



COCOA AGROFORESTERY SYSTEMS IN CONGO BASIN AND COTE D'IVOIRE

THE ROLE OF TIMBER TREES

1 The timber industry in Western Africa and Congo Basin

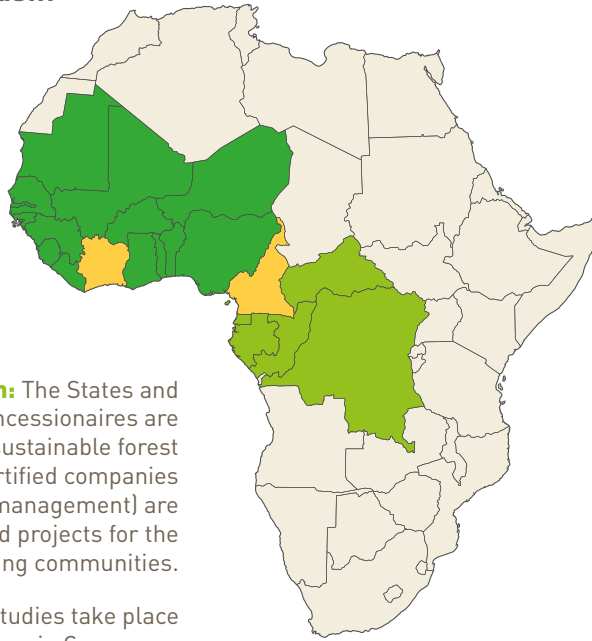
Western Africa:

A shortage of timber is expected. Some logging companies and producer cooperatives are experimenting with cacao-timber tree plantations

Our case studies take place in Côte d'Ivoire.

Congo Basin: The States and many concessionaires are committed to sustainable forest management. The certified companies (for sustainable forest management) are looking for livelihood projects for the neighbouring communities.

Our case studies take place in Cameroun.



2 The cocoa industry faces many challenges

DEFORESTATION

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 farming¹.

LIVELIHOOD

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 farmers².

SUSTAINABILITY

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 concessionaires, 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:

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

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

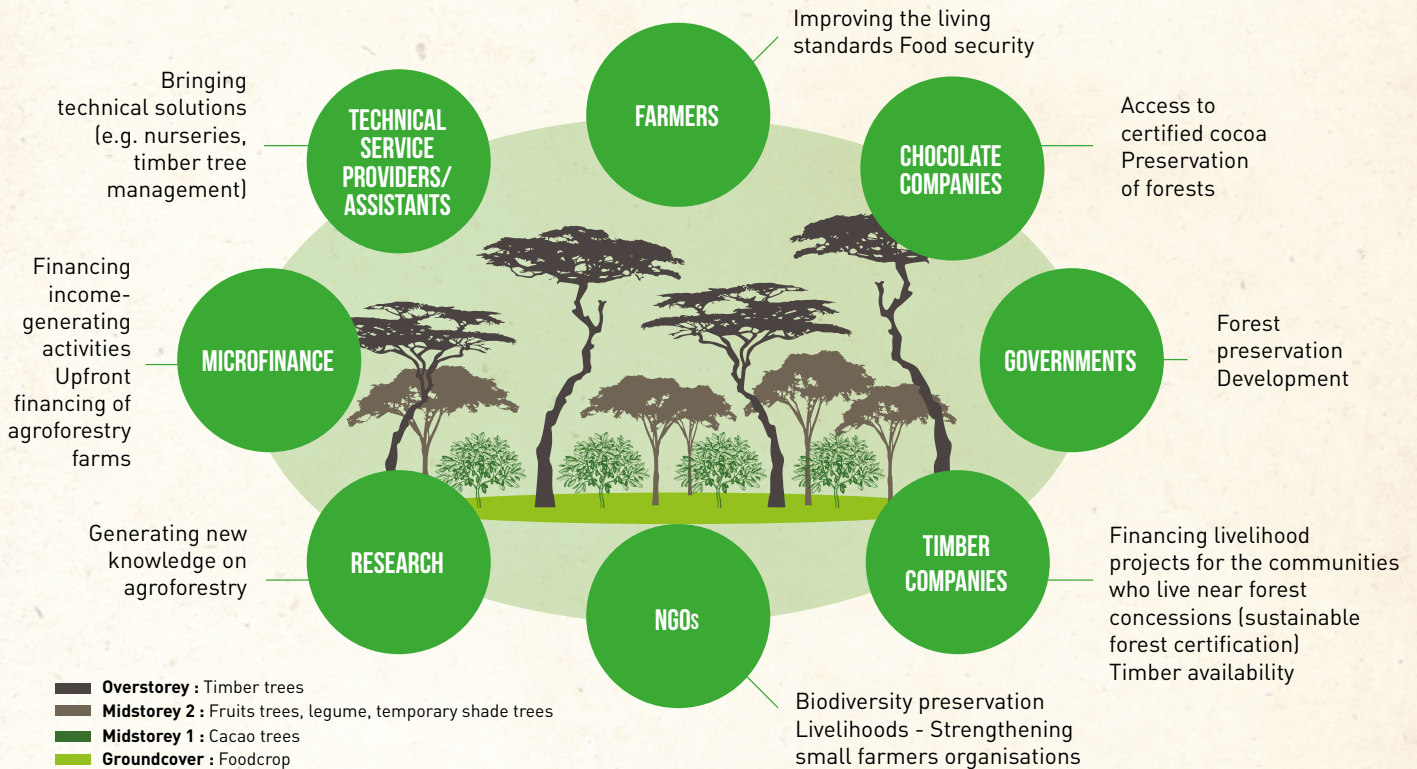
Our mission in this project: feasibility study for innovative plantations in terms of timber, firewood and agricultural products' needs in Western Africa and the Congo Basin.

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: to assess livelihood and production derived from agroforestry systems (fruit, timber, cocoa)

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.

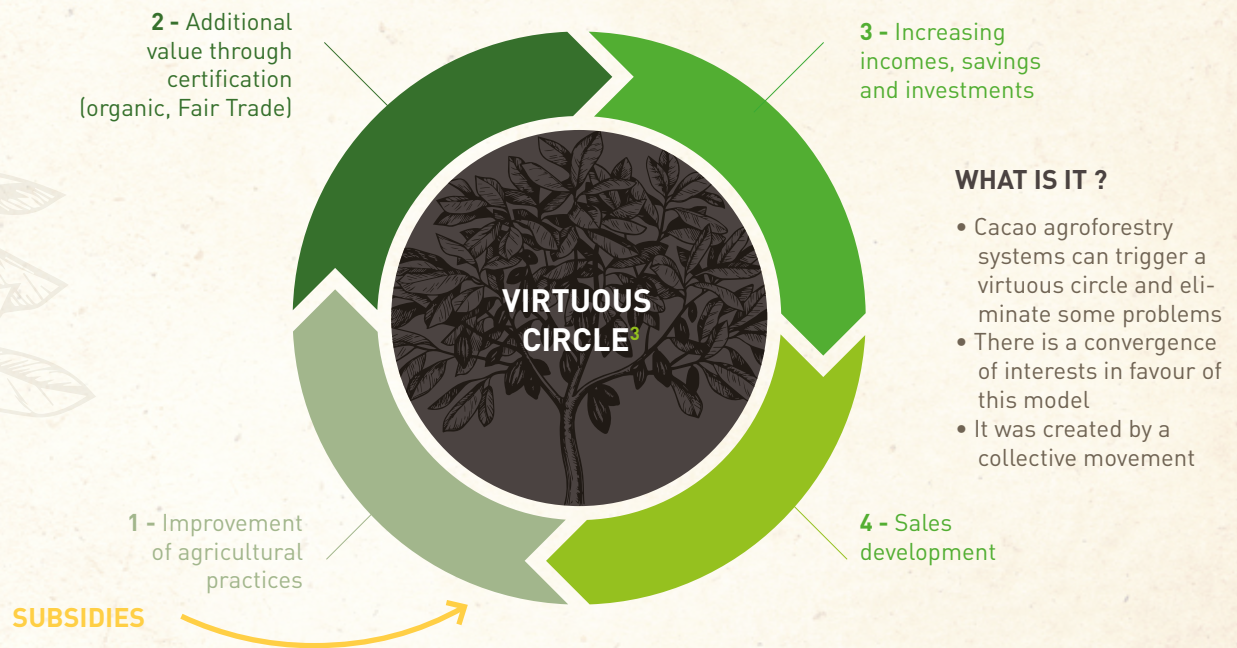


Project: In 2016, the Équité program (FFEM-AFD) conducted a project aimed at supporting Fair Trade and agroecology in Western Africa

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





WHAT IS IT ?

- Cacao agroforestry systems can trigger a virtuous circle and eliminate some problems
- There is a convergence of interests in favour of this model
- It was created by a collective movement

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

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

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 Développement Durable.

Article references: **Cacao agroforestry systems in the Congo Basin and Côte d'Ivoire, The role of timber trees.**

Fare Y.¹, Duhesme C.², Rivain S.³, Perthuisot N.³, Stoll J.⁴, Guittard B.⁵, Jobbé-Duval B.²

¹Kinomé | ²ATIBT | ³Oréade-Brèche | ⁴Commerce Equitable France | ⁵AVSF

1. lebasic.com/nouvelle-etude-la-face-cachee-du-chocolat/

2. Etude sur les coûts de production et le coût de la vie des producteurs de coopératives du programme Equité en Côte d'Ivoire

3. Rapport d'évaluation des impacts environnementaux des 19 projets d'OP Equité. Kinomé, TERO

To find out more, read the study: Feasibility study for cacao agroforestry projects under the shading of timber tree species (Congo Basin and Côte d'Ivoire), available on www.atibt.org



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