

DIALOGUE ON WATER & CLIMATE IN THE SAN JUAN RIVER BASIN, COSTA RICA AND NICARAGUA



INTRODUCTION:

The San Juan river basin covers an area of about 38,500 km². The Annual rainfall varies between 1,500 and 6,000 mm. This transboundary basin constitutes the most significant freshwater reserve in Central America with a wide range of ecosystems and associated habitats, and a wealth of biodiversity. The area has a population of about 1 million inhabitants, who are generally below poverty-level and lack access to safe drinking water, adequate sanitation, and schools. All economic and quality-of-life indicators in the catchment are significantly below the national averages for both Costa Rica & Nicaragua. Uncontrolled migration of people results in increased pressures on institutions in relation to sanitation, health, and educational needs. These poverty conditions are enhanced by the threat of hurricanes and tropical storms, in an area that is a common westward passageway for anticyclones from the Atlantic to the Pacific. These impacts of climate variability and change are additional to the threats posed by volcanic activity and seismic pressures that already make the freshwater supply very vulnerable. Thus, reducing the vulnerability of the social and economic infrastructure to climate variability and change is a key to sustainable social and economic development of the basin. The governments of Costa Rica and Nicaragua, with the technical assistance of the OAS/USDE GEF and UNEP, are already working together on the formulation of a Strategic Action Program (SAP) for the Integrated Management of Water Resources and the Sustainable Development of the San Juan River Basin and Its Coastal Zone. As a result this project can be supported by an already in place participation process.

Aim of the project

- an inventory of *best practices* and *lessons learned* in relation to coping with climate change & variability.
- an assessment (inventory & evaluation) of possible coping strategies within the river basin.
- Recommendations for implementation of coping strategies within the Strategic Action Program (SAP) for Integrated Water Resource Management and Sustainable Development of the San Juan River Basin and Its Coastal Zone.

Activities

- A consultation process (interviews & questionnaires) with a carefully selected representative number of stakeholders.
- A workshop in which the stakeholder perceptions and posed coping strategies are discussed in more detail.
- In both activities regional technical experts in hydrology, climatology and participatory processes will give contributions.



Outputs

The output will be a technical document, which will include:

- A factsheet with the findings of the multi-stakeholder consultation.
- A report on *best practices* and *lessons learned* in the Basin and other main transboundary basins in the Central American Isthmus.
- Concrete recommendations for action and guidelines for the formulation of policy and strategies aimed to cope with climate variability and climate change, in the context of the implementation of a Strategic Action Plan for the Integrated Management of Water Resources and the Sustainable Development of the San Juan River Basin and Its Coastal Zone.

In addition, the report will attempt to offer new and innovative solutions tailored to the San Juan River Basin needs and its bi-national nature, utilizing community-based and participatory approaches.

Contact

Executing Agencies: The Ministries of Environment of Costa Rica and Nicaragua, and the Unit for Sustainable Development and Environment of the General Secretariat of the Organization of American States (OAS/USDE)

Project Leader: Pablo González

OAS/USDE

1889 F Street, N.W., Washington D.C. 20006, USA

Email: pgonzalez@oas.org

Phone: (202) 458-3745

Website: www.oas.org/usde/sanjuan/sanjuan.htm

COPING WITH CLIMATE VARIABILITY IN THE SAN JUAN RIVER BASIN: CHALLENGES & DILEMMA'S

OTHER PARTICIPANTS:

The Global Environment Facility (GEF), the United Nations Environment Programme (UNEP), and the CRRH-SICA (The regional Committee on Water Resources of the Central American System on Integration).

Local governments, associations of municipalities, municipalities, associations of producers, farmers, households and housewives, non-governmental organizations, universities, academic and research institutions, teachers and students, governmental institutions, civil defense, disaster preparedness and response institutions, and sectoral ministries and organizations.



CHALLENGES & ACHIEVEMENTS:

- A multi-stakeholder participatory process is already in place. Stakeholders in the Basin have actively participated in the identification of the major issues and their root causes that hamper the sustainable development of the Basin.
- The Governments of Costa Rica and Nicaragua recognize the impact of climate variability on development and poverty reduction programs in the San Juan River Basin. They also recognize the need for an active participation of all members of the civil society.
- Stakeholders, at all levels, understand the importance of incorporating vulnerability reduction activities into watershed management activities.
- Stakeholders recognize that reducing the vulnerability of the social and economic infrastructure to hydrometeorological hazards is key to the sustainable social and economic development of the Basin.

DILEMMA'S & PITFALLS:

- Lack of Basin-wide information restricts the decision-making process on natural hazards (climate variability origin) vulnerability reduction.
- Lack of a co-ordinated water resources management policy detracts from the possibility of reducing vulnerability to hydrometeorological hazards at the watershed level.
- Lack of institutional capacity at the local level to implement water resources policies.
- Inclusion of coping and adaptation strategies to climate variability in water resource management projects often is posed as a budget issue.



Other Factsheets from this series:

National

- Bangladesh
- Russia
- The Netherlands
- Japan

Basins

- San Juan
- San Pedro
- Thukela
- Lena
- Murray-Darling
- Yellow River

Regional

- Central America
- Caribbean
- Pacific
- West Africa
- Mediterranean
- Cambodia & Vietnam

Thematic Factsheets

- Insurance
- Global Analysis
- More...