Gender dynamic about Adoption of Household’s Level Post-Harvest Technologies & Practices

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Objectives and research questions

- Objective of the study in ToR:

  “The overall objective of the study is to identify factors that determine the selection and adoption of postharvest technologies by smallholder farmers. A special emphasis is placed on the gender dynamics including the decision making in selection of technologies and effects (social, economic, health) on women by using improved PHT”

- What are the factors influencing the decision and adoption of improved post-harvest practices and technologies by smallholder farmers in the central corridor of Tanzania, including gender aspects?
Hypothesis

One: Decision and adoption of PHP and PHTs are influenced by different farm characteristics, by the project and by external factors.

Two: There are differences between gender regarding selection and adoption of improved post-harvest management explained by culture and traditions and gender roles in post-harvest management.
## Decision making in post-harvest process

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<tr>
<th>Decisions</th>
<th>Harvest</th>
<th>Transport</th>
<th>Drying</th>
<th>Shelling</th>
<th>Cleaning/winnowing</th>
<th>Mixing the chemicals with the maize</th>
<th>Selection of PHT</th>
<th>Storing for own consumption</th>
<th>Storing to sell</th>
<th>Marketing</th>
<th>Expenditures (household expenses allocation)</th>
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## Work in post-harvest process

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POST-HARVEST PRACTICES

- Tarpaulin for harvest
- Tarpaulin for transport
- Tarpaulin for drying
- Shelling machine
Reasons for **not using** tarpaulin for harvest

- The field is very big, difficult to move around with the tarpaulin
- Would need too much tarpaulin (too expensive)
- Tarpaulin are very delicate, get broken easily in the field
- We are slow to change our habits of throwing on the ground
- Didn't realise the importance of the practice until now
- Just received training about it, will buy it next year

All maize plant carried at home and peeled there -> no need of tarpaulin

Women

Men
Reasons for not using tarpaulin for transport

- Not necessary, nothing can fall from the cart
- Just got the training about the importance of it
- Harvest so low that farmers give up even on taking care not to lose
- Pearl millet branches destroy tarpaulin
- All post-harvest steps done on the field, grains transported in bags from there
- Don't see the importance of the practice
- Tarpaulin very expensive
- Because maize is packed in bags from field to home
- All plant is carried home and peeled there --> no need of tarpaulin

Women
Men
Reasons for **not using** a tarpaulin for drying

- To much production to put all on tarpaulin
- Not really aware of the losses occured while not using it
- Not enough knowledge about the practice
- Use of ashes on the ground instead of tarpaulin
- Because use of tractor to thresh the pearl millet --> would destroy tarpaulin
- Because drying in traditional technology (Kichanja), no need of tarpaulin
- Maize produced in groups of different owners so put on the ground waiting for the owner to take it
- No need, ground cleaned first
- Expensive
- Maize harvest dried so directly go for shelling
Reasons for **not using** shelling machine

- Expensive
- Low harvest so do it by hand
- Shelling machine not always available
- Threshing machine for millet not available
- Desire to use the cob for firewood, destroyed by the machine so use of hands

Women vs. Men
POST-HARVEST TECHNOLOGIES

- Metal silo
- PICS bags
- PP bags + chemicals
Reasons for using metal silo

- Small space occupation
- Prevents unnecessary use of maize
- No share with relatives or thieves
- Friendship with the artisan = low price
- Store maize to sell at better price
- No chemicals (health concern)
- Grains preserved with no change of form
- Durable
- No pests / rats infestation
- Improved food security
- After training decision to buy
- Store certain amount of maize at once safely and for a long time
- No need to wash maize before milling
- No losses
- No access for children, maize secured
- No need to buy bags every year

Women and men
Reasons for **not using** metal silo

- Don't know how to get one / not available
- Turn in VICOBA not arrived yet
- Artisan stopped producing / was moved elsewhere = not available
- Price is too high (too expensive) / not enough money
- Poor harvest doesn't allow to buy (not enough money)
- Challenge with seed-money in VICOBA group, misunderstandings
- Just received the training about the technology
- Use of PICS bag (because less expensive)
- In the process of getting one
- Never attended training no knowledge about it
- Technology is new so people don't think about buying it / difficult to change minds
- Capital of the VICOBA group is low so income generation activities in priority
- Don't see the point of it because local storage (Vihenge) is doing the same
- Not organize for purchase yet but will do
- Capital of the VICOBA group is low so income generation activities in priority

**Women**

**Men**
Reasons for using PICS bags

- No use of chemicals (health concerns)
- Not affected by rats if used as advised
- No change of maize form and stored long time (maintain grain quality)
- No pests/disease infestation = no losses
- Cheaper than metal silo and easy to use
- No need to buy bags every year = less costs
- No water/oxygen penetration
- Easy to use
- Durable
- No costs of chemicals

- Small family, using PICS is enough to store the grains
- Got it from VICOBA group
- Copied someone else who was using it after seeing great result
- Because not enough to buy a (second) silo

Women vs Men: 
- Women: [Graph showing preference]
- Men: [Graph showing preference]
Reasons for not using PICS bags

- Low production, not much to store
- Easily affected by rats
- Preference to save money for purchase of metal silo
- High price, too expensive, no fixed price
- Not available in the area, travel expensive to town
- Using other technology
- Ignorance, forgot about it after training
- No money yet but as soon as available will buy
- No knowledge about the technology
- Now after being convinced of the importance to use it, will buy
- Just been trained about the technology, no purchase yet

Women / Men
Reasons for using PP bags + chemicals

- Keep the food safe for the whole year
- Use for comparison with other improved technology
- Cheap and available
- A lot of production to store
- PP not hermetic so need for chemicals
- Not enough money to buy only silo and PICS
- Avoid pests (while waiting for the buyers and better prices)
Conclusion: hypothesis two

“There are differences between gender regarding selection and adoption of improved post-harvest management explained by culture and traditions and gender roles in post-harvest management”

• Different reasons for adoption / non-adoption of PHT-PHP between men and women

• Difference is decision making power

• Joint decisions and work above individual
Thank You

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