

## PROTECTING BIODIVERSITY FOR AND WITH COMMUNITIES

*Reduced flood risks through mangrove rehabilitation by indigenous communities*

### OVERVIEW

- Organization data:
  - ✓ Name: **San Crisanto Foundation**
  - ✓ Organization type: **Representative citizens organization**
  - ✓ Year of foundation: **1995**
- Beneficiaries : **150 families, 570 people living in the community**
- Donors and financing: **Fish and Wildlife Services, Programa de Pequeñas Donaciones del PNUD, Comisión Nacional Forestal, RAMSAR, Comisión Nacional de los Pueblos Indígenas**
- Location: **San Crisanto community, Yucatan, Mexico**
- Beginning date: **1996**
- Motivations: **Restore aquatic fauna and the presence of migratory birds by preserving natural resources and promoting socio-economic development**



### CONTEXT AND ACTION

**Summary** | Mangrove forests are among the most productive and biologically complex ecosystems in the world, and function as buffer zones protecting communities living in them. In the Yucatan peninsula, these mangroves are threatened by economic development and poorly controlled land use planning. In this area, residents frequently experience intense rainfall resulting in flooding that causes extensive damage. In particular, the fishing community of San Crisanto was severely affected by two consecutive hurricanes in 1995.

These events led the inhabitants to create the San Crisanto Foundation, whose objective is to develop resources sustainably by restoring mangroves, local biodiversity and protecting wetlands. The main activities of the inhabitants are fishing and coconut plantation. They own the land around the community, through the "ejido" system, a way of collectively managing land in Mexico that allows owners to maintain their economic activities, without the land being taken over by large industries. The San Crisanto Foundation was born by incorporating itself into this "ejido". In addition to the economic activity of the latter, the foundation includes environmental and social aspects. To drain water into the mangroves and increase aquatic fauna, 11,300 metres of canals have been restored, as well as 45 cenotes, which are large natural wells created in karst environments. Thanks to these activities, the inhabitants have also been able to develop ecotourism and diversify their sources of income.

To make these protection actions sustainable, the San Crisanto Foundation educates its inhabitants and those of neighbouring communities, adults and children alike, on the importance of preserving mangroves to conserve available natural resources.

**Local challenges |**

- Strong demographic development: the population has quadrupled in 40 years;
- Increasing flooding as a result of hurricanes and heavy rainfall;
- Threat on the traditional means of subsistence due to the increase in intensive agriculture on large areas;
- Strong tourist pressure due to the many archaeological sites and large beaches.

**Local responses |**

- Preservation of biodiversity;
- Sustainable management of natural resources;
- Capacity building of communities through practice and environmental education;
- Emphasis on ecotourism with low ecological impact: creation of a technical school;
- Community development and empowerment of local populations.

**BENEFITS**

**Environmental |** Thanks to the policies settled by the foundation, the endemic wild fauna and flora of cenotes and mangroves has increased. Today, 60% of the mangrove lost during the 2012 hurricanes has been restored, corresponding to 850 hectares of forest cover. Similarly, these efforts have benefited 167 bird species such as the pink flamingo, which reappeared after it disappeared 50 years ago. In addition, mangroves help to fight climate change, functioning as a true carbon sink.

**Social |** The community's quality of life has improved considerably thanks to the income that has made it possible to establish basic public services, and all households have access to drinking water, electricity and latrines.

**Economic |** Restoration efforts have led to the creation of 30 jobs, and the incomes of the inhabitants have increased considerably. Indeed, the beauty of the site has attracted the attention of many tourists who come to enjoy ecotourism, a very profitable business for the community. The population now has an income twice as high as the average national income per capita.

**SUCCESS FACTORS**

- Direct engagement of community members in environmental development;
- The president of the foundation is in direct contact with the inhabitants since he is part of the community;
- All economic investment is local, there is no external private company interacting with the community.

**OBSTACLES**

- Resistance to the creation of a communal property (ejido) in the place of private agricultural exploitation;
- The inhabitants of the area do not always respect the regulations for hunting and harvesting wood;
- Lack of recognition by the federal, state and local governments.



*«By conserving our natural heritage, we guarantee a future for future generations. We cannot waste the resources of those who come tomorrow today.»*

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- Related link(s) :

<https://www.equatorinitiative.org/2017/05/28/fundacion-san-crisanto-san-crisanto-foundation/>