

ASCIMA Organic Agriculture Cooperative *Organic Agriculture*

Twenty families from a rural settlement in Northeastern Brazil are proving that sustainable development has many faces and offers many opportunities for success. These families have formed a cooperative to grow and market organic produce using a solar PV powered irrigation system. Instead of selling their produce at local markets, however, the ASCIMA cooperative will sell *directly* to 140 families in the state capital of Foraleza.

ASCIMA Snapshot

Country: Brazil

Entrepreneur: ASCIMA Cooperative

Energy Service: Solar PV Irrigation

REED Services:

- Financial Plan Assistance
- US\$ 50,000 loan
- Post investment enterprise development services

The cooperative is the result of a successful pilot project supported by IDER (B-REED's NGO partner) and NEPA, a local NGO specialized in organic agriculture and distribution. In the pilot phase, IDER and NEPA provided cooperative members with a number of enterprise development services. These included various training sessions, a workshop on business plan development, help to organise responsibilities within the new cooperative, and assistance with the financial analysis.

This analysis showed that organic produce is a rapidly growing market in Brazil – growing at rates of 25% per year from 1998 to 2000 and now around 50-70%, according to Biodinamic Institute of Botucatu (IBD). Globally, the market is estimated to grow approximately 20% and 50% annually.

Through the advanced work with IDER, the cooperative first came to B-REED in April, 2003. After further enterprise development, B-REED agreed to advance a US\$ 50,000 loan to grow crops on two additional hectares of land (one hectare was planted in the pilot phase), which will be irrigated using a solar PV pumping system.

For B-REED, the ASCIMA cooperative has the potential to create substantial positive economic, social and environmental impacts. By stimulating organic agriculture in rural communities, the cooperative represents a viable and profitable example of a productive use of renewable energy.

In addition, the demand for organic produce will be stimulated. As production grows, the number of urban family customers can grow proportionally. This is a distribution mechanism that greatly reduces sales risk and ensures the consumption of the produce in an efficient manner.

From the environmental perspective, organic farming reduces agro toxins in the soil, leading to the regeneration of local land and hydro resources. This in turn can increase local biodiversity, stimulating new environmental consciousness among locals, and hence leading to greater preservation of ecosystems. The use of solar panels will displace the need for more polluting diesel-powered pumps. To irrigate the same area, two diesel

pumps costing R\$3,500 each would be needed, consuming a total of about 22 liters per day of diesel.

Without B-REED support, the cooperative would not have access to financing given the start-up nature of the business, the general exclusion of such families due to the regulations of the traditional banking system, and the lack of sufficient asset guaranties. This financing also represents a step forward for the organic agriculture finance sector, which often suffers from a lack of available credit at affordable rates.

After receiving approval in November of 2003, ASCIMA used the US\$ 47,500 B-REED loan to purchase equipment for the prepare the land for planting, other initial inputs (eg. manure, mineral and natural fertilizers and seeds), a solar pump, a pickup truck to transport the produce to Fortaleza, and working capital.

Post-investment EDS includes technical assistance following the installation of the solar pumping system, marketing assistance with the distribution and sale of the produce, and any other issues related to the loan including repayment schedules, registering guaranties, and complying with monitoring and evaluation.