

Frans-SEC

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

Smallholder farmers as a heterogeneous group: Assessing how farmers' perception of their livelihood situation is influenced by intersecting social differences

Introduction

Ngwenya P¹, Höhne M¹, Mnimbo T², Ellison N³, Mchau D⁴, Kaburire L², Bashir M⁴, Swai E⁴, Lelea, M.¹, Kaufmann, B.¹

Problem: The likelihood that farmers adopt innovations depends inter alia on how they view their livelihood system and how they perceive the problem to be solved by the innovation. Their perspectives are influenced by multiple social factors and differ even among famers that produce under similar conditions. Aim: Identify social differences responsible for heterogeneity among smallholder farmers in four case study sites (CSS) in Dodoma and Morogoro in Tanzania. Assess how these differences affect farmers' perspectives on 1) available resource bases, 2) livelihood activities, 3) crop priorities and 4) most important problems.

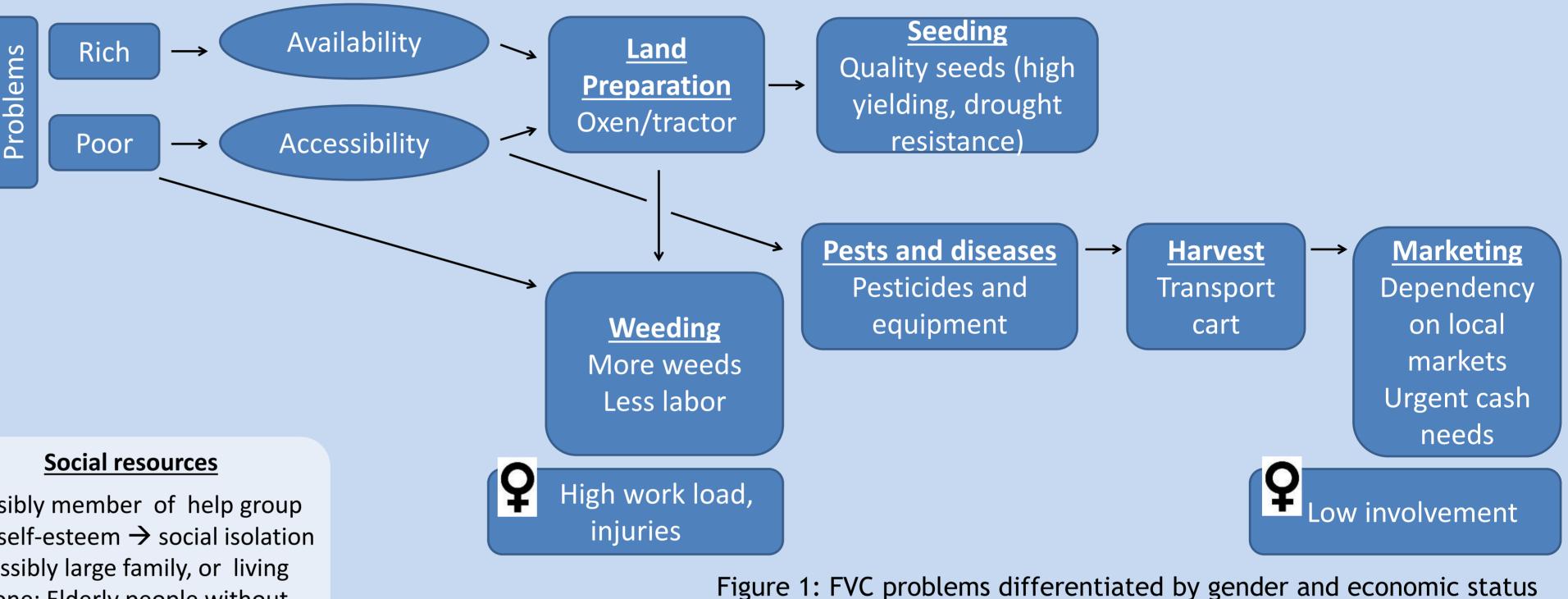
Methods

Participatory situation analysis:

- 58 group sessions using various communication tools, e.g. livelihood analysis, seasonal calendars, net maps and problem trees with 360 female and male farmers of different age and wealth classes.
- 8 participatory role play exercises with 84 ulletparticipants, including specific sessions for female household heads and peripheral villagers.



Results



Possibly member of help group Low self-esteem \rightarrow social isolation Possibly large family, or living alone: Elderly people without children to take care of them Widowed or divorced women often expelled by husband's family

Human resources

Financial resources

Scarcity of cash and food, work as casuals for richer persons to earn cash Must beg for help; always in debt, take loans

Social resources

Often married couples with children

Possibly members of savings and credit group Have inheritance rights to land

Activities

Q

"Woman for woman": plaiting hair, selling clothes

Preparation of food: Local alcohol "pombe", pastries, cafeteria

Preferred crops: millet, maize groundnuts, sunflower, hibiscus

millet, sorghum sesame

ď

Figure 3: Example of livelihood activities by gender

Lack of labour power due to: Being elderly,

"High capital": shop, milling machine, trader;

Activities

Skilled labour: carpenter, butcher, mechanic for bicycles/motorcycles, mason, carpenter

Preferred crops: groundnuts, sunflower,

Physical resources Own mud house with grass roof; 2 rooms; traditional furniture; may not have a

toilet; cook on open fire; no

sick or disabled,

high alcohol

consumption,

Natural resources

Possibly own chicken and some fruit trees Cultivate up to 1-2 acres of land with food crops only, up to 2 hours walking distance

Conclusions

Figure 2: Resource base of rich and poor households, Ilakala

Income generating activities, such as selling eggs and chicken

Human resources

Typically a middle aged couple with adequate labour power, including hired help Education of children, seen as a way to make long term investment in the family

a rich house ho

Physical resources

Own brick house with windows and manufactured doors, metal roof, 6 rooms, toilet with tank. Own motorbike and/or car Fenced yard, can hire tractor for ploughing

Likely involved in politics

Financial resources Produce cash crops Own transport, to hire out for cash **Possibly** additional small business Possibly formally employed Bank account Access to credit through S&C group

Natural resources

Access to a large area of land

(15-40 acres), to grow cash and

food crops, may also keep

livestock

mosquito net

Lack of capital and labour - a vicious cycle

Gender differences intersect with inequalities between wealthier and poorer households, e.g. single female headed-households are likely to be part of

'If there was a drought in the first year, you will get less produce, which won't be enough either for food or for income up to the next harvest, so you may start either selling or eating the grain that was stored as seeds for the next year. You won't have money left to buy new seeds, so the first thing would be to undertake wage labour for others, in order to organize food for the family, at the same time organizing money to buy new seeds. So you might then be unable to plant the seeds in time, you might even miss the first rain, and those who are late might face problems. In the end, the next harvest will again be less than expected and since you are urgently in need of money, again, you will just have to sell your harvest to the next best small trader who is taking advantage of your situation and will pay a low price.'

poorer groups and have less profitable options for income generation. High dependence on crop farming across all CSS highlights that in order to improve livelihoods, innovations need to improve both, food availability and capital situation and especially consider labour constraints of poor farmers. There are no "one size fits all" solutions. With diverse resource endowments, livelihood activities and problem situations observed, a plural and inclusive approach is needed for different economic and gender groups to benefit. Collaborative design approaches, considering participants' needs and their room for maneuver, are proposed as a way of increasing the relevance of innovation processes for heterogeneous groups of smallholder farmers.



¹ DITSL (German Institute for Tropical and Subtropical Agriculture), Germany ² Sokoine University of Agriculture, (SUA), Tanzania ³ MVIWATA, Tanzania

⁴ Agricultural Research Institutes (ARI), Ilonga and Makatupora, Tanzania