Trans-SEC

Innovating pro-poor Strategies to safeguard Food Security using Technology and Knowledge Transfer

Assessing Implementation Processes of Food Securing Innovations among Rural Farmers in Tanzania

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Background

Since 2013, the Trans-SEC project has been studying, testing and implementing upgrading strategies (UPS) to improve food security among smallholder farmers in the semi-arid Dodoma region and in the sub-humid Morogoro region of Tanzania.

Objectives

We aim at understanding the details of the UPS implementation by analyzing the storylines referred by the farmers and researchers involved in the implementation. Moreover, we wish to highlight implementation hurdles and success stories

Focus

We focused on six UPS:

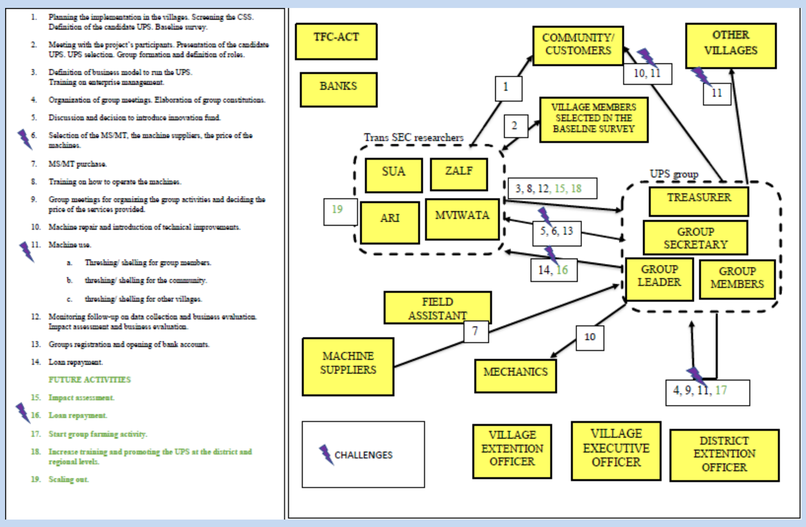
- Improved Processing (maize sheller and millet threshing machines) (MS/MT)
- Improved Firewood Cooking Stoves (ICS)
- Optimised Market Oriented Storage (OMOS)
- Rainwater Harvesting (TR)
- Kitchen Gardens with green leafy vegetables (KG)
- Poultry-Crop Integration (PCI)

Method

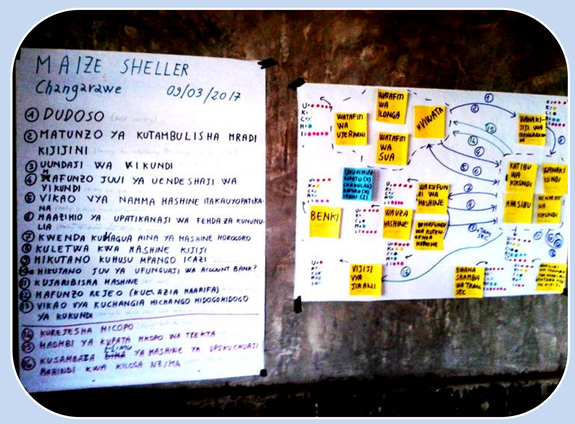
To collect the implementation storyline data we used Process Net-Map (Schiffer et al. 2017).

We asked the interviewees to:
1. Remember and report the important actors, their linkages and the most important activities.
2. Rank the actors according to 5 criteria: Influence, Income, Food security, Learning, Trust.
3. Identify the challenges encountered.

In total, we conducted around 100 Process Net-Map interviews and feedback discussions in 10 UPS farmer groups.



The configuaration of the MS/MT implementation.



A feedback discussion in the village of Changarawe.

Ranking the actors involved in the implementation.

Results

Success Stories

- MS/MT group members perceive positive increases in their overall food security and income.
- There has been a consistent uptake of OMOS improved bags in Ilakala associated with increased food security.
- In both regions, ICS have been adapted and improved by farmers.
- KG increased knowledge and awareness about the importance of vegetable consumption and the need to diversify diets to reduce nutrient deficiencies.
- TR have improved the knowledge on increased water retention on farm plots especially in semi-arid Dodoma.
- There is a perceived increase in general consumption of vegetables in Idifu and Changarawe
- PCI and OMOS improved bags were associated with increased household incomes and overall food security.

Implementation Challenges

- Transparency issues were reported in the UPS groups for MS/MT. Farmers tend to underreport the amount of harvest processed, possibly to increase their personal income.
- The OMOS group members are dissatisfied with the increase in income brought about by the implementation of their UPS.
- Mechanical failures of MS/MT machines delayed the implementation and reduced the motivation of group members.
- Short and unstable onset of rain season hinders TR implementation; TR perceived to be difficult to prepare before the onset of rain season.
- Financial constraints made it hard for farmers to manage effectively the adopted PCI.

Conclusions and Recommendations

Success stories highlight the importance of participation, information flow, co-learning and trust in providing a solid basis for innovations. Storylines from implementation hurdles suggest improving links with private actors for facilitating the dissemination of the OMOS strategy, and putting further emphasis on learning and on building trust to improve the implementation and the transparency of the MS/MT.

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Schiffer, E. et al. 2017: Process Net-Map has been developed in collaboration with Regina Birner with input from Jennifer Hauck at UFZ and researchers at IFPRI.
https://netmap.wordpress.com/process-net-map/