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"Global food security and food safety:
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Enhancing Nutritious Food Availability through Promotion of Native Edible Tree/ Shrub Species in Sub-Saharan Africa

Amadou Malé Kouyate[1], Achille Assogbadjo[2], Amadé Ouédraogo[3], Tougiani Abasse[4], Anne Mette Lykke[5], Patrick Van Damme[6]

[1] *Institute of Rural Economy, Dept. of Forest Resources, Mali*
[2] *University of Abomey-Calavi (FSA/UAC), Lab. of Applied Ecology (LEA), Benin*
[3] *Université Ouaga I Pr Joseph Ki-Zerbo, Lab. Bio. et Ecol. Végétales, Burkina Faso*
[4] *National Institute of Agronomic Research, Regional Centre of Agronomic Research of Maradi, Niger*
[5] *Aarhus University, Dept. of Bioscience, Denmark*
[6] *Ghent University, Dept. of Plant Production - Lab. for Tropical Agronomy, Belgium*

Abstract

The project "Enhancing nutritious food availability through promotion of native edible tree and shrub species in sub-Saharan Africa (TREEFOOD)" is implemented in Benin, Burkina Faso, Mali and Niger. In West Africa, malnutrition affects more than 18 million children and is considered as a serious constraint to socio-economic development. Despite a high potential for food production, the situation of malnutrition could increase with regard to the high population growth in sub-Saharan Africa. Non-timber forest products (NTFPs) from native tree and shrub species are source of nutrient and food diversification. TREEFOOD aims to contribute to increase food security and fight against malnutrition through sustainable management and improved use of selected native edible tree/shrub species. The project focuses on selected native NTFPs in order to: 1) assess traditional knowledge and practices on them; 2) analyse their biochemical compounds and nutritional value; 3) analyse and develop value chains and improved marketing and processing of products; 4) develop locally adapted propagation methods; and 5) strengthen institutional and innovation capacities of local communities. Field work is conducted in two different agro-ecological zones per country. The project works with farmer-led innovation platforms for improving collection, production, processing and marketing of products from *Adansonia digitata*, *Balanites aegyptiaca, Borassus aethiopum*, *Irvingia gabonensis*, *Saba senegalensis, Ziziphus mauritiana*. Preliminary results showed a high number of edible trees and shrubs used as food and to reduce malnutrition which varied according to the study villages in the four countries. Up to now, we have documented farmers' perception of food role, consumption forms, food categories of edible organs, and economic and social use, constraints of the native edible tree/shrub species. Adult Trees and regeneration average density per hectare and species richness in forests and fields are variable within and between agro-ecological zones. The next step will focus on the biochemical analysis and characterisation of the value chain of the main products derived from the target species.

Keywords: Agro-biodiversity, food security, innovation platform, native edible tree/shrub, non-timber forest products, sub-Saharan Africa

Contact Address: Amadou Malé Kouyate, Institute of Rural Economy, Dept. of Forest Resources, Quartier résidentiel, PO Box: 16 Sikasso, Mali, e-mail: kouyate01@hotmail.com