

## Building Capacity for Energy Micro-Enterprises and NGOs, Morocco

### Themes

- ★ Renewable energy
- ❖ Financing mechanisms and private sector involvement
- ❖ Technical capacity development

### PROJECT DATA

**Name:** Building Capacity for leaders of energy micro-enterprises and NGOs

**Implementing Organization:** Group for Study and Research on Renewable Energies (NGO)

**Location:** rural areas of Morocco

**SGP Contribution:** \$41,241.00

**Start Date:** December 2000

### ENERGY OVERVIEW

**Energy Resource:** solar, biomass

**Technology:** photovoltaic panels, solar water heaters, solar dryers for agricultural products

**Application:** lighting, water heating, battery charging, agricultural product drying, cooking of bread and food, domestic heating

**Sector:** commercial (micro-enterprises), NGOs

**Institutions Served:** 30 young entrepreneurs, 50 NGOs

### BACKGROUND

Since 1996, Morocco has pursued an aggressive rural electrification program via the Office of National Electrification (ONE). Morocco's approach involves two components. In some cases, the government helps support the extension of the grid. In other cases, however, the government contracts with private retailers to install solar home systems, providing a one-time payment of \$300 per home. This second approach, particularly pursued in the northern part of Morocco, depends upon the existence of local micro-enterprises in non-electrified regions with the capacity to install solar home systems and guarantee them for a 7-10 year period in return for monthly payments from customers.

### PROJECT DESCRIPTION

#### Overview

The project is building the capacity of entrepreneurs to run rural energy micro-enterprises, particularly helping them build a good understanding of a variety of renewable energy sources and how these relate to various sectors, including agriculture, water use, and food preparation. It also seeks to build the capacity of 50 Moroccan NGOs concerning renewable energy and climate change.

#### Implementation

In the context of the larger electrification process, the Group for Study and Research in Renewable Energy (GSRRE) pro-

vides training and produces communication and training materials for young entrepreneurs and NGOs on a variety of renewable energy sources, including solar, biogas and the gasification of biomass. A consulting service has also been put in place to provide advice on handling energy issues.

#### Benefits and Impacts

While the SGP-funded project has not directly implemented energy services, it provides substantial support to the micro-enterprises in doing so. The trained NGOs will also support micro-enterprises by informing and sensitizing local communities on energy issues. The potential impact of the education and training that the micro-enterprises and the NGOs receive is great given the national scale of the electrification process; in 1999, 1,650 villages were electrified, many by micro-enterprises.

#### Environmental Benefits

**Global:** The 30 micro-enterprises and the 50 NGOs receiving training on renewable energy are located in 11 provinces throughout Morocco. All promote renewable energy, providing modern energy services in villages that previously depended upon wood, kerosene and dry cell batteries. Thus, the micro-enterprises and the NGOs are achieving reductions in carbon dioxide emissions.

**Local:** In many cases, villages previously depended upon local biomass resources for cooking. By reducing these needs, via improved stoves, biogas or other renewable means, local ecosystems are also protected.

#### Local Livelihood Benefits

**Health:** The micro-enterprises learn through the SGP-funded training how energy is used in various sectors, including water. This education helps the enterprises to look for ways to improve access to water using renewable energy, thereby improving sanitation and health. The reduced use of kerosene and wood as fuel also improves local air quality.

**Poverty Alleviation:** The micro-enterprises provide gainful employment to the young entrepreneurs as well as to other local residents. In the first phase of the program (prior to the implementation of this grant), 17 micro-enterprises provided employment to a total of 41 people.

#### National Benefits

Improved electrification rates: Morocco has placed a high priority on extending modern energy services to rural regions. The project helps the country achieve this goal by strengthening the ability of micro-enterprises and NGOs to meet a variety of energy needs.

#### Capacity Development

The major focus of this project is building the capacity of young micro-enterprise leaders and NGOs. This is being achieved through training sessions, training and communication materials and 'as-needed' consultations.

## Arab States: Morocco

### Partners

Morocco's overall approach to electrification is based on partnerships between government, private sector entities, NGOs and individual communities. The particular SGP-funded aspect of this project involves helping young entrepreneurs and NGOs understand the benefits of building partnerships with entities in other sectors, such as water and agriculture, to diversify support for the extension of energy services.

### LESSONS LEARNED

#### Environmental Management

This project focuses on the importance of creating links between energy services and a variety of economic and livelihood sectors. In addition, the project promotes the use of a diversity of energy sources; different sources may be appropriate depending upon differing energy needs and local conditions. The project's effort to educate entrepreneurs and NGOs broadly about a range of energy sources and technologies is unique, since most micro-enterprises specialize in a single technology.

#### Barrier Removal

*Information/Knowledge:* While Morocco's overall approach to electrification addresses financial and institutional barriers, the SGP-funded portion addresses knowledge barriers to the implementation of various energy sources in a variety of sectors. The approach to reducing knowledge barriers has largely been a participatory one, bringing together local community actors in various sectors to discuss energy needs and possible solutions. The project therefore takes advantage of existing

local knowledge and complements it with expert knowledge offered by the grantee on forms of renewable energy. While the project emphasizes building the capacity of the participating entrepreneurs and NGOs, others in the communities learn through the process as well due to the participatory approach.

#### Scaling Up

Unlike many SGP grants that involve very small scale demonstration projects, this program is part of a larger, national scale effort to bring modern energy services to remote areas of Morocco. The increased capacity of NGOs and of these entrepreneurs to provide energy services will impact a much broader range of people receiving the energy services. In addition, other NGOs partners and entrepreneurs that are part of the larger program could also receive similar assistance if the benefits of this project are adequately demonstrated.

### SOURCES CONSULTED

- Project Record MOR/00/06, SGP Project Database, <http://www.undp.org/sgp>
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- Dubash, Navroz. "The Changing Global Context for Electricity Reform." In Power Politics, World Resources Institute, 2002, p. 22. [http://governance.wri.org/pubs\\_description.cfm?PubID=3159](http://governance.wri.org/pubs_description.cfm?PubID=3159) (February 4, 2003).