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Fruit Trees in Coffee Agroforestry Systems in Costa Rica

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## Abstract

Following the worldwide coffee price crisis and its impacts on the economy of coffee exporting countries, such as in Central America, specialty and niche marketing possibilities were explored. Organic, bird-friendly, fair—trade or gourmet coffees are seen as a chance for farmers to achieve higher prices for their products in Costa Rica. Furthermore, many producers in Latin America tried to diversify their farms and products to decrease economical dependence on one cash crop. As shade canopy is now propagated for coffee plantations to increase sustainability of production and quality. Trees have been widely (re-)established, thus creating agroforestry systems.

In January and February 2005, interviews with 30 organic coffee producers in 12 communities of Turrialba, Costa Rica, were conducted. Apart from the characterisation (species, amount, production) of the trees present in the coffee field, the survey's objectives were to identify factors limiting fruit production and commercialisation (economical, infrastructural or ecological), the farmers incentive for establishing fruit trees into their production system, and the perceived impact of those fruit trees on the coffee.

Fruit trees provide additional household income and food but also require higher inputs in terms of workload, fertilisers and pest and disease management. Also, most coffee farmers have little experience working with fruit trees. Infrastructures for market access such as cooperatives are inadequate and information about requirements for larger-scale commercialisation and processing is rare.

The farmers who have participated in the survey have a highly diverse production of fruits in their coffee agroforestry systems, but higher quantities are produced of only a few products with a secure market (bananas, citrus, plantain, and guava). The other fruits serve mainly for household consumption or are lost. These two factors are also the main incentive for planting new trees, regardless of their impact on the coffee production. The diversification of the finca is generally seen as an economical benefit (higher income and security), though ecological effects are also perceived. Following this reasoning, finding accessible markets for less common products may be crucial for sustaining and promoting higher diverse production systems.

Keywords: Coffee agroforestry, Costa Rica, fruit trees

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