

## Agroforestry to improve food security and income in La Mosquitia, Honduras

### Background



Photo: Geoff Crawford/Tearfund

In Honduras, vast areas of forest have been cut down so that the land can be used for agriculture and cattle grazing. Non-sustainable agricultural practices have led to degradation of the land and local ecosystems, increasing poverty and forcing people to look for other ways of life.

One of the main destinations for migrants is the tropical rainforest in the region of La Mosquitia. Unfortunately, the migrant families bring with them the non-sustainable agricultural practices that originally caused them to move. The Mosquitia region itself has therefore suffered from land degradation in recent years, putting increasing pressure on the indigenous communities who live there and rely on its fragile ecosystems.

### Partner organisation's work

**Tearfund's partner, MOPAWI**, has identified three key ways of reducing environmental degradation in La Mosquitia and, at the same time, providing people with food security and a sustainable livelihood.

- *Growing cocoa for markets.* This provides families with an income as cocoa is in high demand nationally and internationally. Growing cocoa also helps promote sustainable agroforestry as cocoa plants require shade from other trees and plants.
- *Crop rotation.* Farmers plant the fast-growing Guama plants which are used for firewood. These are nitrogen-fixing plants and they improve soil quality as well as enhancing the growth of other crops such as maize, beans and pineapple.
- *Export of local tree products for use in the cosmetics industry.* The export of these products has strengthened the traditions of the indigenous people to maintain the forests and the biodiversity found within them.

### Growing cocoa

For optimal production, cocoa needs constant warm temperatures, lots of rain and shelter from sun and wind. It can be grown in combination with fruit trees (eg *Artocarpus artilis* and citrus species), trees for firewood (eg *Inga* sp and *Prosopis* sp), timber species (eg *Swietenia macrophylla* and *Cedrella odorata*), coco palms (*cocos nucifera*) and food crops such as bananas and plantains.

As well as providing for the daily subsistence and firewood needs of producers, these secondary crops can also be sold locally allowing the purchase of other foodstuffs such as oil, salt, sugar, flour and beans. Such agroforestry systems maintain a high degree of biodiversity, soil structure and fertility in areas where traditional slash and burn systems with long fallow periods are no longer feasible.

After about three years, the cocoa trees begin to produce pods suitable for the cocoa market. Maximum production is reached when they are about seven years old but they will carry on producing for 25-30 years.

Working with groups of farmers, MOPAWI first began to promote the production of cocoa in agroforestry systems in 1985. Cocoa was already grown on a very small scale by some indigenous families in the area for local consumption which provided evidence that it would grow well in the local conditions (climate, altitude and soils) and was accepted by the communities.

### Impact on beneficiaries

Through training and long-term accompaniment, more and more families began to see the benefits of the system and adopt and adapt it accordingly. Those who were initially reluctant to give it a go because of the three year lag period between planting and first harvest soon began to see the benefits being accrued by others, plus the fact that companion crops could be harvested and consumed or sold within a much shorter period. Ensuring quality of fermentation, drying and storage of the cocoa beans was initially a big challenge but with ongoing training and support quality improved and the product was able to attract good prices in the national marketplace.

Despite widespread destruction of the cocoa plantations in 1998 during hurricane Mitch, cocoa is now grown and commercialised very successfully by many families in La Mosquitia. MOPAWI has helped the producers to form a Cocoa Producers Association which now has its own offices as well as facilities to process and store cocoa.

Through training and empowerment, the Association has developed financial, training and market partnerships and the organic cocoa produced in the region is being recognised as having distinct characteristics making it some of the finest cocoa in Central America. National and international interest in working with the cocoa producers of La Mosquitia is increasing and opportunities are opening up within the European market.

The livelihoods of many families have been and continue to be enhanced through this project. Food security in the region has improved, environmental destruction slowed and many are now able to afford to improve their homes and send their children to secondary school and college.

# Food Security