

# Scientification of community forestry in Tanzania: Are communities complying with prescriptions and why?

BY

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PhD Project: Participation of the local communities in the Community-Based Forest Management in Tanzania



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# Talk abstract

In Tanzania, local communities cannot attain management rights over the forest on their village land unless they have Forest Management Plan (FMP) approved by the forest bureaucracy. The plan entails forest use and management prescriptions that they should comply with during the actual forest management practices. Based on a case study of Sautimoja Village, Tunduru District, Southern Tanzania, the study highlighted compliance behavior of local communities on FMP prescriptions. The village is owning and managing 21,966 Ha of the natural forest. The result showed that local communities do comply with FMP prescription on forest protection because they don't have USD 2,089 needed to undertake forest patrols and USD 7, 482 to make fire line and carrying out controlled burning. They also do not comply with standard harvesting procedures such as minimum tree size for harvesting because trees prescribed were not found in the forest, therefore, considered the prescription not relevant. Instead, tree harvesting largely informed by experienced-based knowledge. Furthermore, they considered prescription that requires them to have written permission to access forest not relevant, and therefore not enforceable. The study question on whether in resource-constrained local communities managing uneven-aged forest ecosystem we still need complex and technical prescriptions.

# Introduction and background

# Introduction

- In 1980s many countries implemented institutional reforms to decentralize forest management.
- The objective was to enable forest adjacent communities to have user rights over forest through Community Forestry (CF).



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- A common feature of decentralization laws is a requirement of Forest Management Plan (FMP) for communities to attain user rights.
- The requirement has driven the framing of CF on principles of the scientific forestry.

# Introduction....

- FMP entails prescriptions that should be complied with in actual forest management.
- Therefore, realization of CF promises depends on compliance with FMP prescriptions.



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- However, our knowledge on local communities' compliance and the reasons for compliance/non-compliance is limited.
- Previous studies in CF have focused on very few elements of the FMP prescriptions.

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# Aim of the study

1. To examine compliance behavior of Village Natural Resource Committee (VNRC) and ordinary villagers on protection and sustainable utilization of the village forest.



2. To explain reasons for perceived low compliance behavior and its implications on the sustainability of the village forest.

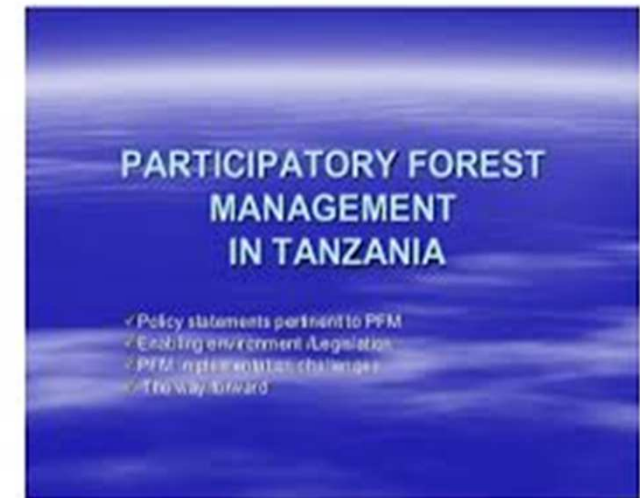


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# Background

- CF in Tanzania is popular known as Participatory Forest Management (PFM).
- The PFM entails Joint Forest Management (JFM) and Community Based-Forest Management (CBFM).



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This study focuses in CBFM in Tunduru District, Ruvuma Region, Southern Tanzania.

# FMP prescriptions focused

- Forest protection
  - Forest and bird patrols, and
  - Forest fire control



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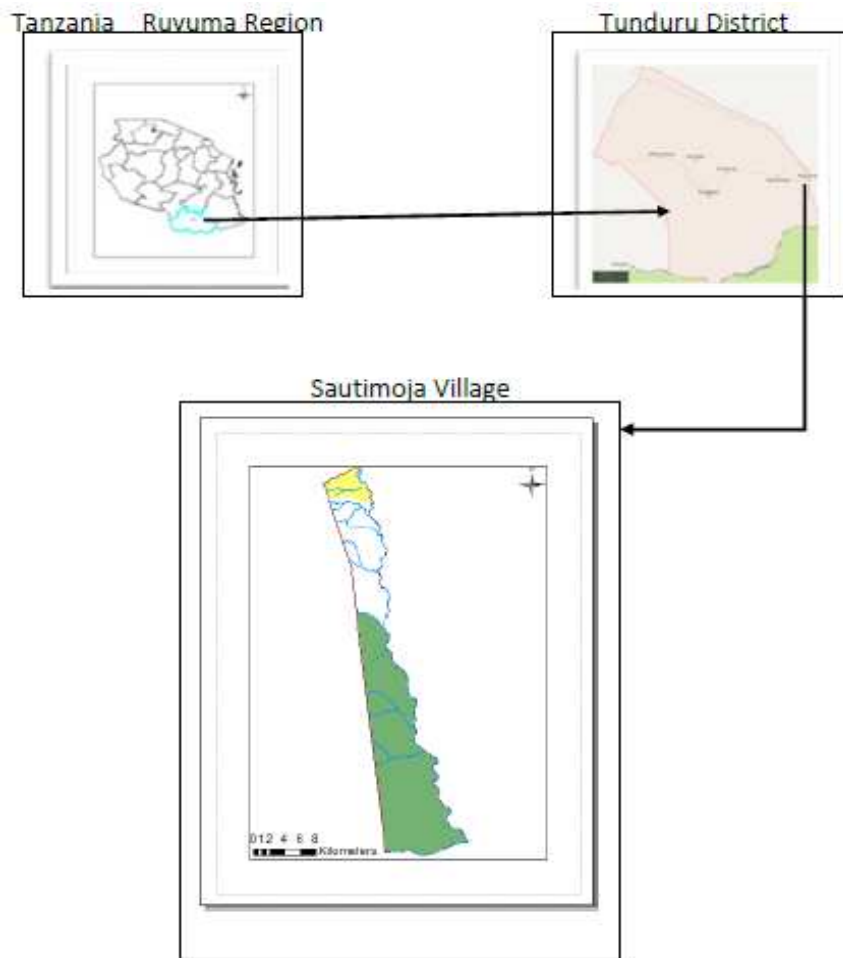
- Sustainable utilization of the village forest
  - Standard procedures of timber production; and
  - Need for a written permit from VNRC for collection or harvesting of forest products.

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# Study area and methods

# Study Area: Sautimoja, Tunduru District



- The village has 577 people and 182 households.
- The village is covering an area of 28,182.6 Ha.
- The CBFM process started in May, 2014 and completed in June 2015.
- Forest size is 21966 Ha, divided into two zones: Production (19,769 Ha), and protection (2,197 Ha).
- The first timber harvesting was in October 2015 and the second in July 2016.

# Methods

1. Ethnographic approach - spent six months, October 2015 - March 2016.

➤ Participated in timber harvesting, patrols, meetings, and training.

2. Interviews - group and individual interviews, May – June 2017.

➤ Group interviews – VNRC, and ordinary villagers.

3. Review of records - FMP, financial reports, and record books accessed from the village government office.



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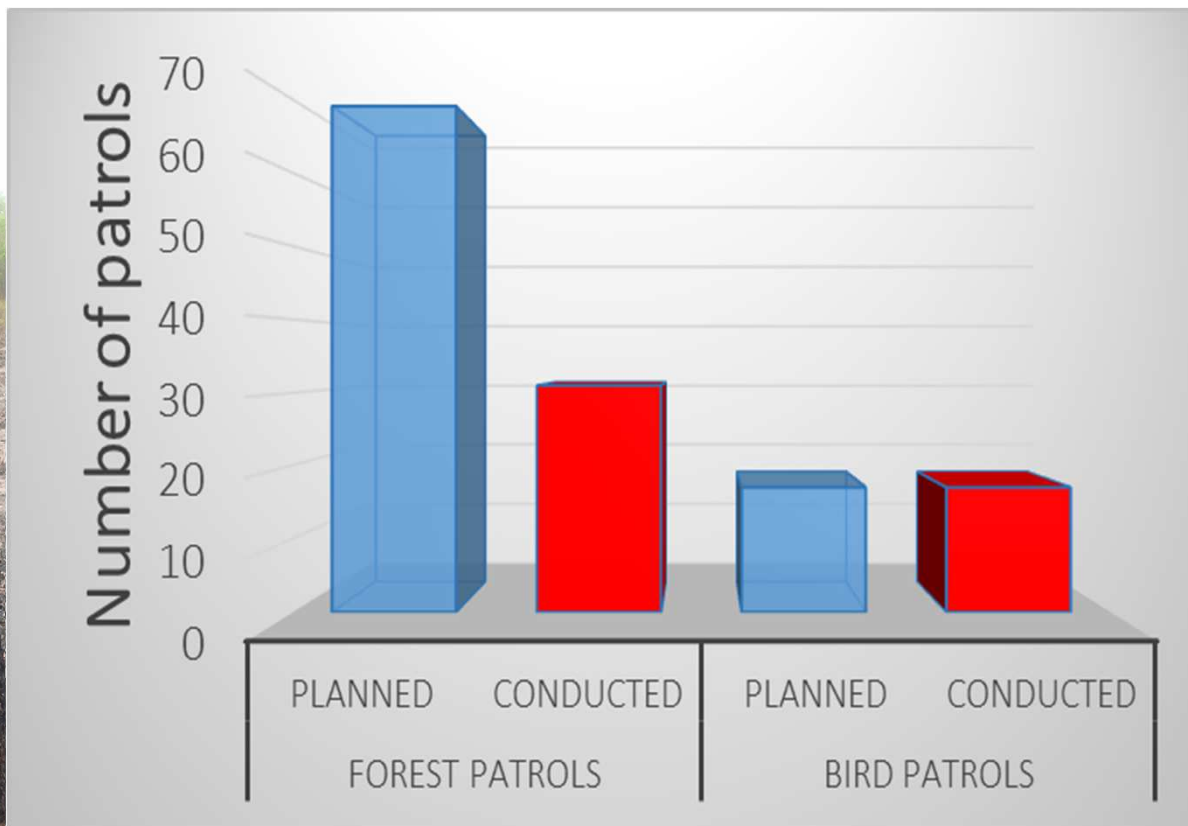
# Results

# Compliance investigated from VNRC: Forest protection

## 1.1 Patrols – 3 forest and 1 bird per month



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- Forest patrols - Low compliance.
- Reason: an insufficient fund to cover costs – food, fuel, and allowance for patrol guards.
- Bird patrol - high compliance.
- Reasons: Fear of losing FSC membership and incentive provided to patrol guards.

# Compliance investigated from VNRC: Forest protection

## • 1.2 Forest fire control



→20 Km Fire break of 10 m width: No



→Controlled burning: No

### Explanation for non-compliance

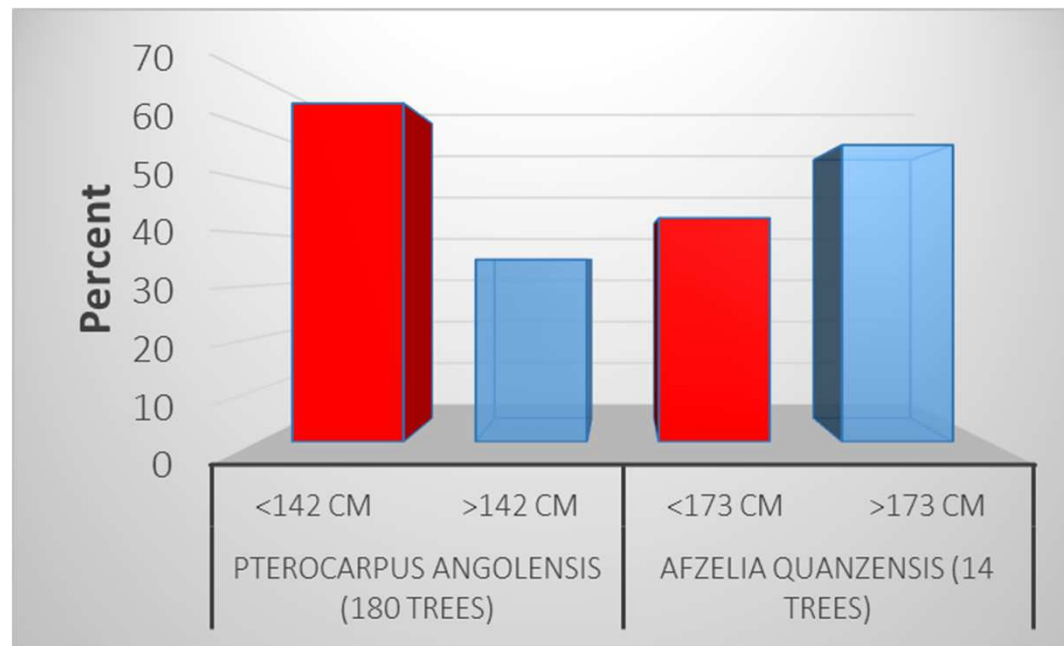
- No fund allocated because is not priority of the village council
- USD 7,482 for the first year
- USD 1,857 for year 2
- Villagers considered prescription to be not relevant.

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# Compliance investigated from VNRC: Sustainable utilization of the village forest

## 2.1 Legal minimum girth for harvesting (LMGH)

- LMGH for *Pterocarpus angolensis* is  $\geq 142$  cm, and *Azelia quanzensis* is  $\geq 173$  cm.



- Why? Larger trees prescribed in the FMP were not found during actual harvesting, probably because of **unreliable inventory results**

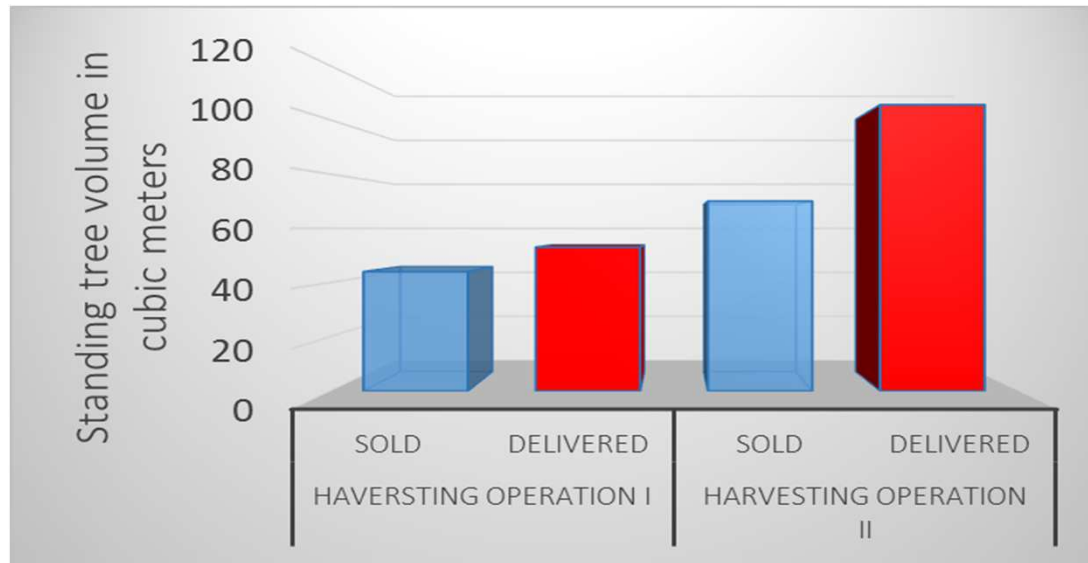
# Compliance investigated from VNRC: Sustainable forest utilization

## 2.3 Selling and delivering standing tree volume

- They sold standing tree volume, but they delivered a log volume to the buyer.



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Non-compliance, Why? Lack of expertise on tree volume calculations

*“We did what expert taught us. They taught and gave us a formula for calculating log volume, and we used it, we could not go beyond what they taught us.”*



# Compliance investigated from ordinary villagers



1. Forest protection: Participation of villagers in forest patrol.
  - Villagers have participated in only 2 of 31 patrols conducted.
  - Reasons for low compliance is perceived low relevance and lack incentive.

## 2. Sustainable utilization of forest: **Written permit for harvesting products.**

- No villager applied for written permit, they access forest illegally – non compliance.
- Why? Perceived low relevance and lack of money to pay for permit e.g. in commercial harvesting of forest products.



# Discussion and Conclusion

# Discussion



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- Explanations for low level of compliance reported
  - Lack of financial resources - no fund for forest patrols, and controlling forest fires.
  - Lack of relevant expertise – e.g. conversion of log volume to standing tree volume.
  - Perceived low relevance because planning process dominated by experts’ opinion– e.g. LMGH, written permit, and the number of forest patrols per month.

# Conclusion



→ Scientification of CF has increased management cost and limited sources of revenue for villagers.



→ Compliance is fairly low because of the combined effect of perceived low relevance, lack of resources, and knowledge requirement.

# Thank you for listening



For more information and updates about this PhD project, please visit:  
<http://www.ifro.ku.dk/scifor>