Leibniz Centre for **Agricultural Landscape Research** (ZALF)

Land Use & Governance

Smallholder Farmers' Contribution Toward Forest Landscape Restoration: Evidence From Tchamba District, Togo

Hamza Moluh Njoya[1,2*], Kossi HounKpati [1,3], Adjonou Kossi[3], Kouami Kokou[3], Stefan Sieber[1,2] Katharina Löhr[1,2]

[1]Leibniz Centre for Agricultural Landscape Research (ZALF), 15374 Müncheberg, Germany

[2]Humboldt Universität zu Berlin, 10099 Berlin, Germany

[3]University of Lomé , Forestry Research Laboratory, Climate Change Research Centre (CRCC)

Tropentag 2024 (September 11 – 13)

Introduction

- Natural resources face increasing pressure due to population growth, urbanization, and unsustainable consumption.
- Globally, about 30% of potential forests have been destroyed, and 20% are degraded.
- Sub-Saharan African countries, including Togo, have committed to restoring over 100 million hectares of degraded land by 2030.
- Togo has pledged to restore 1.4 million hectares of forest landscape, prioritizing sustainable land management practices
- However, the contribution of smallholder Togolese farmers to forest landscape restoration (FLR) efforts is not well understood.

Objective

- This study evaluates the restoration efforts of smallholder rural farmers in central Togo at both the individual and communal levels.

Methodology

- Tchamba prefecture, Central region of Togo.
- Data Collection: 313 household surveys and 8 focus group discussions in Tchamba Prefecture, 2023.
- Analytical Tools: Descriptive Statistics, Multivariate Tobit regression and Poisson models were used to analyze the data.

Results

Extent of Farmland Restoration Across Space

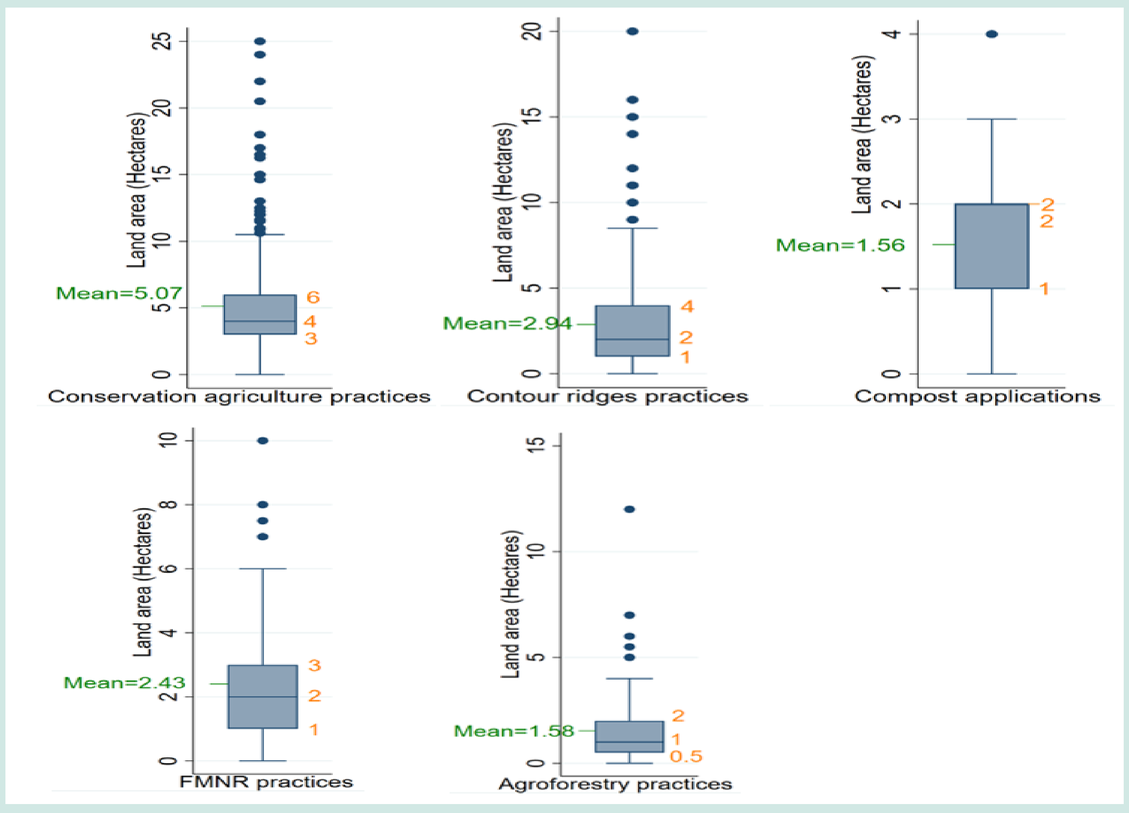

Figure 1: Distribution of Land-Plot Restoration Extent at the Farm-Household Level in Tchamba Prefecture

Table 1:Correlations between the different restoration practices used on plots in Tchamba prefecture

	Conservation Agriculture	Contour ridges farming	Compost application	FMNR	Agroforestry
Conservation Agriculture	1	0.3827***	0.1251**	0.1282**	0.0435***
Ridges farming	0.3827***	1	0.0947*	0.1078***	-0.0131
Compost application	0.1251**	0.0947*	1	0.1259	0.0660
FMNR	0.1282**	0.1078*	0.1259	1	0.1424**
Agroforestry	0.0435***	-0.0131	0.0660	0.1424**	1

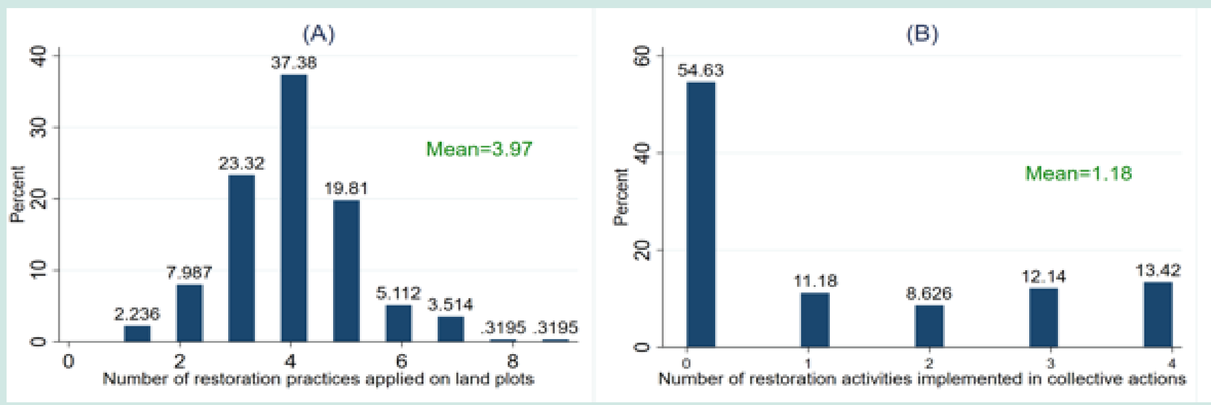

Figure 2: Number of restoration practices on individual plots (A) and communal activities (B).

- On average, households restored 2.11 hectares, representing 36.19% of their total landholdings.
- On average, farmers applied FMNR and agroforestry practices on at least one hectare of land.
- while Conservation agriculture and ridges farming were implemented on over 2 hectares, covering 5.07 ± 3.66 hectares and 2.94 ± 2.92 hectares, respectively, in the study area.
- Farmers typically implement 2–4 restoration practices in various combinations with an average number of restoration practices around 3-4 on individual land plots.

Factors influencing restoration efforts

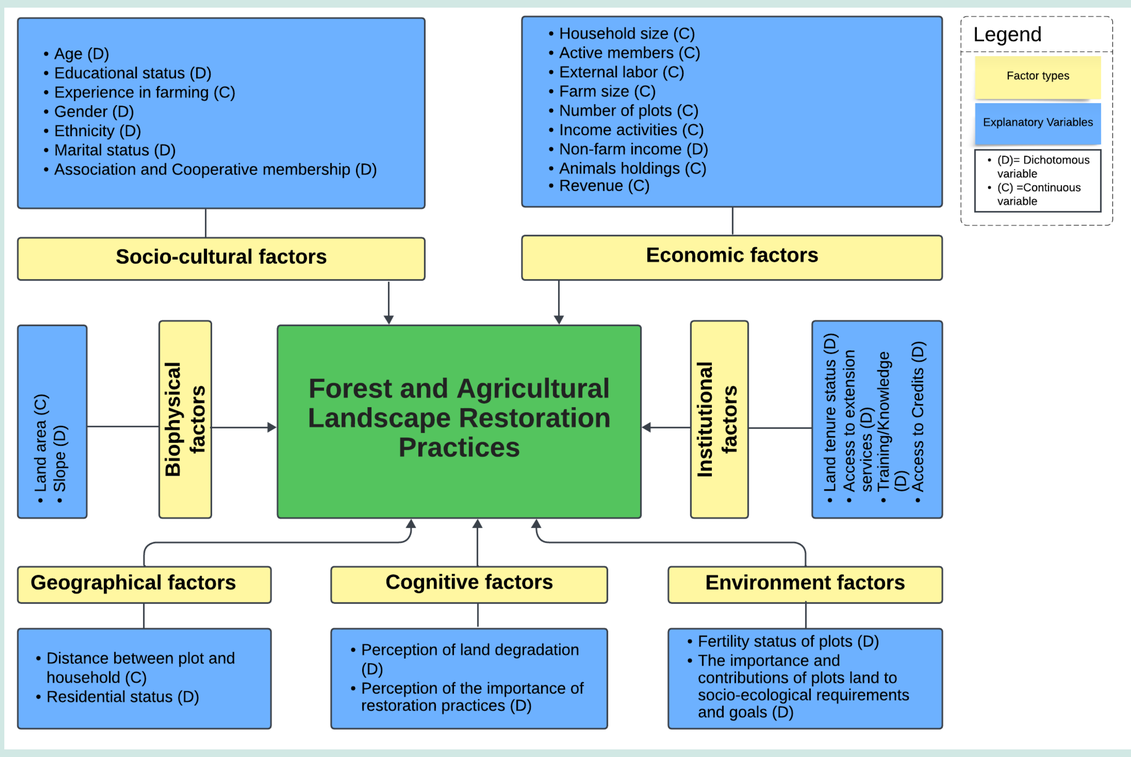

Figure 3: Conceptual framework (own illustration)

Policy implication

- Restoration policies should prioritize land ownership security, and incorporate gender-responsive approaches.
- Insights from this study can guide future restoration initiatives, ensuring community participation and effective management

Conclusion

- Smallholder farmers are essential contributors to FLR in Togo. Their restoration practices and the factors influencing these efforts provide valuable lessons for achieving sustainable land management and restoration goals.

Contact: Hamza Moluh Njoya, email: Hamza.Moluh-Njoya@zalf.de

Leibniz Centre for Agricultural Landscape Research (ZALF) | Eberswalder Straße 84 | 15374 Müncheberg | Germany
Project coordination: Dr. Katharina Löhr, katharina.loehr@zalf.de, https://www.zalf.de

Date: 12.09.2024

Supported by the Federal Ministry for Economic Cooperation and Development