Cocoa agroforestry in the Brazilian Amazon
Food security and livelihood development in an agricultural frontier

Brazil
Size: 8,515,767 km²
Population: 200.4 million
Capital: Brasilia

Food security is declining
Natural resources in the Brazilian Amazon have been rapidly depleted due to changes in human activities over the past decades. The loss of 75 million hectares of forest and related ecosystem services is leading to a decline in food security.

Cattle ranching is increasingly popular with small agricultural landowners
In the eastern municipality of Sao Felix do Xingu (SFX), farmers who once focussed on crop cultivation are now turning to cattle ranching due to agricultural price instability and the emerging regional demand for beef. The adoption of cattle ranching by smallholders raises concerns about livelihood transformation and food security, as well as the environmental costs of ranching expansion in the region.

Raising livestock on a small scale can pose many risks, including:
rapid soil degradation, expensive pasture restoration, and uneven market relationships with larger farmers or middlemen. In the current socio-economic context, cocoa-based agroforestry is one of the only alternatives that can outperform livestock in terms of income generation.

Cocoa-based agroforestry systems represent a profitable long-term alternative to grazing
Cocoa is a global, high-demand commodity with an established market chain and the potential for high economic return. Cocoa-based agroforestry presents a promising opportunity for restoration, while strengthening food security among small-scale farmers in critical Amazon development frontiers.

Cocoa forms the understorey below a canopy of companion trees which support a range of functions:
- Companion trees provide shading and micro-climatic protection for young cocoa trees
- Companion trees can be used and/or sold (food, timber, fuelwood)
- They maintain soil fertility and host pollinators and predators of cocoa-pests
- They support natural water, energy and nutrient cycles and promote biodiversity
- Global benefits include increased carbon sequestration and reduced emissions compared with the historically common scenario of planting cocoa after forest clearing

How companion trees work
Cocoa-based agroforestry
Cocoa is planted with other ‘companion’ trees and food crops such as cassava, banana and mahogany.
Implementing cocoa-based agroforestry

Almost the size of Portugal, SFX is located in one of the most deforested areas of the Amazon. In 2011, The Nature Conservancy and partners began restoring the region’s degraded pastures.

The project takes a multi-stakeholder approach, engaging grassroots organisations, government agencies and the private sector. Working with farmers means that mobilisation and adhesion to the project is gradual, but essential to its success and sustainability.

The project now works with over 60 small landholders

Fruits, wood & oils

Can potentially provide...

US$ 3,750 to US$ 25,000 per year per farm

Property characteristics

such as size, location and degree of degradation are considered in community meetings and by producers when selecting land and planning for cocoa-based agroforestry.

Technical assistance

is provided for capacity building and area preparation activities, such as soil analysis and species composition.

Producers commit

to zero deforestation, an environmental assessment, restoring over-grazed land, and acquiring their rural land registry.

Cocoa-based agroforestry

can then be implemented and scaled up.

Property characteristics

such as size, location and degree of degradation are considered in community meetings and by producers when selecting land and planning for cocoa-based agroforestry.

Cocoa-based agroforestry

can then be implemented and scaled up.

The project now works with over 60 small landholders

1.5 to 10 hectares

Can potentially provide...