Cocoa agroforestry systems in Congo Basin and Côte d’Ivoire

The role of timber trees
Cocoa farming has largely contributed to deforestation. 13 million ha of forests have been cut down in Côte d’Ivoire since 1960, mostly because of cocoa farming. Our case studies take place in Côte d’Ivoire.

There is a low level of income diversification and a high level of poverty among farmers. For example, in 2016, experts estimated that cocoa prices in Côte d’Ivoire were not sufficient to ensure a decent income for farmers.

In Western Africa, according to farmers, full sun cacao cropping systems are affected by the ageing of trees and diseases as well as climate change. In 2016, a drought in Côte d’Ivoire decimated many cocoa farms.

CAN AGROFORESTRY SYSTEMS BRING AN INTEGRAL SOLUTION TO BOTH OF THESE SECTORS AND HOW CAN WE DEVELOP IT?

The following approach is an answer to this question:

**Anthropological procedure**
- Stakeholders’ identification
- Interviews with forest concessionnaires, chocolate industry stakeholders, NGOs, cocoa cooperatives’ representatives etc.

**Forestry and Agronomic procedure**
- Review of existing agroforestry models
- Proposition of different techniques aimed at implementing cacao-timber tree association models from different initial landscapes (ageing full sun cacao crops, very degraded forest, etc.)
- Proposition of additional models based on the timber species most requested by companies and the fruit trees requested by communities.
- Identification of endogenous innovations
- Theoretical analysis and field analysis to evaluate the performance of two groups of plantation systems (Western Africa and Central Africa).

**Two Case Studies to Bring Results as Answers to the Question:**

**FLEG-REDD+ Project (2013-2020 / FFEM):**
Integration of the Central and West Africa tropical timber sector into the FLEG and REDD+ mechanisms

**Goal:** To actively encourage the private forestry sector to move towards sustainable management of tropical forests and socio-economic development

**Equité Project (2016-2019 / FFEM-AFD):**
To strengthen family agriculture and support the development of Fair Trade in Western Africa

**Goal:** Poverty alleviation and the reinforcement of family agriculture through the support of fair trade initiatives in 5 value chains including cocoa

**Our mission in this project:** feasibility study for innovative plantations in terms of timber, firewood and agricultural products’ needs in Western Africa and the Congo Basin.
RESULTS

OUR TWO CASE STUDIES BROUGHT SOCIAL RESULTS WHICH PROVE THAT AGROFORESTRY SYSTEMS MEET STAKEHOLDERS’ INTERESTS

These two case studies present convincing and positive arguments in favour of shaded cacao cropping systems both in terms of forestry and agronomic benefits.

**Project:** In 2013, the FFEM funded a project called “Integration of the Central and West African tropical timber sector into the FLEGT and REDD+ mechanisms”.

**Results:**
- Wood production increased by 1.5 to 25 m³/ha/year (depending on the scenario)
- Significant increases in family income: 20 to 100% in a long term perspective
- Return on investment after 2-3 years
- The earnings derived from timber sales finance costly replantation operations.

**Project:** In 2016, the Équité program (FFEM-AFD) conducted a project aimed at supporting Fair Trade and agroecology in Western Africa.

**Results:**
- Agroecological and agroforestry practices have had the following results:
  - High survival rate of cacao and fruit trees: 95-99% vs 75% baseline
  - Return on investment after 2-3 years despite a first investment of 1.5 million CFA francs per plot
  - Yam production: 50% increase
  - Banana production: from 8 tons to 19 tons

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The Cacao - Timber Tree Association Model

**Prospects**
- Large-scale dissemination of knowledge of agroforestry systems to other Fair Trade certified cooperatives
- Enhancing the value of timber trees grown in agroforestry systems with the new ‘Trees outside forest’ PEFC standard
- Development of financial mechanisms
- The legal framework needs to be adapted

**Key Learnings**
- The agroforestry model depends on production goals
- A strong synergy between farmers, NGOs and donors is essential to successful initiatives
- Funding is key to start off the initial stages of a project as the inability to pay for initial costs may prevent excellent investments from being made.
- A virtuous cycle is then triggered: aid > certification > livelihoods improvement > savings > reinvestment > scaling up

**Who are we?**

The Cité du Développement Durable is a unique pole in Paris which gathers together more than 20 organisations working on sustainable development and transition issues. Together with international partners, it is contributing to the production and dissemination of knowledge and ideas focusing on sustainable development in order to share innovative solutions.

This brochure is based on an article written by the Agroforestry cluster of the Cité du Développment Durable.

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