

## Agroindustry investment expands in Costa Rica

The ICDF has chosen a wild guava pulp processing project in Costa Rica to serve as one of its agroindustry investments in Central America. A loan and cooperation agreement signed between the ICDF technical mission in Costa Rica, APPAG (an association of 70 or so small farmers from five communities in Turrialba) and the National Board of Production will make possible the construction of a fully equipped guava processing plant. Turrialba was selected because it is a relatively undeveloped economic area and because success in the project will make a noticeable difference in the lives of the local people.

The ICDF loan will amount to a maximum of 27,664,850 colones (about US\$100,000). The farmers hope that, through this investment and their own efforts, they will be able to create a viable agribusiness. If they can bypass some of the middlemen who have traditionally pocketed the profits that can be made from processing and add value to the raw product themselves, they can increase their incomes considerably. To ensure sustainability, APPAG will be setting up a fund to improve the farmers' knowledge and farming methods.

The guava plant, which is common throughout the tropical regions, enriches the diet of millions of people in Latin America. In addition to being an excellent source of soluble fiber, it is a good source of vitamin C, lycopene, beta-carotene and other essential nutrients. As discussed below, many people also employ it as a natural medicine.

It is believed that the guava originated from southern Mexico into or through Central America, and it has been cultivated and distributed for some two thousand years. It is appreciated as a crop throughout Asia, Africa, India and parts of Europe, especially on the Mediterranean coast. In many parts of the world, the guava runs wild; indeed, in certain countries, wild guavas constitute the bulk of the commercial supply.

In Costa Rica's tropical climate, with a dry season that lasts from December to April and a rainy season that lasts from May to November, the guava thrives up to an altitude of 1,400 m. The trees grow rapidly and produce fruit from within two to four years from seed, and they can live for 30 to 40 years. Unfortunately, the trees are highly susceptible to pests and diseases; undoubtedly, the experience of the Taiwanese orchard management specialists will be of help in controlling some of these.

Available fresh from late spring through early fall, the guava (*guayaba* or *guyava* in Spanish) can be consumed fresh, puréed as a sauce or chutney for meat or poultry, or as a vegetable. A fruit that bruises easily and is highly perishable, the guava is extensively processed for jam, jelly, nectar and fruit juices, and serves as a flavoring for other foods. Guava juice is universally popular as a bottled beverage as well as in punch and ice cream sodas.

Other uses for the guava are plentiful. The wood, which is fine-grained, compact and moderately strong, is used in carpentry and lathe-constructed products such as handles, engravings and spinning tops. It is also good for fuelwood and is a source of charcoal. The leaves and bark are rich in tannin. In Central America the bark is used for tanning hides, and in Asia the leaves are processed to produce a black dye for textiles. The roots, bark, leaves and immature fruits, which are highly astringent, have some common medicinal uses: to halt gastroenteritis, diarrhea and dysentery. Crushed leaves are beneficial in treating skin diseases and leaf infusions have been found to lower fever and soothe kidney inflammations.

Traditionally, Costa Rica's economy has depended heavily upon the export of agricultural products (coffee, bananas, sugar, corn, rice, beans, potatoes, etc.). The expansion of wild guava processing will create added value by popularizing a fruit that is readily available in Costa Rica and extending the range of agricultural products that are exported. The exploitation of this crop is sure to bring important benefits to the farming communities of Turrialba.

