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"Competing pathways for equitable food systems transformation: Trade-offs and synergies"

Diversity and diversification in cocoa agroforestry systems and household food security: Case study of central and southeastern Côte d'Ivoire

Constant Yves Adou Yao[1], Venance-Pâques Gniayou Kouadio[1], Affia Sonmia Francia Kossonou[2], Bonna Antoinette Tokou[3], N'Gouan Emmanuel Joël Abrou[1], Bruno Kouassi Kpangui[2]

[1] *University Félix Houphouët-Boigny, Côte d'Ivoire*

[2] *University Jean Lorougnon Guédé, Agroforestry, Côte d'Ivoire*

[3] *Leibniz-Centre for Agric. Landscape Res. (ZALF), Sustainable Land Use in Developing Countries (SusLAND), Germany*

Abstract

Côte d'Ivoire is a country with a strong agricultural vocation. The world market is increasingly demanding beans from sustainable production systems, encouraging cultivation methods that are better adapted to climate change while contributing to the food security of local families. For resilient cocoa production, some farmers in Côte d'Ivoire have adopted agroforestry systems for several generations. To better appreciate the viability of these systems, this study proposed to analyse their diversification and diversity and their effects on the lives of households in two contrasting production zones of Côte d'Ivoire, and on their food security. The research implemented ethnobotanical and socioeconomic survey methods with 152 producers and 268 women involved in the production of products from cocoa-based agrosystems. It carried out botanical inventories and direct observations in 100 cocoa plantations. The data analysis showed that 30 % of women in the Center own a cocoa farm with a total of 79 companion plant species against 105 associated species associated in men's plantations. Among these, 28 species that produce fruits or seeds that are consumed directly by households or marketed and 38 species whose barks, leaves and roots are used in traditional medicine. In the Southeast, 117 companion species were inventoried with 48 species used (41 % species inventoried). They are used in several purposes. In addition, the study shows that in the Center, 12 % of households surveyed are food insecure. Less than 25 % of the populations assessed were heavily involved in survival, stress and crisis strategies at the time of the study. This work shows that the diversity of income sources increases with the complexity of the systems and contributes to the well-being of producers, hence the need to promote agroforestry in the current context of climate change and food security of vulnerable households.

Keywords: Agroforestry systems, Côte d'Ivoire, diversification, food security, uses, women

Contact Address: Constant Yves Adou Yao, University Félix Houphouët-Boigny, Switzer Centre of Scientific Research (CSRS), UFR Biosciences, Abidjan, Côte d'Ivoire, e-mail: adouyaocy@gmail.com