

Project title : MASSELEC 2 - Biomass deposits in Côte d'Ivoire, focus on the cashew nut and cotton sectors

Project place	Project cost	Role in the project	Technical and financial sponsors	Dates
Côte d'Ivoire	25 940 €	Expertise	Confidential	February 2025 - June 2025

Project's goals and results

Main goals

This study follows on from a more general study, MASSELEC, which covered a wider range of sectors such as coconut and palm oil (see link at the bottom of the page for more information). With the aim to establishing biomass power plants, Nitidæ helped to identify, map and quantify biomass deposits within the Ivorian cotton and cashew nut sectors by collecting information available in the bibliography and international trade data, as well as from institutions, professional organisations, technical and financial partners and other stakeholders involved in national production and processing.

The objective was also to determine which agricultural and industrial residues have good energy potential and are available without competing with human food or soil fertility, as well as to assess the impacts of current sector trends, national strategies and market variations on the availability of these resources.

Specific objectives

SO1. Identify potentially recoverable agricultural and industrial residues for biomass resulting from the cashew and cotton value chains, their conversion ratios (from literature and surveys with industry stakeholders), and their current (non-)use

SO2. Map the available biomass deposits (industrial plantations, smallholder plantations, factories)

SO3. Analyse the potential of current and future deposits, considering current trends in the sector, the stakeholders to approach and their strength, national strategies and international market prospects

SO4. Issue operational recommendations to allow the partner to refine the scope, both geographically and in terms of biomass sources, for their future feasibility studies

Beneficiaries

Results

R1. The various residues from the cotton and cashew nut industries are identified, along with their current uses. The bibliography and interviews with inter-professional organisations provide the conversion ratios for quantifying these resources

R2. A map of the supply basin is produced

R3. The theoretical potential of each biomass resource is calculated in terms of volume

R4. Scenarios for the evolution of resources by 2050 are produced based on current trends in the sector, national strategies and global market data

R5. For each deposit, opportunities and risks/threats are analysed and an action plan for further analysis is proposed

Activities

A1. Analysis of bibliographic, statistical and cartographic data on the above-mentioned sectors in Côte d'Ivoire, mainly remotely

A2. Field mission to meet stakeholders and collect mainly qualitative data on the availability, current uses, accessibility and price of biomass deposits