

Representatives from three communities close to the botanic garden, San Antonio, Cristo Rey and El Progreso, work together as ITZAMNA society. The members of ITZAMNA manage a farmer's co-operative and are guardians of the Don Eljio Panti National Park. The farmers are interested in implementing organic farming techniques and finding alternative crops to replace or supplement income from slash and burn and vegetable farming. They are also worried about the evidence of *xateros* in their national park. Already 30 farmers from the three communities are willing to participate in the Darwin project.

There are many environmental benefits to farming *xate*. The palms are native to Belize. They can be grown organically at relatively low costs. They require heavy shade so farmers can keep existing forest mostly intact rather than clearing land to plant, or they can plant into existing agroforestry crops such as cacao and black pepper. The diversity can create a more stable income than relying on a single crop.

With careful management, *xate* could become a profitable industry for Belize. It will need properly educated producers, an infrastructure and a careful study of what it will take to keep the industry going. Unfortunately recent press about the Guatemala-Belize *xate* situation has convinced some that planting acres of *xate* or cutting leaves from the forest will guarantee a prosperous future. Would-be entrepreneurs in Belize are jumping aboard the *xate* bandwagon with no indication that they have weighed the environmental or financial risks. Without strong government policy and enforcement,

Belize could wind up in the same situation as Guatemala, where demand exceeds a degraded supply, or like Mexico where other palms have been overexploited to the point of extinction.

Many international organizations are willing to assist in solving problems of over-exploitation of the plants and people involved in *xate*. Groups such as Rainforest Alliance, Asociación Coordinadora Indígena Campesina de Agroforestería Comunitaria Centroamericana (ACICAFOC), Alianza para un Mundo Justo and Belize Community Service Alliance are also involved in projects focusing on the social, economic and environmental aspects of *xate*. The groups are looking at the problem from different angles such as linking conscientious buyers of leaves with sustainable sources, trying to ease border tension, job training to provide alternative income, community farming endeavors and sustainable farming projects. With their efforts and the Darwin project leading to heightened public awareness, buyers may begin demanding sustainable *xate* for their flower arrangements helping to change the fate of the plants and the people involved.

#### LITERATURE CITED

- OYAMA, K. 1992. Conservation and exploitation of tropical resources: The case of *Chamaedorea* palms. *Environment Update. Evolutionary Trends in Plants* 6(1): 17-20.
- VOVIDES, A.P. AND A. GARCIA BIELMA. 1994. A Study of the in situ situation of four species of threatened understory palms of the genus *Chamaedorea* in the wild in the state of Veracruz, Mexico. *Principes* 38: 109-113.

## CLASSIFIED

**PERMANENT BOTANICAL GARDEN SIGNS FOR PRIVATE OR PUBLIC COLLECTIONS.** Call or write for brochure. Phone: (760) 723-1354; Fax: (760) 723-3220; e-mail: <palmnut@pacbell.net>. Gary Wood, PLANT SIGNS, 960 El Caminito, Fallbrook, CA 92028. Web Page: <http://www.plantsigns.com>

**AMAZONIA.** Palm, cycad and exotic fresh seeds. Catalog: 707 palm species. Tell us your preferences, we will advise you when seeds are available. Amateurs (10 seeds minimum) and nurseries. <http://www.amazonia-online.com> Our address: [amazonia@amazonia-online.com](mailto:amazonia@amazonia-online.com)