



**CASE STUDY**

# Guatemala: Successful IWRM experiences in San Jeronimo Basin



## Summary

The overexploitation and pollution of water resources of the San Jeronimo River, together with agricultural developments and deforestation, have generated conflicts between bordering communities. To address these, the San Jeronimo Basin Committee was created, mantling the role as a negotiating body and with a mission to implement IWRM. The key lesson learnt is that for success, it is crucial that local organisations take their social responsibility.

## Background

The San Jerónimo river basin is a microbasin belonging to the Salamá sub-basin, which belongs to the Salinas basin. The Salinas river forms the Usumacinta river and flows down to the Gulf of Mexico. It is the only river of Biosphere Reserve Sierra de las Minas that belongs to this slope.

The overexploitation and pollution of water resources of the San Jeronimo River, together with the agricultural development and massive deforestation, have generated conflicts between bordering communities. These conflicts originated with the deterioration in the water quality and quantity. The municipality's problems are related to the lack of proper waste water and solid waste treatment, which results in the polluting of underground and surface water sources. This pollution is transferred to the neighboring communities and even to the municipality's population, which suffers due to the increase of gastrointestinal and related diseases mainly afflicting children under five years old. The pollution, as well as the protection of the river basin relies upon the inhabitants of the municipality, since their

actions exacerbate water pollution problems.

Nevertheless, through the establishment of the River Basin Committee, there has been an improvement in the processes related to the protection and use of water resources. This Committee actively involves the local government, the Association of Users of Irrigation of San Jerónimo (AURSA) and Defensores de la Naturaleza, the NGO in charge of managing Sierra de las Minas. Defensores de la Naturaleza, AURSA and the municipality of San Jerónimo all face common problems, which have forced them to coordinate through the Basin Committee, in order to develop joint efforts aimed at the sustainable management of the river basin and especially of Sierra de las Minas.

### **Actions taken**

The need for protecting water resources, identified by the key players in the San Jerónimo basin, allowed for the establishment of the Basin Committee as a coordinating and negotiating agent. This Committee aims to implement joint operations towards the sustainable use of the basin's water resources. The Committee includes representatives of all main users and their functions, including irrigation, pisciculture, hydroelectricity, tourism, domestic uses and others.

The Committee's main objectives are: to preserve and to properly use the San Jeronimo basin's natural resources, to fortify the abilities of its members in the integrated management of the natural resources and to motivate the key players of the river basin to preserve and adequately use its natural resources. The creation of the San Jeronimo Basin Committee is aimed at contributing to this problem's solution. This Committee is enabling both the recovery of the river basin and the creation of alternative sources of income for its inhabitants through more efficient use of the resource.

The San Jeronimo Basin Committee acts as a negotiating body between all the basin's users. The Committee comprises main water users representing various functions, including agricultural irrigation, aquaculture, hydroelectric use, human consumption and tourism. Its mission is to implement integrated management of the sub-basin, as well as to preserve biodiversity to ensure the socioeconomic well-being of the population and of water consumers. The creation of the Committee has allowed for strengthened coordination between all the different key players involved, and the development of joint activities aimed at preserving the river basin and promoting sustainable water use.

### **Outcomes**

The San Jeronimo Basin Committee, which brings together different water users, developed a joint plan, which generated the following actions and guidelines:

1. main diagnosis of the issues and needs of the sub-basin, as a starting point;
2. strengthening of the committees capacities;
3. preservation and management of water resources;
4. preservation and management of forest resources and
5. agricultural practices.

The important benefits obtained are:

1. Improved coordination, in order to protect and preserve the San Jerónimo basin, as well as similar basins.
2. Participation in training, experiences and exchange events with GWP Guatemala as a platform.
3. Joint awareness campaigns, information and environmental education aimed at reducing pollution of underground and surface waters due to waste waters and solid waste.
4. Contribution from members of the Basin Committee such as AURSA. Through the member's contribution to the Water Fund (managed by Defensores de la Naturaleza) reforestation of the high part of Sierra de las Minas is deemed possible.

## **Lessons Learned**

Through the incorporation of institutions, users, and NOGs increased recognition of IWRM principles among local population.

The social responsibility of organizations located in specific area is a key factor in obtaining positive results in water conservation. The negotiating role of Committee has helped to establish coordinating mechanisms between different water resource users and Board of Directors.

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## **Supporting Materials**

[GWP Central America](#)

[Guatemala: Successful IWRM experiences in San Jeronimo Basin](#)

## **Related IWRM Tools**

## National Apex Bodies, Civil Society Organisations, Basin Organisations

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