D6X7t_5G8zA