Kossi.hounkpati
@zalf.de

Integration tree into cropping systems : Insights for enhancing agroforestry and forest landscape restoration in central Togo

Edoh Ekoue, Kossi Hounkpati, Hamza Moluh Njoya, Kossi Adjonou, Akouété Galé Ekoue, Adjowa Lidia Dekede, Kouami Kokou, Stefan Sieber, Katharina Löhr

Introduction

- Forest Landscape Restoration (FLR) rises as a key strategy facing human pressures increasing on global forest ecosystems.
- Integrating trees into cropping systems represents an opportunity for FLR
- However, factors determining the uptake are scarcely explored in FLR.
- Understanding of these adoption factors is crucial to ensure FLR success

Objective:

The objective of the study is to :

- Determine farmers' perceptions of tree integration into cropping systems
- Identify the drivers of adoption of this FLR practice.

Picture 1. Cashew trees integration into crops

Picture 2. Gmelina trees integration into crops

Conclusion

- ❖ The study highlights the need to tailor FLR interventions to farmers' socio-economic realities.
- ❖ It raising awareness to improve farmers' access to resources
- ❖ Additionally, it provides information to reduce gender disparities in FLR involvement

- ❖ Strengthened FLR programs can enhance sustainable agricultural productivity and livelihoods
- ❖ Empowering youth and women will foster more inclusive and resilient rural communities
- ❖ Improved land tenure security could lead to greater adoption of tree-based systems and long-term landscape restoration

Results and Discussion

- Socioeconomic characteristics

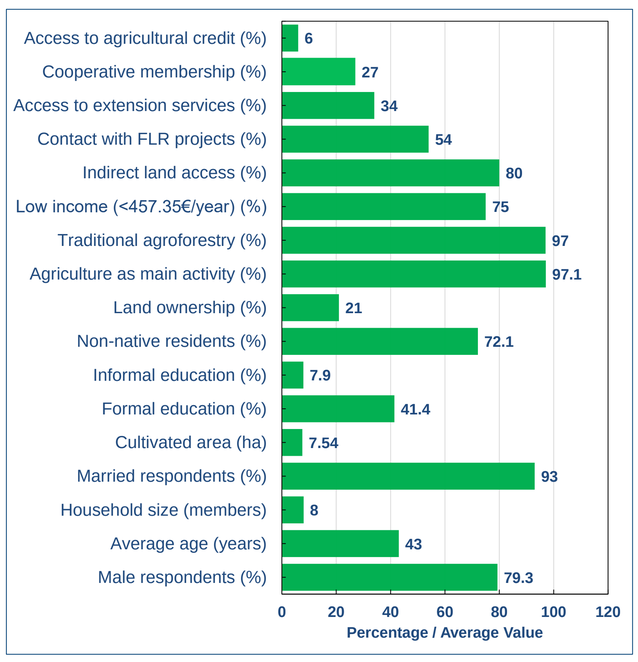

Figure 2. Socio-economic profile of the farmers

- Perceptions on the tree integration into cropping systems

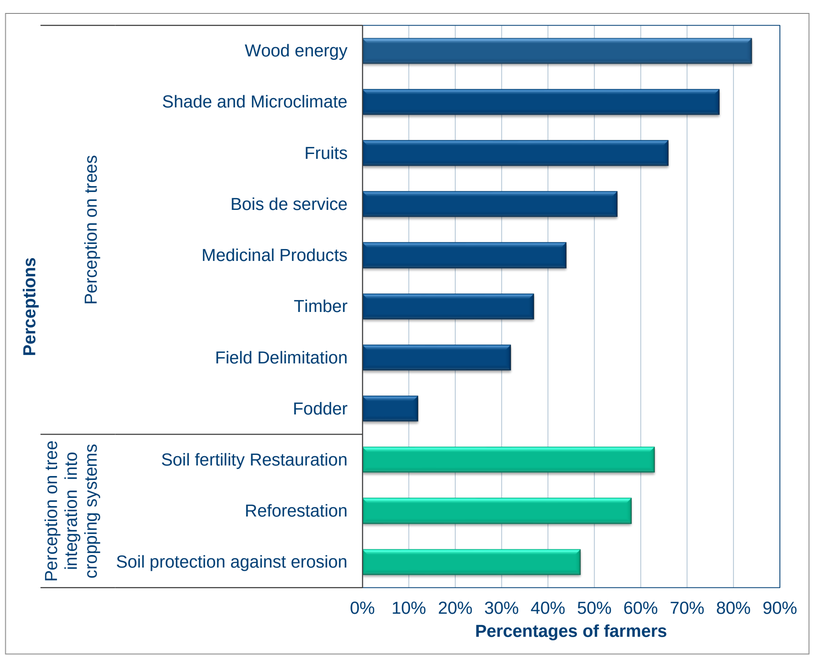

Figure 3. Farmers' perceptions of trees and tree integration into cropping systems

- Result of the logistic regression

Variables	Coefficients	Standard errors	P-Value
Age	-0.034**	0.015	0.025
Household size	0.047	0.044	0.280
Cultivated area	-0.007	0.018	0.699
Gender	-2.501**	1.130	0.027
Marital status	0.144	1.440	0.920
Formal education	0.654***	0.176	0.000
Informal education	-0.586	0.888	0.509
Residency status	-1.373***	0.477	0.004
Agriculture main activity	-0.965	1.313	0.462
Use of traditional agroforestry practices	0.123	0.166	0.457
Household income	0.070	0.446	0.874
Land access mode	-0.511***	0.172	0.003
Tenure security over the cultivated land	0.117	0.254	0.645
Contact with project	1.573*	0.916	0.086
Membership in a cooperative	0.017	0.033	0.609
Perceived benefits of integrating trees into cropping systems	-0.101	0.065	0.123
Perceived drawbacks of integrating trees into cropping systems	0.003	0.003	0.234
Access to extension services	0.260	0.332	0.432
Access to agricultural credit	0.227	0.230	0.322

Significant Codes: * = p < .05, ** = p < .01, *** = p < .001

Material and Methods

- Study area is Tchamba Prefecture in the Central Region of Togo (Figure 1)
- Primary data collected from 140 smallholder households
- Theoretical framework, economic constraints model
- Descriptive statistics
- Econometrics model is logit regression model

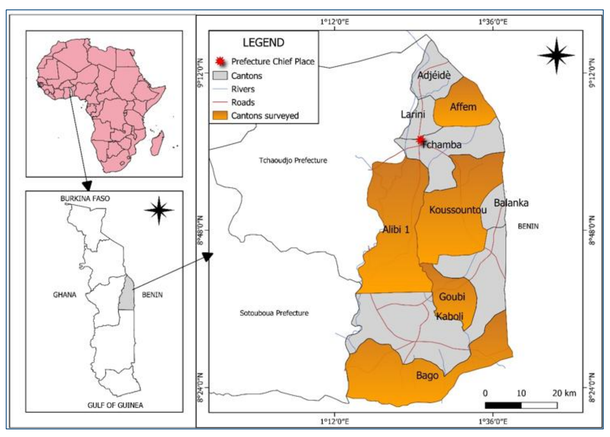

Figure 1. Location of the study area

Picture 3. Carrying out field data collection

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