

# Identifying positive deviance cases to improve forest landscape restoration and well-being of smallholder farmers in Togo (West Africa)

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## Introduction

- Forest Landscape Restoration (FLR) is recognised to restore ecological integrity and improve human well-being.
- Recommended practices do not always meet basic needs or achieve expected results on a larger scale.
- Some smallholders perform better than others in similar context-based conditions.
- Identifying underlying practices of outperformers holds potential to develop better context specific solutions for more long term success.

## Objective

- The objective of the study is to identify outperformers and their relating practices.

## Methodology

- **Study area:** Tchamba Prefecture in the Central Region of Togo (Figure 1)
- **Using the Positive deviance (PD) approach :**
  - Quantitative data: Survey of 494 smallholder farmers.
  - Performance indicators: human well-being dimensions (Figure 2)
  - 12 control variables e.g. access to extension services, access to micro-credits, fertiliser use, the intervention of farm technician, awareness of FLR practices in the area..
  - Quantile regression: calculating residuals.
  - Pareto optimal: frontier analysis.
  - Qualitative data: in-depth interview 17 PD identified.

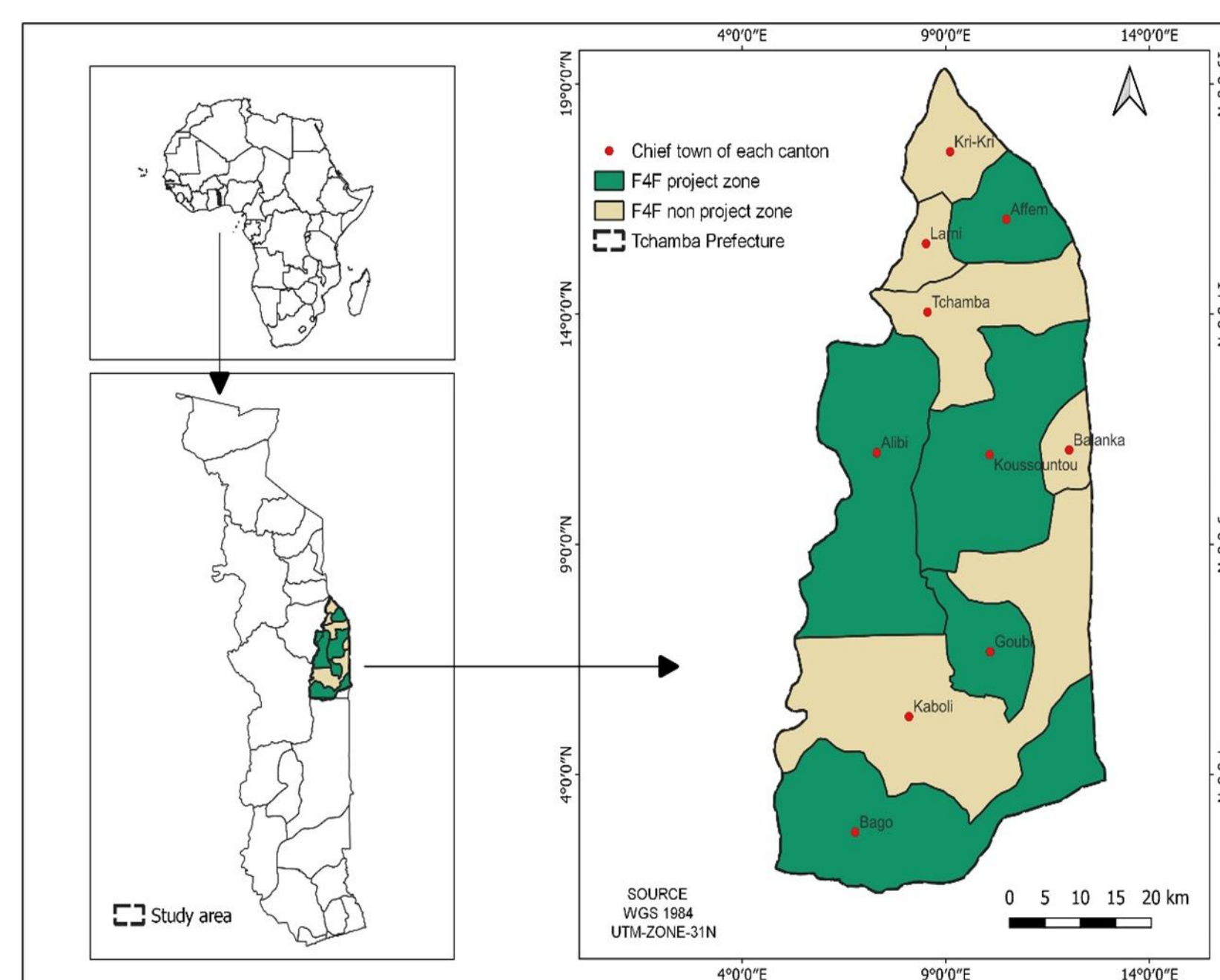


Figure 1 : Case study

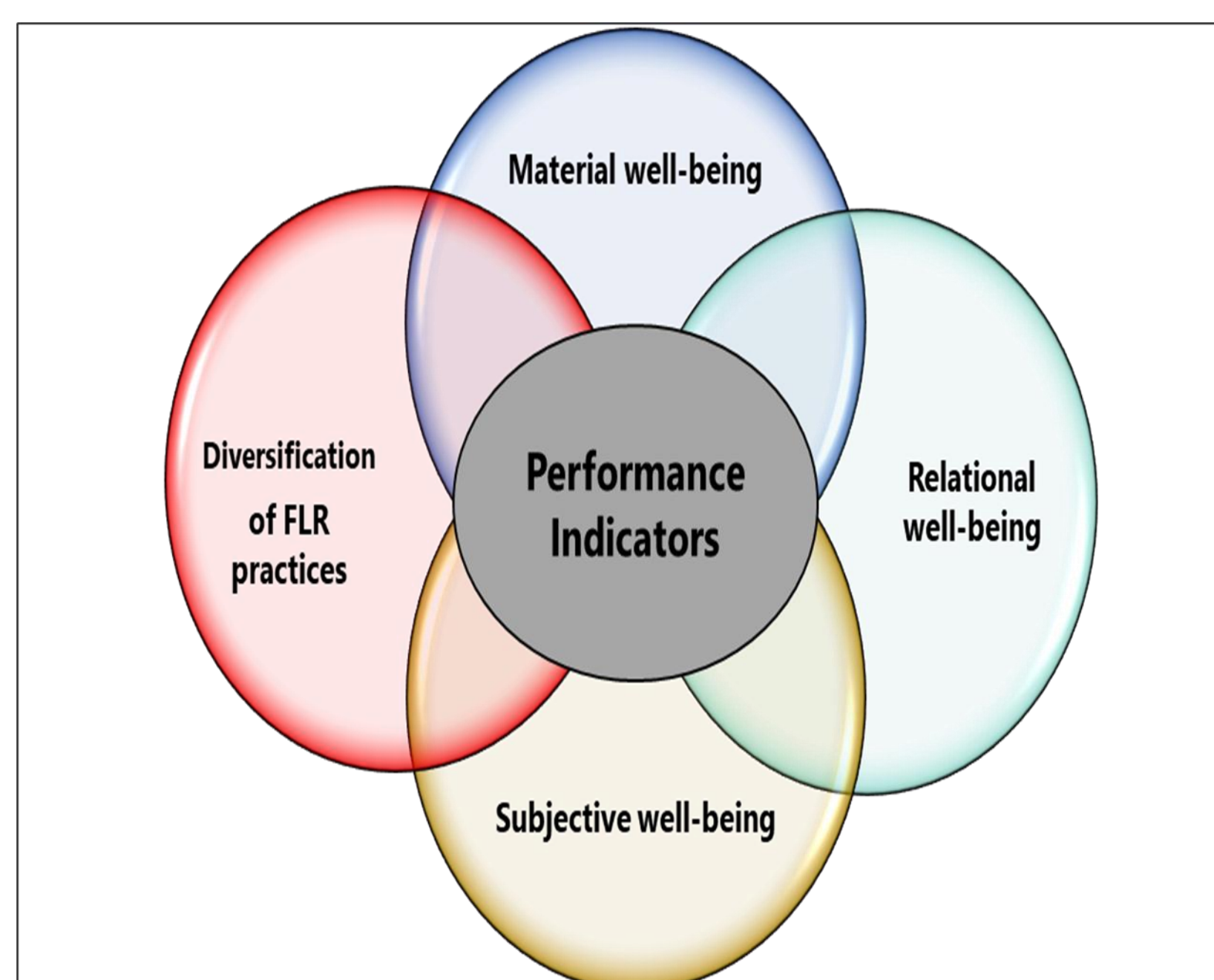


Figure 2 : Performance indicators

## Results

**Quantile regression and Pareto optimal:** 34 PD households were identified out of 494 surveyed households.

### PD practices identified:

- Diversification of FLR practices: agroforestry, natural regeneration, natural regeneration under the seedbed (Figure 3), regular annual cashew tree cutting to optimise production.
- Optimisation of agricultural space by combining maize (high crop), beans (nitrogen enrichment) and manioc ( subsoil crop).
- Use of multifunctional granary to store cereals without chemicals, while at the same time providing shelter for animals.
- Conservation by combining Neem leaves with maize for long-term conservation without chemicals.
- Input management using a combination of organic manure and fertiliser in the field.
- Soil conservation through fertiliser species planting, soft fire practice and surface/direct spreading of organic compost.
- Diversification of income and improvement of farm income.



Figure 3: Nursery ≠ practice of natural regeneration under seedbed (©Kossi Hounkpati)

## Outlook

- The PD approach provides a real opportunity to highlight locally viable and sustainable solutions.
- This is an asset-based, problem-solving, and community-driven approach that enables to discover successful behaviors and strategies.
- To promote these practices, often non-conventional with exceptional results it need to be further analyze for up and outscaling potential.