



CASE STUDY: VILLAGE-LED WATERSHED MANAGEMENT IN HONDURAS

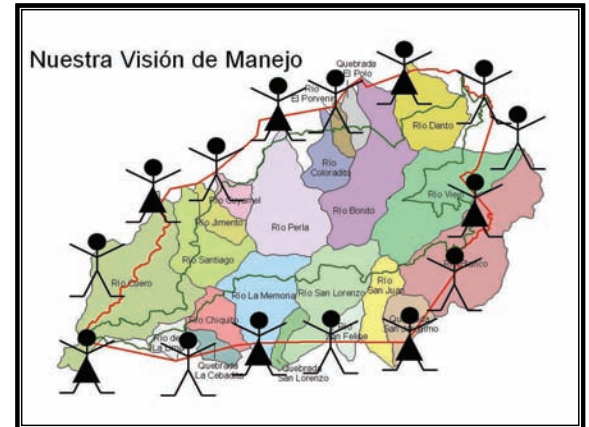


Project location:

La Ceiba, Honduras, Central America

Partners and stakeholders:

Fundación Parque Nacional Pico Bonito (FUPNAPIB); EcoLogic Development Fund; La Fundación para la Protección de Lancetilla and Punta Sal y Texiguat (PROLANSATE); Ford Foundation; Blossom Fund; Arntz Family Foundation; European Union/COSPE; Governments of Honduras and Ireland (APSO); World Bank-GEF; City of La Ceiba; and City of Tela.



Summary:

Honduras is one of the Central American countries that has suffered the most severe reductions in available fresh water. Rampant deforestation and destruction of river ecosystems have caused soil erosion, contamination and water scarcity. Increasingly polluted and diminishing water supplies compromise health and food security, and undermine economic growth.



The aim of this project is to protect freshwater resources in the Pico Bonito National Park, part of the Nombre de Dios mountain range, which houses 21 important watersheds that supply water to over 500,000 local residents. Community participants are volunteers, motivated to participate as a result of their urgent need to improve their water supply. Nominal, voluntary user fees maintain the potable water infrastructure.

Description of actions taken:

The Pico Bonito National Park Foundation (FUPNAPIB) is charged with the management and protection of the Pico Bonito National Park and its natural resources. Over the past three years, EcoLogic and FUPNAPIB have developed and refined a highly effective strategy in 14 microwatersheds around the southern perimeter of Pico Bonito National Park in northern Honduras. We have demonstrated success in organizing local communities and municipal

governments to employ upland watershed management as a sustainable land use strategy in the park's buffer zone. The village-led watershed management model introduces or improves upon existing potable water systems, including the installation of chlorination tanks and environmentally friendly latrines. Village water committees sustain their work through volunteer efforts and cover their costs by charging minimal user fees to support infrastructure improvements to the water delivery system and maintenance of the water catchments areas.

Outcomes and achievements:

In 2005, FUPNAPIB and EcoLogic completed a successful \$340,000 three-year project focused on microwatershed management support to the neglected southern perimeter of the park. Our support has helped (a) organize 25 communities to manage 14 water sources, (b) plant over 12,000 trees, (c) introduce sustainable agroforestry on 400 hectares of land, and (d) establish an ongoing regional council of community water boards positioned to continue and expand the work of their member communities. EcoLogic also worked with FUPNAPIB to provide materials and training to help park communities build 950 fuel-efficient stoves. These new stoves use 50% less firewood and greatly reduce the amount of smoke inhaled by community members when cooking, particularly women and children. We seek to build upon this success where FUPNAPIB can ultimately organize all 216 communities in the park buffer zone around their water supply.

Utility to IWRM Practitioners:

Our approach provides local communities with such tools as the implementation of agroforestry techniques that will reduce pressure on the environment and improve the quality of life of the region's poor. Ultimately, these efforts can provide a model for fostering good governance solutions necessary for improving water quality and biodiversity in the Caribbean.

Replicability:

To date, EcoLogic and FUPNAPIB have replicated this model in 14 of the park's watersheds. As of 2003, EcoLogic began to replicate the model in Totonicapán, Guatemala. EcoLogic also seeks to replicate this proven methodology with its other Honduran partner, PROLANSTATE, and the communities around the nearby Jeannette Kawas National Park, one of the largest and most important coastal marine protected areas in Honduras. Like its sister park, Jeannette Kawas houses important watersheds for the region, which provide water to thousands of people living in extreme poverty, yet are compromised by unsustainable land use practices.

Impact on policies at the national/regional level:

- **Raising awareness of the population:** A crucial part of the entire process is raising awareness of those populations involved in the project. Community education focuses on resource conservation and the implications for quality of life improvement. The education of the urban consumers of water focuses on awareness about the sources of natural resources, specifically water, the value of having quality access to water, and the necessity of maintaining that resource over time and for more people.
- **Lobbying of local authorities:** A permanent lobbying process with local authorities builds support for establishing a framework for implementing payment for environmental services that will be gradually recognized by the population and legally encouraged by the authorities.

Lessons learned:

- Communities need incentives to engage in effective conservation. The guarantee of a clean and safe water supply is one such incentive. Economic incentives in the form of payment for environmental services are another
- The advantage of this approach is that we are able to strengthen water security and improve community health and nutrition, while at the same time ensuring biodiversity conservation.
- A crucial part of the whole process is a plan for raising awareness of those populations involved in the project.
- Community involvement is necessary for meaningful, long lasting change to occur.
- A permanent lobbying process with local authorities is needed in order to build support for implementing payment for environmental services that will be recognized by the population and encouraged by authorities.



Photo: Todd Shapera

Contact information:

Adonis Hernández, Executive Director
Fundación Parque Nacional Pico Bonito
Cll 19, C# 130 a un costado de la Iglesia Suyapa
Barrio Alvarado
La Ceiba, Atlántida, Honduras, Central America

Telefax: (504) 442-0618
E-mail: fupnapib@laceiba.com

Shaun Paul, Executive Director
EcoLogic Development Fund
25 Mt. Auburn St., Suite 203
Cambridge, MA 02138

Tel: (617) 441-6300
Fax: (617) 441-6307
E-mail: spaul@ecologic.org
Web site: www.ecologic.org