Diversity, resilience and market orientation: A private-sector driven approach to cocoa agroforestry in Ghana

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Background

Commitment to cocoa agroforestry

As of 2025, a Swiss-based chocolate manufacturer wants to source only cocoa originating from agroforestry systems.

Lindt & Sprüngli's requirement for cocoa agroforestry systems

Minimum 30% shade tree cover, with a minimum of 25 permanent shade trees per hectare and of 5 different shade tree species

Collaboration in Ghana between Lindt & Sprüngli and Ecom

Methodology

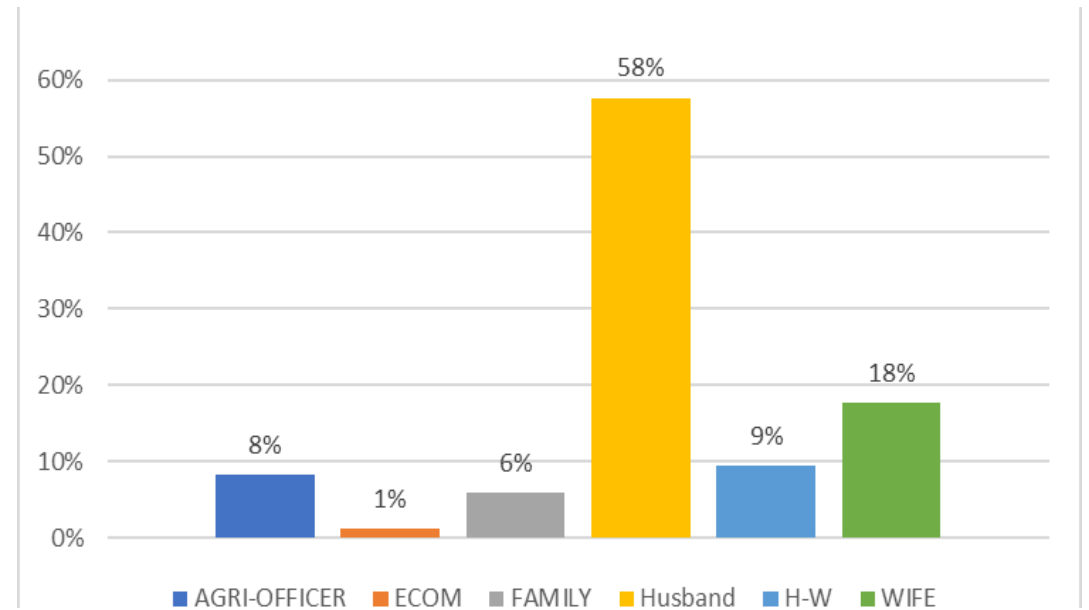**Review of cocoa agroforestry program** based on:

1) Review of secondary information

2) Household survey in Enchi (n=129)

3) Value chain analysis (timber, cashew, medicinal plants)

4) Capacity building of Ecom technicians (n=25)

5) Development of action plan

Currently promoted tree species

- Timber species (*Terminalia superba, Terminalia ivorensis, Khaya ivorensis, Milicia excelsa*) and fruit trees (avocado) were the most planted

- Men farmers mainly decide to plant trees on farm, followed by women farmers and joint decision making

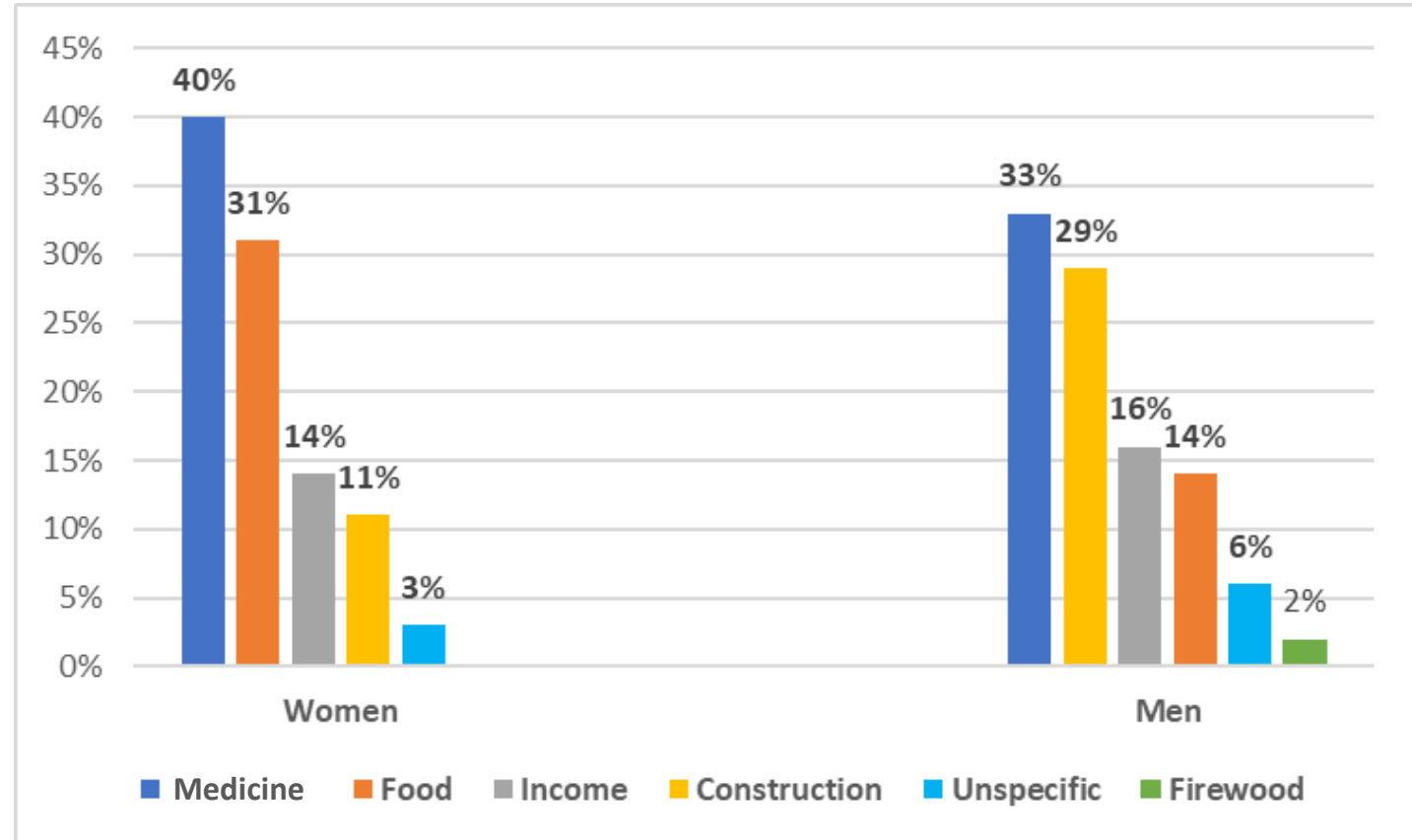# Point of departure: gender-differentiated cocoa farming

- Important differences between cocoa farms managed by women and men

- Women-managed cocoa farms with scattered distribution of cocoa, timber trees and abundant food crops

- Men-managed cocoa farms mostly monospecific

Gender-differentiated preferences for trees

- Medicinal tree species ranked top by women and men as first choice

- Trees producing food ranked second by women, while men prefer trees producing wood for construction as second choice

Expected benefits of trees by gender

Action plan for agroforestry systems

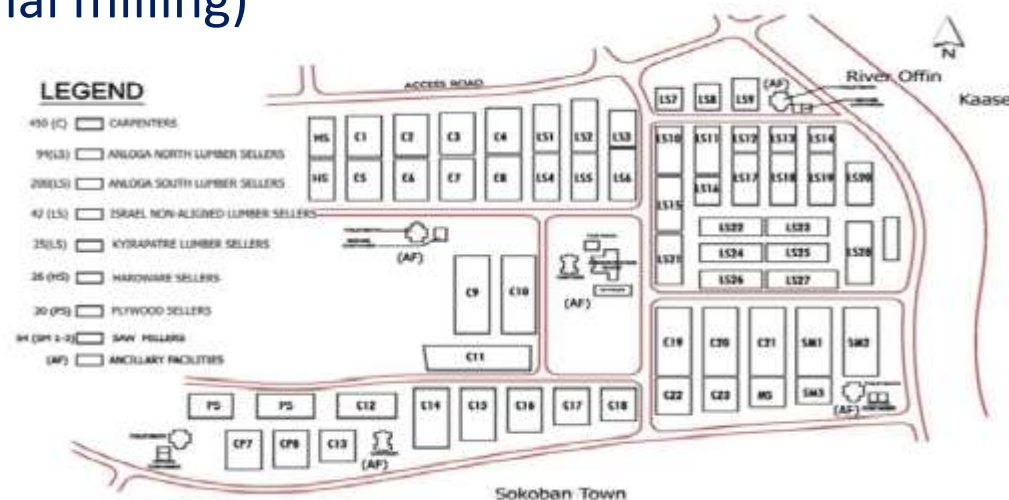**We propose AF systems considering:**

- men & women farmer preferences
- 3 strata for effective shade and diversified income
- CSSV status of given tree species

Key features of AF systems	Current AF systems managed by women	Current AF systems managed by men	Proposed AF systems
Number of strata	3 – understory (food crops), cocoa, AF trees	2 – cocoa, AF trees	3 – cocoa (<5m), canopy (10-20 m) and emergent (20-35 m)
Number of tree species	Less than 5	5 or less	At least 7
Diversity in terms of uses	Food crops included	Medicinal trees included	Food and medicinal trees included
Shade cover	Less than 30%	30% or less	Between 30% and 50%
Tree species that host CSSV	Not checked	Not checked	Checked

Action plan for wood product value chain

- Support farmers' organization into SMEs

- Strengthen linkages with wood processors and service providers (cluster development)

- Policy dialogue for improved tree tenure (and costs of permits)

- Build capacity for seedling production (nurseries)

- Build capacity for tree management (planting, nurturing, pruning, directional felling, hauling, on-site processing)

- Build capacity for local processing (artisanal milling)

Sokoban Wood Processing Cluster in Kumasi

Ackah et al. (2018), adopted from ASSCU Plan (2016)

Action plan for cashew and medicinal plant value chains

- Support farmers' organization into SMEs

- Strengthen linkages with processors and service providers for cashew (MOFA, CRIG, Ghana Cooperative Cashew Farmers and Marketing Association, Africa Cashew Alliance) and medicinal plants (Federation of Traditional Medicine Practitioners Associations, Center for Scientific Research into Plant Medicine, FDA)

- Sourcing of quality seeds for production of quality seedlings (nurseries)

- Build capacity for tree management (planting, nurturing, pruning, harvesting, post-harvest handling)

- Build capacity for local processing of cashew (artisanal shelling) and medicinal plants (e.g., essential oils)

Integrating crop, biological, social, and economic diversity: Cocoa agroforestry and value chain development at household, community and landscape level

Global value chains
(e.g., cocoa, coffee, nuts, honey)

Regional value chains
(e.g., timber, fruits, livestock)

Local value chains
(e.g., fuelwood, staples, livestock)

- Capitalizing on biological and crop genetic diversity
- ... and social diversity (gender, age, culture)
- Taking advantage of market opportunities
- Realizing synergies across value chains and sectors
- Improving resilience and environmental and social footprints

Image credit: Landscapes for People, Food and Nature

Thank you

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