

## Ecological Archeological Park in Guatemala

### Location

Cancuén National Park and archeological site, in Northern Guatemala

### Problem

Lack of modern energy services in an Archeological Park and surrounding agricultural communities

### People

Rural poor communities surrounding the archeological park.

### Solution

Provision of lighting and energy services for community centers, schools, and park infrastructures; productive use applications

### Timeframe

2002-2003

### Results

Enhanced communication in and around the park; solar electrification of park facilities, local schools, community centers and a corn mill.



Cancuén National Archeological Park

Cancuén National Park is located on the border of two northern Guatemalan provinces. This area spans volcanic highlands and tropical lowlands, creating a lush transitional ecosystem with unique conservation value. Almost 75% of the population is made up of Q'eqchi' Maya villages mainly dedicated to subsistence agriculture, with little access to education and basic infrastructure, including grid-connected electricity.

Archeological research has been conducted in the Cancuén area since 1998, through a consortium of universities and supporting local and international organizations. The major discovery of a Mayan archeological site in the region provided an opportunity to create synergies

between local cultural preservation and environmental conservation efforts towards sustainable development for local communities. The aforementioned consortium has worked to develop the Cancuén area as an archeological park, creating an enabling environment in support of local community development processes, while supporting archeological research and preservation.

Since the Cancuén Archeological Park, its associated infrastructure and surrounding communities lacked access to modern energy services, electrification for targeted end uses was identified for project development intervention synergy.

Fundación Solar (FS), with support from Winrock International and USAID, and local NGOs CAP and Sank, coordinated the provision of rural energy services for the park infrastructure as well as the surrounding communities. These services

include communications, and lighting for community centers, schools, park infrastructures and a local corn mill. FS also provided technical support, capacity building for participating partner organizations, and training of users in system operation and maintenance.

A 200W solar-powered lighting and communication system was installed for the park, consisting of lighting, telephone and radio communication systems for use by rangers and boats traveling the river, enhancing visitor park services. The



Installing PV for communications and lighting

Visitors Center is now able to provide services for the researchers working there; archaeologists can use the radio system to exchange information and findings, and can operate computers.

FS installed solar-powered lighting in 10 local schools, which has increased the

use of educational infrastructure for both primary schooling and community involvement through parent meetings. Educational programs have also been launched in the park area to improve reading and writing skills for other community members.

Electrification has further benefited women from the El Zapote community, where a solar lighting system was installed at the local corn mill, resulting in improved working conditions for the women. FS has trained the women who use the mill, as well as local organizations, in system operation and maintenance. Technology transfer has been planned around the needs and skills of local residents.

Through this project, the archeological park now has improved communications and scientific capacity, and local communities enjoy lighting and enhanced educational programs.