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Impact of Training Couples on Decision Making and Planning on Food and Income Security: A Case of Cowpeas Farmers in Guruve District, Zimbabwe

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Abstract:
The study's main aim was to evaluate the impact of gender household targeted training (added to technical skills acquired) on decision making and planning on food and income security. Determining the level of women participation in household decision making and planning on income level and assets accrued from sales of cowpeas produce and appraising training impact were the guiding objectives. The T-Test analysis results showed a significance difference of 1between trained and untrained women's level of participation in household decision making and planning with (0.015 p value), income realised from cowpea produce (0.041 p value), ownership of productive assets (0.017 p value and food security (0.039 p value). The significant differences in favour of the treatment (trained) group signified the positive impact of targeted couple trainings. Thus, training proved to have promoted women participation in economic household decision making processes with their improved self-confidence, signifying significances of targeted training. Trainings also improved coordination between spouses in areas of input acquisition, planning, decision making as well as marketing and accountability over use of proceeds. The implication of these results was that development partners and extension agents should add couple/ household targeted gender and agricultural trainings to tackle gender challenges that retard commercialization of cowpeas production and other potential crops labeled 'women's crops'.

Keywords: *Gender training, smallholder farmer, poverty, food security*

1. Introduction

Zimbabwe is one of the countries thriving to fulfill Millennium Development Goals (MDGs) especially goal 3 of eliminating gender disparities by 2015 (MWAGCD, Zimbabwe Gender Policy, 2012,). Its initiative to transform smallholder agriculture into a competitive and productive sector stretches to more than 30 years. Both public and private sector initiatives introduced to reduce gender discrimination and rural poverty since independence in 1980 however have continued to realize limited success. At global level, attention is increasingly focused on poverty reduction than ever before. In this respect the global target for poverty reduction is to halve the number of poor persons (defined as those living on less than US$1 per day) by 2015 (World Bank, 2006). In Zimbabwe's smallholder farming communities poverty levels however remain high due to a number of challenges. These include lack of household coordination in utilizing available resources, poor decision making and planning processes between spouses and gender discrimination among other issues (MWAGCD, Zimbabwe Gender Policy, 2012). With regards to women participation in economic decision and planning at house hold level in particular, the gender gaps are however still large.

Thus Farmers Association of Community self- Help Investment Groups (FACHIG) Trust (the base on which this study is centered), like any other development partners, have also been very supportive to smallholder farmers. It is a Community Based Organization (CBO) operating in four districts namely Guruve (the study area), Centenary, Mt Darwin and Rushinga of Mashonaland Central province in Zimbabwe. The poverty incidence in Zimbabwe, as measured by the Total Consumption Poverty Line (TCPL), increased from 42% in 1995 to 60% in 2010, [PASS], 2011). However, TCPL of Mashonaland Central province stood at 51% as compared to the national's 63%, (PASS 11, 2006). Recent observations however show that the poverty situation has worsened. This is mainly due to the consecutive depressed harvests and high cost of living (PASS 2011, Alliance for a Green Revolution in Africa: AGRA, 2009; Food and Agriculture Organisation: FAO, 2009; Pazvakavambwa, 2009, ZIM VAC 2012).

Particularly striking however is lack of training on coordination at household level between smallholder spouses especially on day to day programming (FAO, 2011). Men normally tend to lead the pace in almost everything due to cultural beliefs and gender inequality. This is despite the fact that rural women, more than their male counterparts, take the lead in agricultural activities, making up to 60-80

percent of labour force (United Nations Development Programme –UNDP, 1997). Gender inequality is therefore dominant in the sector and this constitutes a bottleneck to small holder farming development (Njuki et al, 2011). Policies which aim at increasing food security tend to either underestimate or totally ignore women's role in general decision-making and planning process within the household (Okali, 2011, Reemer, 2009).

In an attempt to bridge the gap between men and women farmers in Zimbabwe, FACHIG has emerged to enhance rural women participation. This was done by establishing commodity groups in poverty stricken communities involved in various agricultural projects. The projects include producing seed cowpea under contract with a local seed company called ARDA seeds. The study area, Guruve district, is characteristically poor with many farming communities living a subsistence type of life. Its Human Development Index (HDI) was 0.398 in 1995 and had dropped to 0.335 by 2008 (Ministry of Public Service, Labour and Social Welfare – Zimbabwe, MPSLSW, 2010) which showed that poverty was worsening. The objectives of the study are to determine the level of participation of women in household decision making and planning between trained and untrained couples, to compare cowpeas production levels among trained and untrained producers and to compare income levels and assets accrued from sales of produce by trained and untrained cowpeas producers.

2. Statement of the Problem

Zimbabwe is one of the countries thriving to fulfill Millennium Development Goals (MDGs) especially goal 3 of eliminating gender disparities by 2015 (MWAGCD, Zimbabwe Gender Policy, 2012,). Its initiative to transform smallholder agriculture into a competitive and productive sector through integration of women in to the sector has always been questionable. Both public and private sector initiatives introduced to reduce gender discrimination and rural poverty since independence in 1980 have continued to hit a snag. Zimbabwe's smallholder farming communities are characterized with alarming levels of poverty as they remain exposed to numerous challenges. The diverse challenges as cited by MWAGCD, Zimbabwe Gender Policy, (2012) include lack of household coordination in utilizing available resources, poor decision making and planning processes between spouses as well as gender discrimination among other issues. It is therefore against this background that the study sought to explore the impact of training couples on decision making and planning on boosting household food and income security of Zimbabwe's smallholder farming communities.

3. Research Objectives

The major objective of the study was to evaluate the impact of training couples on decision making and planning to boost household food and income security.

3.1. However Specific Objectives Guiding the Study Were

- Establish how household decisions are made and who bears the responsibility of making them
- Establish the extent to which rural Zimbabwean women participate in decision making and planning on farming activities
- Establish how decisions regarding disbursement of income realized from cowpea production and retention of surplus produce for household food security are made

4. Literature Review

4.1. Main Characteristics of Planning

Research done by Alela et al (2004) in Kenya noted that planning increases the efficiency of household in their day to day administration of activities. It reduces the risks involved in agricultural business activities, facilitating proper coordination of activities within the household. It aids in organizing all available resources. IT helps to maintain a good control of available resources and thus limiting leakages of scarce resources and proceeds from the household. It helps to achieve objectives, motivates the household members and encourages creativity and innovation by both spouses and key members of the family. It also helps in decision making by both spouses. The concept of planning is to identify what the household wants to do using available resources by using the four questions which are "where are we today in terms of our business or strategy planning? Where are we going? Where do we want to go? How are we going to get there? (Baluku, P. 2009, Alela et al, 2004)

4.2. Planning and Decision Making

An evaluation done by FAO (2011) in Southern Africa has noted that most decisions are not being done properly in smallholder farming communities due to lack of trainings and gender discrimination. The research revealed that it was common to note that men were making decisions without planning and involvement of their spouses. Planning makes decision making a lot simpler than it is especially if all household members are involved. Narman (1991) in his research consented that training of key household members together on decision making and planning will allow for limited resources to be committed in an orderly way and always govern the use of what is limited (e.g. capital, time, land, inputs, labour etc.). The view was supported by FAO (2009) who noted that if trainings on decision making and planning are targeted for both household spouses improved coordination and consultation in household programmes will always bring positive result especially in poor smallholder farming households. For instance, Ortiz (1998) reported that the production trend of cowpea in Nigeria shows a significant improvement with about 441% increase in area planted and 410% increase in yield from 1961 to 1995. Alela et al (2004) noted that in Kenya household surveys and the observations of field staff and

extensionists revealed that combined trainings of couples on decision making and planning by ACDI/VOCA has helped both women and youth smallholder farming households. From distribution of labor through sharing of resources and working together as a family during planning, women and youth have strengthened their household roles and improving family incomes from farming.

5. Research Methodology

The study sought to explore the impact of training couples on decision making and planning on boosting food and income security in Guruve District of Mashonaland Central province, with particular reference to smallholder cowpeas farmers. A sample of 56 respondents/ spouses were conveniently selected from one ward of the district with a population of 400 households, the sample comprised 28 trained and 28 untrained spouses as shown on table below:

Representative Groups	Number of Participants Sampled
Trained spouses	28
untrained spouses	28
Total	56

Table 1: Sample Composition

The research used the questionnaire as a technique for primary data collection, and the T-Test statistic model for analysing the generated data and findings.

6. Results and Discussion

Table 2 below gives a summary of comparisons between trained and untrained respondents on how household decisions are made and who bears the responsibility of making them

	Trained		Untrained	
	Frequency	**Percentage %**	**Frequency**	**Percentage %**
How are decisions made at HH				
Husband decides	2	7	20	71
Wife decides	0	0	3	11
Both decides	26	93	5	18
Total	**28**	**100**	**28**	**100**
Who decides work to be done in the fields				
Both spouses				
Men	28	100	7	25
	0	0	21	75
Total	**28**	**100**	**28**	**100**

Table 2: How household decisions are made and by whom

Results showed that in trained group of respondents 93% confirmed to be making decisions together against 7%. It further showed that 100% of respondents indicated that they now decide together on work to be done in the fields. However in untrained cohort, only 18% confirmed to be making decisions together against 72% who testified that decisions were individually done by males at 71% and by wife at 11% respectively.

Thus, findings noted big differences in the way decisions were made between couples. It came out that 93% of trained couples (against 18% untrained couples) were making joint decisions after consulting key household members especially wife and husband. This conforms with a survey done in Uganda's Bukonzo cooperatives where a household targeted training was done to couples on gender action learning system. It came out from the result that household approaches hold huge potential for transforming lives in agrarian societies across Africa (Mayoux 2010, WEMAN 2013, and FACHIG GALS Review workshop report 2013). Thus the research noted that respondents pointed to remarkable life changes occasioned by their participation in the training.

However, in untrained respondents a paltry 18% confirmed that decisions were jointly made, while 82% confessed that decision making process was a preserve for males in the household hence not done in a transparent manner. The majority of women acknowledged that despite the fact that cowpeas is being grown as a cash crop (seed crop), attention to the crop was diverted towards other crops deemed important by their husbands. Similar results were echoed by Bajracharya (1994) who noted that in most rural communities of Central and Southern Africa household gender specific constraints are common especially on limited decision making by women on type of crops and gender division of labour. In that respect most cash crops are dominated by men. This means that a majority of women's work tends to be economically 'invisible' as they lack decision making power on key household issues.

Table 3 summarizes the extent to which rural Zimbabwean women participate in decision making and planning on farming activities, where an independent sample T-test was used to compare the means of trained and untrained data to measure their significance level (p values).

	Category	Mean	P Value
Do you receive any training on gender	Trained	1.00+/-0.00	0.004
	Untrained	2.00+/-0.00	
Do you develop plans	Trained	1.04+/-0.19	0.001
	Untrained	1.61+/-0.50	
Do men consult spouses on decision HH making and planning	Trained	1.25+/-0.44	0.000
	Untrained	2.04+/-0.19	
Who decides on use of HH proceeds	Trained	1.00+/-0.00	0.000
	Untrained	1.96+/-0.58	
Who normally decides what to sale and participate in marketing	Trained	1.07+/-0.38	0.197
	Untrained	2.07+/-0.47	
Do husband always account for income realised from sales to spouse	Trained	1.64+/-0.95	0.015
	Untrained	2.57+/-0.63	

Table 3: Level of women participation in decision making and planning

6.1. Training Received on Gender Issues

The T -Test results showed a p value of 0.004. This means that the difference between trained and untrained respondents was statistically significant. Key reason could be that trained respondents were deliberately targeted for the training and thus had been exposed to household decision making and planning skills. Variables on development of plans, men consulting spouses on household decisions and planning, decision on use of proceeds and accountability by husbands on income realized from sales were found to be statistically significant at 0.000 to 0.015 p value. The results showed that there was a marked difference in the way trained and untrained couples make household decisions and plans. Gender discrimination was rife in untrained couples where decision making and planning was dominated by men. This was consistent with findings by (WEMAN, 2013, Mayoux 2010, Baluku et al) whose findings showed that trained participants showed great household coordination after trainings.

Table 4 summarises decision making processes on disbursement of income realized from cowpeas and retention of surplus produce for household food security

	Trained		Untrained	
	Frequency	**%**	**Frequency**	**%**
Who decides on use of HH proceeds				
Both spouses	28	100	5	18
Husband only	0	0	19	68
Wife only	0	0	4	14
	28	**100**	**28**	**100**
Who normally decides what to sale and participate in marketing				
Both spouses	27	96	2	7
Husband only	0	0	22	79
Wife only	1	4	4	14
	28	**100**	**28**	**100**
Do husband always account for income realised from sales to spouse				
Yes always	19	68	2	7
No	0	0	8	29
Not always	9	32	18	64
	28	**100**	**28**	**100**

Table 4: Decision on use of proceeds, accountability and participation in markets

Results showed that 100% of trained respondents confirmed that decisions on use of HH proceeds are being done by both spouses whilst 96% consented that both spouses decided on what to sale and participated in marketing of cowpea produce together against 4%. Results further showed that 68% against 32% trained respondents confirmed that husbands accounted for income realised from sales. In the untrained group 18% of respondents confirmed that decisions on use of HH proceeds are being done by both spouses against 68% (husband only) and 14% (wife only). In addition only 7% consented that both spouses decided on what to sale and participated in marketing of cowpea produce together against 79% (husband only) and 14% (wife only). Results further showed that only 7% against 93% untrained respondents confirmed that husbands accounted for income realised from sales.

Also in terms of accountability 68% of trained respondents confirmed that husbands were accountable always whilst 32% still noted that their husbands were not always accountable. Thus in some cases they failed to justify cash shortages despite agreed plans.

Contrariwise in the untrained group only 7% of respondents confirmed that decision on use of household proceeds was decided by both spouse. This demonstrates that the training has been remarkably powerful in unseating authoritative cultural norms that have existed for generations.

A total of 64% of untrained respondents declared that decision on use of cash and what to sale was dominated by male spouses. Most female respondents cited that in most cases husbands were not accountable to almost 50% of income realised and asking them would cause conflicts and violence. The revelation was in agreement with the current Zimbabwe Gender Policy (MWAGCD, 2012) which noted that gender discrimination is rife among small holder farmers.

Table 5 shows how decisions regarding disbursement of income realized from cowpeas production and retention of surplus produce for household food security are made. An independent sample T-test was used to compare the means of trained and untrained data to measure their significance level (p values).

	Category	**Mean**	**P Value**
Was input package provided enough	Trained	1.79+/-0.42	0.000
	Untrained	1.96+/-0.19	
If not do you supplement with own inputs	Trained	1.04+/-19	0.000
	Untrained	1.54+/-0.51	
Yield level (t/ha) 2013	Trained	3.61+/-1.32	0.044
	Untrained	2.04+/-1.12	
Profit realised from sales of cowpeas 2013	Trained	5.29+/-1.18	0.041
	Untrained	3.89+/-1.32	
Food security	Trained	1.54+/-0.69	0.039
	Untrained	2.36+/-0.73	

Table 5: Cowpea production levels, income realized and food security

6.2. Yield Level

Yield level show statistical difference between trained and untrained at 0.044 p value. Cowpeas yield was significantly higher for trained respondents (1.44t/ha) than untrained respondents (0.72t/ha). The results show that the training programme has been successful in increasing yield for vulnerable households who benefitted in the programme. The findings augur well with other similar research done on gender trainings elsewhere. For instance, Ortiz (1998) noted that cowpea production trend in Nigeria shows a significant improvement of about 441% increase in area planted and 410% increase in yield between from 1961 to 1995. The author attributed this development mainly to the trainings targeted to smallholder cowpeas producer couples on household planning and decision making among other topics.

6.3. Profit Realised from Sales

Profit realised presented a significant level of 0.041 (p value). This approves to the fact that trainings done has positively affected income levels at household level. However the fact that the p value is close to 0.05 could mean that higher profit margin could have been caused by other factors besides training. However similar research done in India' Jorhat district of Assam, Uganda, Ethiopia and Kenya noted that trained small holder farmers were significantly income secure. This was credited to increased level of knowledge and coordination by couples which reduce risks to abuse of available income (Sama et al 2009,Kefyalew 2006,Alela et al 2004). Mbene (2005) however noted in his study in Senegal that cowpea is not only used for human consumption and animal feed, it has increasingly become a cash crop for small-scale producers especially women.

6.4. Food Security

There was a statistically significant p value of 0.039. This confirmed that there was a sensible difference in household food status between the two groups. This indication also justified the significant contribution of training on boosting food security.

7. Conclusions and Recommendations

It came out that on women participation in HH decisions and planning, level of participation was high in trained respondents than untrained group. In addition there was notable improvement in coordination between spouses in areas of input acquisition, planning, decision making, and accountability by men on proceeds use. These results suggest that trainings done to couples on decision making and planning really do have an effect on household food and income security status.

FACHIG Trust and other development partners should expand couple/ household training approach well beyond a methodology aiming to achieve household food and income security. It should be able to contribute towards broader development agendas by demonstrating how gender relations can inhibit progress in other development arenas like value chain mapping, diversification, climate change mitigation and market development.

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