SAVING LIVES
CHANGING LIVES

Promoting the Production and Consumption of Nutritious Foods through an Integrated Multi-sectoral Approach in Zambia

Baseline Report

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Executive summary

The project Promoting the Production and Consumption of Nutritious Foods through an Integrated Multi Sectoral Approach focus on Integrating Nutrition Support and Smallholder Market Support and managing of food waste to address nutrition knowledge gaps, promotion of good feeding practices, promotion of diversified agriculture, and facilitating access to viable and functional markets in twelve districts across Southern, Eastern, Central and Western provinces. Specifically, to looks at bridging the knowledge gaps on nutrition and infant feeding practices amongst targeted communities and schools; promoting access and consumption of nutritious foods at household level through production and markets; and generating lessons and best practices through implementation with partners that will operationalize nutrition-sensitive policies and programmes. A baseline study to ascertain the level of household's livelihood and knowledge, and have baseline values of impact, outcome and output indicators as spelled out in the project log frame was undertaken. These baseline values will provide an initial benchmark for assessing project performance from a monitoring and evaluation perspective and create an opportunity for impact assessment at the end.

The results from the survey show that majority of the households are male headed, married, have attained primary education and an average household size is 7 members in the implementation camps and 6 members in the control camps. Households with members who are either unable to work, chronically ill or disabled were few. Informal employment which comprise farming and other small-scale income generating activities such as self-employed, petty trade, sell of charcoal, casual labourer, was the main type and decisions at the household level were mainly made jointly by both men and women. Boreholes and unprotected wells was the main source of drinking water for the households with the water source indicated being located elsewhere. The main measures were used to make water safer were chlorine and boiling as a measure taken to make water safer to drink. Pit latrines with slabs, pit latrines without slabs and the bush/field are the main sanitary facility. In terms of agricultural, on average households own about 9ha of land with female headed households owning less land than male headed households. Households grew on average 3 crops with male headed households growing more crops compared to female headed households. Majority of the households indicated having heard about CA practices (about 80%) and practiced CA.

Most of the women met the minimum dietary diversity score, with most households having an acceptable food consumption. Majority of the household spent between 1-49% of their income on food, however, there is a significant proportion of households spending most of their income (75% or more) on food in both the implementation and control camps. Family/friends and money lenders/loan sharks remain the main source of credit and the main reason for taking a loan was for the purchase of agricultural inputs, small scale business running and education expenses, while lack of collateral was the main reason for loan denial. Mobile money was the most common mode of savings, this is followed using government banks and private banks as a formal method of savings. On the informal savings methods, most households indicated the use of savings/cooperative societies. In terms of marketing low market price, lack of transport, long distances to markets and lack of buyers were indicated as the main challenges with the use of uncalibrated scales being the most common unethical practice. Weevils, followed by rodents, rain water and poor harvesting techniques were the most common causes of post-harvest loss, with the loss mainly occurring at the harvest and transport point. Very few households received training on post-harvest loss and use improved storage methods.

Based on the findings, it is recommended that diversified diets are promoted particularly under disadvantaged households such as women headed and those already consuming less diversified diets. Create awareness and/or promote good water and sanitation practices. Have increase awareness on infant and young child feeding practices and consumption of appropriate food for children, as well as promote. cooking demonstrations and/or behavioural change in consumption of food groups that will trigger improved dietary scores. Financial services such as savings and input-based credit in the Conservation Agriculture uptake promotion to ease up the challenge of accessing appropriate inputs. Rollout out traditional micro financing through savings groups coupled with tailored nutrition education among project participants. Training on pre- and post-harvest management and facilitating linkages for farmers to access post-harvest storage technologies to minimize losses should be done was well as facilitation of market access through a

network of Aggregation Centres to increase economies of scale from the quantity and distance perspective, key elements that off-takers consider.

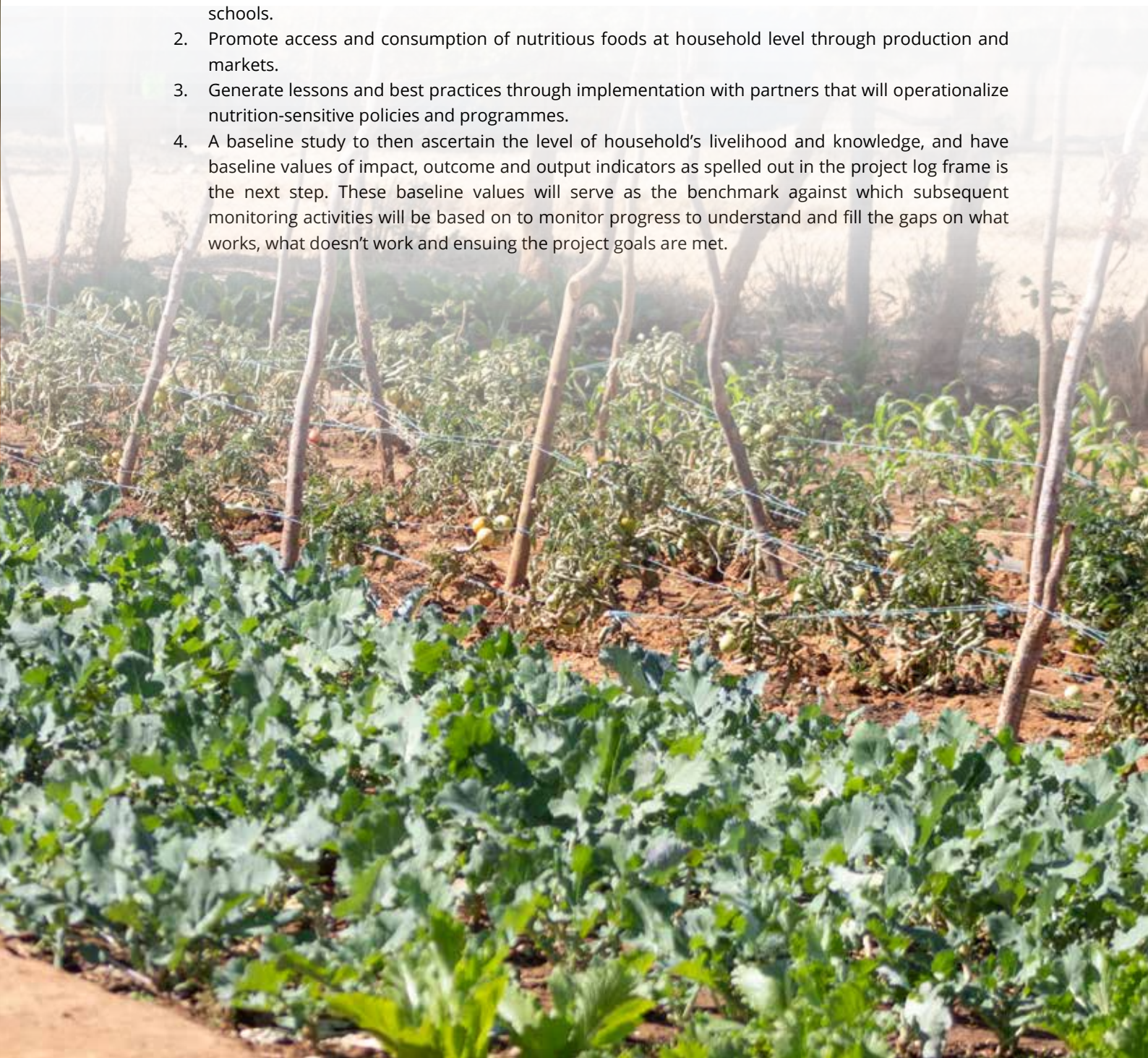
1. Introduction

The project, Promoting the Production and Consumption of Nutritious Foods through an Integrated Multi Sectoral Approach has two main activity components on focusing Integrated Nutrition Support and Smallholder Market Support. The project is designed to address nutrition knowledge gaps, promotion of good feeding practices, promotion of diversified agriculture, and facilitating access to viable and functional markets. In addition, the project will as well address pertinent issues around managing of food waste. The proposed project strategies and approaches are aligned to national priorities enshrined in the 7th National Development Plan (7NDP) specifically under the development area of Economic Diversification and Job Creation (Development Outcome 1), Poverty and Vulnerability Reduction (Development Outcome 1) and Enhancing Human Development (Development Outcome 1, 2 and 3).

The project goal is to improve Food and Nutrition Security of Women and Children in Central, Southern and Eastern Provinces through fostering production, marketing and consumption of diversified nutritious foods.

The objectives are:

1. Bridge knowledge gaps on nutrition and infant feeding practices amongst targeted communities and schools.
2. Promote access and consumption of nutritious foods at household level through production and markets.
3. Generate lessons and best practices through implementation with partners that will operationalize nutrition-sensitive policies and programmes.
4. A baseline study to then ascertain the level of household's livelihood and knowledge, and have baseline values of impact, outcome and output indicators as spelled out in the project log frame is the next step. These baseline values will serve as the benchmark against which subsequent monitoring activities will be based on to monitor progress to understand and fill the gaps on what works, what doesn't work and ensuing the project goals are met.



2. Project Area

The map below shows the project area located in Central, Eastern, Southern, and Western Provinces. The project is in 12 districts, of which, 4 (Chisamba, Chibombo, Kapiri-Mposhi and Mumbwa) are in Central province, 4 (Katete, Lundazi, Nyimba and Petauke) are in Eastern province, 2 (Mazabuka and Monze) in Sothern province and 2 (Mongu and Kaoma) in Western province. These districts fall in agroecological regions I and II.

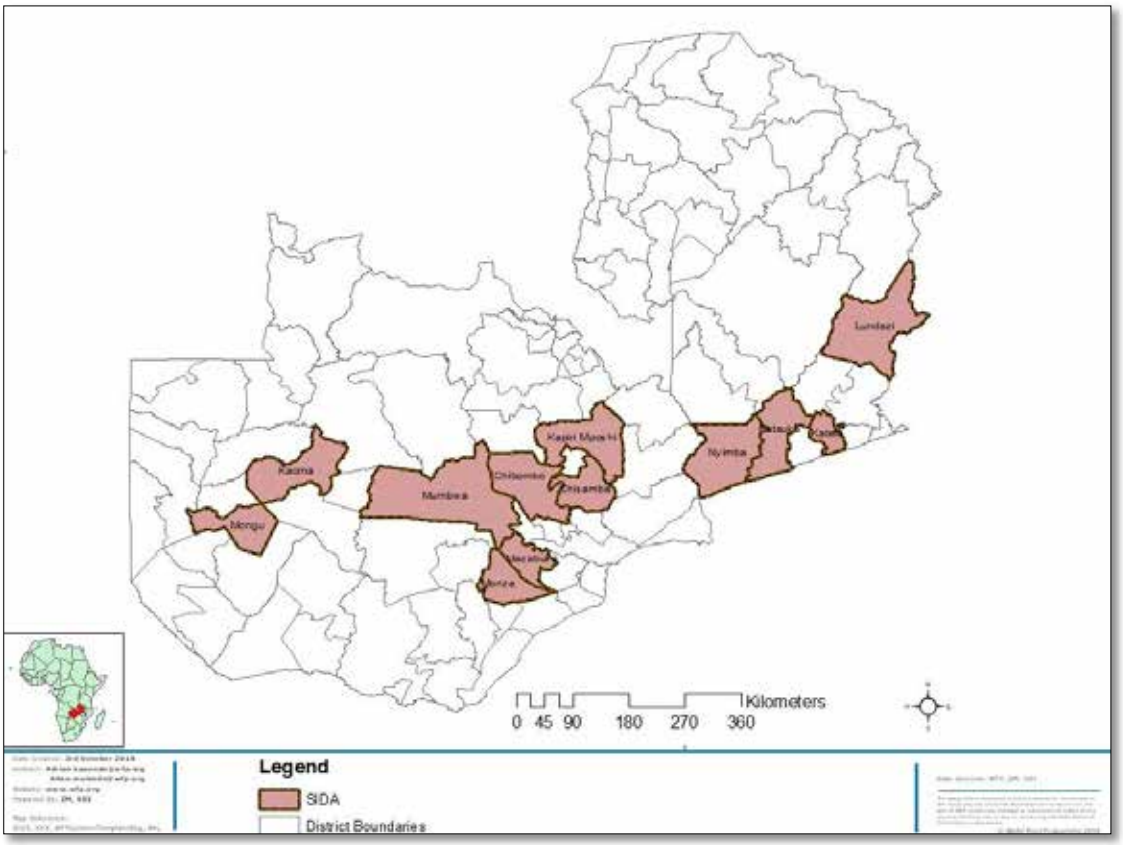


Figure 1:Project Areas

3. Objectives and Scope of Work

The main objective of this baseline survey report is to provide an initial benchmark for assessing project performance from a monitoring and evaluation perspective and create an opportunity for impact assessment at the end. Findings from this baseline survey report will be complemented by other monitoring activities as spelled out in the M&E framework.

4. Methodology

4.1 Study Design and sampling

The baseline survey was carried out using the household survey approach. Data was collected using a structured questionnaire. The data collection exercise was preceded by training of enumerators to allow for reliable data collection. The baseline survey covered 12 districts in Southern, Western, Central and Eastern Provinces. A total of at least 150 households was sampled per district, bringing the total number of households interviewed to 1,810 households (Table 1). The sampled households were randomly selected to ensure non-biased data.

Table 1:Household Sample size

District	Total Households
Chibombo	150
Chisamba	152
Kaoma	150
Kapiri-Mposhi	150
Katete	152
Lundazi	151
Mazabuka	153
Mongu	151
Monze	150
Mumbwa	149
Nyimba	152
Petauke	150
Total	1810

4.2 Data

The baseline survey data was collected using a household survey questionnaire programmed on tablets using ODK platform. Data collection process was preceded with a comprehensive 3-day training of enumerators which included a review of all the modules and a pre-test in an area with similar characteristics to the four districts. Data collection for the baseline was conducted in December 2018. The enumerators were supervised by WFP Zambia country team personnel to check the data completeness and consistency. Statistical Package for Social Science (SPSS) was used for analysis which included univariate, bivariate and multi-variate analysis. Analysis was also done in line with WFP standard methodologies and indicator interpretation. The analysis process culminated into this baseline report whose findings are articulated herein.

5. Results and Discussion

5.1 Household Demographics and Characteristics

This section presents the demographic characteristics of the sampled households. These include the average household size, gender, age, marital status, employment status and the level of education of the household heads. In addition, information was collected on household dynamics including decision making responsibilities and whether the sampled household had members who had any disabilities or were chronically ill.

5.1.1 Household Gender and Size

Gender remains a key component in agriculture production and productivity. Female farmers play a significant role in the production of agriculture, with more female farmers engaging in agriculture (78%) compared to male farmers at 69% (Sitko et al. 2011). The results from the survey shows that majority of the households are male headed across all implementation (83.7%) and control (82.3%) camps (Figure 2). At provincial level, the Eastern province control camp has the highest percent of households that are headed by females (23%). This could be due to the matriarchal culture in some parts of eastern province districts in both the control and project areas with about 83% being male headed compared to about 17% female headed (Figure 2).

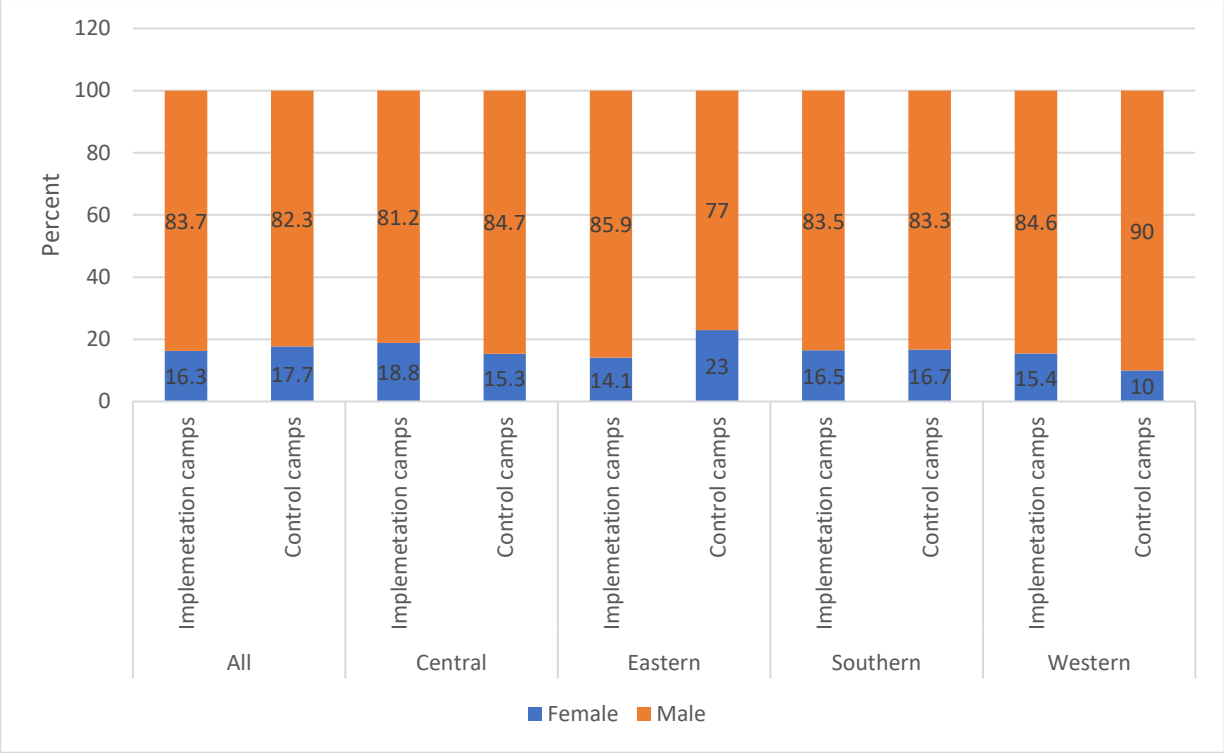


Figure 2:Household head Gender by implementation and control camps

The results show that the average household size is 7 members in the implementation camps and 6 members in the control camps (Table 2). Female headed households have lower households' members (6) compared to male headed households (7). These results remain consistent across the provinces apart from Central province in both the implementation and control camps, where household sizes tend to be slightly higher.

Table 2: Household size by implementation and control camps:

		Household Size				
		Overall	Central	Eastern	Southern	Western
Implementation camps	All	7	7	6	6	6
	Female	6	6	5	5	5
	Male	7	7	7	7	6
Control camps	All	6	7	6	6	6
	Female	6	6	6	6	6
	Male	7	7	7	6	6

5.1.2 Age Categories for Household Head

The results show that the overall average age of the household head range between 45 to 55 with the overall average age for the household head in the implementation camps being 49 compared to 46 in the control camps (Table 3). In both the implementation and control camps, results show that the average age of female households are higher compared to that of male heads of households. In the implementation camps, the average age of the female heads of households is 55 years compared to 47 years for the male heads of households whereas in the control camps, the average age of female heads of households is 51 years compared to 45 years that of the male heads of households.

Table 3: Average household heads age by implementation and control camps

		Average age of household head (years)				
		Overall	Central	Eastern	Southern	Western
Implementation camps	All	49	50	46	50	49
	Female	55	56	53	62	48
	Male	47	49	45	48	49
Control camps	All	46	47	45	48	48
	Female	51	53	48	61	42
	Male	45	46	44	45	48

The results at provincial level show a similar trend, with female heads of households being older than their male counterparts in Central, Eastern and Southern districts across the implementation and control camps. The situation is however different in Western district in both the implementation and control camps where male household heads are older than the female household heads.

5.1.3 Marital Status and Education Level of Household Head

The results show majority of the household heads in both the implementation and control camps are married at 81.6% in the implementation camps and 80.3% in the control camps (Figure 3). There are more widowed and divorced female heads of the households across the implementation and control camps compared to male head of households as can be seen in the figure below. This finding indicates a highly patriarchal society where mostly it's the men who head households and women mostly head a household if she is widowed, divorced, separated or raising children as a single parent.

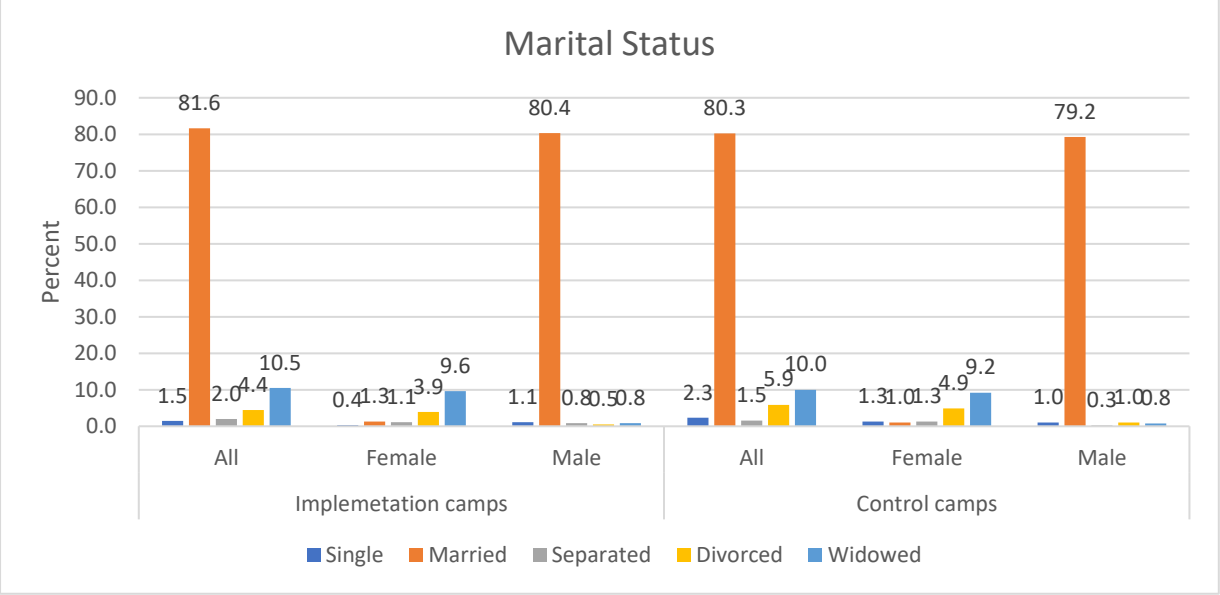


Figure 3: Household heads Marital Status by implementation and control camps

A look at the provincial results show an almost similar trend to the overall results where majority of the household heads are married in both the implementation and control camps (Table 4). Similarly, there are fewer female heads of households who are married across all the sampled areas in both the implementation and control camps with at least one in every ten female household heads with an exception of the control camps in Southern and western provinces where none of the female heads of households are married.

Table 4: Household heads Marital Status by implementation and control camps- Provincial

		Marital Status for the household head				
		Single	Married	Separated	Divorced	Widowed
Central implementation camps	All	1.	77.6	2.9	4.6	13.0
	Female	0.0	1.4	1.4	4.1	11.8
	Male	1.9	76.2	1.4	0.4	1.2
Central control camp	All	3.4	81.4	0.0	5.9	9.3
	Female	2.5	0.8	0.0	3.4	8.5
	Male	0.8	80.5	0.0	2.5	0.8
Eastern implementation camps	All	0.7	85.0	1.8	5.1	7.5
	Female	0.2	1.3	1.1	4.4	7.1
	Male	0.4	83.7	0.7	0.7	0.4
Eastern control camp	All	1.3	77.0	1.3	9.9	10.5
	Female	0.0	2.0	1.3	9.2	10.5
	Male	1.3	75.0	0.0	0.7	0.0
Southern implementation camps	All	2.1	82.7	0.0	2.1	13.2
	Female	0.8	0.8	0.0	2.1	12.8
	Male	1.2	81.9	0.0	0.0	0.4
Southern control camp	All	3.3	80.0	3.3	1.7	11.7
	Female	1.7	0.0	1.7	1.7	11.7
	Male	1.7	80.0	1.7	0.0	0.0
Western implementation camps	All	1.7	82.2	2.5	5.4	8.3
	Female	0.8	1.2	1.7	4.6	7.1
	Male	0.8	80.9	0.8	0.8	1.2
Western control camp	All	1.7	86.7	3.3	0.0	8.3
	Female	1.7	0.0	3.3	0.0	5.0
	Male	0.0	86.7	0.0	0.0	3.3

Education Level of Household Head

The highest level of education attained by most of the household heads is primary education, followed by secondary, no education and tertiary education, across both the implementation and control camps (Table 5). Further analysis reveal that women heads of households are more disenfranchised in terms of literacy levels compared their men counterparts. The trend remains the same when examined at provincial level, with the exception of central control camps having no households' heads that have never been to school. These positions may therefore be used as a reference point with regards to the quality of investment being compromised due to low literacy levels and the need to address the knowledge gap.

Table 5: Household heads education level by implementation and control camps

		Highest level of education attained			
		Never been to school	Primary school	Secondary school	Tertiary
Overall implementation camps	All	10.6	50.4	36.0	3.0
	Female	3.5	8.9	3.8	0.2
	Male	7.2	41.5	32.2	2.7
Overall control camps	All	9.2	50.8	37.7	2.3
	Female	2.8	11.3	3.6	0.0
	Male	6.4	39.5	34.1	2.3
Central implementation camps	All	5.0	50.9	40.0	4.1
	Female	2.9	11.2	4.3	0.4
	Male	2.1	39.8	35.6	3.7

Central control camp	All	0.0	44.9	50.8	4.2
	Female	0.0	11.9	3.4	0.0
	Male	0.0	33.1	47.5	4.2
Eastern implementation camps	All	19.9	53.6	24.1	2.4
	Female	5.1	6.8	2.2	0.0
	Male	14.8	46.8	21.9	2.4
Eastern control camp	All	19.1	56.6	23.7	0.7
	Female	5.9	13.8	3.3	0.0
	Male	13.2	42.8	20.4	0.7
Southern implementation camps	All	5.8	48.1	42.8	3.3
	Female	2.5	10.3	3.7	0.0
	Male	3.3	37.9	39.1	3.3
Southern control camp	All	6.7	53.3	36.7	3.3
	Female	1.7	10.0	5.0	0.0
	Male	5.0	43.3	31.7	3.3
Western implementation camps	All	9.5	45.6	43.6	1.2
	Female	2.5	6.6	5.8	0.4
	Male	7.1	39.0	37.8	0.8
Western control camp	All	5.0	45.0	48.3	1.7
	Female	1.7	5.0	3.3	0.0
	Male	3.3	40.0	45.0	1.7

5.1.4 Household Disability and Chronic Illness

The results show a very small proportion of households with members who are either unable to work, chronically ill or disabled across the implementation camps, an overall proportion of 10.6% compared to 4.9% in the control camps (Table 6). In the implementation camps, 3.7% of the households have members who cannot work, this consists of 0.8% of household members in female headed households compared to 2.9% in male headed households. In addition, 3.5% of the households in the implementation camps have members within their households who are chronically ill; 1.1% in female headed households and 2.4% in male headed households.

Table 6: Household heads disability and chronic illness by implementation and control camps

		Household Disability and Chronic Illness			
		Proportion of household members chronically unable to work for health reasons	Proportion of household members chronically ill	Proportion of household members unable to work for disability reasons	Proportion of household members disabled
Overall implementation camps	All	3.7	3.5	1.8	1.6
	Female	0.8	1.1	0.4	0.2
	Male	2.9	2.4	1.4	1.4
Overall control camps	All	2.6	1.0	0.8	0.5
	Female	1.0	0.3	0.0	0.0
	Male	1.5	0.8	0.8	0.5
	All	1.7	0.6	2.3	1.2
	Female	0.2	0.2	0.8	0.2

Central implementation camps	Male	1.4	0.4	1.4	1.0
Central control camp	All	2.5	0.0	0.8	0.0
	Female	0.0	0.0	0.0	0.0
	Male	2.5	0.0	0.8	0.0
Eastern implementation camps	All	6.6	7.1	2.0	1.5
	Female	1.5	1.8	0.2	0.0
	Male	5.1	5.3	1.8	1.5
Eastern control camp	All	2.6	2.6	0.7	0.7
	Female	1.3	0.7	0.0	0.0
	Male	1.3	2.0	0.7	0.7
Southern implementation camps	All	3.7	4.5	2.1	1.2
	Female	1.2	2.1	0.4	0.4
	Male	2.5	2.5	1.6	0.8
Southern control camp	All	3.3	0.0	1.7	1.7
	Female	3.3	0.0	0.0	0.0
	Male	0.0	0.0	1.7	1.7
Western implementation camps	All	2.5	1.2	0.4	2.9
	Female	0.4	0.4	0.0	0.4
	Male	2.1	0.8	0.4	2.5
Western control camp	All	1.7	0.0	0.0	0.0
	Female	0.0	0.0	0.0	0.0
	Male	1.7	0.0	0.0	0.0

At provincial level, in the implementation sites, 5.8% of the households in Central had members of their households who had some form of either disability or chronically ill, whereas Eastern had the highest proportion of 17.2%, followed by Southern at 11.5% and Western at 7.1%. In the control camps, the district with the highest proportion of people with disability, chronically ill or unable to work is Southern with 6.7% followed by Eastern with 6.6 %, Central district has a total of 3.4% and finally Western with 1.7%.

5.1.5 Employment Status

In terms of employment status, most household heads across the implementation and control camps are engaged in informal employment which comprise farming and other small-scale income generating activities such as self-employed, petty trade, sell of charcoal, casual labourer, among others. Farming makes up 63.4% and 61.8% in the implementation and control camps respectively. Out of this, 52.4% are in male headed households compared to 11.0% in female headed households in the implementation camps while 50.9% and 10.9% are in male and female headed households respectively in the control camps. Only 1.8% of the members of households in the implementation camps and 2.6% in the control camps are in formal employment (Table 7). This trend is similar when examined at provincial level.

Table 7: Household heads employment Status by implementation and control camps

		Employment status			
		Formal (e.g. White Collar)	Informal (e.g. Farmer Only)	Informal (e.g. Self-employed, Farmer, Petty trade, Sell of charcoal, Casual, Laborers)	Unemployed
Overall implementation camps	All	1.8	63.4	33.3	1.6
	Female	0.2	11.0	4.4	0.6
	Male	1.6	52.4	28.9	0.9
Overall control camps	All	2.6	61.8	33.8	1.8
	Female	0.0	10.9	5.7	0.8
	Male	2.6	50.9	28.1	1.0
Central implementation camps	All	2.1	43.2	53.5	1.2
	Female	0.4	9.8	8.5	0.2
	Male	1.7	33.4	45.0	1.0
Central control camp	All	6.0	40.2	53.0	0.9
	Female	0.0	7.7	7.7	0.0
	Male	6.0	32.5	45.3	0.9
Eastern implementation camps	All	2.2	74.6	21.7	1.6
	Female	0.0	12.7	1.1	0.4
	Male	2.2	61.8	20.5	1.1
Eastern control camp	All	0.0	68.5	30.2	1.3
	Female	0.0	16.1	6.7	0.0
	Male	0.0	52.3	23.5	1.3
Southern implementation camps	All	1.7	74.7	20.3	3.3
	Female	0.0	11.2	2.1	2.5
	Male	1.7	63.5	18.3	0.8
Southern control camp	All	0.0	76.3	16.9	6.8
	Female	0.0	6.8	3.4	5.1
	Male	0.0	69.5	13.6	1.7
Western implementation camps	All	0.4	71.7	27.5	0.4
	Female	0.4	10.0	4.6	0.0
	Male	0.0	61.7	22.9	0.4
Western control camp	All	5.0	73.3	21.7	0.0
	Female	0.0	8.3	1.7	0.0
	Male	5.0	65.0	20.0	0.0

5.1.6 Decision Maker over Household resources

Across the various the implementation and control camps, majority of the decisions at the household level are made jointly by both men and women, with 57.8% and 54.8% respectively (Figure 4). It is interesting to note that in female headed households there are decision still made jointly by men and women and in the control camps by a few men.

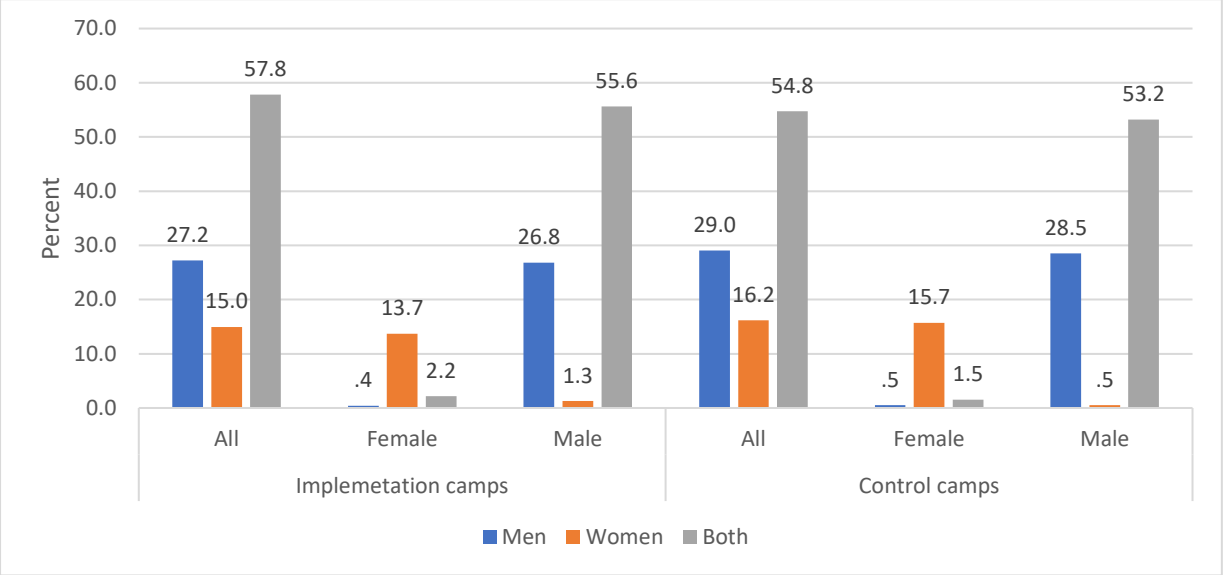


Figure 4: Decision maker over household resources.

Summary

Majority of the households are male headed across all implementation (83.7%) and control (82.3%) camps

The average household size is 7 members in the implementation camps and 6 members in the control camps Female headed households have lower households' members (6) compared to male headed households (7).

Majority of the household heads are married, and women mostly head a household if she is widowed, divorced, separated or raising children as a single parent.

The highest level of education attained by most of the households is primary education, followed by secondary, no education and tertiary education, across both the implementation and control camps

Very small proportion of households with members who are either unable to work, chronically ill or disabled across the implementation camps, an overall proportion of 10.6% compared to 4.9% in the control camps

Most household heads across the implementation and control camps are engaged in informal employment which comprise farming and other small-scale income generating activities such as self-employed, petty trade, sell of charcoal, casual laborer, among others

Majority of the decisions at the household level are made jointly by both men and women.

5.2. Water and Sanitation

This section presents the water and sanitation access of the sampled households.

5.2.1 Main source of drinking water of the households

Majority of households indicates the use of boreholes and unprotected wells as the main source of drinking water for the households. Results in table 8 show that in the implementation camps, 45.2% of the households use wells or boreholes, while in the implementation camps, this stands at 54.1% of the households with very few households using surface water to source their drinking water (Table 8).

Table 8:Main source of drinking water-overall

		Implementation camps			Control camps		
		All	Female	Male	All	Female	Male
Main source of drinking water (%)	Piped into dwelling	0.2	0	0.2	0.3	0	0.3
	Piped to yard/plot	0.3	0	0.3	0.3	0	0.3
	Piped to neighbour	0.2	0.1	0.1	0	0	0
	Public tap standpipe	2.8	0.3	2.5	1.8	0.3	1.5
	Tube well or borehole	57.6	9.4	48.2	54.1	10.8	43.3
	Protected well	12.4	1.8	10.7	13.8	2.1	11.8
	Unprotected well	16.7	3.5	13.2	20.3	3.1	17.2
	Protected spring	0.8	0.1	0.6	0.3	0	0.3
	unprotected spring	1.7	0.2	1.5	1.5	0.5	1
	Cart with small tank	0.1	0	0.1	0.3	0	0.3
	Surface water (River/Dam,etc)	5.1	0.8	5.7	6.7	0.8	5.9
	Other, specify	0.6	0.1	0.6	0.8	0.3	0.5

A breakdown of the results by region shows that 75% of the households in the eastern implementation camps use borehole as the main source of drinking water (Table 9), this is relatively the highest across the control and implementation camps.

Table 9: Main source of drinking water-provincial

		Main source of drinking water for members of your household?											
		Piped into dwelling	Piped to yard/plot	Piped to neighbour	Public tap standpipe	Tube well or borehole	Protected well	Unprotected well	Protected spring	unprotected spring	Cart with small tank	Surface water(River/Dam/ Canal,etc)	Other, specify
Central implementation camps	All	0.4	0.2	0.4	6.6	38.3	24.0	23.8	1.0	2.3	.2	2.1	0.6
	Female	0.0	0.0	0.0	0.6	8.7	3.5	5.4	0.2	0.2	0.0	0.2	0.0
	Male	0.4	0.2	0.4	6.0	29.6	20.5	18.4	0.8	2.1	.2	1.9	0.6
Central control camp	All	0.0	0.0	0.0	4.2	23.7	29.7	34.7	0.0	3.4	0.0	3.4	0.8
	Female	0.0	0.0	0.0	0.8	0.0	5.1	6.8	0.0	1.7	0.0	0.0	0.8
	Male	0.0	0.0	0.0	3.4	23.7	24.6	28.0	0.0	1.7	0.0	3.4	0.0
Eastern implementation camps	All	0.2	0.7	0.2	0.9	75.6	4.4	6.7	0.9	1.6	0.0	7.3	1.6
	Female	0.0	0.0	0.2	0.0	10.2	0.7	1.6	0.2	0.2	0.0	0.9	0.2
	Male	0.2	0.7	0.0	0.9	65.4	3.8	5.1	0.7	1.3	0.0	6.4	1.3
Eastern control camp	All	0.0	0.0	0.0	0.0	75.0	5.9	6.6	0.0	1.3	.7	9.2	1.3
	Female	0.0	0.0	0.0	0.0	18.4	1.3	1.3	0.0	0.0	0.0	2.0	0.0
	Male	0.0	0.0	0.0	0.0	56.6	4.6	5.3	0.0	1.3	.7	7.2	1.3
Southern implementation camps	All	0.0	0.0	0.0	1.2	70.2	9.1	13.6	0.0	0.8	0.0	5.0	0.0
	Female	0.0	0.0	0.0	0.4	12.0	1.2	2.1	0.0	0.0	0.0	0.4	0.0
	Male	0.0	0.0	0.0	0.8	58.3	7.9	11.6	0.0	0.8	0.0	4.5	0.0
Southern control camp	All	1.7	1.7	0.0	0.0	55.0	16.7	23.3	1.7	0.0	0.0	0.0	0.0
	Female	0.0	0.0	0.0	0.0	15.0	0.0	1.7	0.0	0.0	0.0	0.0	0.0
	Male	1.7	1.7	0.0	0.0	40.0	16.7	21.7	1.7	0.0	0.0	0.0	0.0
Western implementation camps	All	0.0	0.0	0.0	0.0	49.8	7.5	24.5	0.8	1.6	0.0	15.8	0.0
	Female	0.0	0.0	0.0	0.0	6.6	0.8	5.0	0.0	0.4	0.0	2.5	0.0
	Male	0.0	0.0	0.0	0.0	43.2	6.6	19.5	0.8	1.2	0.0	13.3	0.0
Western control camp	All	0.0	0.0	0.0	3.3	60.0	0.0	23.3	0.0	0.0	0.0	13.3	0.0
	Female	0.0	0.0	0.0	0.0	8.3	0.0	1.7	0.0	0.0	0.0	0.0	0.0
	Male	0.0	0.0	0.0	3.3	51.7	0.0	21.7	0.0	0.0	0.0	13.3	0.0

5.2.2 Main source of cooking and handwashing water

Results clustered as per implementation and control camps show that majority of household's source of water for handwashing and cooking is from boreholes, protected wells, unprotected wells and surface water. With some households indicating public taps. In the implementation camps 42.7% use protected wells, 7.7%5 use surface water, 1.8% use public taps (Table 10).

With regards to where the water sources are located, majority indicated the sources been located elsewhere with others indicated the sources been within their own yards.

Table 10: Main Source of Water used for cooking and Handwashing implementation and control camps

		Implementation camps			Control camps		
		All	Female	Male	All	Female	Male
Main source of water used by your HH for other purposes such as cooking and hand washing (%)	Piped into dwelling	0.7	0.1	0.7	0.5	0	0.5
	Piped to yard/plot	0.2	0	0.3	0	0	0
	Piped to neighbour	0.1	0.1	0.1	0	0	0
	Public tap standpipe	1.8	0.4	1.9	1.8	0	1.8
	Tube well or borehole	54.4	8.8	45.6	52.8	10.8	42.1
	Protected well	12.2	1.8	10.4	15.1	2.6	12.6
	Unprotected well	18.8	3.5	15.4	17.9	2.6	15.4
	Protected spring	0.5	0.2	0.3	0.5	0	0.5
	unprotected spring	1.9	0.4	1.6	2.3	0.5	1.8
	Surface water (River/Dam,etc)	7.7	1	6.7	8.5	1	7.4
	Bottled water	0.2	0	0.2	0.3	0.3	0
	Other	0.6	0	0.6	0.3	0	0.3

A look at the results by region shows 35.2% of the households in central implementation camps use boreholes, and of these they are dominated by male headed households. In the western, southern and eastern implementation camps, 27.4%, 16.9% and 6.9% respectively use unprotected wells to source water for other purposes. The gender trend is similar with results been dominated by male headed households.

Table 11: Main source of water used for cooking and handwashing by region

		What is the main source of water used by your hh for other purposes such as cooking and hand washing?											
		Piped into dwelling	Piped to yard/plot	Piped to neighbour	Public tap standpipe	Tube well or borehole	Protected well	Unprotected well	Protected spring	unprotected spring	Surface water (River/Dam,etc)	Bottled water	Other, specify
Central implementation camps	All	.4	.2	.2	6.2	35.2	24.4	26.7	.6	2.7	2.7	0.0	.6
	Female	0.0	0.0	0.0	.8	7.7	3.7	5.4	.4	.6	.2	0.0	0.0
	Male	.4	.2	.2	5.4	27.5	20.7	21.3	.2	2.1	2.5	0.0	.6
Central control camp	All	0.0	0.0	0.0	2.5	20.3	33.9	33.1	.8	4.2	4.2	.8	0.0
	Female	0.0	0.0	0.0	0.0	0.0	5.9	5.9	0.0	1.7	.8	.8	0.0
	Male	0.0	0.0	0.0	2.5	20.3	28.0	27.1	.8	2.5	3.4	0.0	0.0
Eastern implementation camps	All	.2	.7	.2	.2	72.5	4.9	6.9	.7	2.2	9.5	.7	1.3
	Female	0.0	0.0	.2	0.0	9.8	.9	1.1	.2	.2	1.6	0.0	.2
	Male	.2	.7	0.0	.2	62.7	4.0	5.8	.4	2.0	8.0	.7	1.1
Eastern control camp	All	0.0	0.0	0.0	.7	73.0	6.6	5.3	.7	1.3	11.8	0.0	.7
	Female	0.0	0.0	0.0	0.0	18.4	1.3	1.3	0.0	0.0	2.0	0.0	0.0
	Male	0.0	0.0	0.0	.7	54.6	5.3	3.9	.7	1.3	9.9	0.0	.7
Southern implementation camps	All	3.3	0.0	0.0	.4	65.3	8.3	16.9	.4	0.0	5.4	0.0	0.0
	Female	.8	0.0	0.0	.4	11.6	.8	2.5	0.0	0.0	0.0	0.0	0.0
	Male	2.5	0.0	0.0	0.0	53.7	7.4	14.5	.4	0.0	5.4	0.0	0.0
Southern control camp	All	1.7	0.0	0.0	0.0	61.7	13.3	23.3	0.0	0.0	0.0	0.0	0.0
	Female	0.0	0.0	0.0	0.0	15.0	0.0	1.7	0.0	0.0	0.0	0.0	0.0
	Male	1.7	0.0	0.0	0.0	46.7	13.3	21.7	0.0	0.0	0.0	0.0	0.0
Western implementation camps	All	.4	0.0	0.0	0.0	48.1	5.8	27.4	0.0	1.7	16.6	0.0	0.0
	Female	0.0	0.0	0.0	0.0	6.6	.8	5.0	0.0	.4	2.5	0.0	0.0
	Male	.4	0.0	0.0	0.0	41.5	5.0	22.4	0.0	1.2	14.1	0.0	0.0
Western control camp	All	1.7	0.0	0.0	5.0	56.7	1.7	15.0	0.0	3.3	16.7	0.0	0.0
	Female	0.0	0.0	0.0	0.0	8.3	1.7	0.0	0.0	0.0	0.0	0.0	0.0
	Male	1.7	0.0	0.0	5.0	48.3	0.0	15.0	0.0	3.3	16.7	0.0	0.0

5.2.3 Availability of Water Sources

The survey sought to get an understanding of the availability of the water sources based on a 2 weeks period to know if they had access. Overall 17.9% on the implementation camps and 19.7% in the control camps indicated the water source not having been available in the last two weeks prior to the survey (Figure 5) .

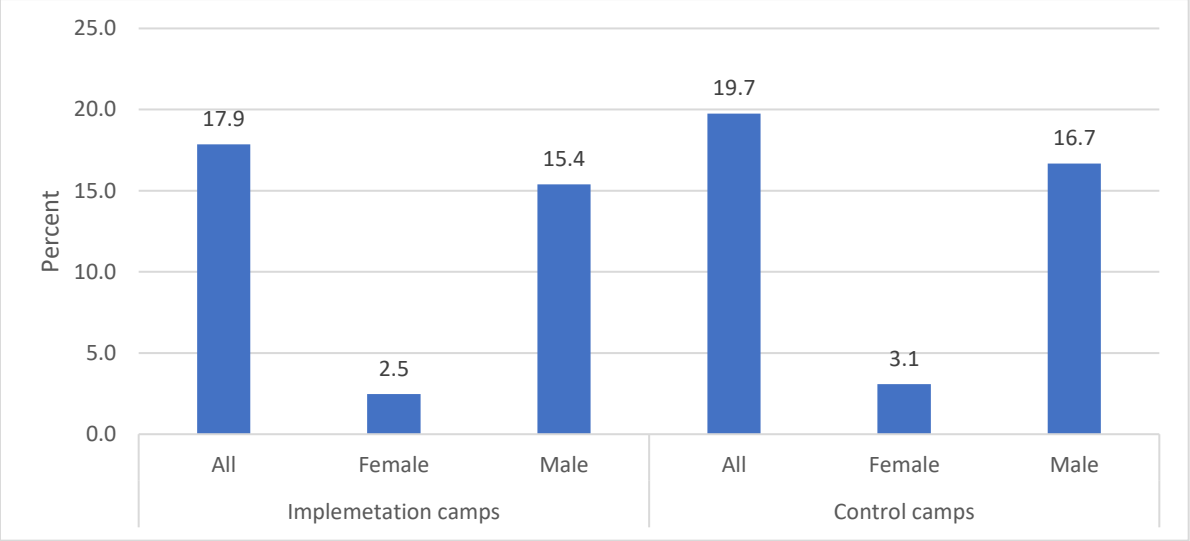


Figure 5: Availability of water in last two weeks implementation and control camps-overall

A look at the results by region shoes that households that had challenges accessing the water sources in the last two weeks were mainly observed in the southern province in both the implementation camps (33.1%) and control camps (33.3%) (Figure 6).

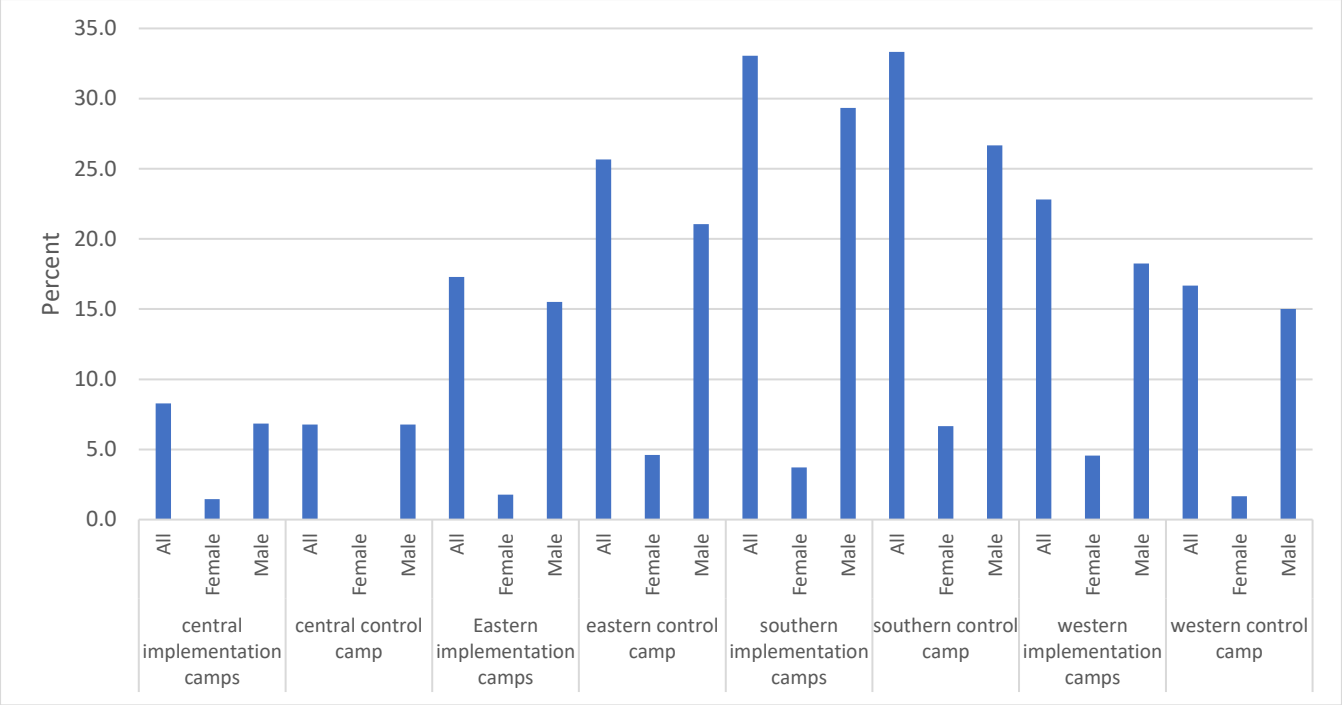


Figure 6: Availability of water in last two weeks implementation and control camps-provincial

5.2.4 Water Safety Measures

An overall look at the results show that in the implementation camps, 32.8% of the households take effort to make water safer to drink as compared to 36.7% in the control camps (Table 12). Majority of the households indicated the use of chlorine (72.7% in the implementation camps) as a measure of making water safer to drink. This was followed by boiling with few households indicating the use of solar disinfection.

Table 12: Water safety measures implementation and control camps

	Implementation camps			Control camps		
	All	Female	Male	All	Female	Male
Households treating water (%)	32.8	5.2	27.7	36.7	5.9	30.8
Boil	19.8	2.8	17	18.9	1.4	17.5
add bleach/chlorine	72.7	11.2	61.5	77.6	14	63.6
Strain through a cloth	0.9	0.4	0.4	0	0	0
Solar disinfection	0.9	0.4	0.4	0.7	0	0.7
Let to stand and settle	4.1	0.6	3.4	1.4	0	1.4
Other	1.5	0.2	1.3	0.7	0	0.7
Don't know	0.2	0	0.2	0.7	0.7	0

A look at the results by province shows that in the Southern, Eastern, Western and Central control camps 60%, 81.5%, 41.7%, and 81.5% use chlorine as a measure of making their water safer to drink with few households 2.1% in the southern implementation camps indicating them not having knowledge of the methods of water treatment indicated during the survey.

5.2.5 Main toilet facility of the households

A look at the type of toilet facility used across the implementation and control camps shows that majority of households use pit latrines with slabs, pit latrines without slabs and the bush/field. Break down of results show that 58% and 57.7% of the households in the implementation and control camps use pit latrines without slabs (Table 13). With regards to the location of the facility, most households indicated that these facilities are located within their own yards

Table 13: Main toilet facility used by household implementation and control camps -Overall

	Implementation camps			Control camps		
	All	Female	Male	All	Female	Male
Flush to piped sewer system	0.1	0	0.1	0.5	0	0.5
Flush to septic tank	0.2	0.1	0.1	0	0	0
Flush to pit latrine	0.1	0	0.1	0.3	0	0.3
Flush to somewhere else	0.1	0	0.1	0	0	0
Flush don't know where	0.1	0	0.1	0	0	0
Ventilated improved pit latrine	2.7	0.6	2.1	1.5	0	1.5
Pit latrine with slab	24.2	4.2	20	29.7	5.4	24.4
Pit latrine without slab / open pit	58	9.3	48.7	57.7	9	48.7
Composting toilet	0.3	0	0.3	0.5	0.3	0.3
Hanging toilet / Hanging latrine	0.3	0	0.3	0.3	0.3	0
No facility / bush / field	13.8	2.2	11.6	9.2	2.6	6.7

A look at the results by region shows that 28.3% of the households in the southern implementation camps use pit latrines without slabs. In the eastern control camps, 8.6% of the households use the bush facility, 40.1% use pit latrines with slabs.

Summary

Summarily, most of households across both the project and control camps indicate the use of boreholes and unprotected wells as the main source of drinking water for the households with the water source indicated being located elsewhere with some saying these are located within their yards.

With regards to making water safe to drink, 32.8% of households in the implementation camp indicated taking effort to make water safer to drink while this was at 36.7% of the households in the control camps. On what measure was used most of the households indicated the use of chlorine and boiling as a measure taken to make water safer to drink.

Majority of the households indicated the use pit latrines with slabs, pit latrines without slabs and the bush/field as the main sanitary facility with majority indicating these facilities being within their own yards. This includes households with various family compositions on the same area of locality.

Table 14: Household Water Treating Methods

		yes	Boil	add bleach/chlorine	Strain through a cloth	Solar disinfection	Let to stand and settle	Other	Don't know
Central implementation camps	All	45.3	22.4	75.3	.9	0.0	0.0	1.4	0.0
	Female	7.2	3.7	11.4	.5	0.0	0.0	.5	0.0
	Male	38.1	18.7	63.9	.5	0.0	0.0	.9	0.0
Central control camp	All	56.8	16.4	83.6	0.0	0.0	0.0	0.0	0.0
	Female	7.6	1.5	11.9	0.0	0.0	0.0	0.0	0.0
	Male	49.2	14.9	71.6	0.0	0.0	0.0	0.0	0.0
Eastern implementation camps	All	35.9	9.3	86.4	1.2	0.0	.6	2.5	0.0
	Female	5.5	0.0	14.8	.6	0.0	0.0	0.0	0.0
	Male	30.4	9.3	71.6	.6	0.0	.6	2.5	0.0
Eastern control camp	All	35.5	13.0	81.5	0.0	0.0	1.9	1.9	1.9
	Female	9.2	1.9	22.2	0.0	0.0	0.0	0.0	1.9
	Male	26.3	11.1	59.3	0.0	0.0	1.9	1.9	0.0
Southern implementation camps	All	19.8	33.3	50.0	0.0	6.3	8.3	0.0	2.1
	Female	2.5	6.3	2.1	0.0	4.2	0.0	0.0	0.0
	Male	17.4	27.1	47.9	0.0	2.1	8.3	0.0	2.1
Southern control camp	All	16.7	40.0	60.0	0.0	0.0	0.0	0.0	0.0
	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	16.7	40.0	60.0	0.0	0.0	0.0	0.0	0.0
Western implementation camps	All	14.9	33.3	25.0	0.0	2.8	38.9	0.0	0.0
	Female	2.9	5.6	5.6	0.0	0.0	8.3	0.0	0.0
	Male	12.0	27.8	19.4	0.0	2.8	30.6	0.0	0.0
Western control camp	All	20.0	41.7	41.7	0.0	8.3	8.3	0.0	0.0
	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Male	20.0	41.7	41.7	0.0	8.3	8.3	0.0	0.0

Table 15: Main Sanitation Facilities used by Households

		Flush to piped sewer system	Flush to septic tank	Flush to pit latrine	Flush to somewhere else	Flush don't know where	Ventilated improved pit latrine	Pit latrine with slab	Pit latrine without slab / open pit	Composting toilet	Hanging toilet / Hanging latrine	No facility / bush / field	Other
Central implementation camps	All	0.0	.6	.2	.2	0.0	3.3	19.5	73.7	0.0	0.0	2.3	.2
	Female	0.0	.2	0.0	0.0	0.0	.6	4.3	13.5	0.0	0.0	.2	0.0
	Male	0.0	.4	.2	.2	0.0	2.7	15.1	60.2	0.0	0.0	2.1	.2
Central control camp	All	0.0	0.0	0.0	0.0	0.0	.8	20.3	76.3	.8	0.0	1.7	0.0
	Female	0.0	0.0	0.0	0.0	0.0	0.0	1.7	13.6	0.0	0.0	0.0	0.0
	Male	0.0	0.0	0.0	0.0	0.0	.8	18.6	62.7	.8	0.0	1.7	0.0
Eastern implementation camps	All	.2	0.0	0.0	0.0	.4	.4	29.7	58.1	.2	0.0	10.6	.2
	Female	0.0	0.0	0.0	0.0	0.0	0.0	4.2	8.4	0.0	0.0	1.6	0.0
	Male	.2	0.0	0.0	0.0	.4	.4	25.5	49.7	.2	0.0	9.1	.2
Eastern control camp	All	0.0	0.0	0.0	0.0	0.0	0.0	40.1	50.7	0.0	0.0	8.6	.7
	Female	0.0	0.0	0.0	0.0	0.0	0.0	9.9	8.6	0.0	0.0	3.9	.7
	Male	0.0	0.0	0.0	0.0	0.0	0.0	30.3	42.1	0.0	0.0	4.6	0.0
Southern implementation camps	All	0.0	0.0	0.0	0.0	0.0	7.4	30.6	44.2	.4	.4	16.5	.4
	Female	0.0	0.0	0.0	0.0	0.0	1.7	6.2	6.2	0.0	0.0	2.1	0.0
	Male	0.0	0.0	0.0	0.0	0.0	5.8	24.4	38.0	.4	.4	14.5	.4
Southern control camp	All	1.7	0.0	1.7	0.0	0.0	6.7	33.3	28.3	0.0	1.7	26.7	0.0
	Female	0.0	0.0	0.0	0.0	0.0	0.0	6.7	3.3	0.0	1.7	5.0	0.0
	Male	1.7	0.0	1.7	0.0	0.0	6.7	26.7	25.0	0.0	0.0	21.7	0.0
Western implementation camps	All	0.0	0.0	0.0	0.0	0.0	.8	17.0	40.2	.8	1.2	39.8	0.0
	Female	0.0	0.0	0.0	0.0	0.0	.4	1.7	5.8	0.0	0.0	7.5	0.0
	Male	0.0	0.0	0.0	0.0	0.0	.4	15.4	34.4	.8	1.2	32.4	0.0
Western control camp	All	1.7	0.0	0.0	0.0	0.0	1.7	18.3	68.3	1.7	0.0	8.3	0.0
	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.7	1.7	0.0	1.7	0.0
	Male	1.7	0.0	0.0	0.0	0.0	1.7	18.3	61.7	0.0	0.0	6.7	0.0

5.3 Agricultural Production

The baseline survey assessed the agricultural production looking at various components namely: land owned, crops grown and conservation agriculture.

5.3.1 Land use

Smallholder farmer's livelihood is mainly dependent on land. The overall results show that in the implementation camps, households own on average 8.99 hectares, while in the control camps the average size of land owned is 7.88 hectares (Figure 7). On average in the control camps female headed households own 5.06 hectares while in the implementation camps they own 6.15 hectares.

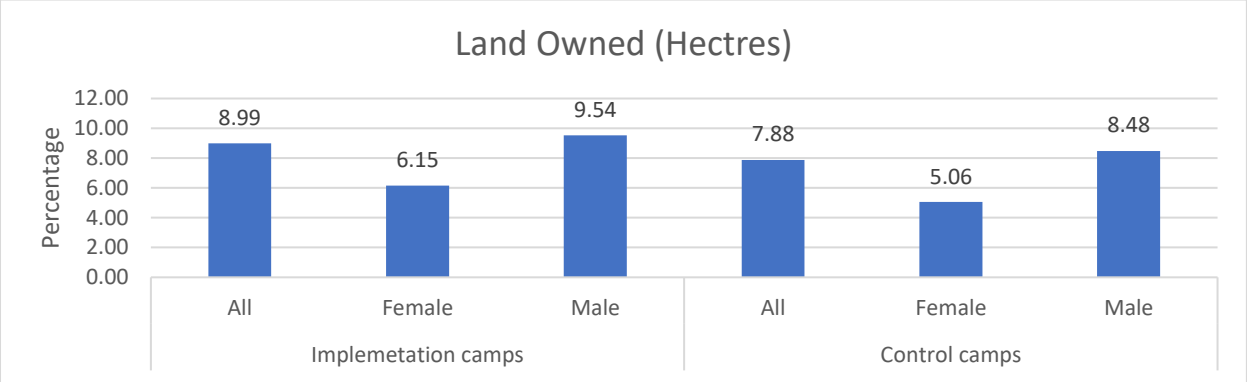


Figure 7: Average land owned by implementation and control camps-overall

A provincial analysis of the average land size owned by households shows that households in the implementation camps of Central province owned the highest size of land at an average of 15.52 while the least o recorded in the implementation camps of eastern province with average land size of 4.89 (Figure 8). The trend across all regions show that female headed households own less land as compared to male headed households

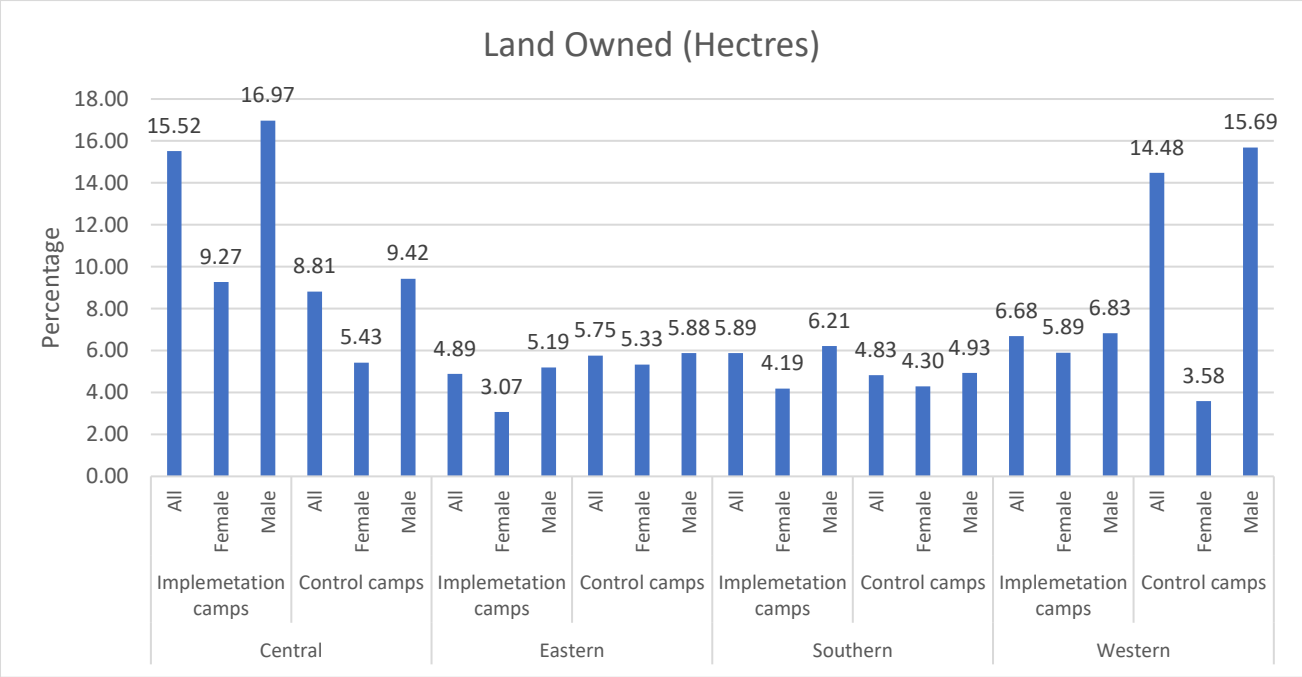


Figure 8: Average land owned by implementation and control camps-provincial

5.3.2 Crops Grown

The survey got an overview of the number of crops grown as this represents the crop diversity in terms of agriculture production which has a direct relation with diversity of food types consumed. In both the implementation and control camps, households grew on average 3 crops with the trend showing male headed households growing more crops compared to female headed households (Figure 9).

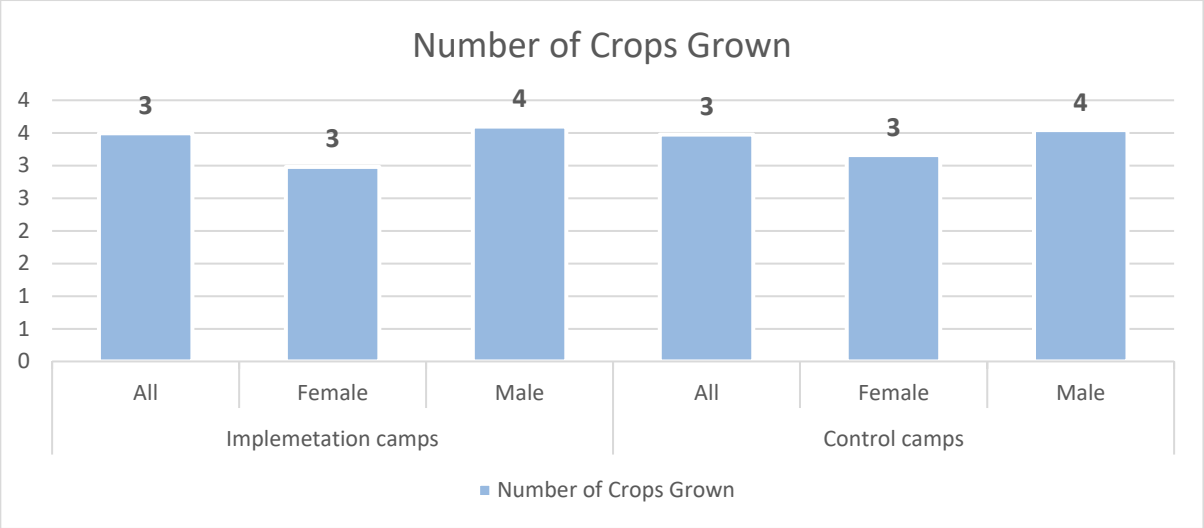


Figure 9: Number of crops grown by implementation and control camps-overall

A look at the results per province shows that Central and Eastern provinces had the highest number of different types of crops grown (on average 4 crops), in Southern and Western the average number of different crops grown was 3. In the Eastern implementation camps female headed households grew on average 3 crops, a trend observed in implementation camps of Central and Eastern province and control camps of Eastern and Western control camps (Figure 10).

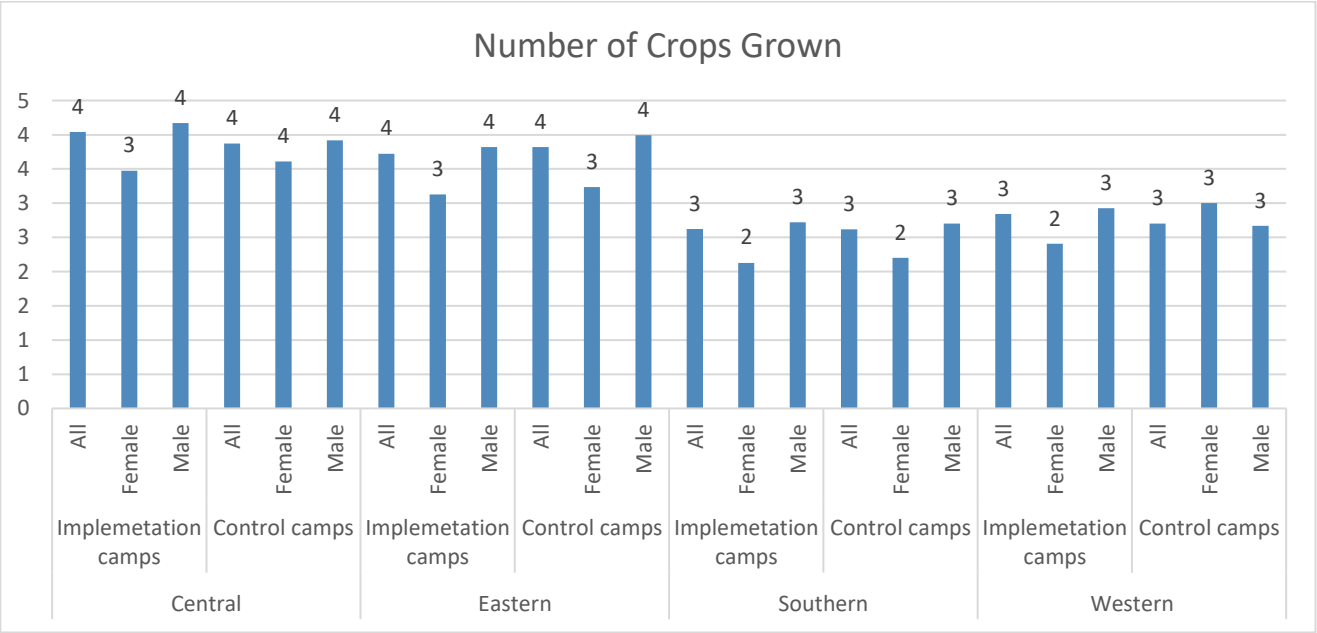


Figure 10: Number of crops grown by implementation and control camps-provincial

5.3.3 Conservation Agriculture

The survey looked at conservation agriculture to assess the household's knowledge and practice. Conservation Agriculture (CA) is a set of agricultural practices which aims to improve agricultural productivity through the application of the three CA principles: minimal soil disturbance, permanent soil cover and crop rotation.

Knowledge of Conservation Agriculture

Majority of the households indicated having heard about CA practices. Results show that across the districts households have knowledge about most conservation agriculture techniques, with most having heard about ripping (Implementation camps-88.1%, Control camps-87.9%) and mulching (Implementation camps-80.0%, Control camps-81.8%) (Figure 11). It is worth noting the relatively low numbers in females having knowledge about CA techniques and practices.

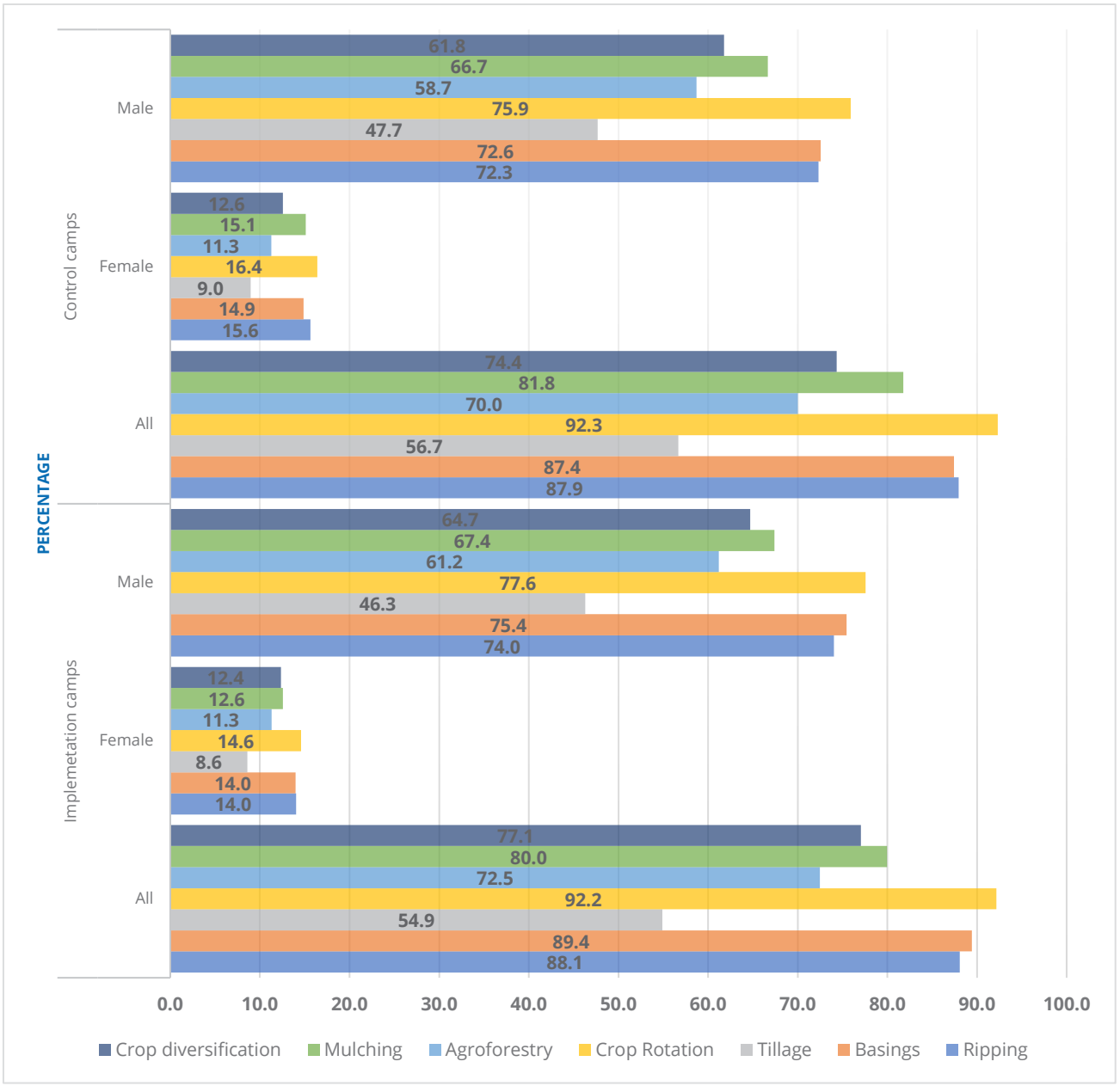


Figure 11: Households knowledge of Conservation Agriculture by implementation and control camps-overall

A look at the results by province shows that overall, western has the least number of households having knowledge of conservation agricultural practices. 10% of the households in the western control camps indicated having knowledge about crop rotation, which is relatively low compared to the 96.9% of households in the eastern implementation camps having knowledge about crop rotation (Table 16). The trend in results show that majority of male headed households have knowledge of various conservation agriculture techniques as compared to the female headed households, this is observed in the southern implementation camps where 7.9% of the female headed households have knowledge about minimum tillage while on the other hand the male headed households are at 52.5%.

Table 16: Households knowledge of Conservation Agriculture by implementation and control camps-provincial

		Ripping	Basins	Tillage	Crop Rotation	Agroforestry	Mulching	Crop diversification
Central implementation camps	All	90.1	91.9	53	94	77	76.2	81.2
	Female	16.6	16.8	9.7	17	13.9	13.5	14.3
	Male	73.5	75.2	43.3	77	63.1	62.7	66.9
Central control camp	All	91.5	88.1	63.6	93.2	77.1	75.4	78
	Female	12.7	11	6.8	13.6	9.3	11	10.2
	Male	78.8	77.1	56.8	79.7	67.8	64.4	67.8
Eastern implementation camps	All	94.7	94.9	62.7	96.9	81.4	96	81.2
	Female	13.1	13.1	10	13.7	11.5	13.5	12.6
	Male	81.6	81.8	52.8	83.1	69.8	82.5	68.5
Eastern control camp	All	92.1	92.1	61.2	97.4	71.1	96.1	73
	Female	20.4	21.1	13.8	22.4	16.4	22.4	17.1
	Male	71.7	71.1	47.4	75	54.6	73.7	55.9
Southern implementation camps	All	97.1	92.6	60.3	96.7	70.2	75.2	81
	Female	15.7	12.8	7.9	14.9	9.5	12	12
	Male	81.4	79.8	52.5	81.8	60.7	63.2	69
Southern control camp	All	98.3	93.3	61.7	95	68.3	78.3	81.7
	Female	16.7	13.3	5	13.3	8.3	10	10
	Male	81.7	80	56.7	81.7	60	68.3	71.7
Western implementation camps	All	62.7	71	38.6	75.1	49	62.2	57.3
	Female	9.1	11.2	4.6	11.2	7.5	9.5	8.3
	Male	53.5	59.8	34	63.9	41.5	52.7	49
Western control camp	All	60	68.3	26.7	75	55	61.7	63.3
	Female	8.3	8.3	5	10	5	10	8.3
	Male	51.7	60	21.7	65	50	51.7	55

Following Knowledge about CA practices, the survey also looked at the levels of application of CA techniques. Indicatively in both the project and control camps, majority of the households practiced crop rotation (79.4% in the implementation camps, 79.7% in the control camps (Figure 12).

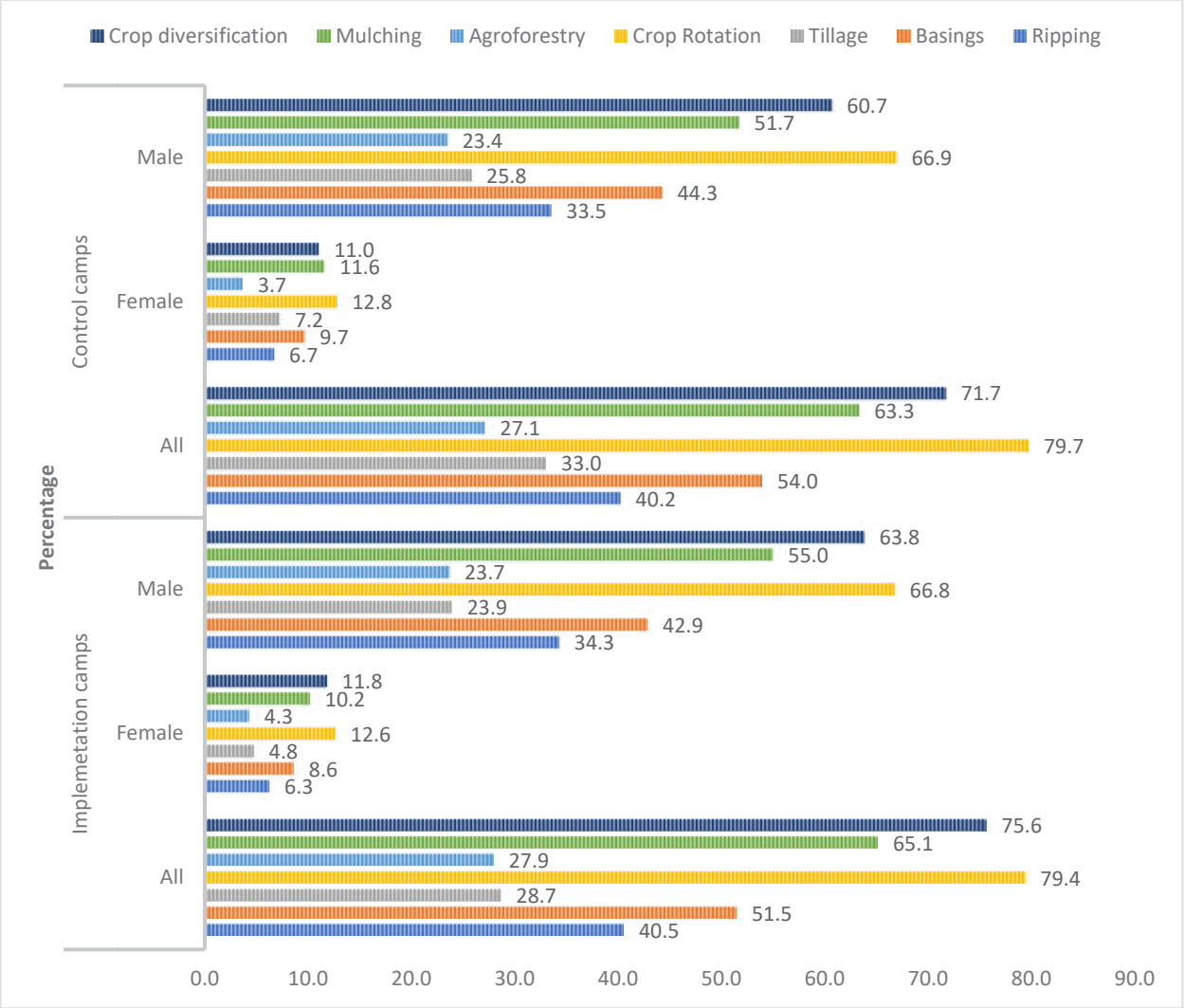


Figure 12: Households practicing Conservation Agriculture by implementation and control camps-overall

A look at results by province shows that none of the female headed households in western region have practiced minimum tillage, while significantly 83.7% in the central project camps have practiced crop diversification (Table 17). In the western implementation camps, 35.8% of the households have practiced ripping while 72.8% of the male headed households in the central region control camps have practiced crop diversification.

Summary

Smallholder farmer's livelihood is mainly dependent on land and own 8ha and 9.54 ha of land in the implementation and control camps. Female headed households own less land than male headed households.

Households grew on average 3 crops with male headed households growing more crops compared to female headed households. Maize remains the predominant crop grown.

Majority of the households indicated having heard about CA practices (about 80%) and practiced CA.

Table 17: Households knowledge of Conservation Agriculture by implementation and control camps-provincial

HH Application of CA Technique		Ripping	Basins	Tillage	Crop Rotation	Agroforestry	Mulching	Crop diversification
Central implementation camps	All	45.1	49.8	18.8	86.3	30.4	60.6	81.4
	Female	8.3	9	2.7	16.3	7	12.2	14.5
	Male	36.8	40.8	16	70	23.4	48.4	66.8
Central control camp	All	54.6	67.3	28	89.1	37.4	53.9	83.7
	Female	7.4	9.6	4	12.7	6.6	9	10.9
	Male	47.2	57.7	24	76.4	30.8	44.9	72.8
Eastern implementation camps	All	37.5	57.7	47	91.5	21.3	77.1	78.7
	Female	5.2	8.9	7.8	13.3	2.7	10.2	12
	Male	32.3	48.8	39.2	78.3	18.5	67	66.7
Eastern control camp	All	35.7	47.9	49.5	88.5	17.6	77.4	73.9
	Female	7.1	13.6	12.9	17.6	3.7	16.4	13.5
	Male	28.6	34.3	36.6	70.9	13.9	61	60.4
Southern implementation camps	All	40.9	35.3	13	68.8	41.2	56.6	71.4
	Female	5.1	5.8	3.4	8.1	3.5	6.6	7.1
	Male	35.7	29.5	9.6	60.7	37.6	50	64.3
Southern control camp	All	37.3	33.9	10.8	68.4	43.9	42.6	65.3
	Female	8.5	3.6	2.7	7	0	4.3	8.2
	Male	28.8	30.4	8.1	61.4	43.9	38.3	57.1
Western implementation camps	All	35.8	61.4	24.7	46.4	22	52	57.2
	Female	5.3	10.5	3.2	7.7	1.7	9.3	10.1
	Male	30.5	50.9	21.5	38.7	20.3	42.7	47.1
Western control camp	All	19.4	68.3	12.5	42.2	9.1	56.8	44.7
	Female	0	4.9	0	4.4	0	8.1	7.9
	Male	19.4	63.4	12.5	37.8	9.1	48.6	36.8

5.4 Impact Indicators

5.4.1 Minimum Dietary Diversity Score for Women

The Minimum Dietary Diversity Score for Women (MDD-W) indicator is a population level indicator that measures the number of women of reproductive age (15 to 49 years old) who consumed five out of ten food items consumed the previous 24 hours. Minimum diet diversity is a proxy indicator that measures diet diversity to predict the likelihood of micronutrient adequacy for groups of women of reproductive age. It is a simple to use dietary indicator for vulnerable populations. Additionally, it can be used to study intra-household allocation of resource to ensure household benefits are shared by all members. It also provides vital information to measure if WFP programmes meet gender requirements.

An overview of the results across all the camps show that majority of the women met the minimum dietary diversity score. In the implementation camps, more women in male headed households meet the minimum dietary score (67.1%) compared to women in women headed households (65.3) (Figure 13). In the control camps, the opposite stands, with more women in female headed households meeting the minimum dietary score (71.7%) compared to 64.9% of women in male headed households.

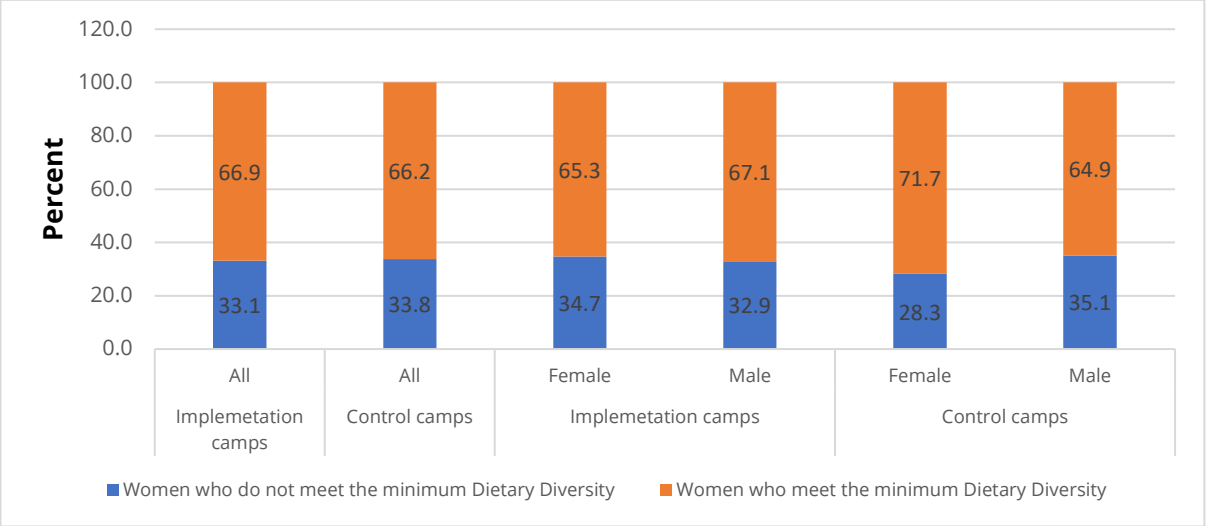


Figure 13: Minimum Dietary Diversity Score Women by implementation and control camps-overall

5.4.2 Food Consumption Score

The household Food Consumption Score (FCS) is used as a proxy indicator for household food security. It is a measure of dietary diversity, food frequency and the relative nutritional importance of the food consumed at household level. A high Food Consumption Score increases the probability of a household's nutrient intake culminating from balanced and diverse foods consumed. The FCS is classified into three components; these are poor, borderline and acceptable as outline in box 1. The results under this subsection are therefore presented based on this classification.

Box 1: Food Consumption Classification

Poor food consumption: *Households that are not consuming staples and vegetables every day and never or very seldom consume protein-rich food such as meat and dairy.*

Borderline food consumption: *Households that are consuming staples and vegetables every day, accompanied by oil and pulses a few times a week.*

Acceptable food consumption: *Households that are consuming staples and vegetables every day, frequently accompanied by oil and pulses, and occasionally meat, fish and dairy.*

Overall, majority of the households in both the implementation and control camps have an acceptable food consumption at 87.8% and 86.9% respectively (Figure 14). The results show a higher food consumption score among male headed households in the implementation camps as compared to the control camps. Under the implementation camps, 2.6% of the households headed by females have poor food consumption, while only 1.4% of households headed by males reported poor food consumption. This is a source of concern in terms of nutritional standings.

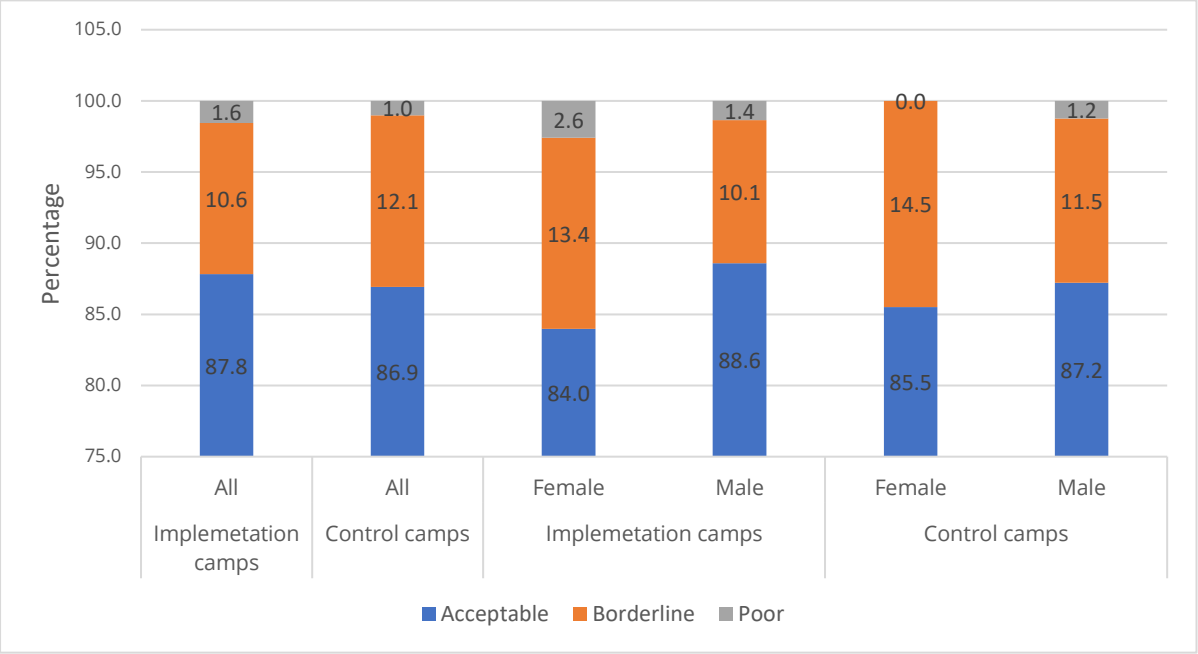


Figure 14: Household Food Consumption Score by implementation and control camps-overall

The results by province show a similar trend. However, southern province recorded a higher poor food consumption of 4.6% overall and 10.3% among the female headed households (Figure 15). This could be due to the poor agriculture season experienced in the province.

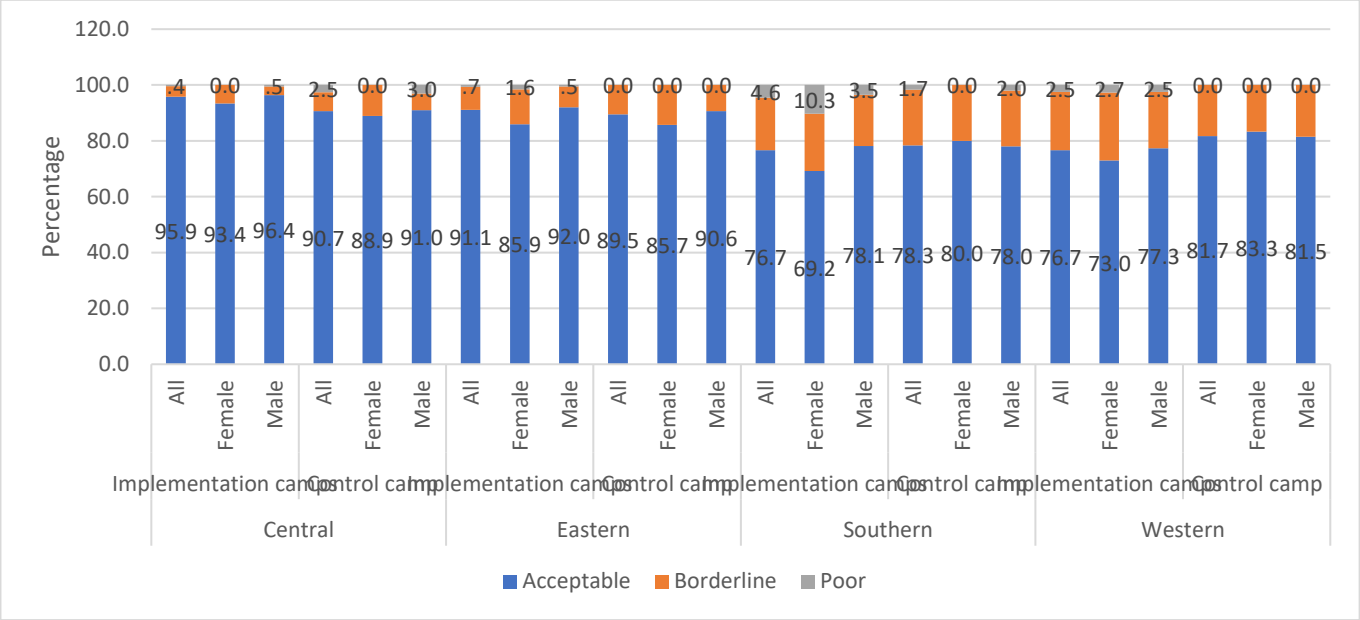


Figure 15: Household Food Consumption Score by implementation and control camps-provincial

5.4.3 Food Expenditure Share

Household expenditure share is used to proxy household expenditure. This indicator is based on the premise that the greater the food budget share within a household's total budget relative to other consumed items the more economically vulnerable the household is. It is calculated as the proportion of monthly food expenditure (both cash and credit) to total monthly household expenditure excluding savings. In general, the higher the expenses are on food in relation to other consumed items/services, the more economically vulnerable the household.

The food expenditure share results show that majority of the household spent between 1-49% of their income on food across both the implementation (71.8%) and control camps (74%) (Figure 16). There is a significant proportion of households spending most of their income (75% or more) on food in both the implementation and control camps.

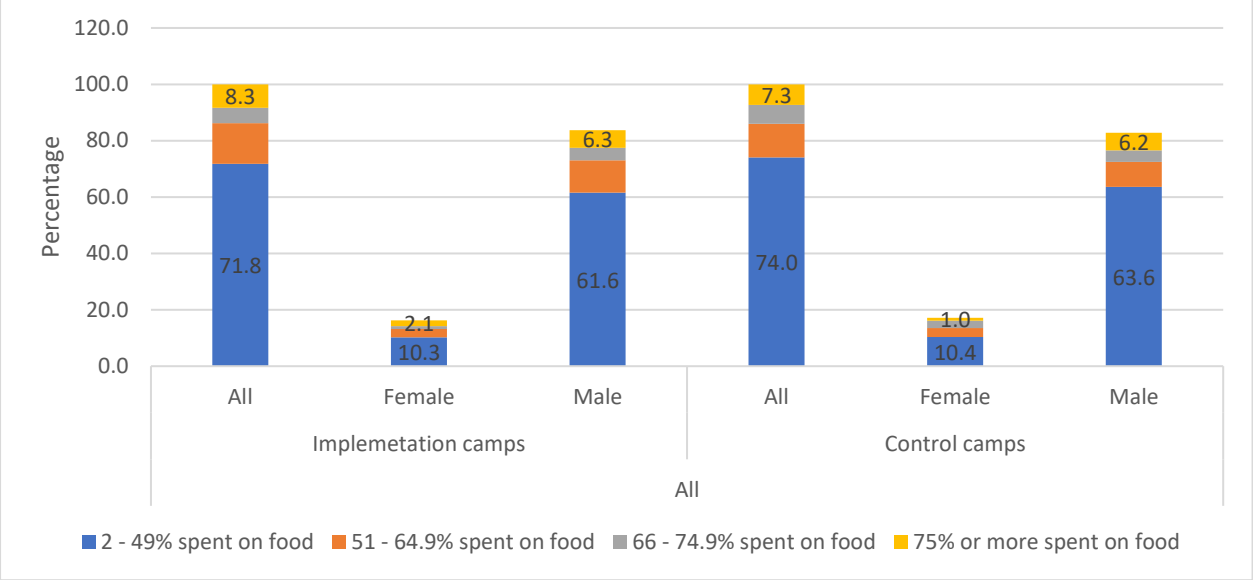


Figure 16: Household Food Expenditure Share by implementation and control camps-overall

Examining the results at provincial level (Table 18), we see that a significant percent of households in western province in both the implementation camps (14.6%) and control camps (11.9%) spent a large proportion (75% or more) of the income on food indicating the economic vulnerability the household. This is followed by eastern and southern provinces.

Table 18: Household Food Expenditure Share by implementation and control camps-provincial

			Food Expenditure Share			
			2 - 49% spent on food	51 - 64.9% spent on food	66 - 74.9% spent on food	75% or more spent on food
Central	Implementation camps	All	78.2	16.1	2.7	2.9
		Female	12.2	4.8	.4	1.3
		Male	66.0	11.3	2.3	1.7
	Control camps	All	84.6	8.5	3.4	3.4
		Female	10.3	4.3	.9	0.0
		Male	74.4	4.3	2.6	3.4
Eastern	Implementation camps	All	70.1	12.6	6.7	10.6
		Female	9.4	1.1	1.6	2.2
		Male	60.7	11.5	5.2	8.3
	Control camps	All	69.8	16.1	6.7	7.4
		Female	14.1	3.4	3.4	.7
		Male	55.7	12.8	3.4	6.7
Southern	Implementation camps	All	70.5	14.5	6.2	8.7
		Female	10.8	2.1	.8	2.5
		Male	59.8	12.4	5.4	6.2
	Control camps	All	68.3	10.0	11.7	10.0
		Female	5.0	1.7	6.7	3.3
		Male	63.3	8.3	5.0	6.7

Western	Implementation camps	All	63.6	14.2	7.5	14.6
		Female	7.5	3.3	1.3	2.9
		Male	56.1	10.9	6.3	11.7
	Control camps	All	69.5	10.2	8.5	11.9
		Female	6.8	1.7	0.0	1.7
		Male	62.7	8.5	8.5	10.2

5.4.4 Minimum Acceptable Diet for Children 6-23months

The MAD is a summary indicator for infant and young child feeding (IYCF) practices among children 6 – 23 months. A child is classified as consuming a Minimum Acceptable Diet if s/he meet both (1) the minimum diet diversity and (2) the minimum meal frequency. MAD combines two other IYCF indicators: minimum dietary diversity and minimum meal frequency and quantifies the likelihood of both adequate macro and micronutrient intake among children of this age group; therefore, it is the most complete available indicator to measure infant and young children diets. Additionally, since it is a summary indicator, it can be disaggregated to determine likely malnutrition issues—whether macronutrient feeding practices or micronutrient diet diversity—and find solutions to these issues.

The MAD indicator determines the proportion of breastfed children (aged 6-23 months) who consumed, at the very least, a minimum level of dietary diversity and meal frequency during the previous day. And the proportion of non-breastfed children (aged 6-23 months) who received at least two milk feedings and had at least the minimum dietary diversity (not including milk feeds) coupled with meal frequency during the previous day.

5.4.5 Awareness on Infant and Young child feeding practice

Infant and Young Child Feeding Practices includes an array of core indicators as outlined below:

1. Early initiation of breastfeeding

Proportion of children born in the last 24 months who were put to the breast within one hour of birth. Knowledge on whether the target population is aware about the need to initiate early breastfeeding and as the first food for a new born showed that majority of the households knew that breastmilk is the only food that should be given to a new born baby (Figure 17). The few household's indication other and no knowledge remain worrying.

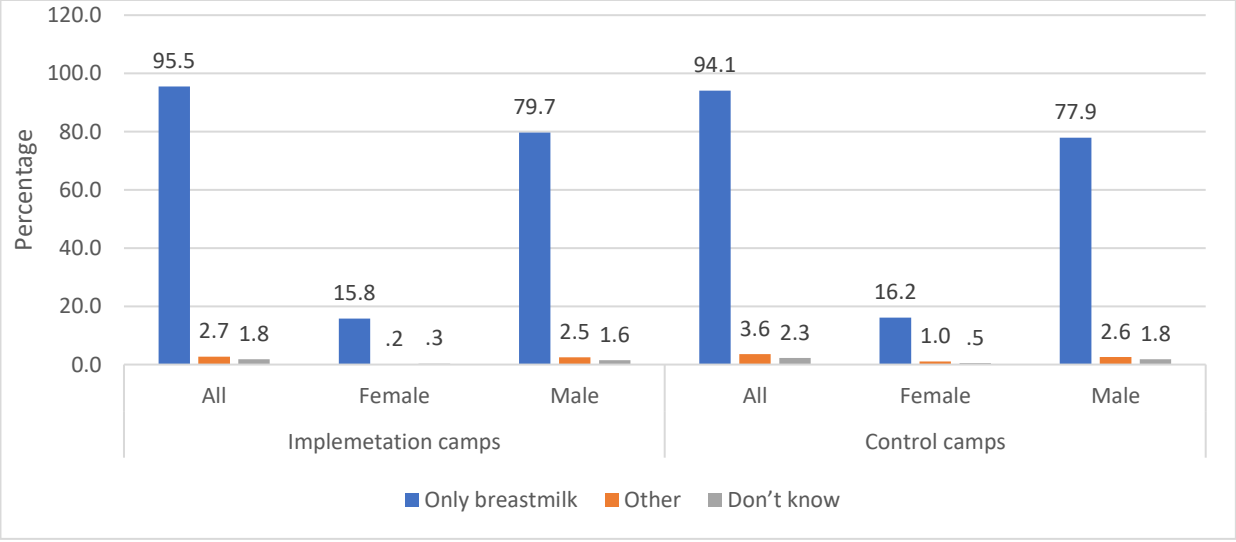


Figure 17: Household Knowledge on Early Initiation of Breastmilk Feeding- overall

The results on provincial representation show steady knowledge base of respondents regarding knowing what new born babies should receive. With the representations standing from the least 91.1% Eastern province; 96.9% Central province; 97.5% Southern province and highest with 98.8% in western province.

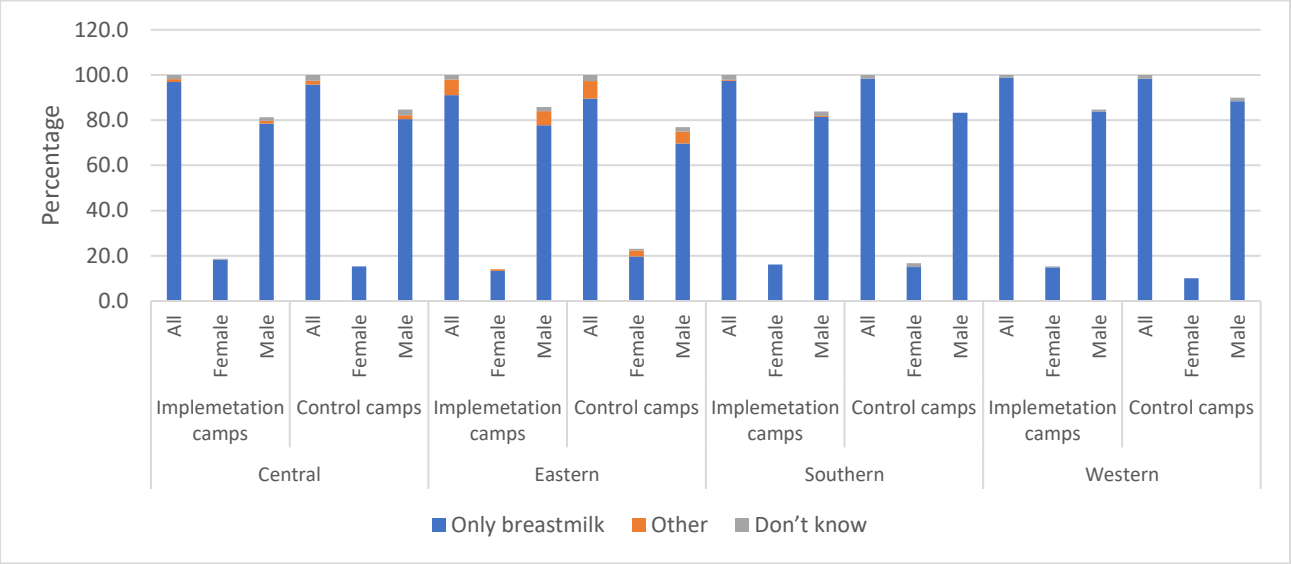


Figure 18: Household Knowledge on Early Initiation of Breastmilk Feeding- overall

2. Exclusive breastfeeding under 6 months

Proportion of infants 0–6 months of age who are fed exclusively with breast milk. Infants 0–6 months of age who received only breast milk during the previous day.

Respondents were asked if they had heard of exclusive breastfeeding. The results show that a large proportion of them had heard about exclusive breastfeeding, with 71.5% in the implementation camps and 66.4 % in the control camps (Figure 19).

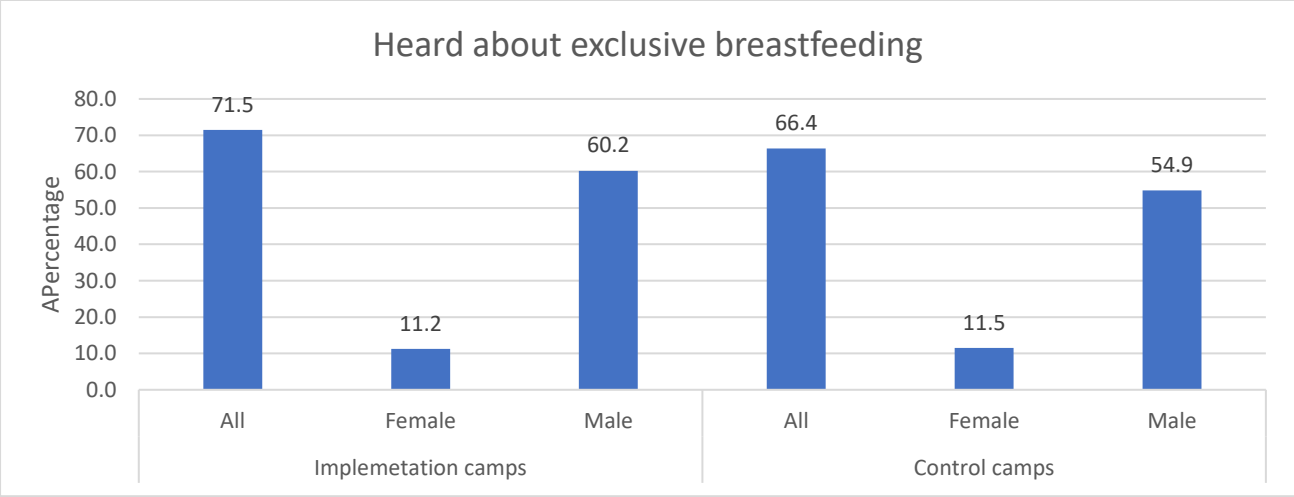


Figure 19:Households that have heard about exclusive breastfeeding-overall

At provincial level, the trend remains the same, with Southern province having the highest respondents having heard about exclusive breastfeeding at 78.5% followed by western province at 75.5%, Central at 71.8% and Eastern province at 65.2% in the implementation camps (Figure 20).

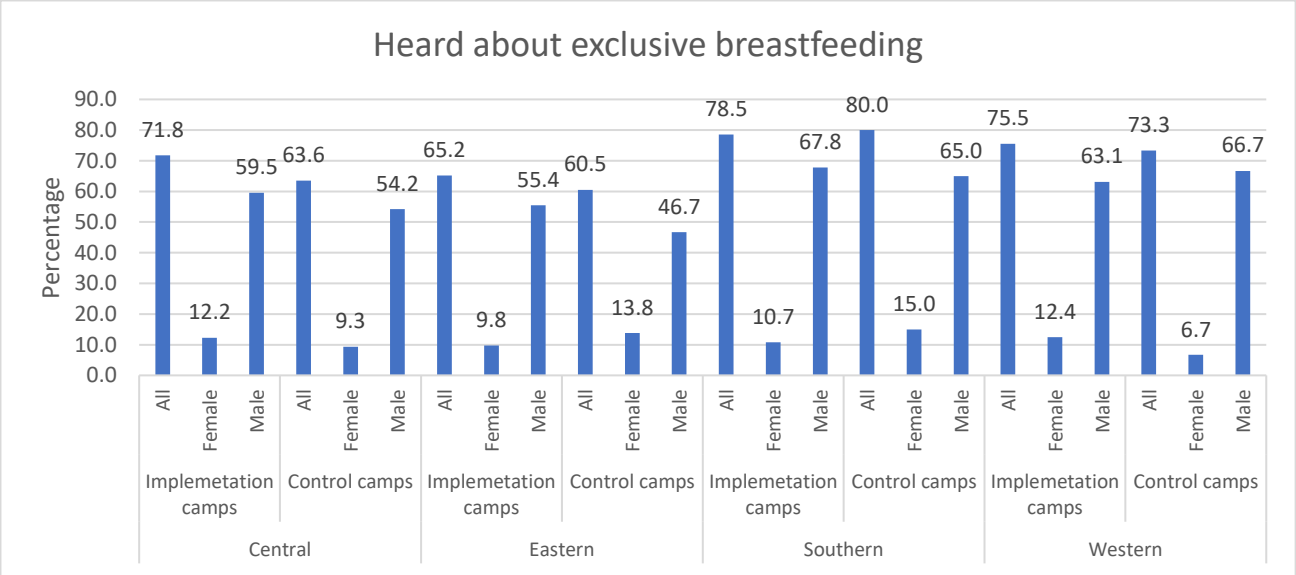


Figure 20: Households that have heard about exclusive breastfeeding-provincial

Exclusive breastfeeding was well understood among most of the respondents in the implementation camps with 74.6% representation. Provincial representation of the respondents had Southern province with 85.5% followed by Western province with 81.3% with Eastern province having the least representation of 68.7%.

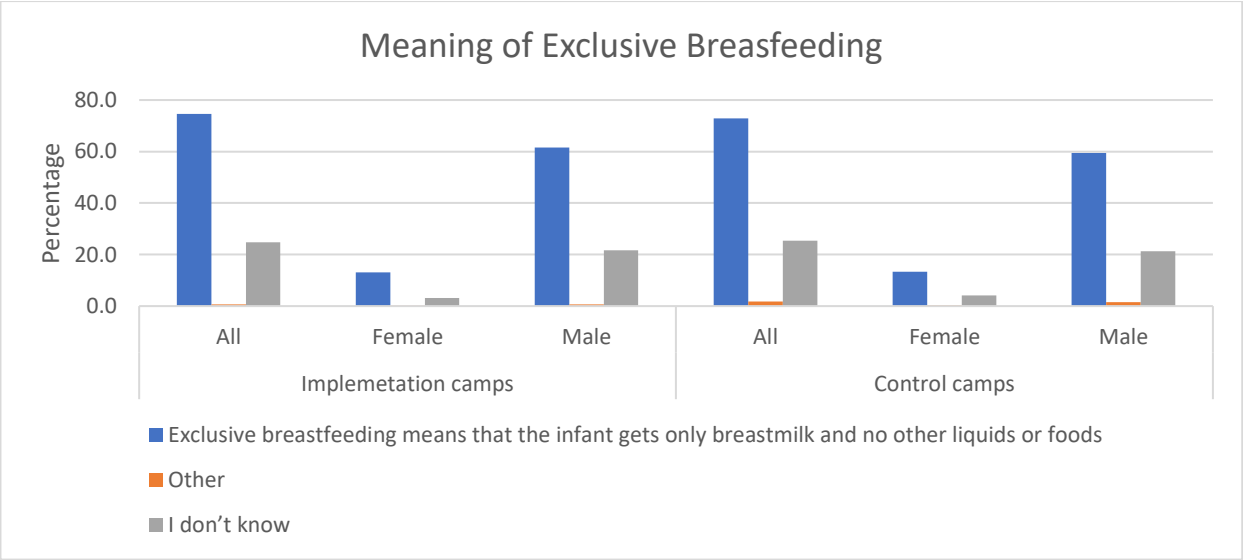


Figure 21: Households who know the meaning of exclusive breastfeeding-overall

Respondents that showed lack of knowledge of what exclusive breastfeed meant was higher in central province as compared to other provinces (Figure 22).

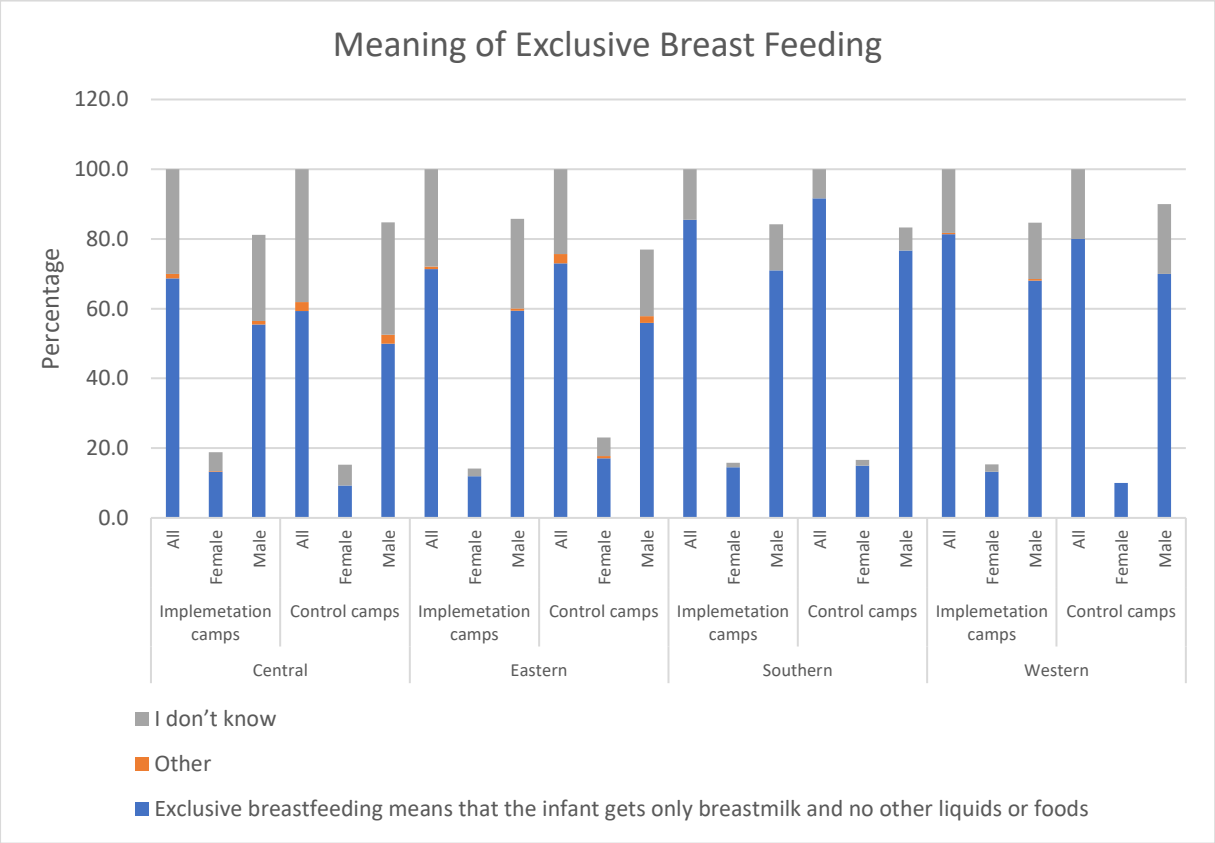


Figure 22: Households who know the meaning of exclusive breastfeeding-provincial

The representation below highlights the knowledge on age recommended that a mother feeds nothing more than breastmilk. Overall, the baseline brought out an 82.2% (Figure 23) of the respondents having a good knowledge base from the target implementation camps.

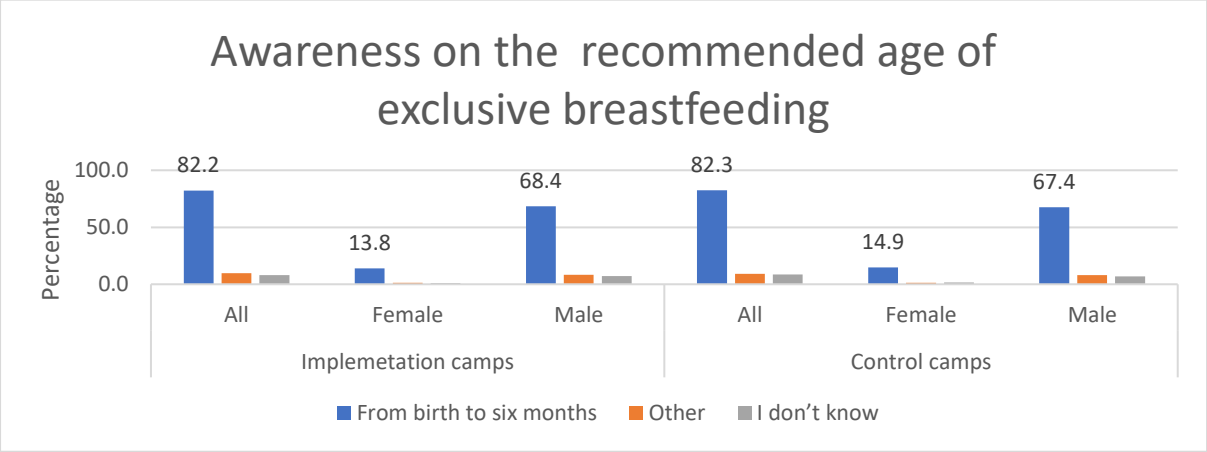


Figure 23: Households awareness of recommended age of exclusive breastfeeding -overall

The knowledge on exclusive breastfeeding basically highlighted provincial representation with western province having more households aware of the recommended age of exclusive breastfeeding. The data indicated western province having 89.2% of the target implementation camps knowledgeable followed by southern province with 86.8%, the figure below highlights much on the knowledge base from the survey.

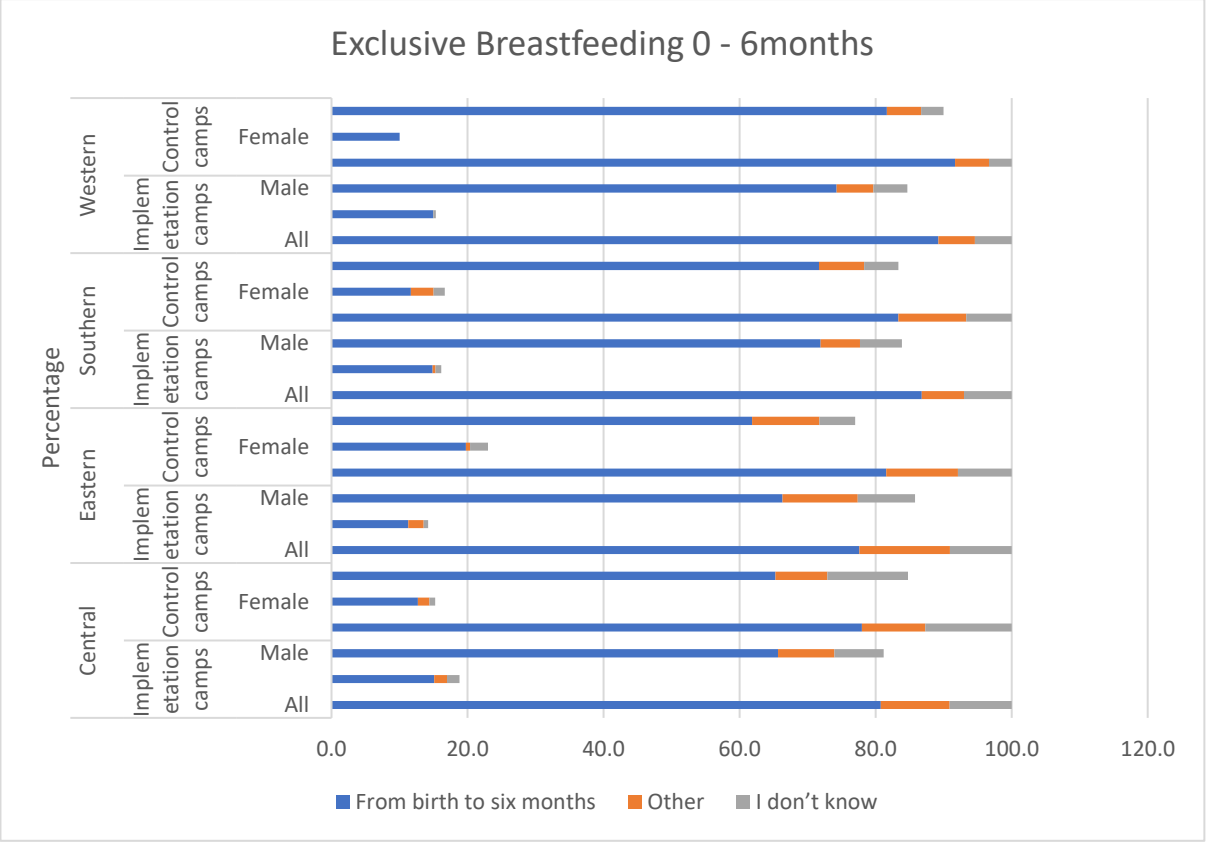


Figure 24: Households awareness of recommended age of exclusive breastfeeding -overall

Interesting feedback was captured when it came to knowledge on why breast milk alone is sufficient to feed babies during the first 6months. With overall representation of 53.3% from all the implementation camps this indicate the need for enhanced nutrition education targeted at mothers and the broader community with male inclusion. The responses also brought out a 13.1% lack of knowledge rating which is significant to trigger need for knowledge sharing. (Figure 25)

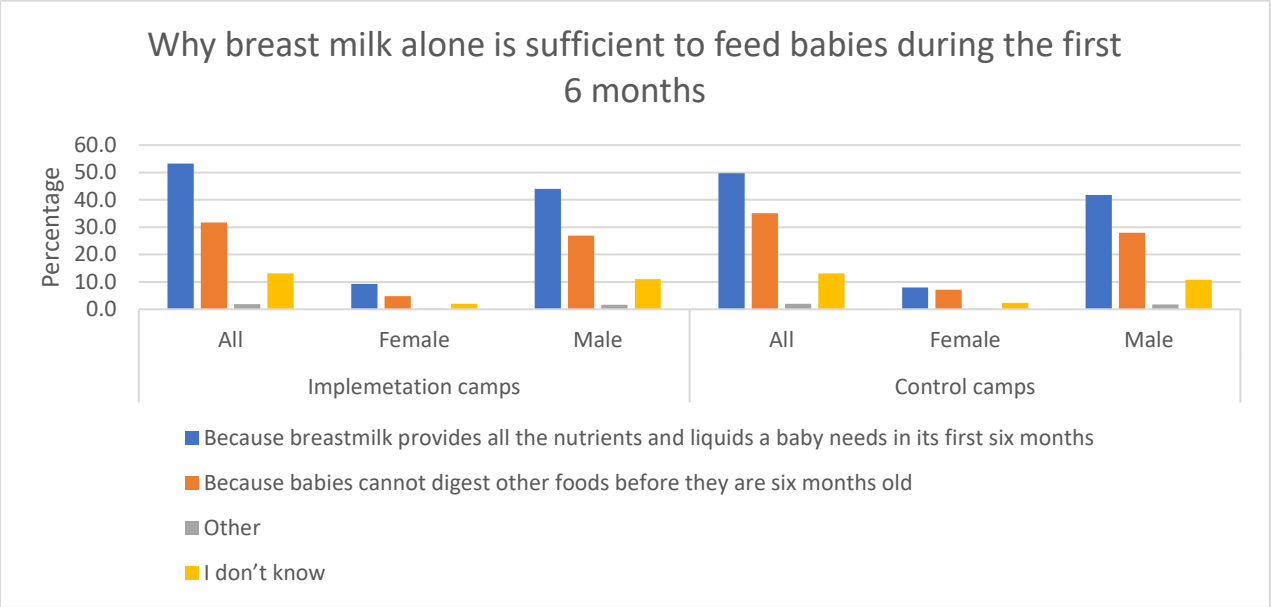


Figure 25: Households awareness of sufficiency of breastmilk alone during the first 6 months -overall

Provincial responses further describe the spread in knowledge from the target provinces. With Eastern province having the least 49.3% responding to breastmilk providing all the nutrients and liquids a baby needs in its first 6months. Southern province recorded the highest with 66.1% respondence (Figure 26)

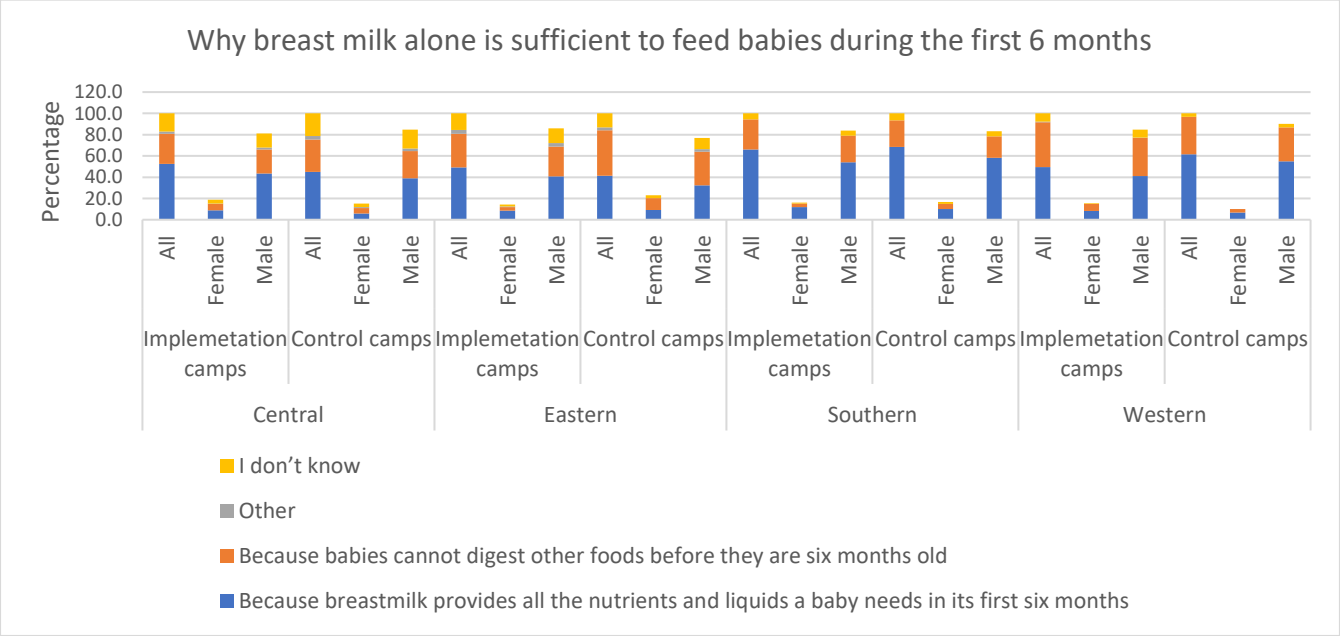


Figure 26: Households awareness of sufficiency of breastmilk alone during the first 6 months -provincial

The result from the baseline survey indicate a higher response rate on basis of respondents having knowledge as to the recommendation that a mother/woman breastfeeds her child with a 62.3%. out of this statistic, central province recorded the highest on knowledge with 74.5% and the lowest province was Southern with 50.4% which shows the geographical focus as for implementation of the SBCC and IYCF activities.

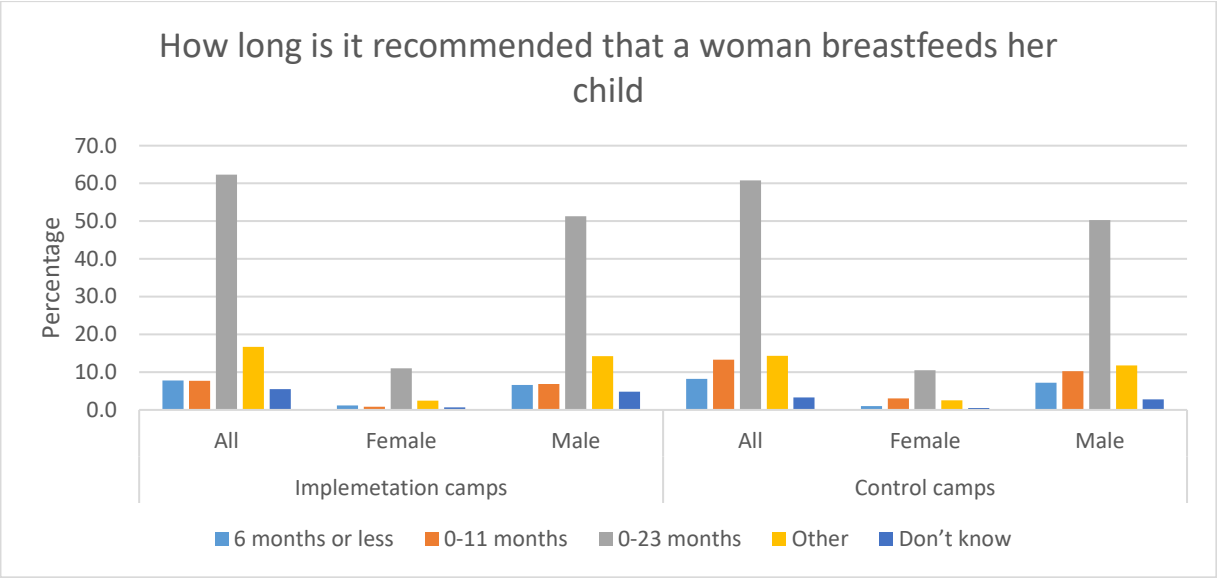


Figure 27:Knowledge of length recommended that a woman breastfeeds her child

Knowledge on age with which the babies should start eating solid foods in addition to breastmilk is at 61.8% with western province having recorded the highest at 71.8% followed by Central province with 67.3% and lowest being Eastern and Southern provinces with 52.3% and 58.7% respectively. These responses clearly highlight the need to focus on delivering adequate nutrition SBCC messaging.

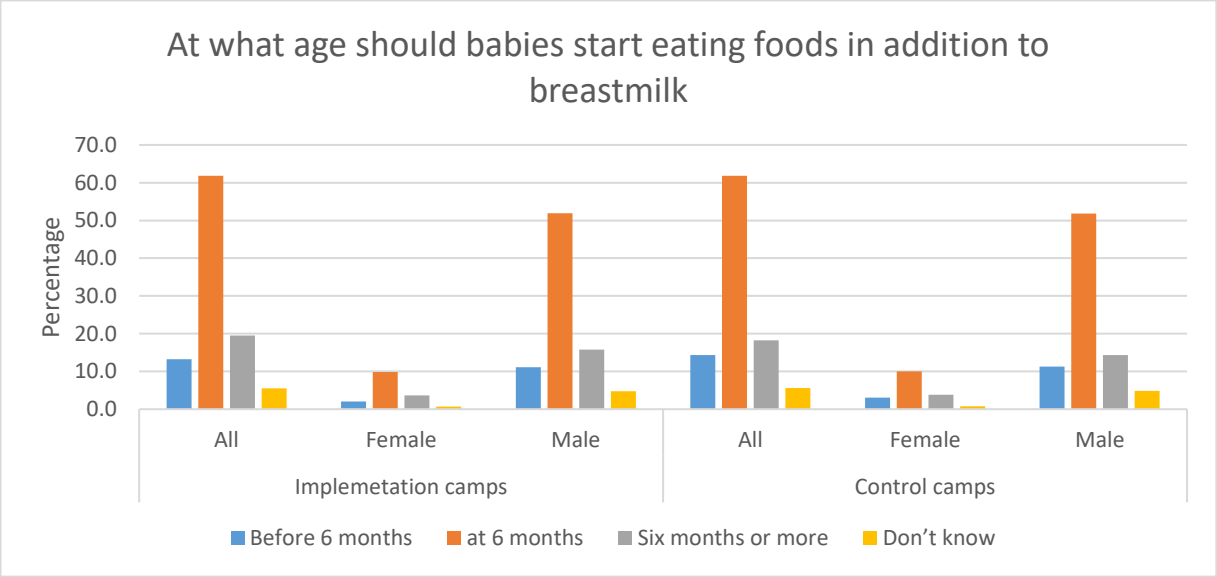


Figure 28: Knowledge of age babies should start eating foods in addition to breastmilk

Knowledge on age with which the babies should start eating solid foods in addition to breastmilk is at 61.8% with western province having recorded the highest at 71.8% followed by Central province with 67.3% and lowest being Eastern and Southern provinces with 52.3% and 58.7% respectively. These responses clearly highlight the need to focus on delivering adequate nutrition SBCC messaging.

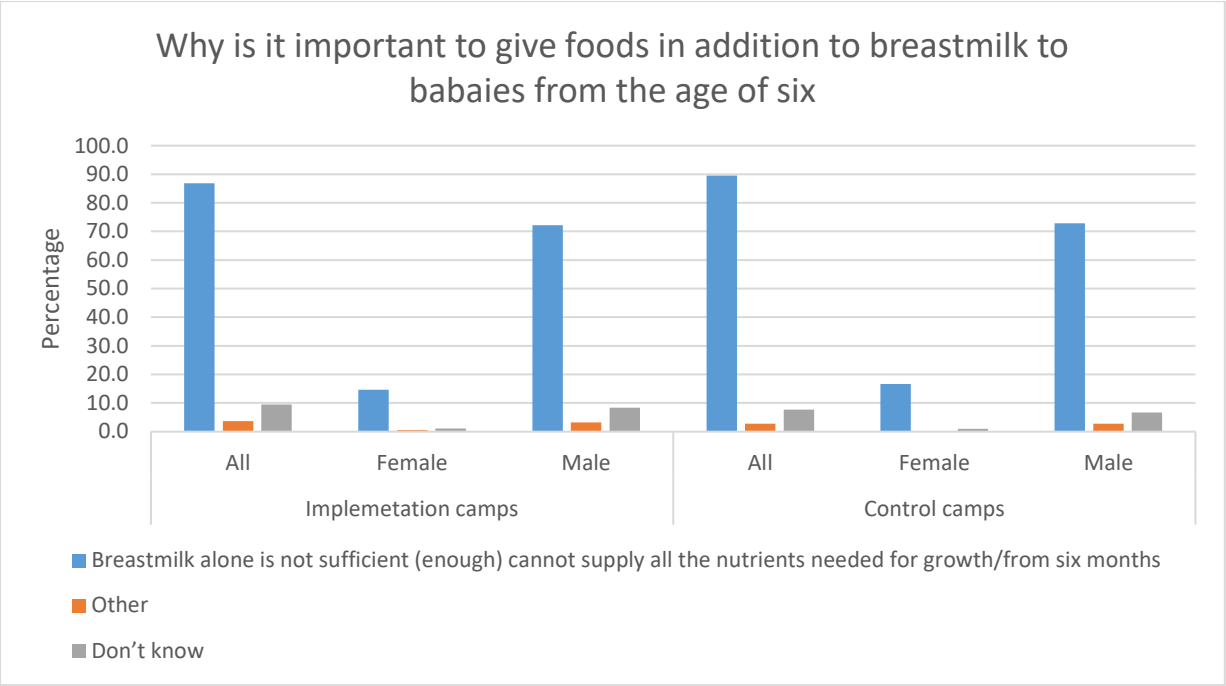


Figure 29: Knowledge of importance of giving additional food from age of six months

Table 19: Knowledge of on young infeed feeding

			How long is it recommended that a woman breastfeeds her child?					At what age should babies start eating foods in addition to breastmilk?				Why is it important to give foods in addition to breastmilk to babies from the age of six months?		
			6 months or less	0-11 months	0-23 months	Other	Don't know	Before 6 months	at 6 months	Six months or more	Don't know	Breastmilk alone is not sufficient (enough) cannot supply all the nutrients needed for growth/from six months	Other	Don't know
Central	Implementation camps	All	1.9	5.8	74.5	10.6	7.3	11.4	67.3	14.3	7.0	81.1	9.3	9.5
		Female	.4	1.2	14.7	1.2	1.0	2.5	12.0	2.9	1.4	15.8	1.2	1.9
		Male	1.5	4.6	59.8	9.3	6.2	8.9	55.3	11.4	5.6	65.4	8.1	7.7
	Control camps	All	4.2	5.9	72.0	11.9	5.9	8.5	66.9	16.9	7.6	83.1	5.9	11.0
		Female	0.0	0.0	12.7	2.5	0.0	2.5	8.5	3.4	.8	14.4	0.0	.8
		Male	4.2	5.9	59.3	9.3	5.9	5.9	58.5	13.6	6.8	68.6	5.9	10.2
Eastern	Implementation camps	All	3.3	14.4	58.8	20.0	3.5	17.7	52.3	23.7	6.2	86.9	1.6	11.5
		Female	.4	.9	9.1	3.5	.2	2.2	7.3	4.4	.2	13.3	.2	.7
		Male	2.9	13.5	49.7	16.4	3.3	15.5	45.0	19.3	6.0	73.6	1.3	10.9
	Control camps	All	2.6	26.3	57.9	10.5	2.6	17.1	55.9	20.4	6.6	90.1	2.6	7.2
		Female	.7	7.2	12.5	2.0	.7	4.6	11.2	5.9	1.3	21.7	0.0	1.3
		Male	2.0	19.1	45.4	8.6	2.0	12.5	44.7	14.5	5.3	68.4	2.6	5.9
Southern	Implementation camps	All	19.8	4.5	50.4	16.1	9.1	13.6	58.7	22.7	5.0	90.1	0.0	9.9
		Female	2.9	.8	8.7	2.5	1.2	2.5	8.7	4.5	.4	15.3	0.0	.8
		Male	16.9	3.7	41.7	13.6	7.9	11.2	50.0	18.2	4.5	74.8	0.0	9.1
	Control camps	All	21.7	6.7	65.0	5.0	1.7	23.3	60.0	15.0	1.7	93.3	0.0	6.7
		Female	0.0	1.7	10.0	3.3	1.7	3.3	11.7	1.7	0.0	15.0	0.0	1.7
		Male	21.7	5.0	55.0	1.7	0.0	20.0	48.3	13.3	1.7	78.3	0.0	5.0
Western	Implementation camps	All	15.8	2.1	56.4	23.7	2.1	7.9	71.8	18.7	1.7	95.0	0.0	5.0
		Female	2.5	0.0	9.5	2.9	.4	.4	11.6	2.9	.4	14.5	0.0	.8
		Male	13.3	2.1	46.9	20.7	1.7	7.5	60.2	15.8	1.2	80.5	0.0	4.1
	Control camps	All	16.7	1.7	41.7	38.3	1.7	10.0	68.3	18.3	3.3	96.7	0.0	3.3
		Female	5.0	0.0	1.7	3.3	0.0	0.0	8.3	1.7	0.0	10.0	0.0	0.0
		Male	11.7	1.7	40.0	35.0	1.7	10.0	60.0	16.7	3.3	86.7	0.0	3.3

Summary

Across all camps most of the women met the minimum dietary diversity score. In the implementation camps, more women in male headed households meet the minimum dietary score (67.1%) compared to women in women headed households (65.3%).

Overall, majority of the households in both the implementation and control camps have an acceptable food consumption at 87.8% and 86.9% respectively, with few having poor food consumption

The food expenditure share results show that majority of the household spent between 1-49% of their income on food across both the implementation (71.8%) and control camps (74%), however, there is a significant proportion of households spending most of their income (75% or more) on food in both the implementation and control camps

5.5 Financial Services

5.5.1 Credit

The baseline survey got a contextual view of household's access to credit, barriers to loan approvals, reasons for loans, the source of credit and who decides the use of loans.

Source of Credit

Results show in the implementation and control camps most of the households borrowed from family/friends (Implementation camps (30.6%), Control camps (33.8%)). This was followed by borrowing from money lenders/loan sharks. Indicatively, few women expressed intent to borrow as compared to men, with only 2.9% of those who borrowed from family/friends in the implementation camps been women (Table 20).

Table 20: Sources of Credit-overall

	Implementation camps			Control camps		
	All	Female	Male	All	Female	Male
Money Lender/ Loan Shark	4.1	0	4.1	4.1	1.4	2.7
Cooperative	1.7	0	1.7	5.4	0	5.4
Family/Friends	30.6	2.9	27.7	33.8	8.1	25.7
Bank	1.2	0	1.2	0	0	0
Micro Bankers Trust (MBT)	2.9	0.4	2.5	2.7	1.4	1.4
Trader	1.2	0.4	0.8	2.7	1.4	1.4
VISION FUND	1.7	0	1.7	0	0	0
Another microfinance group	5.8	0.8	5	6.8	2.7	4.1
Other	34.3	2.5	31.8	29.7	0	29.7

Table 21: Sources of Credit-provincial

		Money Lender/ Loan Shark	Cooperative	Family/Friends	Bank	Micro Bankers Trust (MBT)	Trader	VISION FUND	Another microfinance group	Other
Central implementation camps	All	4.3	2.1	3.2	0	6.4	0	0	13.8	54.3
	Female	0	0	0	0	1.1	0	0	2.1	4.3
	Male	4.3	2.1	3.2	0	5.3	0	0	11.7	50
Central control camp	All	2.8	8.3	2.8	0	5.6	2.8	0	11.1	52.8
	Female	2.8	0	2.8	0	2.8	0	0	2.8	0
	Male	0	8.3	0	0	2.8	2.8	0	8.3	52.8
Eastern implementation camps	All	7.4	1.5	25	2.9	1.5	1.5	0	1.5	44.1
	Female	0	0	2.9	0	0	0	0	0	2.9
	Male	7.4	1.5	22.1	2.9	1.5	1.5	0	1.5	41.2
Eastern control camp	All	4.5	4.5	50	0	0	0	0	4.5	13.6
	Female	0	0	9.1	0	0	0	0	4.5	0
	Male	4.5	4.5	40.9	0	0	0	0	0	13.6
Southern implementation camps	All	0	0	57.8	2.2	0	2.2	8.9	0	4.4
	Female	0	0	4.4	0	0	2.2	0	0	0
	Male	0	0	53.3	2.2	0	0	8.9	0	4.4
Southern control camp	All	14.3	0	85.7	0	0	0	0	0	0
	Female	0	0	42.9	0	0	0	0	0	0

	Male	14.3	0	42.9	0	0	0	0	0	0
Western implementation camps	All	2.9	2.9	80	0	0	2.9	0	0	0
	Male	0	0	8.6	0	0	0	0	0	0
	Female	2.9	2.9	71.4	0	0	2.9	0	0	0
Western control camp	All	0	0	2.2	0	0	0.3	0	0	0
	Male	0	0	0	0	0	0.3	0	0	0
	Female	0	0	2.2	0	0	0	0	0	0

Loan Requests

A loan request is an indication of household's awareness of loan services and ability to have access to these services in their areas. Results show that across all districts, majority of households that requested for loans received loans. The basis of credit requests is based on a 6 months preliminary borrowing period. On average 14.6% and 15.1% of households in the implementation and control camps requested for loans. Of the households that requested loans majority of them received loans with 98.3% in the control camps and 95.7% in the implementation camps. Majority of the recipient of loans is dominated by male headed households (Figure 30).

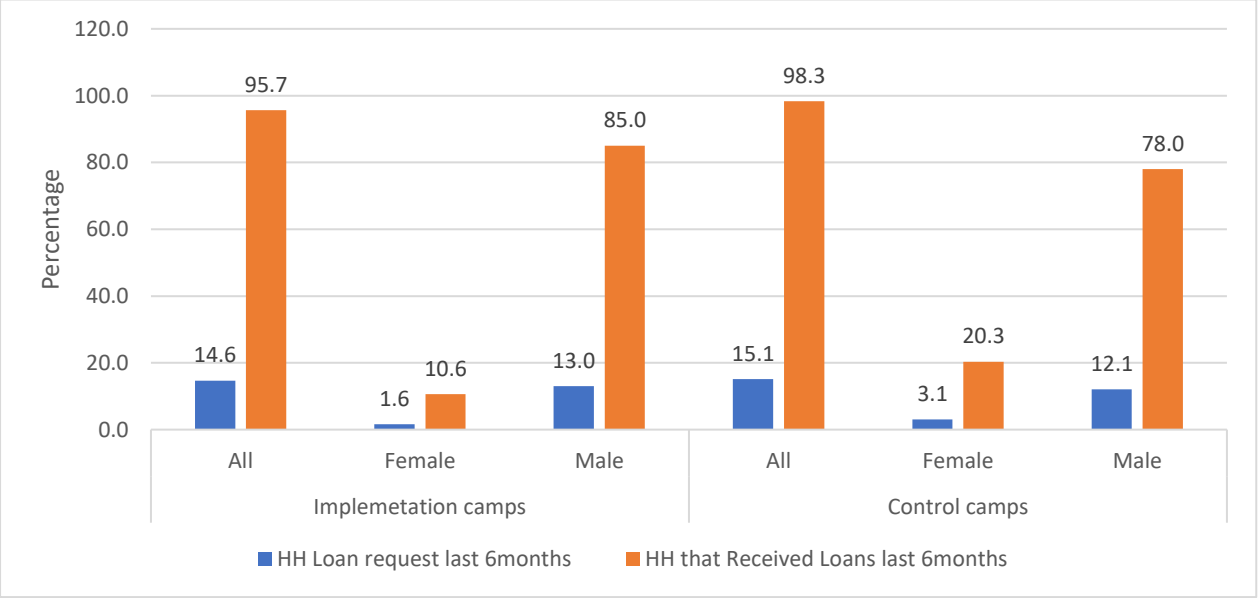


Figure 30: Households access to credit-overall

A look at the results by provincial level, (Table 23) indicates of the households in the eastern region implementation and control camps, all received their loans, this trend is also observed in the western region implementation camps. The highest number of households requesting for loans is observed in the central province implementation camps.

Table 22: Households access to credit-provincial

			HH Loan request last 6months	HH that Received Loans last 6months
Central		All	17.2	91.6
	Implementation camps	Female	2.5	13.3
		Male	14.7	78.3
		All	22.9	100.0
	Control camp	Female	5.9	25.9
		Male	16.9	74.1
Eastern		All	11.8	100.0
	Implementation camps	Female	.7	5.7
		Male	11.1	94.3
		All	12.5	100.0
	Control camp	Female	2.0	15.8
		Male	10.5	84.2
Southern		All	15.3	97.3
	Implementation camps	Female	2.1	13.5
		Male	13.2	83.8
		All	6.7	75.0
	Control camp	Female	1.7	25.0
		Male	5.0	50.0
Western		All	14.1	97.1
	Implementation camps	Female	1.2	8.8
		Male	12.9	88.2
		All	15.0	100.0
	western control camp	Female	1.7	11.1
		Male	13.3	88.9

Reason for Loan

The results show that majority of the household's main reason for taking a loan was for the purchase of agricultural inputs, small scale business running and education expenses. An outlook of the results shows that very few households took out a loan to spend on health and commercial enterprises. Some households in the Implementation camps took out loans for debt reimbursement. This is observed in the implementation camps (Male headed household (0.4%) and Female Headed Household (0.8%)).

Table 23 below shows the main reason for taking loans in both the implementation and control camps, it can be observed that majority of households in both the implementation and control camps took out loans for the sole purpose of purchasing agricultural equipment.

Table 23: Reasons for obtaining loans-overall

	Implementation camps			Control camps		
	All	Female	Male	All	Female	Male
Education	7.4	1.2	6.2	8.1	0	8.1
Health	2.5	0	2.5	0	0	0
Other non-food spending	5.4	0.4	5	10.8	4.1	6.8
Debt reimbursement	1.2	0.4	0.8	0	0	0
Purchase of agricultural inputs	38	3.3	34.7	43.2	4.1	39.2
Other agricultural spending	2.9	0.4	2.5	4.1	0	4.1
Small Scale Businesses	11.6	1.2	10.3	14.9	5.4	9.5
Marriage/Funerals	3.7	0.4	3.3	0	0	0
Commerce/Enterprise	3.7	0	3.7	1.4	0	1.4
Work on the house (e.g. repairs, improvements, etc.)	3.7	0.4	3.3	5.4	1.4	4.1
Medical Expenses	1.2	0	1.2	1.4	0	1.4
Other, specify	7	0.8	6.2	6.8	2.7	4.1

A look at the provincial composition shows that 38.2% of the households in the eastern region implementation camps took out a loan to purchase agricultural inputs (Table 24). In the Southern region control camps, 14.3% of the households borrowed for the purpose of small-scale businesses.

Table 24: Reasons for obtaining loans-provincial

		Education	Health	Other non-food spending	Debt reimbursement	Purchase of agricultural inputs	Other agricultural spending	Small Scale Businesses	Marriage/ Funerals	Commerce/ Enterprise	Work on the house (e.g. repairs, etc.)	Medical Expenses	Other, specify
Central implementation camps	All	5.3	0	4.3	1.1	53.2	2.1	16	0	3.2	2.1	0	11.7
	Female	2.1	0	0	1.1	6.4	0	1.1	0	0	0	0	1.1
	Male	3.2	0	4.3	0	46.8	2.1	14.9	0	3.2	2.1	0	10.6
Central control camp	All	5.6	0	2.8	0	58.3	0	16.7	0	0	5.6	0	8.3
	Female	0	0	2.8	0	5.6	0	5.6	0	0	0	0	5.6
	Male	5.6	0	0	0	52.8	0	11.1	0	0	5.6	0	2.8
Eastern implementation camps	All	4.4	1.5	13.2	0	38.2	5.9	7.4	5.9	1.5	4.4	0	8.8
	Female	0	0	1.5	0	1.5	1.5	0	0	0	0	0	1.5
	Male	4.4	1.5	11.8	0	36.8	4.4	7.4	5.9	1.5	4.4	0	7.4
Eastern control camp	All	4.5	0	18.2	0	40.9	4.5	13.6	0	0	9.1	0	4.5
	Female	0	0	4.5	0	0	0	4.5	0	0	4.5	0	0
	Male	4.5	0	13.6	0	40.9	4.5	9.1	0	0	4.5	0	4.5
Southern implementation camps	All	8.9	2.2	0	4.4	26.7	2.2	13.3	4.4	0	8.9	4.4	0
	Female	2.2	0	0	0	2.2	0	2.2	0	0	2.2	0	0
	Male	6.7	2.2	0	4.4	24.4	2.2	11.1	4.4	0	6.7	4.4	0
Southern control camp	All	0	0	28.6	0	28.6	0	14.3	0	0	0	0	14.3
	Female	0	0	14.3	0	14.3	0	0	0	0	0	0	0
	Male	0	0	14.3	0	14.3	0	14.3	0	0	0	0	14.3
Western implementation camps	All	17.1	11.4	0	0	11.4	0	5.7	8.6	14.3	0	2.9	0
	Female	0	0	0	0	0	0	2.9	2.9	0	0	0	0
	Male	17.1	11.4	0	0	11.4	0	2.9	5.7	14.3	0	2.9	0
Western control camp	All	33.3	0	11.1	0	0	22.2	11.1	0	11.1	0	11.1	0
	Female	0	0	0	0	0	0	11.1	0	0	0	0	0
	Male	33.3	0	11.1	0	0	22.2	0	0	11.1	0	11.1	0

Reasons for Loan Rejections

The results per project and control camps as per gender disaggregation shows that majority of households who had loans rejected where male and this was mainly due to the lack of collateral. This trend is observed in both the project and control camps.

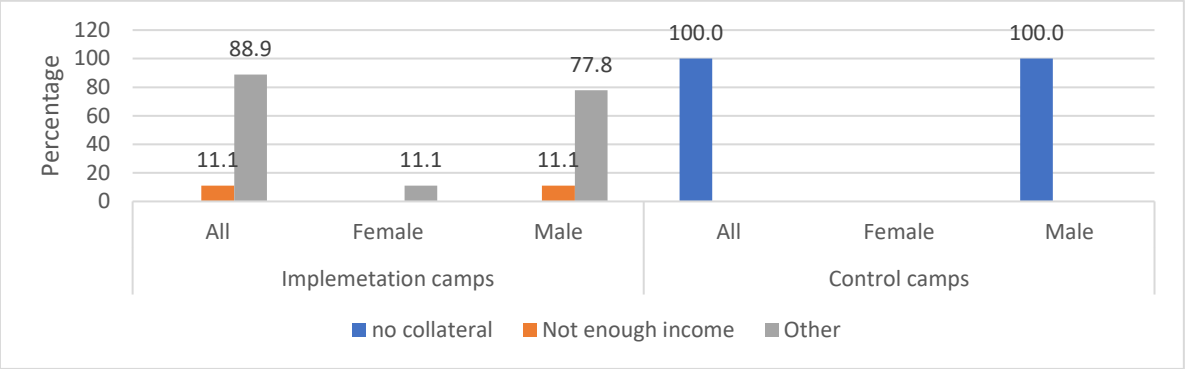


Figure 31: Reasons for Loan Rejections-Overall

The results per province show that majority of loan rejections came from western province implementation camps who had their loans denied due to other reasons away from those captured during the survey (Table 25). In the southern region control camps households indicated their loans having been rejected due to them not having collateral, and of those whose loans rejected, all where Male applicants.

Table 25: Reasons for Loan Rejections-provincial

		No collateral	Not enough income	Other
Central implementation camps	All	0.0	14.3	85.7
	Female	0.0	0.0	14.3
	Male	0.0	14.3	71.4
Central control camp	All	0.0	0.0	0.0
	Female	0.0	0.0	0.0
	Male	0.0	0.0	0.0
Eastern implementation camps	All	0.0	0.0	0.0
	Female	0.0	0.0	0.0
	Male	0.0	0.0	0.0
Eastern control camp	All	0.0	0.0	0.0
	Female	0.0	0.0	0.0
	Male	0.0	0.0	0.0
Southern implementation camps	All	0.0	0.0	100.0
	Female	0.0	0.0	0.0
	Male	0.0	0.0	100.0
Southern control camp	All	100.0	0.0	0.0
	Female	0.0	0.0	0.0
	Male	100.0	0.0	0.0
Western implementation camps	All	0.0	0.0	100.0
	Female	0.0	0.0	0.0
	Male	0.0	0.0	100.0
Western control camp	All	0.0	0.0	0.0
	Female	0.0	0.0	0.0
	Male	0.0	0.0	0.0

Decision Maker over Loan use

The results show that decisions over loan use by households are mainly made by both men and women within the household (36% in the implementation camps and 41.9% in the control camps). A look at the results by gender shows that 13.2% of the women in the implementation camps make decisions over the use of the loan amounts and this is higher (23%) in the control camps (Figure 32).

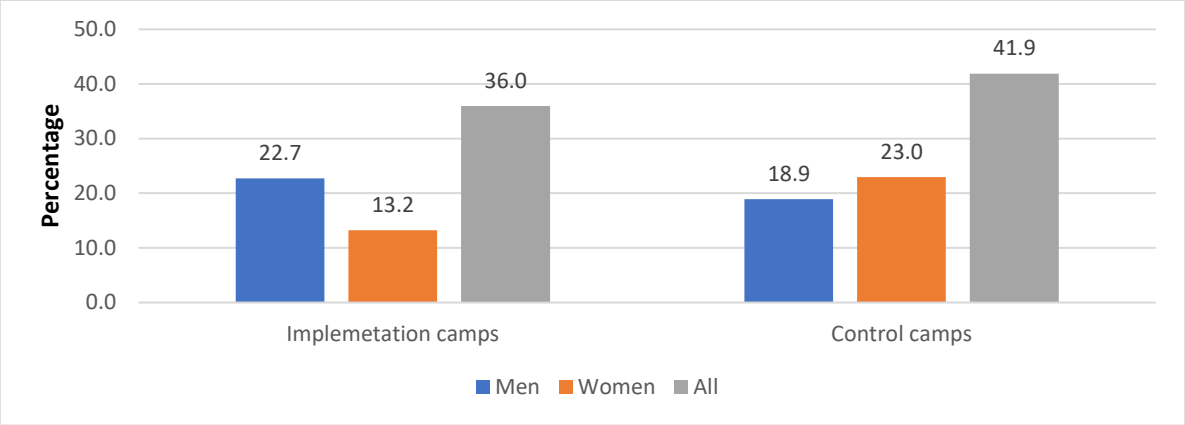


Figure 32: Decision Maker over Household Resources-Overall

Results by province show that in the eastern and southern implementation camps, decision over loan use is made by both men and women, this trend is observed in the central region control camp and the southern region implementation camp though with minimal marginal differences between the male counterparts and females.

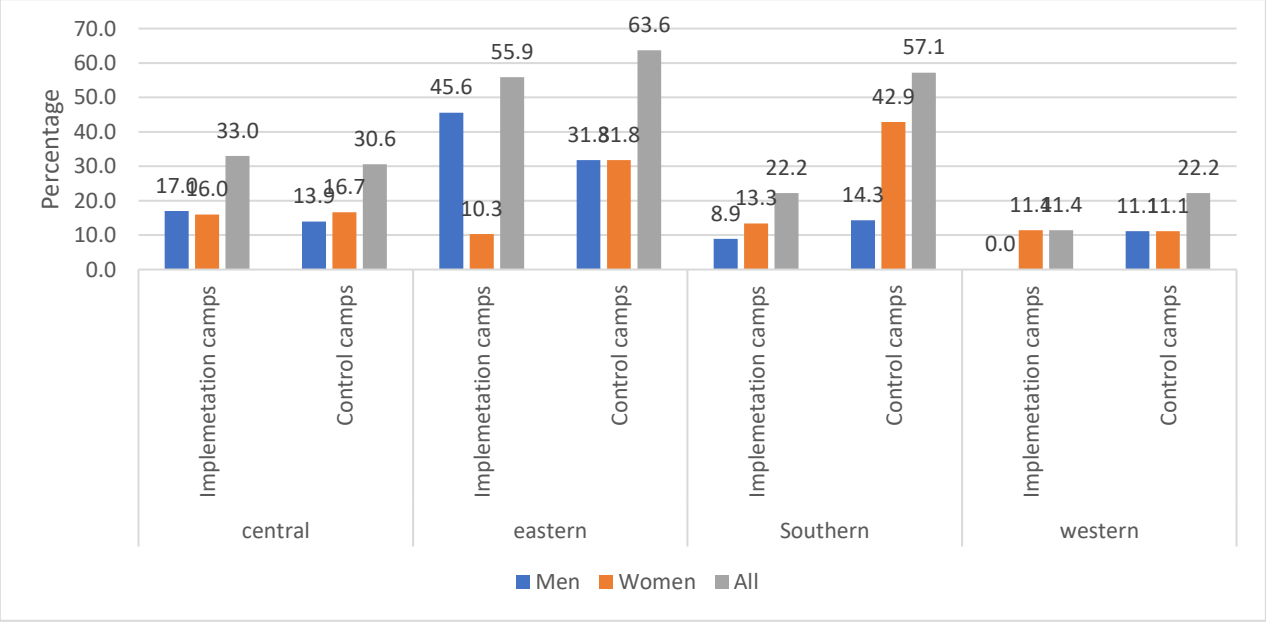


Figure 33: Decision Maker over Household Resources-provincial

5.5.2 Savings

Saving by individual household is important for the household as a way mitigating against future shocks. It's a necessary condition to improve or maintain the quality of life of the members of the household.

Types of Formal Savings Institution

The results show that overall across the implementation and control camps, majority use mobile money as a mode of savings, this is followed by the use of government banks and private banks. A look at the results based on the gender shows that 2.3% of the females in the implementation camps save using government banks, while 0.3% save using agricultural cooperatives.

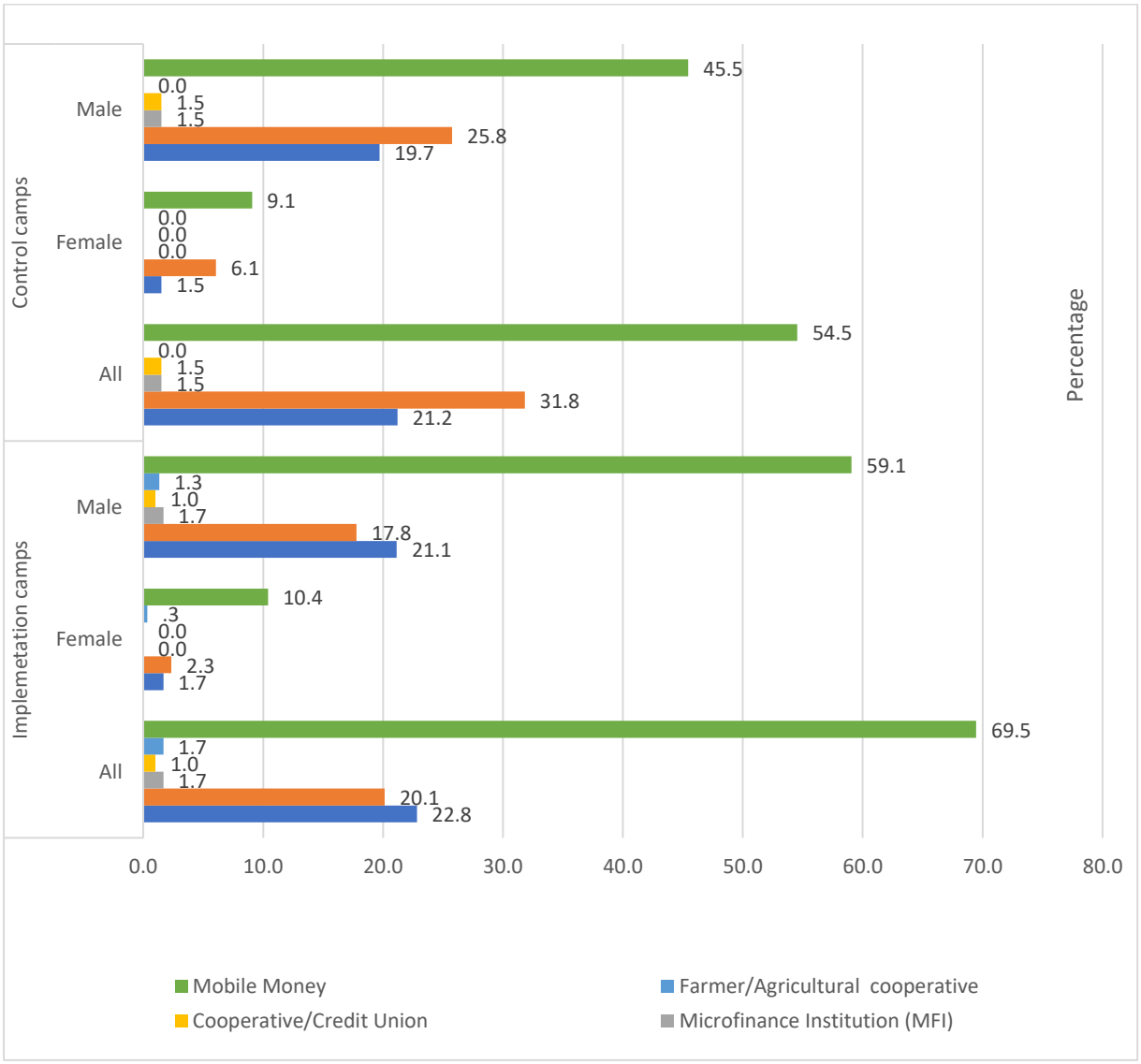


Figure 34: Types of Formal Savings Institution-overall

A look at the results by province shows that in the western implementation camps 9.1% of the women save using government banks and mobile money and these are the only prevalent modes of savings in the region. In central control camps, 62.9% of the households save using mobile money, 2.1% of the females save with private banks and 1.6% save using government banks.

Table 26: Types of Formal Savings Institution-provincial

		Private Bank	Government Bank	Microfinance Institution (MFI)	Cooperative/Credit Union	Farmer/ Agricultural cooperative	Mobile Money
Central implementation camps	All	21.2	14.5	0.0	.5	0.0	81.9
	Female	2.1	1.6	0.0	0.0	0.0	12.4
	Male	19.2	13.0	0.0	.5	0.0	69.4
Central control camp	All	20.0	28.6	0.0	0.0	0.0	62.9
	Female	0.0	2.9	0.0	0.0	0.0	11.4
	Male	20.0	25.7	0.0	0.0	0.0	51.4
Eastern implementation camps	All	26.7	26.7	0.0	3.3	8.3	51.7
	Female	1.7	3.3	0.0	0.0	1.7	8.3
	Male	28.3	23.3	0.0	3.3	6.7	43.3
Eastern control camp	All	21.7	26.1	4.3	4.3	0.0	56.5
	Female	4.3	13.0	0.0	0.0	0.0	8.7
	Male	17.4	13.0	4.3	4.3	0.0	47.8
Southern implementation camps	All	30.4	47.8	17.4	0.0	0.0	17.4
	Female	0.0	0.0	0.0	0.0	0.0	0.0
	Male	30.4	47.8	17.4	0.0	0.0	17.4
Southern control camp	All	0.0	100.0	0.0	0.0	0.0	0.0
	Female	0.0	0.0	0.0	0.0	0.0	0.0
	Male	0.0	100.0	0.0	0.0	0.0	0.0
Western implementation camps	All	18.2	22.7	4.5	0.0	0.0	63.6
	Female	0.0	9.1	0.0	0.0	0.0	9.1
	Male	18.2	13.6	4.5	0.0	0.0	54.5
Western control camp	All	33.3	50.0	0.0	0.0	0.0	16.7
	Female	0.0	0.0	0.0	0.0	0.0	0.0
	Male	33.3	50.0	0.0	0.0	0.0	16.7

Types of informal Savings Institution

Households saving with Savings groups/associations

Results below show that overall, 16.5% of the female headed households in the control camps save using village banks, 9.4% use savings cooperative societies. On the Latter, in the implementation camps, 14.5% of the females use village banks, 3.1% use savings cooperative societies and 0.7% use other forms of savings. Overall a combined view indicates that majority of households in both the implementation and control camps save using village banks.

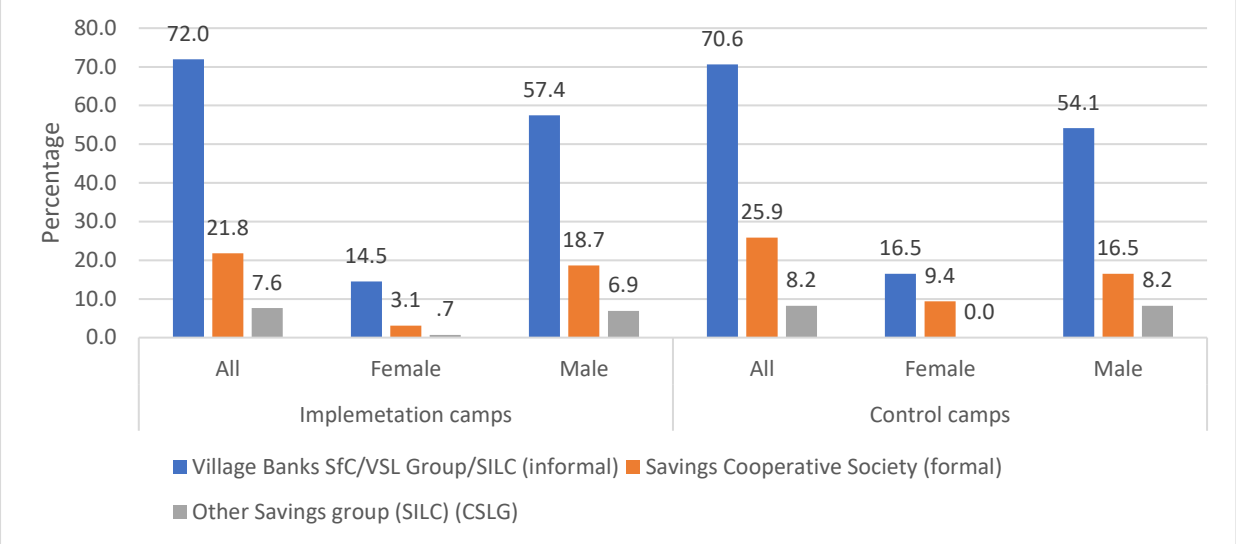


Figure 35: Households saving with Savings groups/associations-overall

At provincial level, results show that the eastern implementation camps had 10.3% of the female headed households saving using village banks which is representative of the least number of households using this mode as a savings mechanism. In the central region implementation camps, 68.1% of the male headed households save using village banks, 4.4% using saving cooperatives and 7.1 using other modes of savings.

Table 27: Households saving with Savings groups/associations-provincial

		Village Banks SfC/VSL Group/SILC (informal)	Savings Cooperative Society (formal)	Other Savings group (SILC) (CSLG)
Central implementation camps	All	87.6	4.4	8.0
	Female	19.5	0.0	.9
	Male	68.1	4.4	7.1
Central control camp	All	73.0	10.8	16.2
	Female	10.8	5.4	0.0
	Male	62.2	5.4	16.2
Eastern implementation camps	All	47.0	49.6	6.8
	Female	10.3	7.7	.9
	Male	36.8	41.9	6.0
Eastern control camp	All	60.5	44.7	2.6
	Female	18.4	15.8	0.0
	Male	42.1	28.9	2.6
Southern implementation camps	All	89.5	0.0	10.5
	Female	13.2	0.0	0.0
	Male	76.3	0.0	10.5
Southern control camp	All	100.0	0.0	0.0
	Female	40.0	0.0	0.0
	Male	60.0	0.0	0.0
Western implementation camps	All	95.2	0.0	4.8
	Female	14.3	0.0	0.0

	Male	81.0	0.0	4.8
Western control camp	All	100.0	20.0	0.0
	Female	20.0	0.0	0.0
	Male	80.0	20.0	0.0

Other forms of Savings

Results show that in the control camps few households save with village elders, 0.9% of the female headed households save with friends, 18% save at home and none save with family/friends or village elders. In the implementation camps, 83.7% of the males save their money at home.

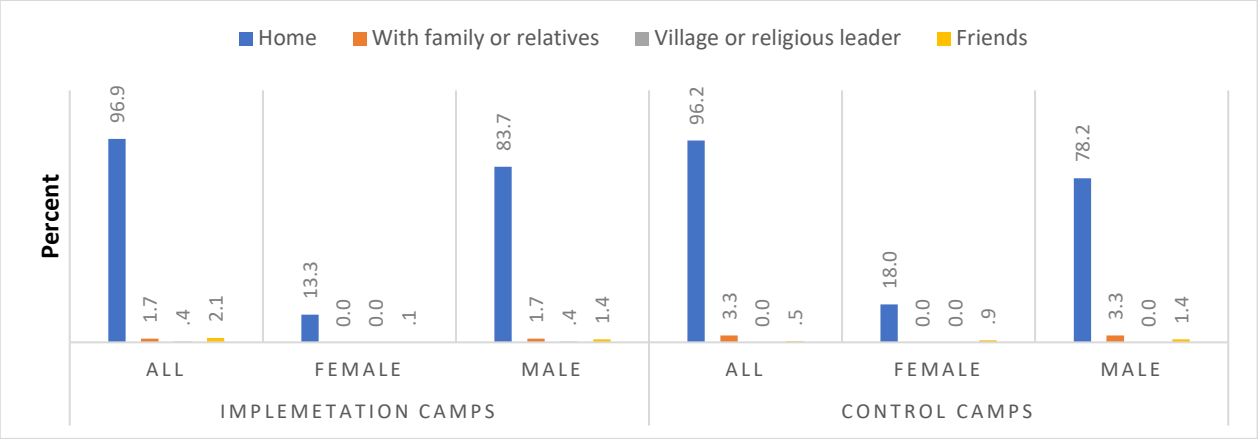


Figure 36: Other forms of Savings-overall

Table 28: Other forms of Savings-provincial

		Home	With family or relatives	Village or religious leader	Friends
Central implementation camps	All	92.6	2.9	1.5	5.1
	Female	18.4	0	0	0
	Male	74.3	2.9	1.5	5.1
Central control camp	All	93.1	3.4	0	3.4
	Female	10.3	0	0	0
	Male	82.8	3.4	0	3.4
Eastern implementation camps	All	97.4	1.5	0.3	2.6
	Female	12.2	0	0	0.3
	Male	85.1	1.5	0.3	2.3
Eastern control camp	All	96.5	2.7	0	3.5
	Female	21.2	0	0	1.8
	Male	75.2	2.7	0	1.8
Southern implementation camps	All	98.4	1.6	0	0
	Female	11.6	0	0	0
	Male	86.8	1.6	0	0
Southern control camp	All	93.9	9.1	0	0
	Female	15.2	0	0	0
	Male	78.8	9.1	0	0
Western implementation camps	All	98.6	1.4	0	0
	Female	12.2	0	0	0
	Male	86.3	1.4	0	0
Western control camp	All	100	0	0	0
	Female	16.7	0	0	0
	Male	83.3	0	0	0

Summary

Majority of the households in both the implementation and control camps borrowed from family/friends and money lenders/loan sharks. Indicatively, few women expressed intent to borrow as compared to men.

The main basis of credit requests is based on a 6 months preliminary borrowing period with majority of the household's indicating the main reason for taking a loan was for the purchase of agricultural inputs, small scale business running and education expenses.

The results per project and control camps as per gender disaggregation shows that majority of households who had loans rejected indicated the lack of collateral and of those that received the loans, the decision over resource use was mainly made by both men and women.

On savings, majority of the households use mobile money as a mode of savings, this is followed by the use of government banks and private banks as a formal method of savings. On the informal savings methods, most households indicated the use of savings/cooperative societies.

5.6 Market Access

Market Access is a major component of Smallholder Agriculture in Zambia. This is because Smallholder Farmers rely on returns from the sale of their surplus produce to meet their dietary and other needs. This section highlights some of the key aspects of the Smallholder Farmers' Access to Markets.

5.6.1 Marketing Channels

The survey results show that the majority of farmers across all camps sell their produce to Private Traders (Briefcase Buyers) with 70.1% in the implementation and 72% in the control camps (Figure 37). A significant percentage sell their produce to their community members while the rest are either selling to the Food Reserve Agency, aggregators, millers off-takers, and out grower schemes.

However, it is important to note that while the farmer may be selling directly to private buyers and community members, the two are the most commonly used aggregation channels. This is because off-takers find it less convenient to buy directly from smallholder farmers due to the low surplus quantities that farmers have for sale.

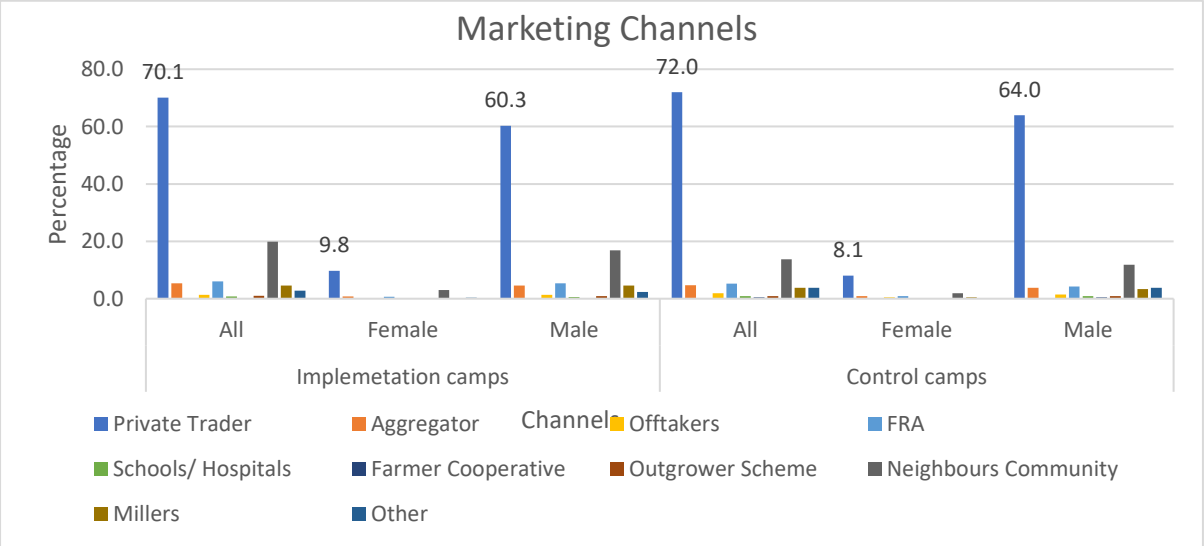


Figure 37: Marketing Channels-overall

Regarding gender, the percentage of male headed households that are selling their crop to the various marketing channels is higher than that of female headed households. On average, 86% of all households that are selling to various marketing channels are male headed households, while female headed households only account for 14%.

At provincial level, all provinces have a trend similar to the general overview, with private traders being the most common channel, preceded by community members. However, no farmers in Southern and Western provinces use millers, out grower schemes, schools/hospitals and farmer cooperatives as marketing channels, while only millers and farmer cooperatives have not been explored in Central Province.

This is true for both Implementation and control camps, except for the Southern Province control camps that do not use aggregators as a marketing channel but instead use more of FRA and offtakers, both ranked as third most common channels after private buyers and community members. The control camps in Western province neither use aggregators nor off takers but have FRA ranked as the third most common channel.

Table 29: Marketing Channels-provincial

Marketing Channels by Implementation and Control Camp per Province												
Province	Camp Type	Gender	Private Traders	Aggregators	Offtakers	FRA	Schools/ Hospitals	Farmer Cooperatives	Outgrower Schemes	Neighbours/ Community	Millers	Other
Central Province	Implementation Camps	All	62.9	7.8	1.6	3.6	.7	.3	1.3	16.0	11.1	3.3
		Female	10.4	1.6	0.0	.7	0.0	.3	.3	2.0	0.0	.7
		Male	52.4	6.2	1.6	2.9	.7	0.0	1.0	14.0	11.1	2.6
	Control Camp	All	67.6	4.2	1.4	1.4	0.0	1.4	1.4	15.5	11.3	2.8
		Female	4.2	0.0	1.4	0.0	0.0	0.0	0.0	4.2	1.4	0.0
		Male	63.4	4.2	0.0	1.4	0.0	1.4	1.4	11.3	9.9	2.8
Eastern Province	Implementation Camps	All	79.4	3.9	1.2	5.4	1.6	0.0	1.6	15.6	0.0	3.1
		Female	9.3	.4	0.0	.8	.8	0.0	0.0	1.6	0.0	.4
		Male	70.0	3.5	1.2	4.7	.8	0.0	1.6	14.0	0.0	2.7
	Control Camp	All	76.5	6.9	0.0	5.9	2.0	0.0	1.0	8.8	0.0	5.9
		Female	12.7	2.0	0.0	1.0	0.0	0.0	0.0	1.0	0.0	0.0
		Male	63.7	4.9	0.0	4.9	2.0	0.0	1.0	7.8	0.0	5.9
Southern Province	Implementation Camps	All	76.7	1.0	1.0	16.5	0.0	0.0	0.0	22.3	0.0	0.0
		Female	8.7	0.0	0.0	1.0	0.0	0.0	0.0	3.9	0.0	0.0
		Male	68.0	1.0	1.0	15.5	0.0	0.0	0.0	18.4	0.0	0.0
	Control Camp	All	66.7	0.0	12.5	12.5	0.0	0.0	0.0	20.8	0.0	0.0
		Female	4.2	0.0	0.0	4.2	0.0	0.0	0.0	0.0	0.0	0.0
		Male	62.5	0.0	12.5	8.3	0.0	0.0	0.0	20.8	0.0	0.0
Western Province	Implementation Camps	All	59.3	6.2	1.2	3.7	0.0	0.0	0.0	45.7	0.0	3.7
		Female	9.9	0.0	0.0	0.0	0.0	0.0	0.0	11.1	0.0	0.0
		Male	49.4	6.2	1.2	3.7	0.0	0.0	0.0	34.6	0.0	3.7
	Control Camp	All	71.4	0.0	0.0	7.1	0.0	0.0	0.0	28.6	0.0	0.0
		Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		Male	71.4	0.0	0.0	7.1	0.0	0.0	0.0	28.6	0.0	0.0

5.6.2 Access to Market Price Information

Access to agricultural market price information is an essential factor in promoting competitive markets and improving agricultural sector development. Figure 38 shows the percentages of farmers that have access to market price information. The shows that most farmers (72% Implementation Camps; 66% Control Camps) have adequate access to market price information. However, only about 10% of the female respondents have access to market price information.

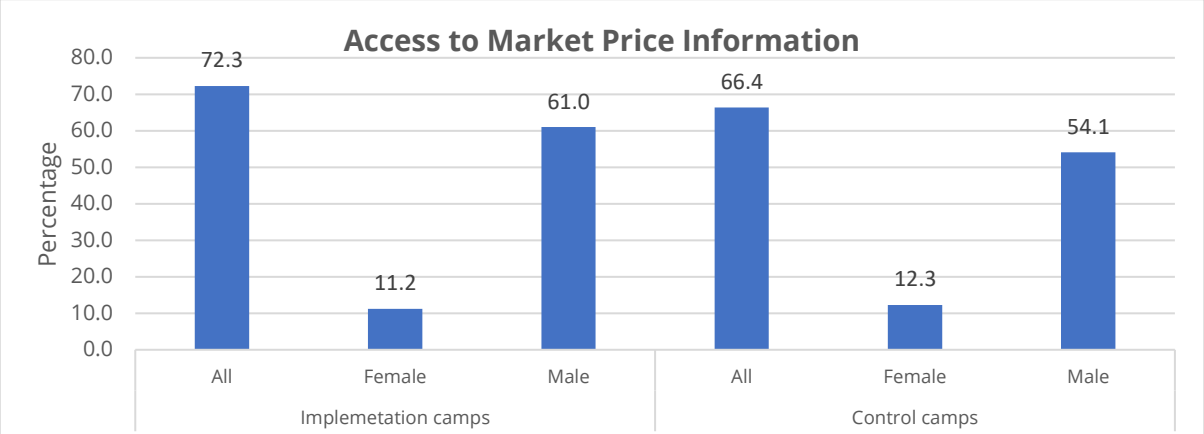


Figure 38: Access to price information- overall

In addition to accessibility, the source of market price information is a major factor in determining the adequacy of the information. The results show that farmers use have access to various sources of market price information with the main one being radio (Figures 39 and 40).

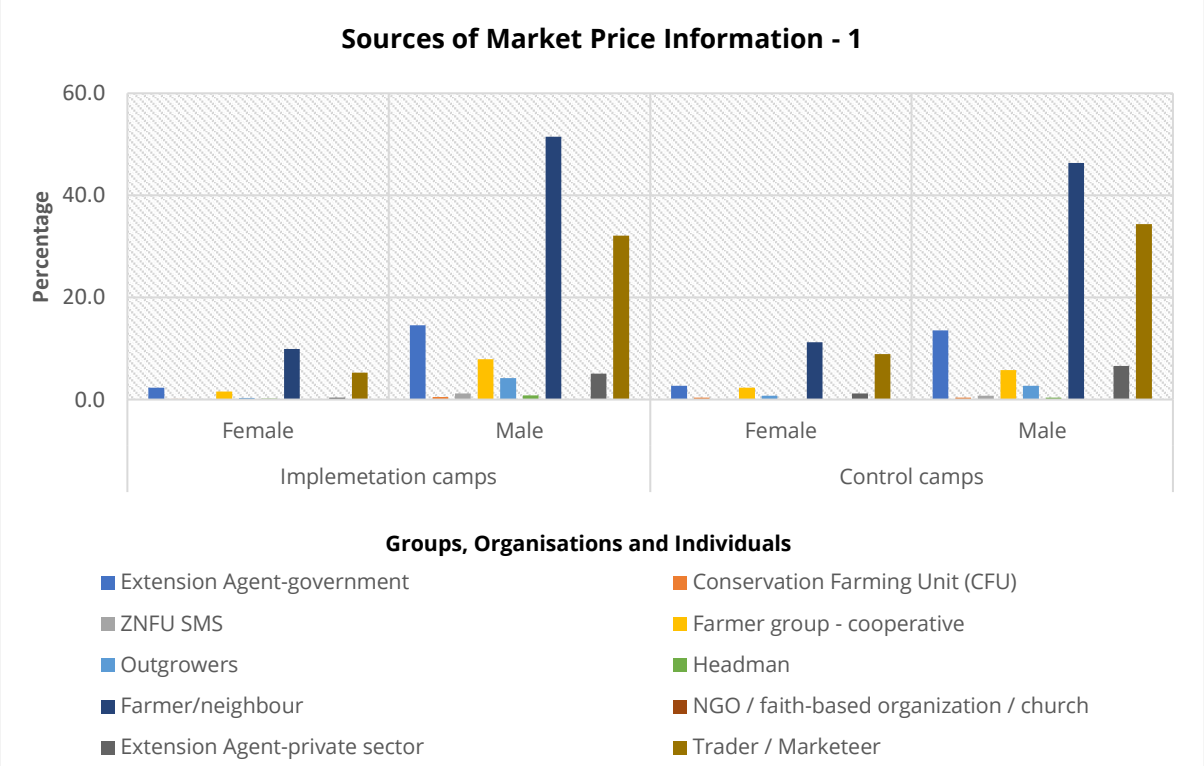


Figure 39: Source of market price information- overall

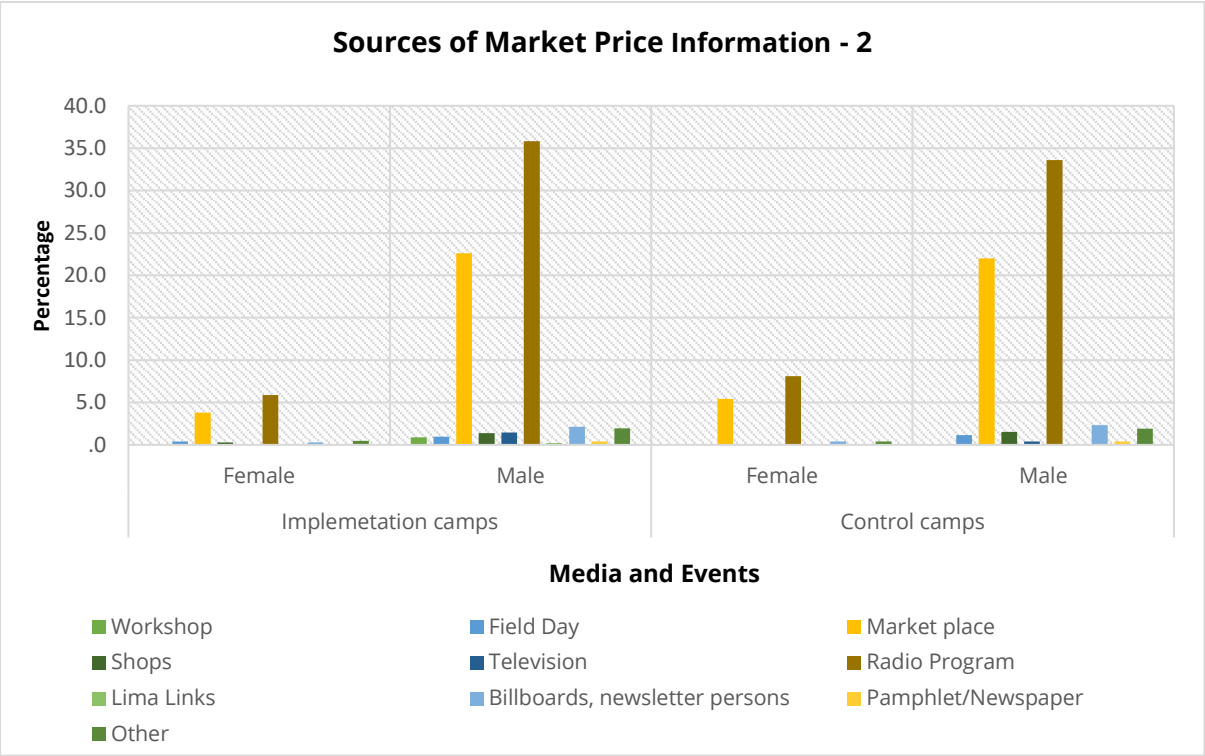


Figure 40: Source of market price information- overall

The same trend is observed at provincial level (Table 30).

Table 30: Source of market price information- provincial

Sources of Market Price Information by Implementation and Control Camp per Province - Groups, Organisations and Individuals												
Province	Camp Type	Gender	Extension Agent - Government	CFU	ZNFU SMS	Farmer group / cooperative	Outgrower	Headman	Farmer /neighbour	NGO / faith-based organization / church	Extension Agent - private sector	Trader / Marketeer
Central Province	Implementation camps	All	3.8	0.0	3.1	.5	4.0	.2	50.8	0.0	.2	39.4
		Female	.7	0.0	.2	.2	0.0	0.0	10.0	0.0	0.0	5.0
		Male	3.1	0.0	2.9	.2	4.0	.2	40.9	0.0	.2	34.4
	Control Camps	All	1.1	1.1	2.2	0.0	3.4	0.0	44.9	0.0	0.0	44.9
		Female	0.0	1.1	0.0	0.0	0.0	0.0	9.0	0.0	0.0	7.9
		Male	1.1	0.0	2.2	0.0	3.4	0.0	36.0	0.0	0.0	37.1
Eastern Province	Implementation Camps	All	21.2	.3	0.0	22.6	6.1	1.7	65.3	0.0	14.0	40.5
		Female	2.2	0.0	0.0	4.1	.8	.6	9.4	0.0	.8	5.8
		Male	19.0	.3	0.0	18.5	5.2	1.1	55.9	0.0	13.2	34.7
	Control Camps	All	23.7	.9	0.0	18.4	5.3	.9	61.4	0.0	15.8	43.0
		Female	3.5	0.0	0.0	5.3	1.8	0.0	13.2	0.0	2.6	9.6
		Male	20.2	.9	0.0	13.2	3.5	.9	48.2	0.0	13.2	33.3
Southern Province	Implementation Camps	All	42.3	2.4	0.0	9.8	5.7	1.6	67.5	0.0	1.6	26.8
		Female	6.5	.8	0.0	0.0	0.0	0.0	8.9	0.0	.8	4.9
		Male	35.8	1.6	0.0	9.8	5.7	1.6	58.5	0.0	.8	22.0
	Control Camps	All	40.7	0.0	0.0	0.0	0.0	0.0	59.3	0.0	7.4	40.7
		Female	7.4	0.0	0.0	0.0	0.0	0.0	14.8	0.0	0.0	11.1
		Male	33.3	0.0	0.0	0.0	0.0	0.0	44.4	0.0	7.4	29.6
Western Province	Implementation Camps	All	24.3	1.7	0.0	.9	0.0	.9	80.9	.9	1.7	31.3
		Female	4.3	0.0	0.0	0.0	0.0	0.0	12.2	0.0	0.0	5.2
		Male	20.0	1.7	0.0	.9	0.0	.9	68.7	.9	1.7	26.1
	Control Camps	All	10.3	0.0	0.0	0.0	0.0	0.0	79.3	0.0	0.0	41.4
		Female	3.4	0.0	0.0	0.0	0.0	0.0	6.9	0.0	0.0	6.9
		Male	6.9	0.0	0.0	0.0	0.0	0.0	72.4	0.0	0.0	34.5

Province	Camp Type	Gender	Workshop	Field Day	Market place	Shops	Television	Radio Program	Lima Links	Billboards/ Newsletters	Pamphlet/ Newspaper	Other
Central Province	Implementation camps	All	0.0	.2	19.0	.2	1.4	38.0	.2	1.9	.5	3.6
		Female	0.0	0.0	2.4	0.0	.2	6.2	0.0	.2	0.0	.7
		Male	0.0	.2	16.6	.2	1.2	31.8	.2	1.7	.5	2.9
	Control Camps	All	0.0	0.0	13.5	0.0	0.0	42.7	0.0	0.0	0.0	5.6
		Female	0.0	0.0	2.2	0.0	0.0	5.6	0.0	0.0	0.0	1.1
		Male	0.0	0.0	11.2	0.0	0.0	37.1	0.0	0.0	0.0	4.5
Eastern Province	Implementation Camps	All	0.0	.3	37.2	4.4	2.5	47.9	0.0	3.9	.6	2.8
		Female	0.0	0.0	5.8	.8	0.0	5.5	0.0	.6	0.0	.6
		Male	0.0	.3	31.4	3.6	2.5	42.4	0.0	3.3	.6	2.2
	Control Camps	All	0.0	1.8	34.2	2.6	.9	44.7	0.0	6.1	0.0	.9
		Female	0.0	0.0	7.9	0.0	0.0	11.4	0.0	.9	0.0	0.0
		Male	0.0	1.8	26.3	2.6	.9	33.3	0.0	5.3	0.0	.9
Southern Province	Implementation Camps	All	7.3	9.8	16.3	0.0	.8	52.8	0.0	0.0	0.0	0.0
		Female	.8	3.3	.8	0.0	0.0	7.3	0.0	0.0	0.0	0.0
		Male	6.5	6.5	15.4	0.0	.8	45.5	0.0	0.0	0.0	0.0
	Control Camps	All	0.0	3.7	29.6	3.7	0.0	37.0	0.0	0.0	3.7	0.0
		Female	0.0	0.0	7.4	0.0	0.0	11.1	0.0	0.0	0.0	0.0
		Male	0.0	3.7	22.2	3.7	0.0	25.9	0.0	0.0	3.7	0.0
Western Province	Implementation Camps	All	.9	0.0	30.4	0.0	0.0	23.5	.9	2.6	0.0	0.0
		Female	0.0	0.0	6.1	0.0	0.0	4.3	0.0	0.0	0.0	0.0
		Male	.9	0.0	24.3	0.0	0.0	19.1	.9	2.6	0.0	0.0
	Control Camps	All	0.0	0.0	41.4	0.0	0.0	31.0	0.0	0.0	0.0	0.0
		Female	0.0	0.0	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		Male	0.0	0.0	37.9	0.0	0.0	31.0	0.0	0.0	0.0	0.0

5.6.2 Challenges in Crop Marketing

Smallholder farmers face several challenges to marketing their produce. The results show that low market price is the biggest challenge faced by farmers, followed by lack of transport, long distances to markets and lack of buyers respectively in both the implementation and control camps (Figure 41). Other challenges faced such as lack of market Information, diseases and pests, poor market infrastructure and lack of storage facilities have a relatively low occurrence.

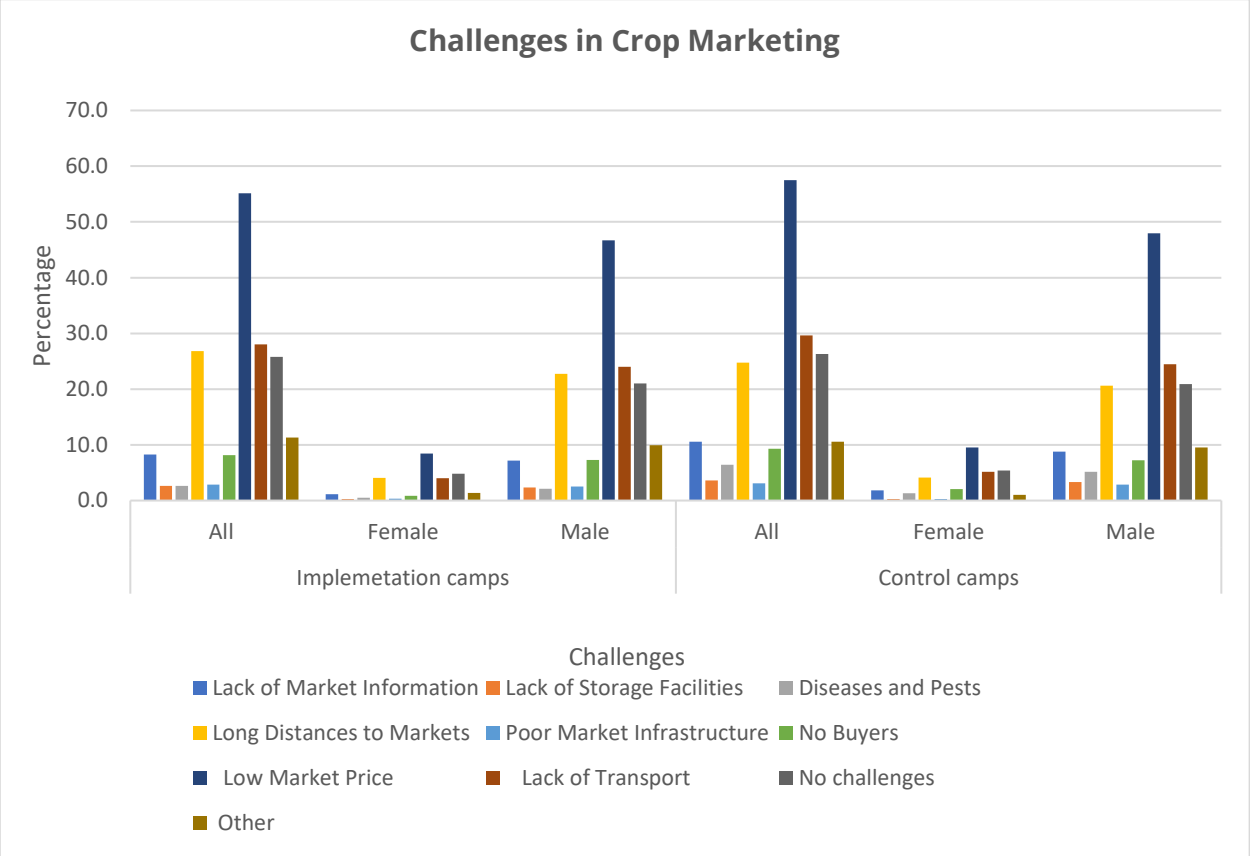


Figure 41: Challenges to crop marketing-overall

Table 31 below give a detailed analysis of the challenges to Marketing at Provincial levels and the trends remain the same across the provinces with low market price followed by lack of transport being the main challenges.

Table 31: Challenges to crop marketing-provincial

Challenges to Crop Marketing by Implementation and Control Camps per Province												
Province	Camp Type	Gender	Lack of Market Information	Lack of Storage Facilities	Diseases and Pests	Long Distances to Markets	Poor Market Infrastructure	No Buyers	Low Market Price	Lack of Transport	No challenges	Other
Central Province	Implementation Camps	All	.8	0.0	.2	8.2	.2	1.5	37.5	11.1	40.0	17.4
		Female	.2	0.0	.2	1.0	0.0	.2	6.7	1.7	8.6	2.7
		Male	.6	0.0	0.0	7.1	.2	1.3	30.8	9.4	31.4	14.7
	Control Camps	All	0.0	0.0	.9	6.0	0.0	.9	35.9	11.1	42.7	22.2
		Female	0.0	0.0	.9	.9	0.0	0.0	3.4	.9	8.5	2.6
		Male	0.0	0.0	0.0	5.1	0.0	.9	32.5	10.3	34.2	19.7
Eastern Province	Implementation Camps	All	6.3	2.0	5.8	25.0	2.9	4.2	74.8	37.7	14.5	12.1
		Female	.2	0.0	.2	3.6	.4	.4	10.5	5.1	2.2	1.1
		Male	6.0	2.0	5.6	21.4	2.5	3.8	64.3	32.6	12.3	10.9
	Control Camps	All	9.3	4.6	13.9	23.8	2.6	6.6	76.2	41.1	13.2	8.6
		Female	2.0	.7	2.6	6.0	.7	2.0	17.2	9.3	3.3	.7
		Male	7.3	4.0	11.3	17.9	2.0	4.6	58.9	31.8	9.9	7.9
Southern Province	Implementation Camps	All	23.4	9.6	3.8	40.6	7.5	10.0	54.8	32.6	25.5	1.7
		Female	4.6	1.7	1.7	6.3	.8	.4	8.4	5.0	4.6	0.0
		Male	18.8	7.9	2.1	34.3	6.7	9.6	46.4	27.6	20.9	1.7
	Control Camps	All	28.3	6.7	5.0	43.3	8.3	10.0	48.3	23.3	30.0	0.0
		Female	6.7	0.0	0.0	6.7	0.0	0.0	6.7	5.0	8.3	0.0
		Male	21.7	6.7	5.0	36.7	8.3	10.0	41.7	18.3	21.7	0.0
Western Province	Implementation Camps	All	11.9	2.1	.4	54.0	3.4	27.2	53.6	39.1	18.7	7.2
		Female	1.3	0.0	.4	8.9	.4	3.4	8.1	5.5	2.1	.4
		Male	10.6	2.1	0.0	45.1	3.0	23.8	45.5	33.6	16.6	6.8
	Control Camps	All	16.7	5.0	0.0	45.0	5.0	31.7	61.7	43.3	23.3	3.3
		Female	0.0	0.0	0.0	3.3	0.0	8.3	5.0	3.3	1.7	0.0
		Male	16.7	5.0	0.0	41.7	5.0	23.3	56.7	40.0	21.7	3.3

5.6.3 Distance to Markets

Distance to markets remains one of the biggest challenges to farmers marketing. An overview of the distance to the farmer's nearest market shows an average distance being about 3.5 Kilometres for both Implementation and Control Camps, it may be assumed that the farmers have readily available market (Figure 42). However, with lack of transport ranking second and long distances to markets ranking third in the challenges faced by farmers, it indicates that the favourable markets are not within the farmers reach and the nearest markets indicated in the graph below are in fact private buyers and community members, as they are (from the survey results) the most common marketing channels.

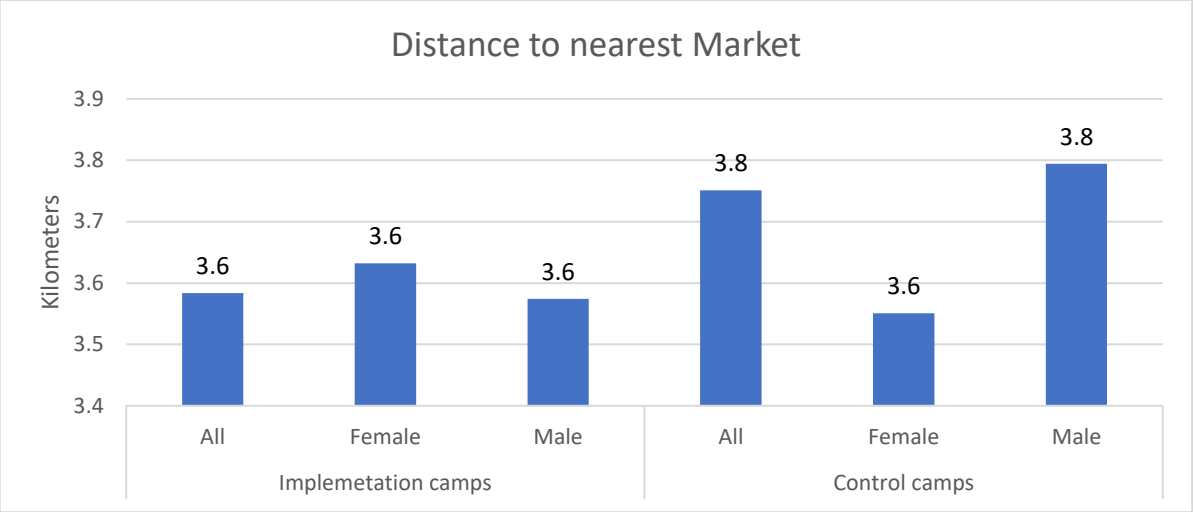


Figure 42: Distance to nearest market-overall

5.6.4 Unethical Trading Practices

Unethical trading practices are one of the major hinderances to the growth of the several smallholder agriculture enterprises. Both farmers and buyers suffer losses due to unethical trading practices. Figure 43 below shows the percentage of farmers that have experienced unethical trading practices across all implementation and control camps. Approximately half of the farmer population has experienced unethical trading practices, with male headed households in the lead with an average of 40% having experienced such.

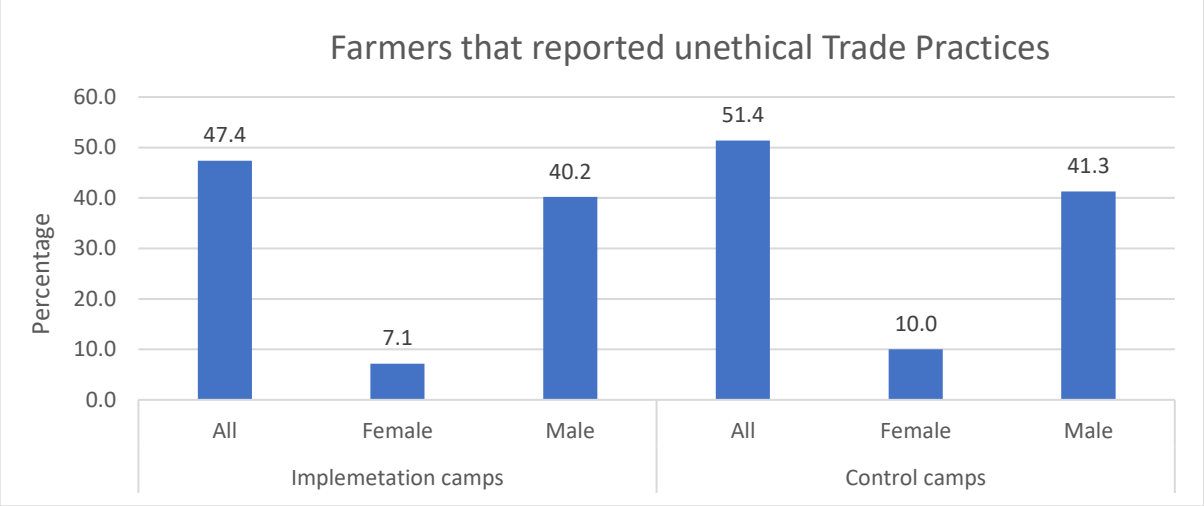


Figure 43:Households reporting unethical trade practices-overall

In looking at the types of unethical trading practices, the most common one is the use of uncalibrated scales by buyers. The number of farmers that experienced this stand at a significant average of 80%. This was

followed by farmers either receiving less money than promised, receiving nothing at all for the produce collected. However, these occur at minimal frequencies, compared to the use of uncalibrated scales.

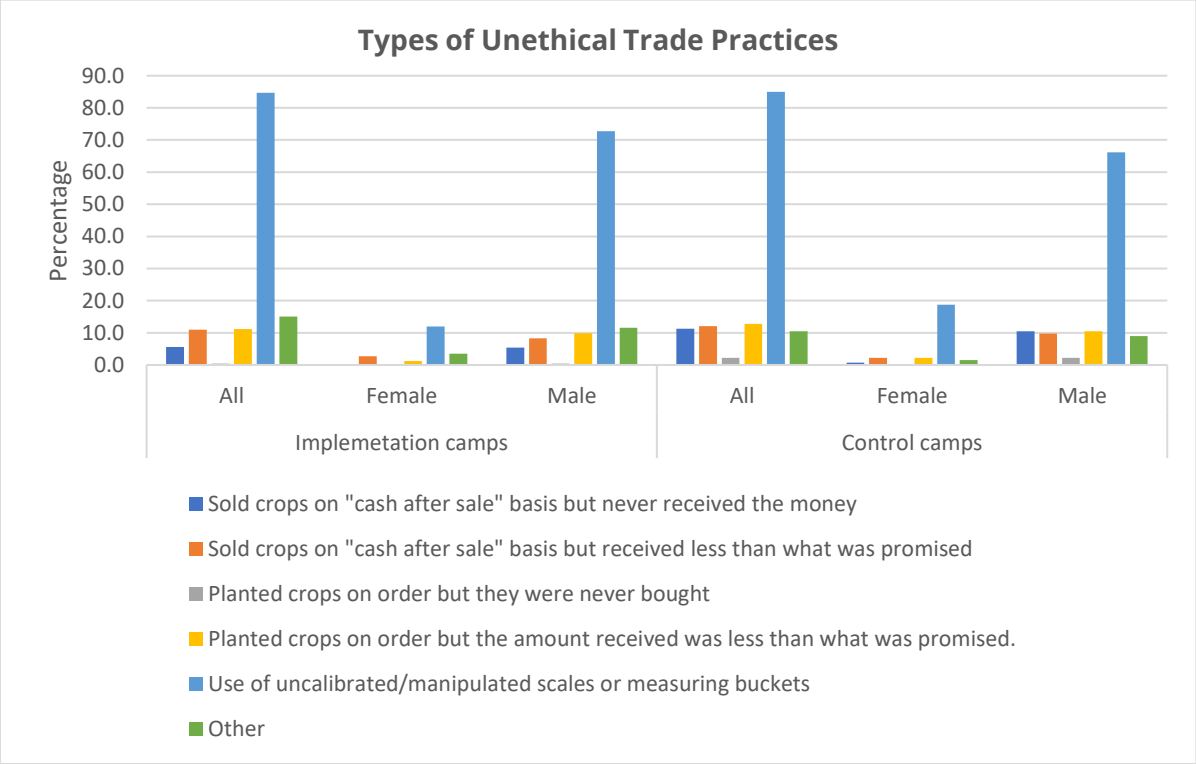


Figure 44: Types of unethical trade practices

Summary

Farmers across all provinces have limited access to markets, resulting in the reliance on private buyers and community members whom often, offer prices below the market price, as evidenced by the challenges faced by the farmers. Private buyers do this to maximize on profits or buy the crop for consumption purposes, in the case of community members.

With the use of uncalibrated scales being the most common unethical practice, it can be assumed that this is mostly practiced by the private buyers that come to buy produce in the communities.

A significant number of Farmers lack access to reliable markets, which has resulted in the high frequency of challenges such as low market prices and unethical trading practices. While markets may be available within the districts, they are not within the farmers' reach. This is evidenced by the percentage of farmers that find the 'long distance to markets' and 'lack of transport to markets' to be major challenges in marketing their produce.

Table 32: Households reporting unethical and types of unethical trade practices-provincial

Types of Unethical Trading Practices by Implementation and Control Camps per Province								
Province	Type of Camp	Gender	Sold crops on "cash after sale" basis but never received the money	Sold crops on "cash after sale" basis but received less than what was promised	Planted crops on order but they were never bought	Planted crops on order but the amount received was less than what was promised.	Use of uncalibrated/ manipulated scales or measuring buckets	Other
Central Province	Implementation camps	All	6.5	5.1	0.0	2.2	73.9	15.9
		Female	0.0	2.2	0.0	0.0	10.1	2.9
		Male	6.5	2.9	0.0	2.2	63.8	13.0
	Control Camps	All	3.7	14.8	0.0	0.0	70.4	18.5
		Female	0.0	3.7	0.0	0.0	14.8	0.0
		Male	3.7	11.1	0.0	0.0	55.6	18.5
Eastern Province	Implementation Camps	All	2.8	12.5	.8	19.0	90.7	16.1
		Female	0.0	2.8	0.0	2.0	10.9	4.4
		Male	2.8	9.7	.8	16.9	79.8	11.7
	Control Camps	All	10.8	9.6	2.4	19.3	88.0	9.6
		Female	0.0	2.4	0.0	3.6	20.5	2.4
		Male	10.8	7.2	2.4	15.7	67.5	7.2
Southern Province	Implementation Camps	All	5.5	5.5	0.0	3.6	83.6	10.9
		Female	0.0	0.0	0.0	0.0	14.5	3.6
		Male	5.5	5.5	0.0	3.6	69.1	7.3
	Control Camps	All	11.1	11.1	0.0	11.1	100.0	0.0
		Female	0.0	0.0	0.0	0.0	22.2	0.0
		Male	11.1	11.1	0.0	11.1	77.8	0.0
Western Province	Implementation Camps	All	18.6	27.9	0.0	4.7	86.0	11.6
		Female	2.3	7.0	0.0	2.3	20.9	0.0
		Male	16.3	20.9	0.0	2.3	65.1	11.6
	Control Camps	All	28.6	21.4	7.1	0.0	85.7	7.1
		Female	7.1	0.0	0.0	0.0	14.3	0.0
		Male	21.4	21.4	7.1	0.0	71.4	7.1

5.7 Post-Harvest Loss and Management

The expression 'post-harvest losses' means a measurable quantitative and qualitative loss in a given product. From an economic point of view, the sum of the losses in quantity and quality of the products inevitably means losses of money, (FAO). These losses can occur during any of the various phases of the post-harvest system. For example, grain partially damaged by insects may no longer be suitable either for human consumption or for sale. Where it was intended for those uses, losses in value have obviously occurred, even if the grain can be salvaged by using it for poultry feed.

This section highlights the loss experienced by households, the severity of loss, the point at which loss occurs, the main cause of loss, the type of storage facilities used by households, and the training received and by who on post-harvest handling and storage.

5.7.1 Post-harvest Loss, Severity and Point of loss

Figure 45 below show the percentages of farmers that experienced post-harvest losses across all provinces at implementation and control camp levels. On average of 25% and 33% of farmers experienced post-harvest losses in the implementation and control camps respectively. At provincial level, Central and Western province reported having experienced lower post-harvest losses, while farmers in Eastern experienced about 50% post-harvest loss.

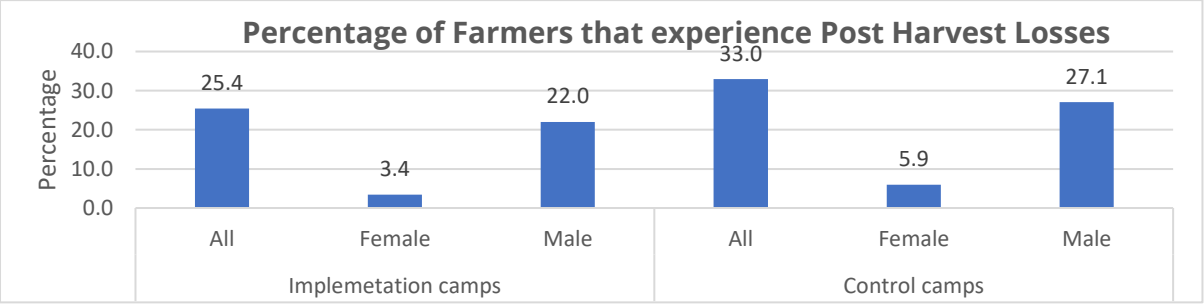


Figure 45:Households that experienced Post-Harvest Losses

In terms of severity of the loss, overall in the implementation camps, majority reported very little damage (50.6%) followed by some damage (37.6%), while in the control camps majority of the households some damage (45.3%) followed by very little damage (41.4%) (Figure 46). Very few households in both the implementation and control reported complete damage.

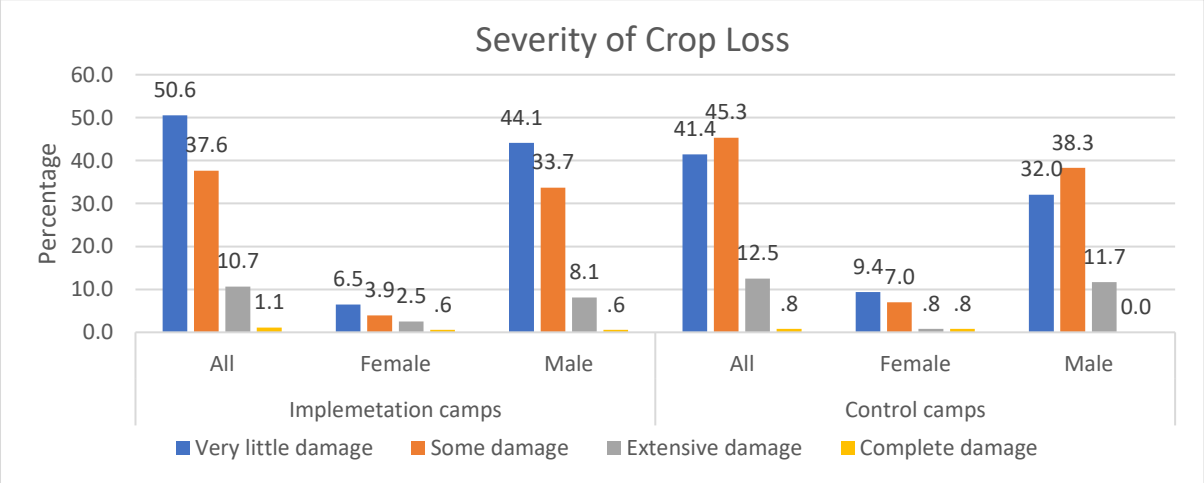


Figure 46: Severity of crop loss

The point at which crop loss across all the camps mostly occurred at harvest and transportation with 51.4% and 57% of the households in the implementation and control camps respectively (Figure 47). This was followed by loss at storage and then processing.

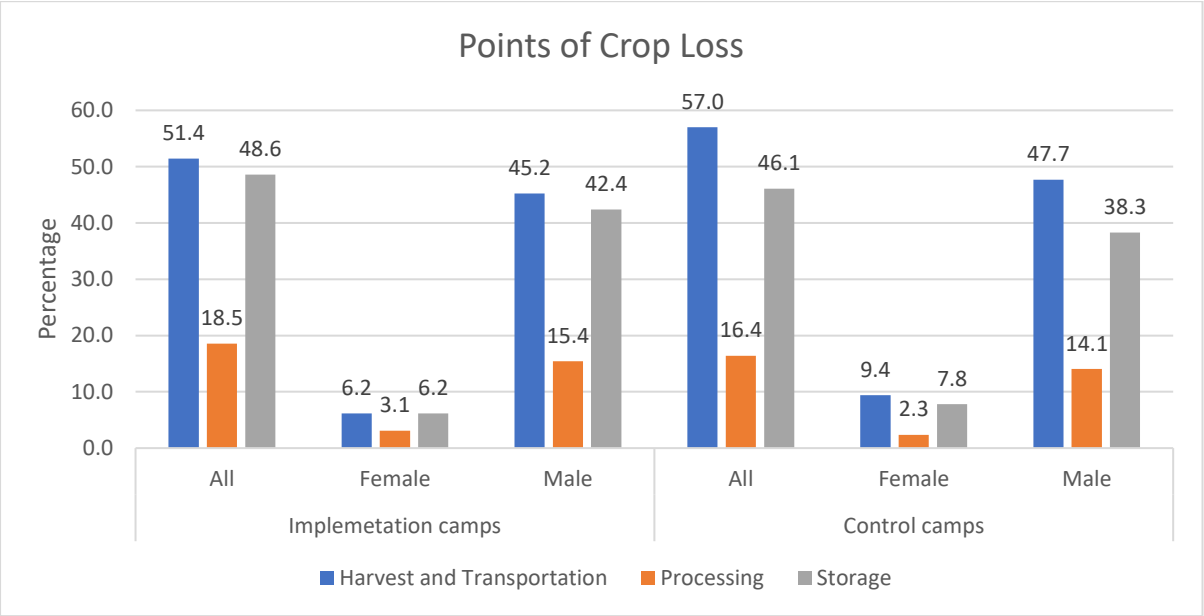


Figure 47: Point of crop loss

At provincial level, in Southern and western provinces, most of the households point of loss was at storage, with all the households in the Western control camps having only loss crop at storage (Table 33). This shows the need to invest in good storage methods to reduce the loss at storage.

Table 33: Percentage, Severity and Points of crop Loss-provincial

Percentage, Severity and Points of Loss by Implementation and Control Camps per Province										
Province	Type of Camp	Gender	Percentage of Farmers that experienced Post Harvest Losses	Severity of Loss				Point of Loss		
				Very little damage	Some damage	Extensive damage	Complete damage	Harvest and Transportation	Processing	Storage
Central Province	Implementation Camps	All	12.2	51.7	25.9	20.7	1.7	34.5	24.1	43.1
		Female	2.1	5.2	3.4	6.9	1.7	6.9	6.9	3.4
		Male	10.1	46.6	22.4	13.8	0.0	27.6	17.2	39.7
	Control Camp	All	15.4	44.4	27.8	27.8	0.0	50.0	22.2	27.8
		Female	.9	5.6	0.0	0.0	0.0	2.9	0.0	0.0
		Male	14.5	38.9	27.8	27.8	0.0	47.1	22.2	27.8
Eastern Province	Implementation Camps	All	50.9	42.5	45.6	10.5	1.3	64.5	21.1	42.1
		Female	6.0	4.8	4.4	2.2	.4	7.5	3.1	3.9
		Male	44.9	37.7	41.2	8.3	.9	57.0	18.0	38.2
	Control Camp	All	58.9	42.7	44.9	11.2	1.1	68.5	15.7	43.8
		Female	12.6	9.0	10.1	1.1	1.1	12.4	2.2	9.0
		Male	46.4	33.7	34.8	10.1	0.0	56.2	13.5	34.8
Southern Province	Implementation Camps	All	20.5	75.5	20.4	4.1	0.0	30.6	6.1	67.3
		Female	2.9	14.3	0.0	0.0	0.0	2.0	0.0	14.3
		Male	17.6	61.2	20.4	4.1	0.0	28.6	6.1	53.1
	Control Camp	All	23.3	42.9	50.0	7.1	0.0	21.4	21.4	57.1
		Female	5.0	21.4	0.0	0.0	0.0	0.0	7.1	14.3
		Male	18.3	21.4	50.0	7.1	0.0	21.4	14.3	42.9
Western Province	Implementation Camps	All	8.9	76.2	23.8	0.0	0.0	4.8	4.8	90.5
		Female	1.7	9.5	9.5	0.0	0.0	0.0	0.0	19.0
		Male	7.2	66.7	14.3	0.0	0.0	4.8	4.8	71.4
	Control Camp	All	11.7	14.3	85.7	0.0	0.0	0.0	0.0	100.0
		Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		Male	11.7	14.3	85.7	0.0	0.0	0.0	0.0	100.0

5.7.2 Quantity of Crop lost

Figure 48 below shows the average quantities of crop lost at the three main points of post-harvest loss. An average of 25kgs of crop are lost at processing point in implementation camps, while the average quantity in the control camps is 18Kgs. This is followed by losses at harvest and transportation point, with an average of 15Kgs for both implementation and control camps. While the quantities of crop lost at storage point was relatively low in the implementation camps (7Kgs), at control camp level, it is slightly higher (18Kgs).

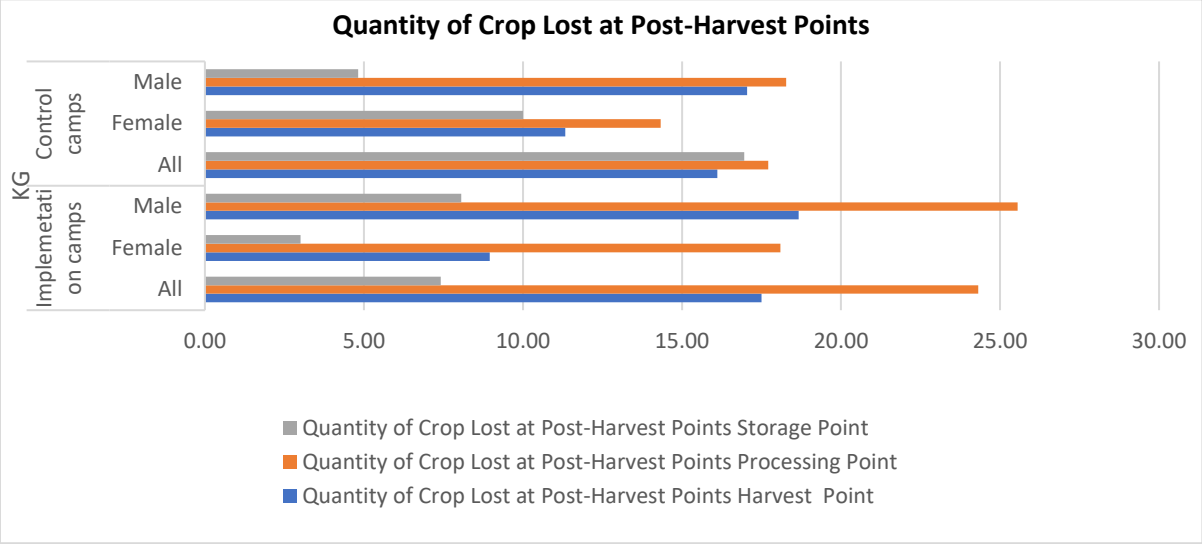


Figure 48:Quantity of crop loss-overall

5.7.3 Main Causes of Post-Harvest Losses

The figure 49 below shows the causes of post-harvest loss. The most common cause of loss is weevils, followed by rodents, rain water and poor harvesting techniques respectively, while the rest are relatively negligible percentages. These remain consistent at provincial level (Table 34).

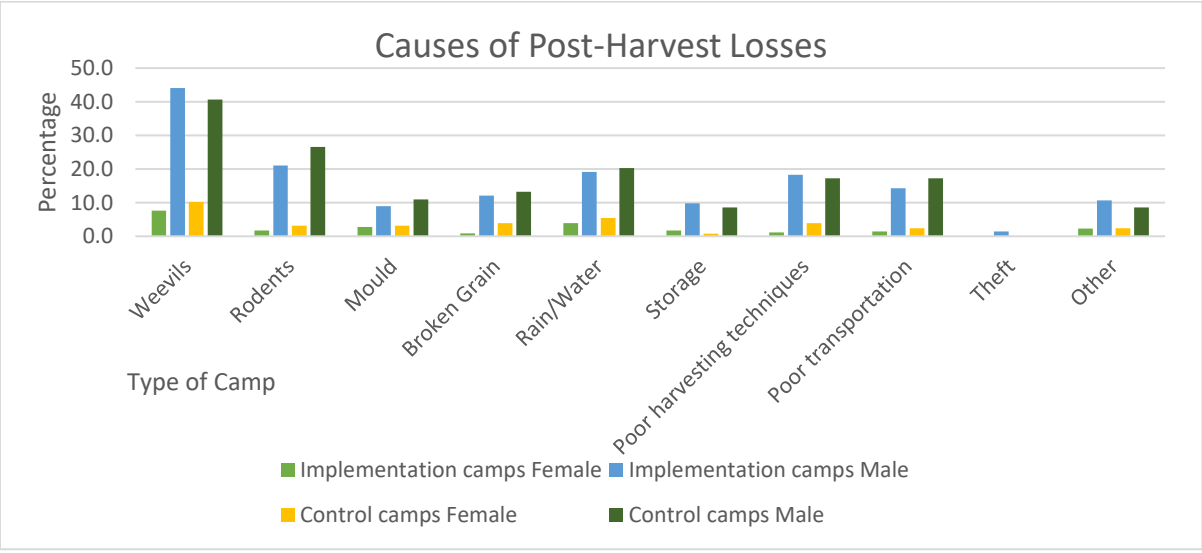


Figure 49:Causes of Post-Harvest losses-overall

Table 34: Quantity of crop loss-provincial

Quantity of Crop Lost at Post-Harvest Points by Implementation and Control Camps per Province					
Province	Type of Camp	Gender	Harvest Point	Processing Point	Storage Point
Central Province	implementation camps	All	12.15	50.86	5.72
		Female	11.50	25.25	3.50
		Male	12.31	61.10	5.91
	control camp	All	8.44	74.00	2.40
		Female	1.00		
		Male	9.38	74.00	2.40
Eastern Province	implementation camps	All	19.42	17.86	10.59
		Female	8.82	14.00	4.56
		Male	20.80	18.52	11.21
	control camp	All	15.36	5.07	6.11
		Female	12.27	19.50	8.13
		Male	16.04	2.67	5.59
Southern Province	implementation camps	All	6.80	11.00	2.70
		Female	1.00		1.46
		Male	7.21	11.00	3.04
	control camp	All	54.33	1.67	12.50
		Female		4.00	5.00
		Male	54.33	.50	2.50
Western Province	implementation camps	All	4.00	2.00	1.84
		Female			2.00
		Male	4.00	2.00	1.80
	control camp	All			5.14
		Female			
		Male			5.14

Table 35: Causes of Post-Harvest losses-overall

Main Cause of Post-Harvest Losses by Implementation and Control Camps per Province												
Province	Type of Camp	Gender	Weevils	Rodents	Mould	Broken Grain	Rain/Water	Storage	Poor harvesting techniques	Poor transportation	Theft	Other
Central Province	Implementation Camps	All	27.6	20.7	1.7	1.7	25.9	1.7	3.4	3.4	1.7	32.8
		Female	5.2	5.2	1.7	0.0	5.2	0.0	0.0	0.0	0.0	5.2
		Male	22.4	15.5	0.0	1.7	20.7	1.7	3.4	3.4	1.7	27.6
	Control Camp	All	22.2	16.7	0.0	5.6	44.4	0.0	11.1	0.0	0.0	16.7
		Female	0.0	0.0	0.0	0.0	5.6	0.0	0.0	0.0	0.0	0.0
		Male	22.2	16.7	0.0	5.6	38.9	0.0	11.1	0.0	0.0	16.7
Eastern Province	Implementation Camps	All	57.5	21.5	16.2	17.5	20.6	13.6	27.6	23.2	1.8	11.0
		Female	7.9	.4	3.5	1.3	3.9	1.3	1.8	2.2	0.0	1.8
		Male	49.6	21.1	12.7	16.2	16.7	12.3	25.9	21.1	1.8	9.2
	Control Camp	All	52.8	31.5	12.4	23.6	20.2	12.4	27.0	28.1	0.0	11.2
		Female	12.4	4.5	3.4	5.6	5.6	1.1	5.6	3.4	0.0	3.4
		Male	40.4	27.0	9.0	18.0	14.6	11.2	21.3	24.7	0.0	7.9
Southern Province	Implementation Camps	All	51.0	26.5	6.1	10.2	26.5	14.3	8.2	2.0	0.0	4.1
		Female	8.2	4.1	2.0	0.0	2.0	4.1	0.0	0.0	0.0	2.0
		Male	42.9	22.4	4.1	10.2	24.5	10.2	8.2	2.0	0.0	2.0
	Control Camp	All	57.1	21.4	28.6	0.0	42.9	0.0	7.1	0.0	0.0	7.1
		Female	14.3	0.0	7.1	0.0	7.1	0.0	0.0	0.0	0.0	0.0
		Male	42.9	21.4	21.4	0.0	35.7	0.0	7.1	0.0	0.0	7.1
Western Province	Implementation Camps	All	57.1	33.3	4.8	0.0	33.3	9.5	0.0	0.0	0.0	0.0
		Female	9.5	0.0	0.0	0.0	4.8	4.8	0.0	0.0	0.0	0.0
		Male	47.6	33.3	4.8	0.0	28.6	4.8	0.0	0.0	0.0	0.0
	Control Camp	All	85.7	57.1	42.9	0.0	14.3	14.3	0.0	0.0	0.0	0.0
		Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		Male	85.7	57.1	42.9	0.0	14.3	14.3	0.0	0.0	0.0	0.0

5.7.4 Storage Facilities

Evidently, the high percentage of losses due to weevils and rodents is due to the use of ordinary grain bags, Traditional granary and empty rooms inside the farmers' house as storage facilities (Figure 50). A very low percentage of farmers use PICS Bags and warehouses to store their produce.

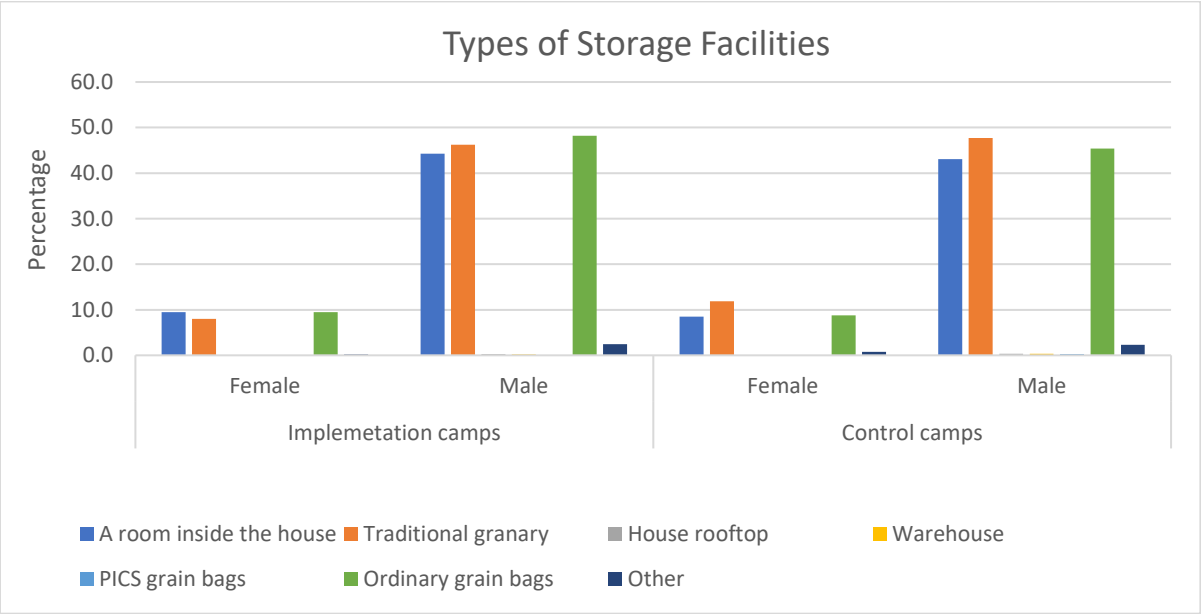


Figure 50:Types of storage facilities

This can be attributed to the low percentage of farmers who received 'Post-harvest Handling and Storage' training, with only 20.3% and 21.6% in the implementation and control camps having received training in post-harvest handling and loss. This is a very low percentage, considering the fact that not all Beneficiaries trained on any innovation will adopt the innovation, as seen in most developmental implementations. Therefore, an even lower percentage of the farmers will use the technologies in which they have received training.

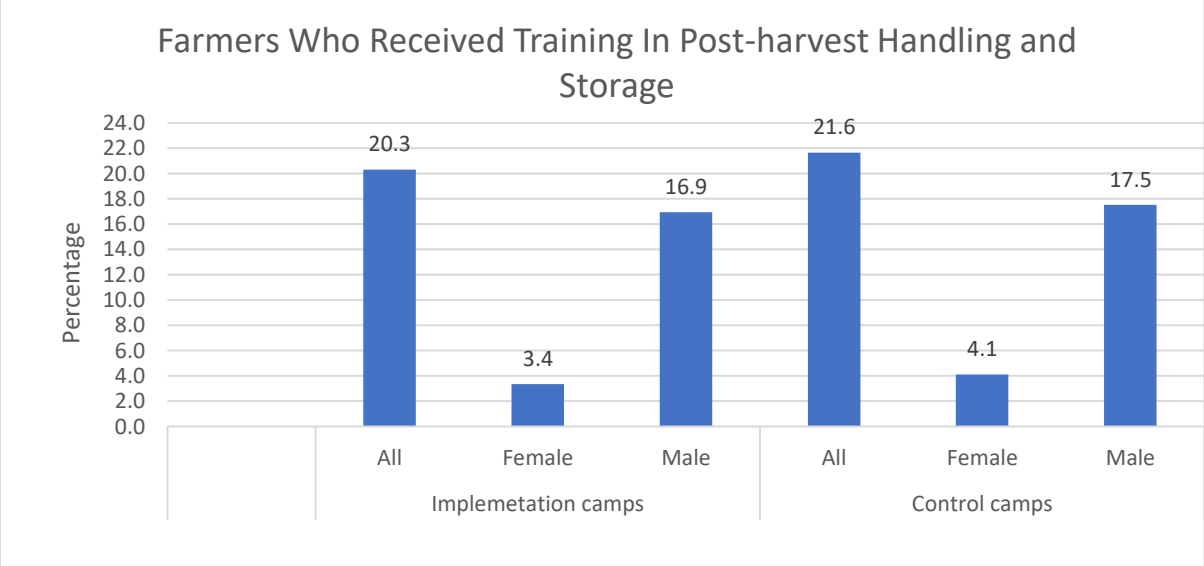


Figure 51: Households who received training in Post-Harvest handling and storage-overall

Figure 52 below shows the sources of 'Post-harvest Handling and Storage' training with Government being the most common source of training. While 50% percentage of the male respondents received 'Post-harvest Handling and Storage' training from Government, only 10% of the female respondents received the training from the same source, in both implementation and control camps. The second most popular source of training is the Conservation Farming Unit at an average of 10%, while other sources were at very low percentages.

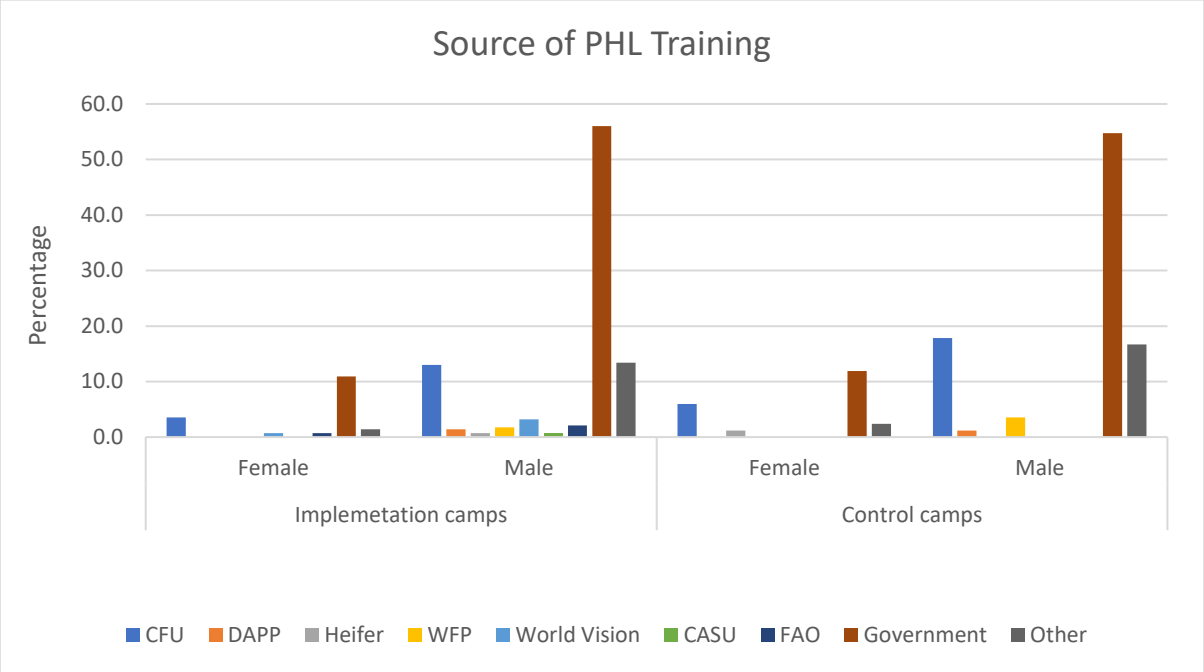


Figure 52:Sources of Post-Harvest loss training

Summary

Most of the post-harvest losses experienced by framers are due to the lack of 'Post-harvest Handling and Storage' trainings and the low adoption of post-harvest technologies by the farmer that have received training.

The highest quantities of losses occur at process point, there is a very low percentage of farmers that experience losses at this point. This could be attributed to the low percentage of farmers that process their crop and the type of equipment used in processing of crops

Table 36: Households who received training in Post-Harvest handling and storage-overall

PHL Training by Implementation and Control Camps per Province												
Province	Type of Camp	Gender	Percentage of Farmers who received Training in Post-Harvest Handling and Storage	Source of PHL Training								
				CFU	DAPP	Heifer	WFP	World Vision	CASU	FAO	Government	Other
Central Province	implementation camps	All	23.9	24.6	2.6	0.0	2.6	5.3	1.8	7.0	51.8	14.0
		Female	4.2	6.1	0.0	0.0	0.0	.9	0.0	1.8	7.9	1.8
		Male	19.7	18.4	2.6	0.0	2.6	4.4	1.8	5.3	43.9	12.3
	control camp	All	27.4	34.4	3.1	3.1	3.1	0.0	0.0	0.0	53.1	25.0
		Female	4.3	3.1	0.0	3.1	0.0	0.0	0.0	0.0	9.4	3.1
		Male	23.1	31.3	3.1	0.0	3.1	0.0	0.0	0.0	43.8	21.9
Eastern Province	implementation camps	All	23.4	12.4	0.0	0.0	0.0	0.0	0.0	0.0	76.2	20.0
		Female	4.7	1.0	0.0	0.0	0.0	0.0	0.0	0.0	17.1	1.9
		Male	18.8	11.4	0.0	0.0	0.0	0.0	0.0	0.0	59.0	18.1
	control camp	All	25.8	23.1	0.0	0.0	0.0	0.0	0.0	0.0	74.4	7.7
		Female	6.6	10.3	0.0	0.0	0.0	0.0	0.0	0.0	15.4	0.0
		Male	19.2	12.8	0.0	0.0	0.0	0.0	0.0	0.0	59.0	7.7
Southern Province	implementation camps	All	17.6	0.0	2.4	4.8	4.8	11.9	0.0	0.0	85.7	4.8
		Female	1.3	0.0	0.0	0.0	0.0	2.4	0.0	0.0	7.1	0.0
		Male	16.3	0.0	2.4	4.8	4.8	9.5	0.0	0.0	78.6	4.8
	control camp	All	8.3	0.0	0.0	0.0	40.0	0.0	0.0	0.0	80.0	0.0
		Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		Male	8.3	0.0	0.0	0.0	40.0	0.0	0.0	0.0	80.0	0.0
Western Province	implementation camps	All	9.8	26.1	0.0	0.0	0.0	0.0	0.0	0.0	65.2	13.0
		Female	1.3	8.7	0.0	0.0	0.0	0.0	0.0	0.0	4.3	0.0
		Male	8.5	17.4	0.0	0.0	0.0	0.0	0.0	0.0	60.9	13.0
	control camp	All	13.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	75.0	62.5
		Female	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.5	12.5
		Male	11.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	62.5	50.0

5.8 Social Networks

This section highlights the household's social networks and the household's access to social safety nets. The survey results showed that households belong to several social networks (Figure 53). Indicatively, most of the households belong to agricultural cooperatives (84% in the implementation camps and 84.4% in the control camps). This is followed by membership in Church groups, with 14.4% of the female headed households in the control camps belonging to church memberships. Household membership to agricultural loan/credit scheme is significantly low across all the districts with only 3.1% of the households in the control and project camps belonging to these groups.

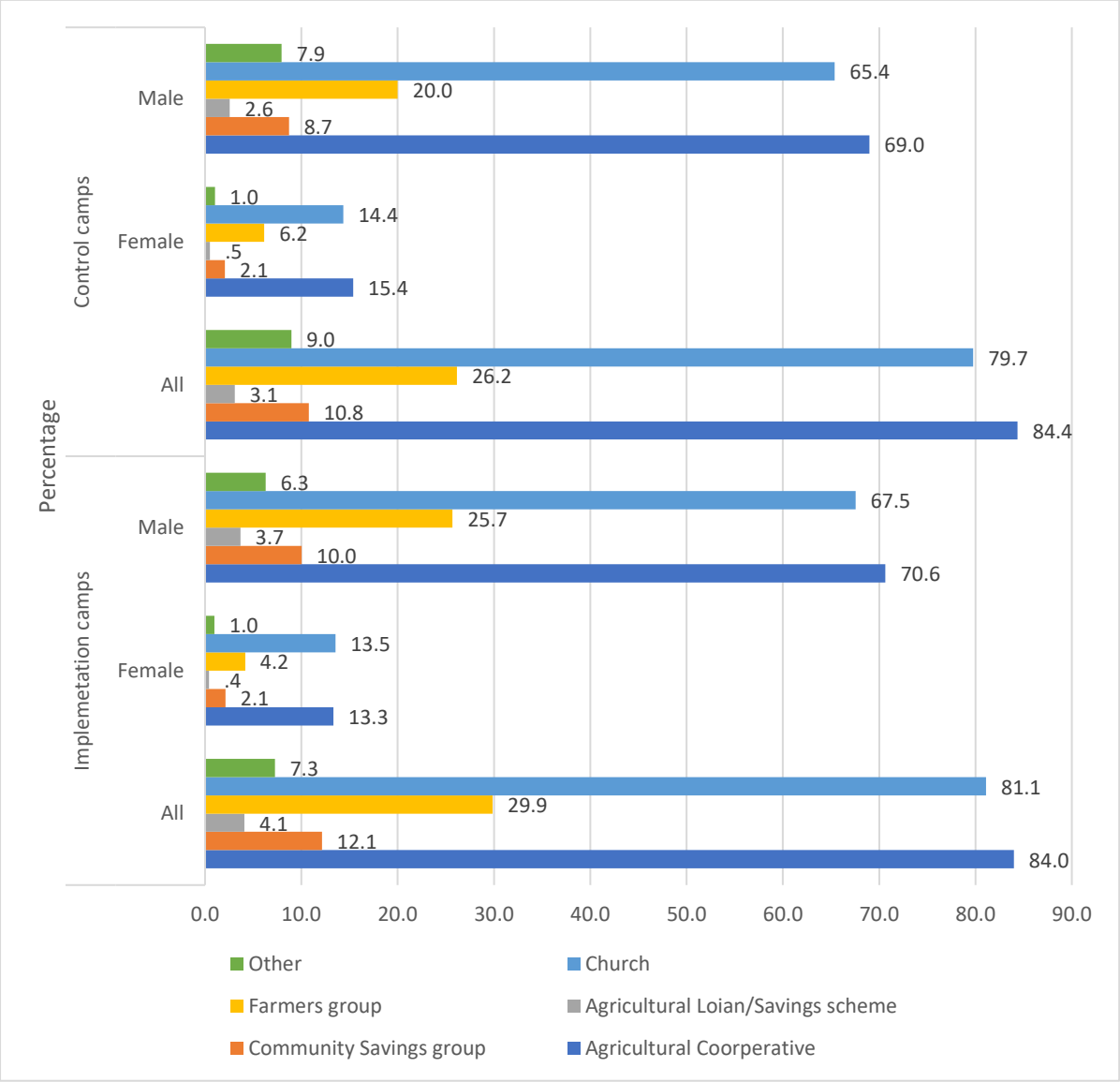


Figure 53: Social Networks- overall

Examining the results by region across implementation and control camp across the districts, show that 95% of the sampled households in Central implementation camps belong to an agricultural cooperative, 36.6% in the eastern implementation camps belong to an agricultural cooperative and none of the households in the western region control camps belong to an agricultural loan/savings group.

Table 37: Social Network-Provincial

		Agricultural Cooperative	Community Savings group	Agricultural Loan/Savings scheme	Farmers group	Church	Other
Central implementation camps	All	95.4	17.4	5.2	31.5	90.5	6.2
	Female	17.4	2.5	.4	6.0	17.4	1.2
	Male	78.1	14.9	4.8	25.5	73.1	5.0
Central control camp	All	91.5	17.8	7.6	26.3	87.3	6.8
	Female	14.4	2.5	1.7	4.2	11.9	0.0
	Male	77.1	15.3	5.9	22.0	75.4	6.8
Eastern implementation camps	All	93.1	7.8	5.5	36.6	89.4	9.8
	Female	12.2	1.8	.7	4.9	11.8	.7
	Male	80.9	6.0	4.9	31.7	77.6	9.1
Eastern control camp	All	97.4	7.2	2.0	30.9	86.2	13.2
	Female	21.7	2.0	0.0	10.5	21.1	1.3
	Male	75.7	5.3	2.0	20.4	65.1	11.8
Southern implementation camps	All	76.4	13.2	1.2	23.1	63.2	1.2
	Female	12.4	2.1	.4	1.7	12.4	0.0
	Male	64.0	11.2	.8	21.5	50.8	1.2
Southern control camp	All	76.7	8.3	0.0	13.3	56.7	1.7
	Female	11.7	3.3	0.0	1.7	13.3	0.0
	Male	65.0	5.0	0.0	11.7	43.3	1.7
Western implementation camps	All	51.5	8.7	2.1	20.7	64.7	10.8
	Male	8.3	2.1	0.0	1.7	10.4	2.1
	Female	43.2	6.6	2.1	19.1	54.4	8.7
Western control camp	All	45.0	8.3	0.0	26.7	71.7	10.0
	Male	5.0	0.0	0.0	3.3	3.3	3.3
	Female	40.0	8.3	0.0	23.3	68.3	6.7

Summary

Most of the households across the implementation and control camps indicated belonging to agricultural cooperatives, this is followed by membership in Church groups and agricultural loan credit schemes.

6. Conclusions and Recommendations

6.1 Conclusions

Majority of the households are male headed, have mainly attained primary education and mostly married across all camps with an average household size is 7 members in the implementation camps and 6 members in the control camps

Very small proportion of households with members who are either unable to work, chronically ill or disabled with most being engaged in informal employment which comprise farming and other small-scale income generating activities such as self-employed, petty trade, sell of charcoal, casual laborer, among others. Majority of the decisions at the household level are made jointly by both men and women.

Most households use boreholes and unprotected wells as the main source of drinking water for the households with the water source indicated being located elsewhere with 32.8% of households in the implementation camp indicated taking effort to make water safer to drink while this was at 36.7% of the households in the control camps. The main measures was used to make water safer were chlorine and boiling as a measure taken to make water safer to drink.

Pit latrines with slabs, pit latrines without slabs and the bush/field as the main sanitary facility with majority indicating these facilities being within their own yards.

On average households own about 9ha of land with female headed households owning less land than male headed households. Households grew on average 3 crops with male headed households growing more crops compared to female headed households. Majority of the households indicated having heard about CA practices (about 80%) and practiced CA.

Across all camps most of the women met the minimum dietary diversity score, with most households having an acceptable food consumption. Majority of the household spent between 1-49% of their income on food, however, there is a significant proportion of households spending most of their income (75% or more) on food in both the implementation and control camps.

Majority of the households in both the implementation and control camps borrowed from family/friends and money lenders/loan sharks.

The main reason for taking a loan was for the purchase of agricultural inputs, small scale business running and education expenses. Majority of households who had loans rejected indicated the lack of collateral and of those that received the loans, the decision over resource use was mainly made by both men and women.

Majority of the households use mobile money as a mode of savings, this is followed by the use of government banks and private banks as a formal method of savings. On the informal savings methods, most households indicated the use of savings/cooperative societies.

Low market price is the biggest challenge faced by farmers, followed by lack of transport, long distances to markets and lack of buyers.

The use of uncalibrated scales is the most common unethical practice, it can be assumed that this is mostly practiced by the private buyers that come to buy produce in the communities.

The most common cause of loss is weevils, followed by rodents, rain water and poor harvesting techniques. The highest quantities of losses occur at process point, there is a very low percentage of farmers that experience losses at this point.

6.2 Recommendations

Based on the findings, the following recommendations are made;

Promote consumption of diversified diets particularly among the disadvantaged households such as women headed and those already consuming less diversified diets.

Create awareness and/or promote good water and sanitation practices.

Increase awareness on infant and young child feeding practices and consumption of appropriate food for children.

Promote cooking demonstrations and/or behavioural change in consumption of food groups that will trigger improved dietary scores (e.g. foods rich in Herm Iron particularly from animal proteins).

Integrate financial services such as savings and input-based credit in the Conservation Agriculture uptake promotion to ease up the challenge of accessing appropriate inputs such as implements connected to mechanization, seed and herbicides.

Rollout out traditional micro financing through savings groups coupled with tailored nutrition education among project participants to capacitate them in accessing diverse nutrition foods either through markets or own production. This will also help increase their investment opportunities beyond agriculture.

Facilitate project participants to apply for viable and less costly agriculture input financing to access hybrid seeds and other relevant implements connected to mechanization.

Supporting training on pre- and post-harvest management and facilitating linkages for farmers to access post-harvest storage technologies to minimize losses.

Facilitation of market access through a network of Aggregation Centres to increase economies of scale from the quantity and distance perspective, key elements that off-takers consider. This will also facilitate access to a fair pricing mechanism that will benefit the project participants (i.e. increased negotiating ability).

ANNEX

A1: Decision Maker over Household Resources

		Who makes decisions over the household resources?			Status of this person who makes decisions in the household				Why decisions are made by this person(s)				
		Men	Women	Both	Head of the household	Spouse to the head of the household	The eldest in the household	Other	Understand importance of collaboration	This issue is for this sex	Only one adult in the HH	Culture dictates this sex makes all decisions	Other
Overall implementation camps	All	27.2	15.0	57.8	86.8	1.3	10.5	1.3	53.8	9.6	10.9	22.6	3.1
	Female	0.4	13.7	2.2	24.7	0.0	7.7	1.0	2.3	0.9	9.2	1.8	2.0
	Male	26.8	1.3	55.6	62.0	1.3	2.8	0.3	51.6	8.7	1.6	20.8	1.1
Overall control camps	All	29.0	16.2	54.8	87.5	0.0	11.9	0.6	49.9	8.0	10.5	26.5	5.1
	Female	0.5	15.7	1.5	25.6	0.0	10.2	0.0	1.5	1.0	9.0	2.6	3.6
	Male	28.5	0.5	53.2	61.9	0.0	1.7	0.6	48.3	6.9	1.5	23.9	1.5
Central implementation camps	All	31.1	18.4	50.5	90.8	1.7	5.9	1.7	51.3	7.5	14.7	23.4	3.1
	Female	0.2	16.6	2.1	27.6	0.0	4.6	1.7	2.1	0.0	13.3	1.2	2.3
	Male	30.8	1.9	48.4	63.2	1.7	1.3	0.0	49.3	7.5	1.4	22.2	0.8
Central control camp	All	29.7	12.7	57.6	96.0	0.0	4.0	0.0	55.9	3.4	10.2	27.1	3.4
	Female	0.0	12.7	2.5	26.0	0.0	4.0	0.0	2.5	0.0	9.3	0.8	2.5
	Male	29.7	0.0	55.1	70.0	0.0	0.0	0.0	53.4	3.4	0.8	26.3	0.8
Eastern implementation camps	All	34.3	13.3	52.4	84.2	1.4	12.6	1.9	52.2	6.0	9.1	28.1	4.6
	Female	0.7	12.2	1.3	18.6	0.0	7.4	0.9	1.5	0.7	7.1	2.0	2.9
	Male	33.6	1.1	51.1	65.6	1.4	5.1	0.9	50.7	5.3	2.0	26.1	1.8
Eastern control camp	All	43.4	23.0	33.6	83.2	0.0	15.8	1.0	33.6	7.9	13.8	36.2	8.6
	Female	1.3	21.7	0.0	21.8	0.0	12.9	0.0	0.0	1.3	11.8	3.9	5.9
	Male	42.1	1.3	33.6	61.4	0.0	3.0	1.0	33.6	6.6	2.0	32.2	2.6
Southern implementation camps	All	14.9	14.5	70.7	77.5	0.0	22.5	0.0	60.3	14.9	7.0	15.3	2.5
	Female	0.4	13.2	2.5	28.2	0.0	18.3	0.0	4.5	2.1	6.6	1.2	1.7
	Male	14.5	1.2	68.2	49.3	0.0	4.2	0.0	55.8	12.8	0.4	14.0	0.8
Southern control camp	All	6.7	16.7	76.7	78.6	0.0	21.4	0.0	61.7	13.3	8.3	11.7	5.0
	Female	0.0	16.7	0.0	50.0	0.0	21.4	0.0	1.7	1.7	8.3	1.7	3.3
	Male	6.7	0.0	76.7	28.6	0.0	0.0	0.0	60.0	11.7	0.0	10.0	1.7
Western implementation camps	All	18.7	11.6	69.7	90.4	1.4	8.2	0.0	55.2	15.4	10.4	18.3	0.8
	Female	0.4	11.2	3.7	30.1	0.0	8.2	0.0	1.7	2.1	7.9	3.3	0.4
	Male	18.3	0.4	66.0	60.3	1.4	0.0	0.0	53.5	13.3	2.5	14.9	0.4
Western control camp	All	13.6	5.1	81.4	100.0	0.0	0.0	0.0	67.8	11.9	5.1	15.3	0.0
	Female	0.0	5.1	5.1	27.3	0.0	0.0	0.0	3.4	1.7	1.7	3.4	0.0
	Male	13.6	0.0	76.3	72.7	0.0	0.0	0.0	64.4	10.2	3.4	11.9	0.0

A2: Household Gender, Age, Education Levels, Marital status and Size

		Mean Age	Gender		Average years in school	Highest level of education completed				Marital status					Household size
			Female	Male		Never been to school	Primary school	Secondary school	Tertiary	Single	Married	Separated	Divorced	Widowed	
Chibombo	Implementation camps	49	15.8	84.2	9.4	2.5	48.3	42.5	6.7	2.5	79.2	2.5	6.7	9.2	7.1
	Control camp	44	16.7	83.3	8.0	0.0	66.7	33.3	0.0	6.7	83.3	0.0	3.3	6.7	6.8
Chisamba	Implementation camps	53	21.1	78.9	7.6	11.4	55.3	29.3	4.1	1.6	74.8	3.3	4.1	16.3	6.6
	Control camp	47	10.3	89.7	10.2	0.0	37.9	55.2	6.9	0.0	86.2	0.0	3.4	10.3	6.3
Kapiri-mposhi	Implementation camps	50	15.0	85.0	8.7	5.0	43.3	47.5	4.2	.8	82.5	.8	3.3	12.5	6.9
	Control camp	50	16.7	83.3	9.9	0.0	36.7	60.0	3.3	3.3	73.3	0.0	10.0	13.3	6.6
Mumbwa	Implementation camps	48	23.3	76.7	8.6	.8	56.7	40.8	1.7	2.5	74.2	5.0	4.2	14.2	7.3
	Control camp	46	17.2	82.8	10.0	0.0	37.9	55.2	6.9	3.4	82.8	0.0	6.9	6.9	7.2
Lundazi	Implementation camps	46	14.0	86.0	8.0	5.8	51.2	39.7	3.3	1.7	85.1	1.7	3.3	8.3	6.4
	Control camp	45	6.7	93.3	7.3	13.3	40.0	46.7	0.0	0.0	96.7	0.0	3.3	0.0	7.1
Katete	Implementation camps	48	9.1	90.9	5.5	27.3	49.6	19.8	3.3	0.0	88.4	1.7	4.1	5.8	6.8
	Control camp	46	25.8	74.2	4.8	19.4	71.0	9.7	0.0	0.0	71.0	0.0	12.9	16.1	6.7
Petauke	Implementation camps	45	14.2	85.8	5.7	22.5	58.3	16.7	2.5	0.0	85.8	1.7	4.2	8.3	6.4
	Control camp	40	10.0	90.0	5.6	20.0	56.7	23.3	0.0	0.0	90.0	0.0	3.3	6.7	6.0
Nyimba	Implementation camps	45	20.9	79.1	5.0	25.3	56.0	18.7	0.0	1.1	79.1	2.2	9.9	7.7	6.0
	Control camp	46	36.1	63.9	5.2	21.3	57.4	19.7	1.6	3.3	63.9	3.3	14.8	14.8	6.3
Monze	Implementation camps	49	16.7	83.3	8.2	5.8	50.8	41.7	1.7	.8	85.0	0.0	.8	13.3	6.6
	Control camp	48	26.7	73.3	8.9	0.0	53.3	46.7	0.0	3.3	70.0	6.7	0.0	20.0	6.3
Mazabuka	Implementation camps	51	16.3	83.7	9.0	5.7	45.5	43.9	4.9	3.3	80.5	0.0	3.3	13.0	6.4
	Control camp	47	6.7	93.3	8.1	13.3	53.3	26.7	6.7	3.3	90.0	0.0	3.3	3.3	6.1
Kaoma	Implementation camps	48	18.3	81.7	8.2	9.2	39.2	50.0	1.7	2.5	79.2	3.3	5.8	9.2	6.0
	Control camp	45	20.0	80.0	8.6	6.7	43.3	46.7	3.3	3.3	76.7	6.7	0.0	13.3	6.3
Mongu	Implementation camps	50	12.4	87.6	7.5	9.9	52.1	37.2	.8	.8	85.1	1.7	5.0	7.4	6.5
	Control camp	50	0.0	100.0	8.8	3.3	46.7	50.0	0.0	0.0	96.7	0.0	0.0	3.3	6.1

A3: Household Members Employment Status and Ability to work

		Employment status				Chronically unable to work for health reasons	Chronically ill	Unable to work for disability reasons?	Disabled
		Formal (e.g. White Collar)	Informal (e.g. Farmer Only)	Informal (e.g. Self-employed, Farmer, Petty trade, Sell of charcoal, Casual, Laborers)	Unemployed				
Chibombo	Implementation camps	1.7	47.1	50.4	.8	3.3	.8	0.0	.8
	Control camp	6.7	63.3	30.0	0.0	3.3	0.0	0.0	0.0
Chisamba	Implementation camps	4.1	35.0	60.2	.8	0.0	0.0	7.3	3.3
	Control camp	10.3	24.1	65.5	0.0	3.4	0.0	0.0	0.0
Kapiri-mposhi	Implementation camps	2.5	46.7	49.2	1.7	2.5	1.7	.8	.8
	Control camp	3.4	48.3	44.8	3.4	3.3	0.0	3.3	0.0
Mumbwa	Implementation camps	0.0	44.2	54.2	1.7	.8	0.0	.8	0.0
	Control camp	3.4	24.1	72.4	0.0	0.0	0.0	0.0	0.0
Lundazi	Implementation camps	4.2	73.9	19.3	2.5	9.9	3.3	4.1	2.5
	Control camp	0.0	66.7	30.0	3.3	0.0	0.0	0.0	0.0
Katete	Implementation camps	3.4	84.9	10.9	.8	4.1	5.8	2.5	1.7
	Control camp	0.0	80.0	20.0	0.0	6.5	3.2	0.0	0.0
Petauke	Implementation camps	.8	68.9	28.6	1.7	5.8	9.2	.8	0.0
	Control camp	0.0	66.7	33.3	0.0	0.0	3.3	0.0	0.0
Nyimba	Implementation camps	0.0	69.2	29.7	1.1	6.6	11.0	0.0	2.2
	Control camp	0.0	64.4	33.9	1.7	3.3	3.3	1.6	1.6
Monze	Implementation camps	.8	72.9	23.7	2.5	3.3	3.3	2.5	.8
	Control camp	0.0	69.0	24.1	6.9	6.7	0.0	0.0	0.0
Mazabuka	Implementation camps	2.4	76.4	17.1	4.1	4.1	5.7	1.6	1.6
	Control camp	0.0	83.3	10.0	6.7	0.0	0.0	3.3	3.3
Kaoma	Implementation camps	.8	71.4	27.7	0.0	.8	0.0	.8	3.3
	Control camp	6.7	70.0	23.3	0.0	0.0	0.0	0.0	0.0
Mongu	Implementation camps	0.0	71.9	27.3	.8	4.1	2.5	0.0	2.5
	Control camp	3.3	76.7	20.0	0.0	3.3	0.0	0.0	0.0

A4: Decision Maker over Household resources

		Main decision maker over the household resources			Status of this person in the household?				Why decisions are made by this person(s)?				
		Men	Women	Both	Head of the household	Spouse to the head of the household	The eldest in the household	Other	Understand importance of collaboration	This issue is for this sex	Only one adult in the HH	Culture dictates this sex makes all decisions	Other
Chibombo	Implementation camps	39.2	18.3	42.5	92.8	1.4	4.3	1.4	44.2	13.3	13.3	25.0	4.2
	Control camp	40.0	10.0	50.0	100.0	0.0	0.0	0.0	50.0	0.0	10.0	33.3	6.7
Chisamba	Implementation camps	30.1	18.7	51.2	93.3	0.0	5.0	1.7	50.4	6.5	17.1	25.2	.8
	Control camp	31.0	10.3	58.6	100.0	0.0	0.0	0.0	55.2	3.4	10.3	31.0	0.0
Kapiri-mposhi	Implementation camps	30.0	13.3	56.7	88.5	1.9	7.7	1.9	57.5	6.7	11.7	22.5	1.7
	Control camp	20.0	16.7	63.3	81.8	0.0	18.2	0.0	63.3	6.7	10.0	16.7	3.3
Mumbwa	Implementation camps	25.0	23.3	51.7	87.9	3.4	6.9	1.7	53.3	3.3	16.7	20.8	5.8
	Control camp	27.6	13.8	58.6	100.0	0.0	0.0	0.0	55.2	3.4	10.3	27.6	3.4
Lundazi	Implementation camps	30.6	13.2	56.2	86.8	0.0	7.5	5.7	52.1	1.7	8.3	30.6	7.4
	Control camp	26.7	10.0	63.3	100.0	0.0	0.0	0.0	63.3	3.3	3.3	20.0	10.0
Katete	Implementation camps	28.3	8.3	63.3	95.5	2.3	2.3	0.0	65.0	3.3	4.2	22.5	5.0
	Control camp	48.4	29.0	22.6	87.5	0.0	8.3	4.2	22.6	9.7	6.5	45.2	16.1
Petauke	Implementation camps	40.0	13.3	46.7	75.0	1.6	21.9	1.6	47.5	10.0	10.0	29.2	3.3
	Control camp	53.3	10.0	36.7	89.5	0.0	10.5	0.0	36.7	3.3	10.0	46.7	3.3
Nyimba	Implementation camps	39.6	19.8	40.7	83.3	1.9	14.8	0.0	41.8	9.9	15.4	30.8	2.2
	Control camp	44.3	32.8	23.0	74.5	0.0	25.5	0.0	23.0	11.5	24.6	34.4	6.6
Monze	Implementation camps	15.1	12.6	72.3	81.8	0.0	18.2	0.0	65.5	11.8	5.0	14.3	3.4
	Control camp	10.0	26.7	63.3	81.8	0.0	18.2	0.0	53.3	13.3	16.7	13.3	3.3
Mazabuka	Implementation camps	14.6	16.3	69.1	73.7	0.0	26.3	0.0	55.3	17.9	8.9	16.3	1.6
	Control camp	3.3	6.7	90.0	66.7	0.0	33.3	0.0	70.0	13.3	0.0	10.0	6.7
Kaoma	Implementation camps	20.8	14.2	65.0	90.5	0.0	9.5	0.0	51.7	13.3	14.2	20.0	.8
	Control camp	6.7	10.0	83.3	100.0	0.0	0.0	0.0	73.3	10.0	6.7	10.0	0.0
Mongu	Implementation camps	16.5	9.1	74.4	90.3	3.2	6.5	0.0	58.7	17.4	6.6	16.5	.8
	Control camp	20.7	0.0	79.3	100.0	0.0	0.0	0.0	62.1	13.8	3.4	20.7	0.0

A5: Crops Grown

		Crops grown							
		maize	groundnuts	Sweet potatoes	cowpeas	beans	cotton	sunflower	Soybeans
Chibombo	Implementation camps	80.4%	83.0%	91.9%	77.8%	80.0%	65.8%	100.0%	87.9%
	Control Camps	19.6%	17.0%	8.1%	22.2%	20.0%	34.2%	0.0%	12.1%
Chisamba	Implementation camps	80.8%	78.6%	83.8%	79.3%	70.6%	88.9%	73.7%	73.0%
	Control Camps	19.2%	21.4%	16.2%	20.7%	29.4%	11.1%	26.3%	27.0%
Kaoma	Implementation camps	79.0%	85.7%	93.3%	81.8%	85.0%	0.0%	0.0%	45.5%
	Control Camps	21.0%	14.3%	6.7%	18.2%	15.0%	100.0%	0.0%	54.5%
Kapiri-Mposhi	Implementation camps	79.6%	87.6%	77.8%	65.4%	100.0%	84.6%	70.0%	66.7%
	Control Camps	20.4%	12.4%	22.2%	34.6%	0.0%	15.4%	30.0%	33.3%
Katete	Implementation camps	79.5%	81.5%	54.5%	71.4%	77.8%	91.5%	78.9%	73.6%
	Control Camps	20.5%	18.5%	45.5%	28.6%	22.2%	8.5%	21.1%	26.4%
Lundazi	Implementation camps	80.4%	77.9%	76.2%	80.0%	45.0%	72.3%	64.8%	78.1%
	Control Camps	19.6%	22.1%	23.8%	20.0%	55.0%	27.7%	35.2%	21.9%
Mazabuka	Implementation camps	80.1%	77.9%	86.8%	75.0%	82.4%	90.9%	73.3%	75.0%
	Control Camps	19.9%	22.1%	13.2%	25.0%	17.6%	9.1%	26.7%	25.0%
Mongu	Implementation camps	79.6%	91.7%	87.5%	92.3%	83.3%			
	Control Camps	20.4%	8.3%	12.5%	7.7%	16.7%			
Monze	Implementation camps	79.5%	78.2%	71.8%	86.1%	83.3%	100.0%	85.7%	50.0%
	Control Camps	20.5%	21.8%	28.2%	13.9%	16.7%	0.0%	14.3%	50.0%
Mumbwa	Implementation camps	80.3%	80.0%	85.3%	83.3%	90.9%	69.0%	82.4%	96.8%
	Control Camps	19.7%	20.0%	14.7%	16.7%	9.1%	31.0%	17.6%	3.2%
Nyimba	Implementation camps	59.9%	61.9%	44.4%	80.0%	66.7%	56.3%	67.4%	66.7%
	Control Camps	40.1%	38.1%	55.6%	20.0%	33.3%	43.8%	32.6%	33.3%
Petauke	Implementation camps	80.1%	82.9%	75.0%	80.0%	83.3%	100.0%	82.5%	84.6%
	Control Camps	19.9%	17.1%	25.0%	20.0%	16.7%	0.0%	17.5%	15.4%

A6: Average Area Planted per crop by District

		Maize (Ha)	Ground nuts (Ha)	Sweet potatoes (Ha)	Cowpeas (Ha)	Beans (Ha)	Cotton (Ha)	Sunflower (Ha)	Soyabeans (Ha)
Chibombo	Implementation camps	2.56	1.31	0.22	0.67	0.63	0.63	0.58	0.77
	Control Camps	0.67	0.78	0.41	19.07	1.00	0.54		0.72
Chisamba	Implementation camps	0.53	0.63	0.63	0.27	0.23	0.56	0.76	0.48
	Control Camps	2.22	0.72	0.15	0.68	0.10	1.00	0.35	0.33
Kapiri-Mposhi	Implementation camps	0.45	0.72	0.36	0.45	0.54	0.53	0.38	0.46
	Control Camps	0.70	0.79	0.19	0.28		0.31	0.35	0.43
Mumbwa	Implementation camps	0.62	1.29	0.47	0.58	0.20	0.68	0.63	0.71
	Control Camps	0.51	1.40	0.20	0.38	0.01	0.34	0.21	0.39
Ludazi	Implementation camps	0.69	0.89	0.51	0.50	0.60	0.70	0.91	0.75
	Control Camps	0.77	1.05	0.21	0.25	0.43	0.69	0.76	0.62
Katete	Implementation camps	0.50	0.62	0.15	0.77	0.33	0.52	0.39	0.57
	Control Camps	0.47	0.45	0.34	0.73	0.66	0.33	0.38	0.42
Petauke	Implementation camps	0.56	0.63	0.31	2.13	0.15	0.71	0.50	0.55
	Control Camps	0.60	1.23	0.20	0.03	0.00		0.71	0.50
Nyimba	Implementation camps	0.52	0.56	0.09	0.19	0.25	0.55	0.54	0.59
	Control Camps	0.70	0.74	0.11	0.13	0.25	0.55	0.57	0.13
Monze	Implementation camps	0.56	0.61	0.47	0.40	0.63	0.51	0.61	0.25
	Control Camps	0.48	0.46	0.25	0.90	0.25		0.67	0.25
Mazabuka	Implementation camps	0.72	0.52	0.25	0.35	0.43	0.78	0.45	0.49
	Control Camps	0.79	0.54	0.06	0.59	0.25	4.00	0.54	0.50
Kaoma	Implementation camps	0.54	0.51	0.52	0.27	0.46		0.48	0.00
	Control Camps	0.94	0.44	0.13	0.56	1.52	2.00	1.54	0.00
Mongu	Implementation camps	0.74	0.47	0.13	0.45	0.17	0.00	0.00	0.00
	Control Camps	0.55	0.50	0.25	0.13	0.25	0.00	0.00	0.00

A7: Conservation Agriculture Techniques

		Heard of a conservation agriculture practice							Applied this conservation agriculture practice						
		Ripping	Planting basins	Zero tillage	Crop rotation	Agroforestry	Soil cover (Mulching)	Crop diversification	Ripping	Planting basins	Zero tillage	Crop rotation	Agroforestry	Soil cover (Mulching)	Crop diversification
Chibombo	Implementation camps	95	96.7	53.3	95	82.5	82.5	85	42.1	54.3	17.2	86.8	30.3	63.6	86.3
	Control camp	86.7	80	56.7	86.7	43.3	66.7	56.7	42.3	70.8	17.6	92.3	30.8	60	94.1
Chisamba	Implementation camps	78.9	86.2	53.7	91.9	67.5	70.7	72.4	23.7	42.5	18.2	81.4	19.3	56.3	78.7
	Control camp	93.1	89.7	58.6	100	93.1	72.4	86.2	40.7	69.2	35.3	89.7	25.9	52.4	80
Kapiri-mposhi	Implementation camps	91.7	90.8	44.2	94.2	76.7	73.3	85.8	54.5	54.1	24.5	88.5	37	58	79.6
	Control camp	100	93.3	63.3	93.3	80	70	80	70	71.4	36.8	92.9	41.7	66.7	87.5
Mumbwa	Implementation camps	95	94.2	60.8	95	81.7	78.3	81.7	57	47.8	16.4	88.6	33.7	63.8	80.6
	Control camp	86.2	89.7	75.9	93.1	93.1	93.1	89.7	64	57.7	22.7	81.5	48.1	40.7	76.9
Lundazi	Implementation camps	97.5	90	59.2	95	75.8	95	84.2	52.1	63	39.4	88.6	23.1	70.2	80.2
	Control camp	100	100	83.3	96.7	73.3	100	96.7	43.3	56.7	68	96.6	22.7	66.7	96.6
Katete	Implementation camps	97.5	97.5	62.8	98.3	81	97.5	81	35.6	57.6	43.4	93.3	24.5	78	82.7
	Control camp	100	90.3	61.3	100	71	100	67.7	51.6	46.4	36.8	96.8	18.2	90.3	81
Petauke	Implementation camps	89.9	95.8	63	96.6	82.4	94.1	78.2	23.4	46.5	40	87	16.3	77.7	72
	Control camp	76.7	86.7	63.3	100	80	96.7	76.7	30.4	34.6	42.1	80	4.2	75.9	78.3
Nyimba	Implementation camps	93.4	96.7	67	97.8	87.9	97.8	81.3	37.6	65.9	68.9	98.9	21.3	84.3	79.7
	Control camp	91.8	91.8	49.2	95.1	65.6	91.8	62.3	25	50	46.7	84.5	22.5	76.8	50
Monze	Implementation camps	95.8	90.8	53.3	95	62.5	66.7	78.3	33.9	26.6	9.4	71.1	45.3	43.8	77.7
	Control camp	96.7	93.3	56.7	90	60	70	80	24.1	21.4	11.8	55.6	38.9	28.6	45.8
Mazabuka	Implementation camps	98.4	94.3	67.2	98.4	77.9	83.6	83.6	47.5	43.5	15.9	66.7	37.9	66.7	65.7
	Control camp	100	93.3	66.7	100	76.7	86.7	83.3	50	46.4	10	80	47.8	53.8	84
Kaoma	Implementation camps	63.3	71.7	36.7	75	51.7	65	58.3	50	61.6	29.5	57.8	21	61.5	60
	Control camp	66.7	73.3	30	80	60	66.7	70	20	68.2	0	54.2	11.1	60	47.6
Mongu	Implementation camps	62	70.2	40.5	75.2	46.3	59.5	56.2	21.3	61.2	20.4	35.2	23.2	41.7	54.4
	Control camp	53.3	63.3	23.3	70	50	56.7	56.7	18.8	68.4	28.6	28.6	6.7	52.9	41.2

A8: Food Consumption Score and Minimum Dietary Diversity Score-Women

		Food Consumption Scores	Recoded Food Consumption Score (%)			Minimum Dietary Diversity Scores for Women	Women who do not meet the minimum Dietary Diversity (%)	Women who meet the minimum Dietary Diversity (%)
			Acceptable	Borderline	Poor			
Chibombo	Implementation camps	72.38	98.3	.8	.8	3.6	8.5	91.5
	Control camp	60.77	83.3	10.0	6.7	3.0	17.6	82.4
Chisamba	Implementation camps	71.45	94.3	5.7	0.0	2.8	10.5	89.5
	Control camp	80.10	96.6	3.4	0.0	3.4	6.7	93.3
Kapiri-mposhi	Implementation camps	69.00	93.3	5.8	.8	3.6	16.7	83.3
	Control camp	59.80	86.7	13.3	0.0	1.7	0.0	100.0
Mumbwa	Implementation camps	75.68	97.5	2.5	0.0	2.0	12.2	87.8
	Control camp	65.62	96.6	0.0	3.4	2.2	25.0	75.0
Lundazi	Implementation camps	68.55	99.2	.8	0.0	3.9	22.2	77.8
	Control camp	70.37	96.7	3.3	0.0	4.4	33.3	66.7
Katete	Implementation camps	56.01	83.5	14.9	1.7	3.3	37.7	62.3
	Control camp	63.97	93.5	6.5	0.0	3.9	17.4	82.6
Petauke	Implementation camps	58.01	86.6	12.6	.8	3.4	37.7	62.3
	Control camp	52.50	90.0	10.0	0.0	3.4	42.9	57.1
Nyimba	Implementation camps	64.48	96.7	3.3	0.0	3.5	22.0	78.0
	Control camp	57.48	83.6	16.4	0.0	3.0	51.4	48.6
Monze	Implementation camps	58.42	77.1	19.5	3.4	3.2	46.2	53.8
	Control camp	52.20	80.0	20.0	0.0	3.8	14.3	85.7
Mazabuka	Implementation camps	54.11	76.2	18.0	5.7	2.6	43.1	56.9
	Control camp	58.80	76.7	20.0	3.3	3.0	35.3	64.7
Kaoma	Implementation camps	58.47	84.2	15.0	.8	2.9	46.1	53.9
	Control camp	61.87	86.7	13.3	0.0	2.6	37.5	62.5
Mongu	Implementation camps	49.49	69.2	26.7	4.2	2.4	74.7	25.3
	Control camp	51.40	76.7	23.3	0.0	2.2	84.2	15.8

A9: Household knowledge of Breastfeeding

		What is the first food a new born baby should receive?			Heard about exclusive breastfeeding	What does exclusive breastfeeding mean?			Until what age is it recommended that a mother feeds nothing more than breastmilk?		
		Only breastmilk	Other	Don't know		Exclusive breastfeeding means that the infant gets only breastmilk and no other liquids or foods	Other	I don't know	From birth to six months	Other	I don't know
Chibombo	Implementation camps	98.3	1.7	0.0	79.2	76.7	2.5	20.8	85.0	14.2	.8
	Control camp	93.3	3.3	3.3	53.3	50.0	6.7	43.3	70.0	20.0	10.0
Chisamba	Implementation camps	95.9	1.6	2.5	67.5	61.0	1.6	37.4	74.8	11.4	13.8
	Control camp	96.6	3.4	0.0	69.0	65.5	0.0	34.5	82.8	3.4	13.8
Kapiri-mposhi	Implementation camps	96.6	0.0	3.4	73.1	70.0	0.0	30.0	85.8	5.8	8.3
	Control camp	96.7	0.0	3.3	70.0	63.3	0.0	36.7	70.0	13.3	16.7
Mumbwa	Implementation camps	96.7	1.7	1.7	67.5	67.5	.8	31.7	77.5	9.2	13.3
	Control camp	96.6	0.0	3.4	62.1	58.6	3.4	37.9	89.7	0.0	10.3
Lundazi	Implementation camps	90.0	8.3	1.7	53.3	61.7	0.0	38.3	86.7	4.2	9.2
	Control camp	86.7	10.0	3.3	70.0	66.7	10.0	23.3	93.3	3.3	3.3
Katete	Implementation camps	88.4	8.3	3.3	62.8	67.8	2.5	29.8	75.2	13.2	11.6
	Control camp	90.3	9.7	0.0	61.3	83.9	3.2	12.9	93.5	0.0	6.5
Petauke	Implementation camps	89.1	9.2	1.7	74.8	78.2	0.0	21.8	73.9	17.6	8.4
	Control camp	76.7	16.7	6.7	60.0	63.3	0.0	36.7	70.0	16.7	13.3
Nyimba	Implementation camps	98.9	0.0	1.1	71.4	80.2	0.0	19.8	73.6	19.8	6.6
	Control camp	96.7	1.6	1.6	55.7	75.4	0.0	24.6	75.4	16.4	8.2
Monze	Implementation camps	95.8	.8	3.3	78.3	82.5	0.0	17.5	83.3	8.3	8.3
	Control camp	96.7	0.0	3.3	83.3	86.7	0.0	13.3	76.7	13.3	10.0
Mazabuka	Implementation camps	99.2	0.0	.8	78.7	88.4	0.0	11.6	90.2	4.1	5.7
	Control camp	100.0	0.0	0.0	76.7	96.7	0.0	3.3	90.0	6.7	3.3
Kaoma	Implementation camps	99.2	0.0	.8	74.2	78.3	0.0	21.7	89.2	4.2	6.7
	Control camp	96.7	0.0	3.3	66.7	76.7	0.0	23.3	93.3	0.0	6.7
Mongu	Implementation camps	98.3	0.0	1.7	76.9	84.3	.8	14.9	89.3	6.6	4.1
	Control camp	100.0	0.0	0.0	80.0	83.3	0.0	16.7	90.0	10.0	0.0

A10: Loan Requests and Loan denials

		Requested Loans	Received Loans	Reasons loan denied:						Outstanding loans
				No collateral	Not enough income	Not enough savings/ shares	Lack of sufficient deposit	Outstanding debt	Other	
Chibombo	Implementation camps	17.5	95.2	0.0	0.0	0.0	0.0	0.0	100.0	5.0
	Control camp	26.7	100.0	0.0	0.0	0.0	0.0	0.0	0.0	9.1
Chisamba	Implementation camps	14.6	88.9	0.0	50.0	0.0	0.0	0.0	50.0	4.7
	Control camp	6.9	100.0	0.0	0.0	0.0	0.0	0.0	0.0	7.4
Kapiri-mposhi	Implementation camps	20.8	92.0	0.0	0.0	0.0	0.0	0.0	100.0	3.1
	Control camp	33.3	100.0	0.0	0.0	0.0	0.0	0.0	0.0	15.0
Mumbwa	Implementation camps	15.8	89.5	0.0	0.0	0.0	0.0	0.0	100.0	4.9
	Control camp	24.1	100.0	0.0	0.0	0.0	0.0	0.0	0.0	9.1
Lundazi	Implementation camps	12.5	100.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9
	Control camp	10.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	3.7
Katete	Implementation camps	7.4	100.0	0.0	0.0	0.0	0.0	0.0	0.0	4.5
	Control camp	6.5	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Petauke	Implementation camps	20.2	100.0	0.0	0.0	0.0	0.0	0.0	0.0	4.2
	Control camp	23.3	100.0	0.0	0.0	0.0	0.0	0.0	0.0	4.3
Nyimba	Implementation camps	5.5	100.0	0.0	0.0	0.0	0.0	0.0	0.0	4.7
	Control camp	11.5	100.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9
Monze	Implementation camps	15.0	94.4	0.0	0.0	0.0	0.0	0.0	100.0	2.9
	Control camp	6.7	100.0	0.0	0.0	0.0	0.0	0.0	0.0	14.3
Mazabuka	Implementation camps	15.6	100.0	0.0	0.0	0.0	0.0	0.0	0.0	5.8
	Control camp	6.7	50.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0
Kaoma	Implementation camps	10.8	92.3	0.0	0.0	0.0	0.0	0.0	100.0	0.0
	Control camp	16.7	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mongu	Implementation camps	17.4	100.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0
	Control camp	13.3	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

A11: Reason for taking out loan

		Reason for Loan													
		Food Consumption	Education	Health	Other non-food spending	Debt reimbursemen	Purchase agricultural inp	Other agricultural spending	Small Scale Businesses	Marriage /Funerals	Commerce /Enterprise	Work on the house (e.g. repairs, improvements, etc.)	Medical Expenses	Non-Medical Emergency/ Shock	Other specify
Chibombo	Implementation camps	0.0	4.0	0.0	12.0	0.0	24.0	4.0	24.0	0.0	8.0	4.0	0.0	0.0	20.0
	Control camp	0.0	0.0	0.0	0.0	0.0	70.0	0.0	10.0	0.0	0.0	0.0	0.0	10.0	10.0
Chisamba	Implementation camps	0.0	4.8	0.0	0.0	0.0	66.7	4.8	19.0	0.0	0.0	0.0	0.0	0.0	4.8
	Control camp	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Kapiri-mposhi	Implementation camps	0.0	3.8	0.0	0.0	0.0	65.4	0.0	15.4	0.0	3.8	3.8	0.0	0.0	7.7
	Control camp	0.0	7.7	0.0	0.0	0.0	38.5	0.0	30.8	0.0	0.0	7.7	0.0	0.0	15.4
Mumbwa	Implementation camps	0.0	9.1	0.0	4.5	4.5	59.1	0.0	4.5	0.0	0.0	0.0	0.0	4.5	13.6
	Control camp	0.0	11.1	0.0	11.1	0.0	55.6	0.0	11.1	0.0	0.0	11.1	0.0	0.0	0.0
Lundazi	Implementation camps	17.6	0.0	0.0	0.0	0.0	52.9	5.9	0.0	0.0	0.0	11.8	0.0	0.0	11.8
	Control camp	0.0	0.0	0.0	0.0	0.0	50.0	25.0	0.0	0.0	0.0	0.0	0.0	0.0	25.0
Katete	Implementation camps	21.4	7.1	0.0	0.0	0.0	35.7	7.1	7.1	7.1	0.0	7.1	0.0	0.0	7.1
	Control camp	0.0	0.0	0.0	0.0	0.0	50.0	0.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0
Petauke	Implementation camps	0.0	7.1	3.6	25.0	0.0	32.1	3.6	10.7	7.1	0.0	0.0	0.0	0.0	10.7
	Control camp	0.0	12.5	0.0	25.0	0.0	37.5	0.0	12.5	0.0	0.0	12.5	0.0	0.0	0.0
Nyimba	Implementation camps	0.0	0.0	0.0	22.2	0.0	33.3	11.1	11.1	11.1	11.1	0.0	0.0	0.0	0.0
	Control camp	12.5	0.0	0.0	25.0	0.0	37.5	0.0	12.5	0.0	0.0	12.5	0.0	0.0	0.0
Monze	Implementation camps	20.0	10.0	5.0	0.0	10.0	35.0	0.0	5.0	5.0	0.0	5.0	5.0	0.0	0.0
	Control camp	0.0	0.0	0.0	33.3	0.0	33.3	0.0	16.7	0.0	0.0	0.0	0.0	0.0	16.7
mazabuka	Implementation camps	28.0	8.0	0.0	0.0	0.0	20.0	4.0	20.0	4.0	0.0	12.0	4.0	0.0	0.0
	Control camp	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
kaoma	Implementation camps	8.3	16.7	16.7	0.0	0.0	25.0	0.0	8.3	16.7	8.3	0.0	0.0	0.0	0.0
	Control camp	0.0	40.0	0.0	0.0	0.0	0.0	40.0	20.0	0.0	0.0	0.0	0.0	0.0	0.0
mongu	Implementation camps	39.1	17.4	8.7	0.0	0.0	4.3	0.0	4.3	4.3	17.4	0.0	4.3	0.0	0.0
	Control camp	0.0	25.0	0.0	25.0	0.0	0.0	0.0	25.0	0.0	25.0	0.0	0.0		

A12: Source of credit-Overall

		What was the source of credit (1)?												
		Village savings & loans association	Money Lender/ Loan Shark	Cooperative	Family/Friends	Bank	Micro Bankers Trust (MBT)	Trader	VISION FUND	FINCA	FITSE	CETZAM	Another microfinance group	Other, specify
Chibombo	Implementation camps	12.0	0.0	4.0	4.0	0.0	4.0	0.0	0.0	0.0	0.0	0.0	20.0	56.0
	Control camp	20.0	0.0	20.0	0.0	0.0	10.0	0.0	0.0	0.0	0.0	0.0	10.0	40.0
Chisamba	Implementation camps	23.8	4.8	0.0	0.0	0.0	14.3	0.0	0.0	0.0	0.0	0.0	9.5	47.6
	Control camp	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.0	75.0
Kapiri-mposhi	Implementation camps	19.2	3.8	3.8	3.8	0.0	7.7	0.0	0.0	0.0	0.0	0.0	19.2	42.3
	Control camp	15.4	7.7	0.0	0.0	0.0	7.7	0.0	0.0	0.0	0.0	0.0	15.4	53.8
Mumbwa	Implementation camps	9.1	9.1	0.0	4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.5	72.7
	Control camp	11.1	0.0	11.1	11.1	0.0	0.0	11.1	0.0	0.0	0.0	0.0	0.0	55.6
Lundazi	Implementation camps	17.6	23.5	5.9	0.0	0.0	5.9	5.9	0.0	0.0	0.0	0.0	0.0	41.2
	Control camp	0.0	0.0	0.0	25.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	75.0
Katete	Implementation camps	7.1	7.1	0.0	28.6	14.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	42.9
	Control camp	50.0	0.0	0.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Petauke	Implementation camps	14.3	0.0	0.0	35.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0
	Control camp	25.0	12.5	0.0	62.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Nyimba	Implementation camps	22.2	0.0	0.0	33.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.1	33.3
	Control camp	25.0	0.0	12.5	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.5	0.0
Monze	Implementation camps	20.0	0.0	0.0	60.0	0.0	0.0	5.0	5.0	0.0	0.0	0.0	0.0	10.0
	Control camp	0.0	16.7	0.0	83.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mazabuka	Implementation camps	28.0	0.0	0.0	56.0	4.0	0.0	0.0	12.0	0.0	0.0	0.0	0.0	0.0
	Control camp	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Kaoma	Implementation camps	8.3	8.3	0.0	83.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Control camp	20.0	0.0	0.0	60.0	0.0	0.0	20.0	0.0	0.0	0.0	0.0	0.0	0.0
Mongu	Implementation camps	13.0	0.0	4.3	78.3	0.0	0.0	4.3	0.0	0.0	0.0	0.0	0.0	0.0
	Control camp	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

A13: Decision over Loan use overall

		Who decides what is done with the loan money?		
		Men	Women	Both
Chibombo	Implementation camps	32.0	20.0	48.0
	Control camp	20.0	30.0	50.0
Chisamba	Implementation camps	4.8	14.3	81.0
	Control camp	25.0	0.0	75.0
kapiri-mposhi	Implementation camps	7.7	15.4	76.9
	Control camp	15.4	7.7	76.9
Mumbwa	Implementation camps	22.7	13.6	63.6
	Control camp	0.0	22.2	77.8
Lundazi	Implementation camps	52.9	0.0	47.1
	Control camp	25.0	0.0	75.0
Katete	Implementation camps	64.3	14.3	21.4
	Control camp	50.0	50.0	0.0
Petauke	Implementation camps	32.1	14.3	53.6
	Control camp	25.0	25.0	50.0
Nyimba	Implementation camps	44.4	11.1	44.4
	Control camp	37.5	50.0	12.5
Monze	Implementation camps	5.0	20.0	75.0
	Control camp	16.7	33.3	50.0
Mazabuka	Implementation camps	12.0	8.0	80.0
	Control camp	0.0	100.0	0.0
Kaoma	Implementation camps	16.7	8.3	75.0
	Control camp	0.0	20.0	80.0
Mongu	Implementation camps	8.7	13.0	78.3
	Control camp	25.0	0.0	75.0

A14: Type of Savings Institution

		Save money using a bank or microfinance institution	Type of Bank or Microfinance						Save money using a savings group or association	Type of Savings group or association		
			Private Bank	Government Bank	Microfinance Institution (MFI)	Cooperative/ Credit Union	Farmer/ Agricultural cooperative	Mobile Money		Village Banks SfC/VSL Group/SILC (informal)	Savings Cooperative Society (formal)	Other Savings group (SILC) (CSLG)
chibombo	Implementation camps	48.3	22.4	13.8	0.0	1.7	0.0	86.2	20.8	76.0	12.0	12.0
	Control camp	16.7	0.0	0.0	0.0	0.0	0.0	100.0	30.0	66.7	22.2	11.1
chisamba	Implementation camps	34.1	28.6	19.0	0.0	0.0	0.0	73.8	26.8	87.9	0.0	12.1
	Control camp	27.6	12.5	62.5	0.0	0.0	0.0	50.0	27.6	87.5	0.0	12.5
kapiri-mposhi	Implementation camps	38.3	15.2	10.9	0.0	0.0	0.0	84.8	20.8	96.0	0.0	4.0
	Control camp	33.3	20.0	20.0	0.0	0.0	0.0	80.0	23.3	100.0	0.0	0.0
mumbwa	Implementation camps	39.2	19.1	14.9	0.0	0.0	0.0	80.9	25.0	90.0	6.7	3.3
	Control camp	41.4	33.3	25.0	0.0	0.0	0.0	41.7	44.8	53.8	15.4	30.8
lundazi	Implementation camps	18.3	27.3	31.8	0.0	9.1	9.1	50.0	25.0	63.3	30.0	10.0
	Control camp	16.7	40.0	20.0	0.0	0.0	0.0	60.0	33.3	20.0	80.0	0.0
katete	Implementation camps	5.8	57.1	14.3	0.0	0.0	0.0	42.9	24.8	20.0	70.0	10.0
	Control camp	6.5	50.0	0.0	0.0	0.0	0.0	50.0	22.6	57.1	42.9	0.0
petauke	Implementation camps	10.9	30.8	38.5	0.0	0.0	7.7	30.8	28.6	58.8	38.2	5.9
	Control camp	10.0	33.3	33.3	33.3	33.3	0.0	33.3	33.3	80.0	30.0	10.0
nyimba	Implementation camps	19.8	11.1	16.7	0.0	0.0	11.1	72.2	25.3	43.5	65.2	0.0
	Control camp	21.3	7.7	30.8	0.0	0.0	0.0	61.5	18.0	81.8	27.3	0.0
monze	Implementation camps	5.0	33.3	50.0	0.0	0.0	0.0	33.3	11.7	78.6	0.0	21.4
	Control camp	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0	100.0	0.0	0.0
mazabuka	Implementation camps	13.9	29.4	47.1	23.5	0.0	0.0	11.8	19.7	95.8	0.0	4.2
	Control camp	6.7	0.0	100.0	0.0	0.0	0.0	0.0	6.7	100.0	0.0	0.0
kaoma	Implementation camps	12.5	20.0	20.0	0.0	0.0	0.0	66.7	6.7	100.0	0.0	0.0
	Control camp	16.7	40.0	40.0	0.0	0.0	0.0	20.0	13.3	100.0	25.0	0.0
mongu	Implementation camps	5.8	14.3	28.6	14.3	0.0	0.0	57.1	10.7	92.3	0.0	7.7
	Control camp	3.3	0.0	100.0	0.0	0.0	0.0	0.0	3.3	100.0	0.0	0.0

A15: Informal Savings Method

		Save money using an informal savings method	Type of Informal method				Save money using any other method?	Type of Other Method		
			Home	With family or relatives	Village or religious leader	Friends		Livestock	Crops	Other
Chibombo	Implementation camps	34.2	95.1	2.4	0.0	4.9	23.3	89.3	3.6	10.7
	Control camp	30.0	77.8	11.1	0.0	11.1	13.3	100.0	0.0	0.0
Chisamba	Implementation camps	23.6	93.1	3.4	0.0	3.4	14.6	66.7	0.0	38.9
	Control camp	31.0	100.0	0.0	0.0	0.0	27.6	37.5	25.0	50.0
Kapiri-mposhi	Implementation camps	25.0	83.3	3.3	6.7	6.7	14.2	76.5	11.8	23.5
	Control camp	10.0	100.0	0.0	0.0	0.0	13.3	25.0	0.0	100.0
Mumbwa	Implementation camps	30.0	97.2	2.8	0.0	5.6	11.7	64.3	21.4	28.6
	Control camp	27.6	100.0	0.0	0.0	0.0	6.9	50.0	0.0	50.0
Lundazi	Implementation camps	67.5	92.6	0.0	0.0	8.6	5.0	66.7	0.0	33.3
	Control camp	50.0	93.3	0.0	0.0	6.7	10.0	66.7	0.0	33.3
Katete	Implementation camps	76.0	100.0	2.2	0.0	0.0	15.7	57.9	21.1	42.1
	Control camp	83.9	96.2	0.0	0.0	3.8	9.7	100.0	33.3	0.0
Petauke	Implementation camps	81.5	97.9	1.0	0.0	2.1	21.8	73.1	30.8	11.5
	Control camp	80.0	91.7	4.2	0.0	8.3	30.0	55.6	44.4	22.2
Nyimba	Implementation camps	80.2	98.6	2.7	1.4	0.0	33.0	56.7	46.7	20.0
	Control camp	78.7	100.0	4.2	0.0	0.0	19.7	83.3	16.7	16.7
Monze	Implementation camps	58.3	100.0	0.0	0.0	0.0	37.5	93.3	57.8	2.2
	Control camp	56.7	100.0	0.0	0.0	0.0	36.7	81.8	63.6	9.1
Mazabuka	Implementation camps	48.4	96.6	3.4	0.0	0.0	39.3	97.9	75.0	0.0
	Control camp	53.3	87.5	18.8	0.0	0.0	33.3	90.0	70.0	10.0
Kaoma	Implementation camps	69.2	98.8	1.2	0.0	0.0	23.3	42.9	78.6	3.6
	Control camp	66.7	100.0	0.0	0.0	0.0	20.0	66.7	83.3	0.0
Mongu	Implementation camps	46.3	98.2	1.8	0.0	0.0	23.1	50.0	92.9	0.0
	Control camp	53.3	100.0	0.0	0.0	0.0	46.7	42.9	85.7	0.0

A16: Marketing Channels

District	Camp type	Market Channel										
		Private Trader (Briefcase)	Aggregator	Virtual Farmer Market (Maano)	Offtaker	FRA	Schools/ Hospitals	Farmer cooperative	Outgrower Scheme	Neigbours/ Community	Millers	Other
Chibombo	Implementation camps	64.1	0.0	0.0	4.7	4.7	3.1	0.0	1.6	21.9	9.4	1.6
	Control camp	35.7	0.0	0.0	7.1	7.1	0.0	0.0	7.1	35.7	14.3	0.0
Chisamba	Implementation camps	69.7	2.6	0.0	1.3	3.9	0.0	0.0	0.0	18.4	13.2	0.0
	Control camp	75.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	25.0	0.0
Kapiri-mposhi	Implementation camps	67.5	1.2	0.0	0.0	6.0	0.0	0.0	0.0	13.3	13.3	3.6
	Control camp	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.3	5.3	0.0
Mumbwa	Implementation camps	51.2	25.0	0.0	1.2	0.0	0.0	1.2	3.6	11.9	8.3	7.1
	Control camp	50.0	16.7	0.0	0.0	0.0	0.0	5.6	0.0	22.2	0.0	11.1
Lundazi	Implementation camps	67.1	2.7	0.0	1.4	12.3	1.4	0.0	0.0	17.8	0.0	8.2
	Control camp	47.4	0.0	0.0	0.0	5.3	5.3	0.0	0.0	36.8	0.0	21.1
Katete	Implementation camps	85.7	0.0	0.0	2.4	2.4	2.4	0.0	0.0	16.7	0.0	2.4
	Control camp	61.1	11.1	0.0	0.0	11.1	5.6	0.0	5.6	0.0	0.0	5.6
Petauke	Implementation camps	78.3	7.2	0.0	1.2	2.4	1.2	0.0	4.8	18.1	0.0	1.2
	Control camp	95.8	4.2	0.0	0.0	4.2	0.0	0.0	0.0	4.2	0.0	0.0
Nyimba	Implementation camps	91.5	3.4	0.0	0.0	3.4	1.7	0.0	0.0	8.5	0.0	0.0
	Control camp	85.4	9.8	0.0	0.0	4.9	0.0	0.0	0.0	2.4	0.0	2.4
Monze	Implementation camps	72.4	0.0	0.0	1.7	19.0	0.0	0.0	0.0	24.1	0.0	0.0
	Control camp	50.0	0.0	0.0	0.0	33.3	0.0	0.0	0.0	16.7	0.0	0.0
Mazabuka	Implementation camps	82.2	2.2	0.0	0.0	13.3	0.0	0.0	0.0	20.0	0.0	0.0
	Control camp	72.2	0.0	0.0	16.7	5.6	0.0	0.0	0.0	22.2	0.0	0.0
Kaoma	Implementation camps	71.9	8.8	0.0	1.8	5.3	0.0	0.0	0.0	31.6	0.0	3.5
	Control camp	70.0	0.0	0.0	0.0	10.0	0.0	0.0	0.0	30.0	0.0	0.0
Mongu	Implementation camps	29.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	79.2	0.0	4.2
	Control camp	75.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.0	0.0	0.0

A17: Challenges to crop marketing

District	Camp type	Challenges to crop marketing									
		Lack of market information	Lack of storage facilities	Diseases and pests	Long distances to market	Poor market infrastructure	No buyers	Low market price	Lack of transport	No challenges	Other
Chibombo	Implementation camps	0.0	0.0	0.0	8.5	.8	2.5	35.6	11.0	31.4	26.3
	Control camp	0.0	0.0	3.4	3.4	0.0	3.4	24.1	10.3	44.8	27.6
Chisamba	Implementation camps	.8	0.0	0.0	9.8	0.0	2.5	42.6	9.8	42.6	13.1
	Control camp	0.0	0.0	0.0	13.8	0.0	0.0	27.6	20.7	44.8	27.6
Kapiri-mposhi	Implementation camps	0.0	0.0	.8	4.2	0.0	0.0	31.4	9.3	50.8	14.4
	Control camp	0.0	0.0	0.0	0.0	0.0	0.0	50.0	6.7	36.7	16.7
Mumbwa	Implementation camps	2.5	0.0	0.0	10.1	0.0	.8	40.3	14.3	35.3	16.0
	Control camp	0.0	0.0	0.0	6.9	0.0	0.0	41.4	6.9	44.8	17.2
Lundazi	Implementation camps	5.9	1.7	5.1	20.3	5.1	5.1	75.4	50.0	13.6	13.6
	Control camp	6.7	10.0	13.3	30.0	6.7	6.7	76.7	36.7	13.3	10.0
Katete	Implementation camps	10.7	1.7	5.8	21.5	4.1	2.5	73.6	40.5	14.9	13.2
	Control camp	12.9	0.0	3.2	19.4	0.0	0.0	77.4	58.1	16.1	6.5
Petauke	Implementation camps	2.5	0.0	5.1	31.4	.8	4.2	73.7	32.2	14.4	9.3
	Control camp	0.0	10.3	13.8	20.7	0.0	6.9	62.1	31.0	13.8	13.8
Nyimba	Implementation camps	5.5	5.5	7.7	27.5	1.1	5.5	76.9	25.3	15.4	12.1
	Control camp	13.1	1.6	19.7	24.6	3.3	9.8	82.0	39.3	11.5	6.6
Monze	Implementation camps	32.5	11.1	6.0	50.4	10.3	8.5	55.6	39.3	17.1	.9
	Control camp	23.3	6.7	6.7	46.7	3.3	10.0	50.0	23.3	33.3	0.0
Mazabuka	Implementation camps	14.8	8.2	1.6	31.1	4.9	11.5	54.1	26.2	33.6	2.5
	Control camp	33.3	6.7	3.3	40.0	13.3	10.0	46.7	23.3	26.7	0.0
Kaoma	Implementation camps	19.8	0.0	0.0	60.3	3.4	26.7	62.9	43.1	6.9	12.9
	Control camp	13.3	0.0	0.0	46.7	0.0	50.0	76.7	50.0	10.0	0.0
Mongu	Implementation camps	4.2	4.2	.8	47.9	3.4	27.7	44.5	35.3	30.3	1.7
	Control camp	20.0	10.0	0.0	43.3	10.0	13.3	46.7	36.7	36.7	6.7

A18: Households Swindled and channels used

		Have access to market price information	Distance from your homestead to your nearest market	Have you ever felt that you were swindled by a buyer?	How they were swindled					
					Sold crops on "cash after sale "basis but never received the money	Sold crops on "cash after sale "basis but received less than what was promised	Planted crops on order but they were never bought	Planted crops on order but the amount received was less than what was promised.	Use of uncalibrated/ manipulated scales or measuring buckets	Other
Chibombo	Implementation camps	90.8	3	21.1	21.7	4.3	0.0	8.7	65.2	13.0
	Control camp	73.3	4	22.7	0.0	80.0	0.0	0.0	0.0	40.0
Chisamba	Implementation camps	86.2	3	30.2	3.1	3.1	0.0	0.0	78.1	18.8
	Control camp	72.4	4	23.8	0.0	0.0	0.0	0.0	100.0	0.0
Kapiri-mposhi	Implementation camps	93.3	3	35.7	7.5	10.0	0.0	2.5	62.5	17.5
	Control camp	86.7	3	53.8	7.1	0.0	0.0	0.0	78.6	21.4
Mumbwa	Implementation camps	78.3	4	45.7	0.0	2.3	0.0	0.0	86.0	14.0
	Control camp	69.0	4	15.0	0.0	0.0	0.0	0.0	100.0	0.0
Lundazi	Implementation camps	65.0	3	71.8	7.1	10.7	0.0	16.1	89.3	8.9
	Control camp	73.3	4	54.5	16.7	25.0	0.0	16.7	83.3	0.0
Katete	Implementation camps	77.7	3	64.9	4.9	21.3	1.6	29.5	93.4	6.6
	Control camp	54.8	3	94.1	12.5	12.5	0.0	31.3	93.8	0.0
Petauke	Implementation camps	89.1	3	67.9	0.0	8.3	1.4	16.7	91.7	20.8
	Control camp	83.3	3	64.0	18.8	0.0	0.0	25.0	75.0	25.0
Nyimba	Implementation camps	93.4	3	69.4	0.0	10.2	0.0	13.6	88.1	27.1
	Control camp	82.0	3	78.0	5.1	7.7	5.1	12.8	92.3	10.3
Monze	Implementation camps	44.1	5	38.5	5.0	5.0	0.0	5.0	90.0	0.0
	Control camp	43.3	5	46.2	0.0	0.0	0.0	0.0	100.0	0.0
Mazabuka	Implementation camps	58.2	4	49.3	5.7	5.7	0.0	2.9	80.0	17.1
	Control camp	46.7	4	21.4	33.3	33.3	0.0	33.3	100.0	0.0
Kaoma	Implementation camps	52.5	5	36.5	34.8	21.7	0.0	8.7	87.0	4.3
	Control camp	46.7	4	78.6	36.4	27.3	9.1	0.0	90.9	0.0
Mongu	Implementation camps	43.3	5	38.5	0.0	35.0	0.0	0.0	85.0	20.0
	Control camp	50.0	5	20.0	0.0	0.0	0.0	0.0	66.7	33.3

A19: Source of Market Price Information

		Source of market price information																			
		Extension Agent-government	Extension Agent-private sector	Farmer/ neighbour	Radio Program	Pamphlet/ Newspaper	Workshop	Field Day	ZNFU SMS	NGO / faith-based organization / church	Billboards, newsletter persons	Conservation Farming Unit (CFU)	Trader / Marketeer	Out growers	Shops	Headman	TV	Market place	Farmer group - cooperative	Lima Links	Other
Chibombo	Implementation camps	7.3	0.0	46.8	38.5	.9	0.0	.9	2.8	0.0	0.0	0.0	45.0	2.8	.9	.9	2.8	33.9	1.8	.9	2.8
	Control camp	0.0	0.0	22.7	40.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	54.5	4.5	0.0	0.0	0.0	31.8	0.0	0.0	0.0
Chisamba	Implementation camps	3.8	0.0	57.5	45.3	0.0	0.0	0.0	1.9	0.0	0.0	0.0	31.1	1.9	0.0	0.0	1.9	11.3	0.0	0.0	3.8
	Control camp	0.0	0.0	42.9	47.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	33.3	0.0	0.0	0.0	0.0	9.5	0.0	0.0	4.8
Kapiri-mposhi	Implementation camps	1.8	0.0	45.5	38.4	0.0	0.0	0.0	6.3	0.0	0.0	0.0	45.5	.9	0.0	0.0	.9	9.8	0.0	0.0	4.5
	Control camp	3.8	0.0	61.5	53.8	0.0	0.0	0.0	7.7	0.0	0.0	3.8	57.7	0.0	0.0	0.0	0.0	3.8	0.0	0.0	3.8
Mumbwa	Implementation camps	2.1	1.1	54.3	28.7	1.1	0.0	0.0	1.1	0.0	8.5	0.0	35.1	11.7	0.0	0.0	0.0	21.3	0.0	0.0	3.2
	Control camp	0.0	0.0	50.0	25.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.0	10.0	0.0	0.0	0.0	10.0	0.0	0.0	15.0
Lundazi	Implementation camps	47.4	23.1	65.4	48.7	0.0	0.0	1.3	0.0	0.0	0.0	1.3	15.4	2.6	0.0	1.3	5.1	26.9	26.9	0.0	3.8
	Control camp	31.8	18.2	68.2	36.4	0.0	0.0	9.1	0.0	0.0	0.0	0.0	36.4	4.5	0.0	0.0	4.5	27.3	40.9	0.0	0.0
Katete	Implementation camps	19.1	10.6	60.6	43.6	1.1	0.0	0.0	0.0	0.0	1.1	0.0	44.7	9.6	4.3	1.1	4.3	40.4	30.9	0.0	4.3
	Control camp	35.3	23.5	58.8	29.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	58.8	0.0	0.0	0.0	0.0	47.1	17.6	0.0	0.0
Petauke	Implementation camps	6.6	11.3	65.1	50.0	.9	0.0	0.0	0.0	0.0	1.9	0.0	48.1	7.5	10.4	1.9	0.0	39.6	16.0	0.0	.9
	Control camp	4.0	12.0	60.0	44.0	0.0	0.0	0.0	0.0	0.0	12.0	0.0	48.0	0.0	4.0	0.0	0.0	40.0	12.0	0.0	4.0
Nyimba	Implementation camps	17.6	12.9	70.6	49.4	0.0	0.0	0.0	0.0	0.0	12.9	0.0	49.4	3.5	1.2	2.4	1.2	40.0	17.6	0.0	2.4
	Control camp	26.0	14.0	60.0	54.0	0.0	0.0	0.0	0.0	0.0	8.0	2.0	38.0	10.0	4.0	2.0	0.0	30.0	12.0	0.0	0.0
Monze	Implementation camps	40.4	1.9	71.2	32.7	0.0	3.8	5.8	0.0	0.0	0.0	1.9	26.9	9.6	0.0	1.9	1.9	19.2	17.3	0.0	0.0
	Control camp	30.8	0.0	53.8	23.1	7.7	0.0	0.0	0.0	0.0	0.0	0.0	46.2	0.0	0.0	0.0	0.0	38.5	0.0	0.0	0.0
Mazabuka	Implementation camps	43.7	1.4	64.8	67.6	0.0	9.9	12.7	0.0	0.0	0.0	2.8	26.8	2.8	0.0	1.4	0.0	14.1	4.2	0.0	0.0
	Control camp	50.0	14.3	64.3	50.0	0.0	0.0	7.1	0.0	0.0	0.0	0.0	35.7	0.0	7.1	0.0	0.0	21.4	0.0	0.0	0.0
Kaoma	Implementation camps	33.3	1.6	87.3	20.6	0.0	1.6	0.0	0.0	1.6	4.8	1.6	28.6	0.0	0.0	0.0	0.0	25.4	0.0	0.0	0.0
	Control camp	21.4	0.0	85.7	14.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0	0.0	0.0	0.0	0.0	50.0	0.0	0.0	0.0
Mongu	Implementation camps	13.5	1.9	73.1	26.9	0.0	0.0	0.0	0.0	0.0	0.0	1.9	34.6	0.0	0.0	1.9	0.0	36.5	1.9	1.9	0.0
	Control camp	0.0	0.0	73.3	46.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	33.3	0.0	0.0	0.0	0.0	33.3	0.0	0.0	0.0

A20: Post Harvest Loss Rates

		Experienced post-harvest losses	Severity of the loss				Point of Loss			Quantity of Crop Loss (Kg)		
			Very little damage	Some damage	Extensive damage	Complete damage	Harvest and transport	Processing	Storage	Harvesting	Processing	Storage
Chibombo	Implementation camps	20.3	62.5	20.8	12.5	4.2	37.5	16.7	45.8	13.44	29.00	5.55
	Control camp	24.1	42.9	28.6	28.6	0.0	85.7	14.3	0.0	9.17	6.00	
Chisamba	Implementation camps	8.2	30.0	20.0	50.0	0.0	30.0	60.0	20.0	8.00	53.33	10.50
	Control camp	3.4	100.0	0.0	0.0	0.0	0.0	0.0	100.0			2.00
Kapiri-mposhi	Implementation camps	11.9	42.9	42.9	14.3	0.0	21.4	21.4	57.1	7.00	90.00	5.00
	Control camp	16.7	40.0	40.0	20.0	0.0	40.0	20.0	40.0	3.00	200.00	3.00
Mumbwa	Implementation camps	8.4	60.0	20.0	20.0	0.0	50.0	10.0	40.0	15.40	6.00	5.25
	Control camp	17.2	40.0	20.0	40.0	0.0	20.0	40.0	40.0	15.00	45.00	2.00
Lundazi	Implementation camps	41.5	38.8	24.5	36.7	0.0	63.3	22.4	26.5	59.58	58.18	10.77
	Control camp	63.3	31.6	31.6	31.6	5.3	78.9	10.5	21.1	25.80	24.00	8.75
Katete	Implementation camps	49.6	55.0	40.0	5.0	0.0	55.0	10.0	38.3	9.37	26.17	9.70
	Control camp	61.3	52.6	42.1	5.3	0.0	42.1	10.5	52.6	6.88	2.50	9.40
Petauke	Implementation camps	59.3	38.6	54.3	2.9	4.3	65.7	27.1	61.4	4.18	2.34	11.10
	Control camp	72.4	23.8	66.7	9.5	0.0	71.4	14.3	47.6	5.53	3.00	3.82
Nyimba	Implementation camps	53.8	36.7	61.2	2.0	0.0	75.5	24.5	34.7	13.66	1.33	10.35
	Control camp	49.2	56.7	40.0	3.3	0.0	76.7	23.3	50.0	17.91	1.29	4.73
Monze	Implementation camps	28.2	66.7	27.3	6.1	0.0	39.4	9.1	57.6	7.62	11.00	2.33
	Control camp	30.0	44.4	55.6	0.0	0.0	11.1	33.3	55.6	9.00	1.67	200002.20
Mazabuka	Implementation camps	13.1	93.8	6.3	0.0	0.0	12.5	0.0	87.5	1.50		3.21
	Control camp	16.7	40.0	40.0	20.0	0.0	40.0	0.0	60.0	77.00		2.67
Kaoma	Implementation camps	8.6	70.0	30.0	0.0	0.0	0.0	10.0	90.0		2.00	2.22
	Control camp	23.3	14.3	85.7	0.0	0.0	0.0	0.0	100.0			5.14
Mongu	Implementation camps	9.2	81.8	18.2	0.0	0.0	9.1	0.0	90.9	4.00		1.50
	Control camp	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			

A21: Main causes of post-harvest losses

		Main cause of post-harvest losses								Type of storage facility used								
		Weevils	Rodents	Mould	Broken Grain	Rain/Water	Storage	Poor harvesting techniques	Poor transportation	Theft	Other	In a room inside the house	Traditional granary	House rooftop	Warehouse	PICS grain bags	Ordinary grain bags	Other
Chibombo	Implementation	33.3	29.2	0.0	0.0	41.7	0.0	4.2	0.0	0.0	8.3	32.2	47.5	0.0	.8	0.0	40.7	1.7
	Control	28.6	28.6	0.0	0.0	71.4	0.0	14.3	0.0	0.0	0.0	41.4	58.6	0.0	0.0	0.0	17.2	10.3
Chisamba	Implementation	10.0	10.0	0.0	0.0	20.0	0.0	10.0	10.0	0.0	60.0	57.4	41.8	0.0	0.0	0.0	59.0	2.5
	Control	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	48.3	55.2	0.0	0.0	0.0	62.1	0.0
Kapiri-mposhi	Implementation	42.9	14.3	7.1	7.1	0.0	7.1	0.0	7.1	7.1	35.7	46.6	25.4	0.0	1.7	0.0	66.1	12.7
	Control	20.0	0.0	0.0	0.0	40.0	0.0	20.0	0.0	0.0	20.0	63.3	23.3	0.0	0.0	0.0	66.7	10.0
Mumbwa	Implementation	10.0	20.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	60.0	48.7	48.7	0.0	0.0	0.0	63.0	5.9
	Control	20.0	0.0	0.0	20.0	20.0	0.0	0.0	0.0	0.0	40.0	51.7	37.9	0.0	0.0	3.4	58.6	3.4
Lundazi	Implementation	42.9	2.0	2.0	8.2	38.8	4.1	12.2	6.1	8.2	34.7	64.4	64.4	1.7	.8	0.0	71.2	2.5
	Control	52.6	26.3	0.0	5.3	42.1	10.5	5.3	5.3	0.0	36.8	66.7	46.7	0.0	0.0	0.0	76.7	3.3
Katete	Implementation	53.3	5.0	11.7	15.0	33.3	11.7	13.3	10.0	0.0	6.7	53.7	71.1	1.7	0.0	0.0	69.4	.8
	Control	47.4	26.3	15.8	21.1	26.3	0.0	5.3	5.3	0.0	5.3	38.7	71.0	0.0	0.0	0.0	67.7	6.5
Petauke	Implementation	70.0	44.3	20.0	24.3	7.1	22.9	38.6	37.1	0.0	4.3	51.7	74.6	0.0	0.0	0.0	65.3	4.2
	Control	52.4	33.3	19.0	23.8	9.5	14.3	23.8	42.9	0.0	4.8	41.4	69.0	0.0	3.4	0.0	51.7	0.0
Nyimba	Implementation	59.2	28.6	30.6	20.4	6.1	12.2	44.9	36.7	0.0	2.0	36.3	92.3	0.0	0.0	0.0	45.1	0.0
	Control	56.7	36.7	13.3	36.7	10.0	20.0	56.7	46.7	0.0	3.3	45.9	82.0	0.0	0.0	0.0	55.7	3.3
Monze	Implementation	48.5	24.2	9.1	15.2	27.3	9.1	6.1	3.0	0.0	3.0	55.6	69.2	0.0	0.0	0.0	28.2	0.0
	Control	66.7	22.2	22.2	0.0	22.2	0.0	0.0	0.0	0.0	11.1	43.3	66.7	0.0	0.0	0.0	26.7	0.0
Mazabuka	Implementation	56.3	31.3	0.0	0.0	25.0	25.0	12.5	0.0	0.0	6.3	58.2	59.8	0.0	0.0	0.0	49.2	.8
	Control	40.0	20.0	40.0	0.0	80.0	0.0	20.0	0.0	0.0	0.0	70.0	76.7	0.0	0.0	0.0	50.0	0.0
Kaoma	Implementation camps	80.0	30.0	10.0	0.0	20.0	0.0	0.0	0.0	0.0	0.0	73.3	32.8	0.0	0.0	0.0	80.2	0.0
	Control camp	85.7	57.1	42.9	0.0	14.3	14.3	0.0	0.0	0.0	0.0	70.0	43.3	0.0	0.0	0.0	76.7	0.0
Mongu	Implementation	36.4	36.4	0.0	0.0	45.5	18.2	0.0	0.0	0.0	0.0	63.0	31.9	0.0	0.0	0.0	52.1	0.0
	Control	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	43.3	60.0	3.3	0.0	0.0	36.7	0.0

A22: Training in Post-Harvest Loss Technologies

		Received Post-Harvest Loss Handling and Storage training	Trainer in Post-Harvest Handling and Storage								
			CFU	DAPP	Heifer	WFP	World Vision	CASU	FAO	Government	Other
Chibombo	Implementation camps	25.4	13.3	6.7	0.0	6.7	0.0	0.0	0.0	70.0	16.7
	Control camp	20.7	33.3	16.7	0.0	0.0	0.0	0.0	0.0	50.0	33.3
Chisamba	Implementatin camps	19.7	20.8	0.0	0.0	0.0	0.0	0.0	4.2	62.5	20.8
	Control camp	13.8	25.0	0.0	0.0	0.0	0.0	0.0	0.0	75.0	0.0
Kapiri-mposhi	Implementation camps	24.6	20.7	3.4	0.0	0.0	10.3	6.9	17.2	51.7	6.9
	Control camp	46.7	57.1	0.0	0.0	7.1	0.0	0.0	0.0	50.0	14.3
Mumbwa	Implementation camps	26.1	41.9	0.0	0.0	3.2	9.7	0.0	6.5	25.8	12.9
	Control camp	27.6	0.0	0.0	12.5	0.0	0.0	0.0	0.0	50.0	50.0
Lundazi	Implementation camps	28.0	12.1	0.0	0.0	0.0	0.0	0.0	0.0	72.7	30.3
	Control camp	30.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	88.9	11.1
Katete	Implementation camps	22.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	96.3	7.4
	Control camp	25.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0
Petauke	Implementation camps	12.7	26.7	0.0	0.0	0.0	0.0	0.0	0.0	53.3	26.7
	Control camp	10.3	33.3	0.0	0.0	0.0	0.0	0.0	0.0	66.7	33.3
Nyimba	Implementation camps	33.0	16.7	0.0	0.0	0.0	0.0	0.0	0.0	73.3	16.7
	Control camp	31.1	42.1	0.0	0.0	0.0	0.0	0.0	0.0	57.9	5.3
Monze	Implementation camps	11.1	0.0	0.0	0.0	7.7	0.0	0.0	0.0	84.6	7.7
	Control camp	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mazabuka	Implementation camps	23.8	0.0	3.4	6.9	3.4	17.2	0.0	0.0	86.2	3.4
	Control camp	16.7	0.0	0.0	0.0	40.0	0.0	0.0	0.0	80.0	0.0
Kaoma	Implementation camps	14.7	35.3	0.0	0.0	0.0	0.0	0.0	0.0	64.7	5.9
	Control camp	23.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	71.4	71.4
Mongu	Implementation camps	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	66.7	33.3
	Control camp	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0

A23: Knowledge of Exclusive Breastfeeding

		Why is breastmilk alone sufficient to feed babies during the first 6 months?				How often should a baby younger than 6 months be breastfed or fed with breastmilk?			Benefits for a baby if he or she receives only breastmilk during the first six months of life					
		Because breastmilk provides all the nutrients and liquids a baby needs in its first six months	Because babies cannot digest other foods before they are six months old	Other	I don't know	On demand whenever the baby wants	Other	I don't know	He/ She grows healthily	Protection from diarrhoea and other infections	Protection against obesity and chronic diseases in adulthood	Protection against other diseases	Other	I don't know
Chibombo	Implementation camps	50.8	31.7	2.5	15.0	82.5	9.2	8.3	86.7	13.3	0.0	37.5	7.5	4.2
	Control camp	43.3	30.0	3.3	23.3	86.7	6.7	6.7	76.7	6.7	0.0	26.7	3.3	13.3
Chisamba	Implementation camps	50.8	27.9	0.0	21.3	78.0	9.8	12.2	74.0	12.2	1.6	39.0	4.1	11.4
	Control camp	48.3	31.0	3.4	17.2	86.2	0.0	13.8	72.4	20.7	0.0	37.9	3.4	10.3
Kapiri-mposhi	Implementation camps	56.7	26.7	5.0	11.7	82.5	10.8	6.7	84.2	10.8	0.0	41.7	6.7	7.5
	Control camp	50.0	23.3	6.7	20.0	70.0	20.0	10.0	73.3	6.7	0.0	30.0	3.3	13.3
Mumbwa	Implementation camps	51.7	27.5	.8	20.0	74.2	10.8	15.0	77.5	9.2	0.0	31.7	2.5	12.5
	Control camp	37.9	37.9	0.0	24.1	75.9	10.3	13.8	86.2	10.3	0.0	31.0	0.0	10.3
Lundazi	Implementation camps	54.2	29.2	3.3	13.3	88.3	10.0	1.7	85.8	22.5	10.8	19.2	1.7	6.7
	Control camp	60.0	26.7	6.7	6.7	96.7	3.3	0.0	90.0	20.0	0.0	46.7	0.0	0.0
Katete	Implementation camps	41.7	40.0	4.2	14.2	87.6	6.6	5.8	83.5	16.5	0.0	26.4	5.0	10.7
	Control camp	41.9	48.4	3.2	6.5	90.3	9.7	0.0	90.3	12.9	0.0	9.7	3.2	3.2
Petauke	Implementation camps	56.3	24.4	2.5	16.8	91.6	3.4	5.0	83.2	15.1	1.7	27.7	1.7	12.6
	Control camp	33.3	40.0	0.0	26.7	86.7	0.0	13.3	83.3	0.0	0.0	10.0	0.0	13.3
Nyimba	Implementation camps	44.0	33.0	4.4	18.7	84.6	8.8	6.6	86.8	6.6	1.1	22.0	1.1	8.8
	Control camp	36.1	49.2	1.6	13.1	85.2	8.2	6.6	77.0	9.8	0.0	19.7	1.6	18.0
Monze	Implementation camps	67.5	25.0	0.0	7.5	82.5	7.5	10.0	77.5	12.5	5.8	21.7	.8	7.5
	Control camp	70.0	23.3	0.0	6.7	86.7	10.0	3.3	86.7	6.7	6.7	23.3	0.0	10.0
Mazabuka	Implementation camps	64.8	31.1	0.0	4.1	92.6	4.9	2.5	75.4	15.6	7.4	39.3	.8	2.5
	Control camp	66.7	26.7	0.0	6.7	93.3	6.7	0.0	76.7	20.0	3.3	36.7	0.0	0.0
Kaoma	Implementation camps	48.3	40.8	.8	10.0	92.5	2.5	5.0	77.5	15.8	10.8	16.7	0.0	8.3
	Control camp	50.0	43.3	0.0	6.7	100.0	0.0	0.0	76.7	13.3	3.3	26.7	0.0	6.7
Mongu	Implementation camps	50.4	43.8	0.0	5.8	92.6	4.1	3.3	68.6	10.7	5.8	24.8	0.0	7.4
	Control camp	73.3	26.7	0.0	0.0	96.7	3.3	0.0	86.7	13.3	6.7	13.3	0.0	3.3

		Many mothers need to work and are separated from their baby. In this situation, how could a mother continue feeding her baby exclusively with breastmilk?			How long is it recommended that a woman breastfeeds her child?					At what age should babies start eating foods in addition to breastmilk?				Why is it important to give foods in addition to breastmilk to babies from the age of six months?		
		Expressing breastmilk by hand, storing it and asking someone to give breastmilk to the baby	Other	Don't know	6 months or less	0-11 months	0-23 months	Other	Don't know	Before 6 months	at 6 months	Six months or more	Don't know	Breastmilk alone is not sufficient (enough) cannot supply all the nutrients needed for growth/from six months	Other	Don't know
Chibombo	Implementation camps	35.8	22.5	41.7	5.0	7.5	75.0	10.8	1.7	16.7	69.2	13.3	.8	86.7	10.0	3.3
	Control camp	26.7	36.7	36.7	10.0	13.3	56.7	16.7	3.3	20.0	50.0	26.7	3.3	86.7	3.3	10.0
Chisamba	Implementation camps	26.8	15.4	57.7	1.6	4.9	76.4	5.7	11.4	13.0	64.2	15.4	7.3	72.4	10.6	17.1
	Control camp	41.4	10.3	48.3	0.0	6.9	75.9	10.3	6.9	3.4	86.2	3.4	6.9	86.2	6.9	6.9
Kapiri-mposhi	Implementation camps	38.3	18.3	43.3	.8	8.4	70.6	15.1	5.0	6.7	67.5	16.7	9.2	85.0	9.2	5.8
	Control camp	40.0	30.0	30.0	6.7	3.3	73.3	10.0	6.7	10.0	50.0	23.3	16.7	80.0	10.0	10.0
Mumbwa	Implementation camps	46.7	9.2	44.2	0.0	2.5	75.8	10.8	10.8	9.2	68.3	11.7	10.8	80.7	7.6	11.8
	Control camp	31.0	13.8	55.2	0.0	0.0	82.8	10.3	6.9	0.0	82.8	13.8	3.4	79.3	3.4	17.2
Lundazi	Implementation camps	41.2	27.7	31.1	5.8	17.5	63.3	11.7	1.7	15.0	54.2	29.2	1.7	89.2	3.3	7.5
	Control camp	30.0	60.0	10.0	0.0	10.0	83.3	6.7	0.0	13.3	53.3	30.0	3.3	83.3	13.3	3.3
Katete	Implementation camps	37.5	42.5	20.0	2.5	14.0	59.5	18.2	5.8	18.2	45.5	25.6	10.7	84.3	2.5	13.2
	Control camp	54.8	22.6	22.6	0.0	32.3	51.6	16.1	0.0	6.5	61.3	25.8	6.5	90.3	0.0	9.7
Petauke	Implementation camps	32.8	39.5	27.7	2.5	14.3	58.8	21.0	3.4	15.1	51.3	26.9	6.7	86.6	0.0	13.4
	Control camp	20.0	43.3	36.7	3.3	30.0	46.7	13.3	6.7	23.3	56.7	13.3	6.7	83.3	0.0	16.7
Nyimba	Implementation camps	25.3	42.9	31.9	2.2	11.0	51.6	31.9	3.3	24.2	60.4	9.9	5.5	87.9	0.0	12.1
	Control camp	41.0	29.5	29.5	4.9	29.5	54.1	8.2	3.3	21.3	54.1	16.4	8.2	96.7	0.0	3.3
Monze	Implementation camps	64.7	4.2	31.1	24.2	6.7	55.8	5.0	8.3	21.7	46.7	26.7	5.0	85.0	0.0	15.0
	Control camp	73.3	0.0	26.7	20.0	10.0	60.0	6.7	3.3	36.7	50.0	13.3	0.0	90.0	0.0	10.0
Mazabuka	Implementation camps	71.3	4.9	23.8	15.6	2.5	45.1	27.0	9.8	5.7	70.5	18.9	4.9	95.1	0.0	4.9
	Control camp	76.7	0.0	23.3	23.3	3.3	70.0	3.3	0.0	10.0	70.0	16.7	3.3	96.7	0.0	3.3
Kaoma	Implementation camps	60.0	3.3	36.7	15.8	2.5	60.8	19.2	1.7	6.7	72.5	19.2	1.7	94.2	0.0	5.8
	Control camp	63.3	0.0	36.7	16.7	3.3	40.0	36.7	3.3	10.0	66.7	16.7	6.7	93.3	0.0	6.7
Mongu	Implementation camps	76.0	.8	23.1	15.7	1.7	52.1	28.1	2.5	9.1	71.1	18.2	1.7	95.9	0.0	4.1
	Control camp	76.7	0.0	23.3	16.7	0.0	43.3	40.0	0.0	10.0	70.0	20.0	0.0	100.0	0.0	0.0

A24: Results on Health-related benefits for a mother who exclusively breastfeeds with ways to keep up milk supply

		Physical or health benefits for a mother if she exclusively breastfeeds her baby							Many times, mothers complain about not having enough breastmilk to feed their babies. Please tell me different ways a mother can keep up her milk supply					
		Delays fertility	Helps her lose the weight she gained during pregnancy	Lowers risk of cancer (breast and ovarian)	Lowers risk of losing blood after giving birth (less risk of post-partum haemorrhage)	Improves the relationship between mother and baby	Other	Don't know	Breastfeeding exclusively on demand	Manually expressing breastmilk	Having a good nutrition/eating well/having a healthy or diversified diet	Drink enough liquids during the day	Other	Don't know
Chibombo	Implementation camps	6.7	4.2	0.0	0.0	13.3	.8	77.5	2.5	0.0	57.5	66.7	4.2	12.5
	Control camp	0.0	0.0	0.0	0.0	6.7	3.3	90.0	3.3	0.0	50.0	46.7	6.7	20.0
Chisamba	Implementation camps	3.3	3.3	2.4	0.0	9.8	2.4	80.5	1.6	0.0	59.3	61.8	4.1	13.8
	Control camp	0.0	3.4	0.0	0.0	13.8	0.0	82.8	0.0	0.0	51.7	55.2	3.4	13.8
Kapiri-mposhi	Implementation camps	6.7	6.7	0.0	0.0	13.3	4.2	70.0	3.3	0.0	65.0	65.8	4.2	10.8
	Control camp	6.7	3.3	0.0	0.0	13.3	10.0	70.0	0.0	0.0	53.3	53.3	3.3	13.3
Mumbwa	Implementation camps	4.2	2.5	1.7	0.0	10.1	4.2	79.8	2.5	0.0	55.0	40.8	3.3	20.0
	Control camp	0.0	3.4	10.3	0.0	6.9	13.8	72.4	3.4	0.0	62.1	41.4	3.4	20.7
Lundazi	Implementation camps	16.7	20.8	3.3	1.7	28.3	11.7	36.7	11.7	0.0	65.8	26.7	11.7	9.2
	Control camp	20.0	3.3	0.0	0.0	43.3	26.7	26.7	10.0	0.0	80.0	36.7	6.7	10.0
Katete	Implementation camps	12.4	19.0	2.5	.8	23.1	13.2	39.7	8.3	4.1	76.0	30.6	16.5	8.3
	Control camp	9.7	19.4	6.5	0.0	22.6	3.2	48.4	9.7	9.7	61.3	19.4	12.9	9.7
Petauke	Implementation camps	14.3	23.5	.8	1.7	17.6	12.6	44.5	5.9	4.2	73.9	37.0	16.0	10.1
	Control camp	0.0	23.3	0.0	0.0	10.0	13.3	56.7	10.0	3.3	66.7	10.0	20.0	20.0
Nyimba	Implementation camps	15.4	31.9	3.3	0.0	13.2	8.8	37.4	2.2	1.1	73.6	27.5	28.6	12.1
	Control camp	8.3	28.3	5.0	0.0	8.3	11.7	46.7	13.1	1.6	67.2	19.7	18.0	19.7
Monze	Implementation camps	.8	6.7	1.7	1.7	30.8	.8	60.8	25.2	5.9	42.0	35.3	2.5	19.3
	Control camp	10.0	0.0	0.0	0.0	53.3	0.0	40.0	20.0	0.0	56.7	46.7	0.0	13.3
Mazabuka	Implementation camps	4.1	16.4	8.2	.8	51.6	.8	33.6	11.5	7.4	48.4	58.2	1.6	7.4
	Control camp	10.0	26.7	0.0	0.0	46.7	3.3	36.7	30.0	3.3	53.3	30.0	3.3	13.3
Kaoma	Implementation camps	4.2	7.5	2.5	0.0	48.3	0.0	41.7	10.8	5.0	68.3	39.2	.8	5.8
	Control camp	0.0	13.3	6.7	0.0	36.7	0.0	46.7	3.3	10.0	73.3	36.7	0.0	10.0
Mongu	Implementation camps	9.1	12.4	7.4	0.0	50.4	.8	33.9	14.0	5.8	62.0	40.5	1.7	6.6
	Control camp	0.0	10.0	3.3	0.0	43.3	0.0	46.7	10.0	6.7	60.0	30.0	0.0	13.3

A25: Social Networks by District

		Social Networks					
		Agricultural Cooperative	Local community savings group	Agricultural loan/credit scheme	Farmers group	Community social group (e.g. church)	Any other group
Chibombo	Implementation camps	94.2	16.7	5.0	30.8	97.5	7.5
	Control camp	90.0	20.0	6.7	16.7	96.7	3.3
Chisamba	Implementation camps	98.4	21.1	3.3	38.2	84.6	4.9
	Control camp	96.6	17.2	3.4	41.4	86.2	13.8
Kapiri-mposhi	Implementation camps	95.8	15.0	6.7	29.2	92.5	5.0
	Control camp	96.7	6.7	10.0	23.3	90.0	3.3
Mumbwa	Implementation camps	93.3	16.7	5.8	27.5	87.5	7.5
	Control camp	82.8	27.6	10.3	24.1	75.9	6.9
Lundazi	Implementation camps	88.3	6.7	8.3	30.0	82.5	5.0
	Control camp	96.7	6.7	6.7	3.3	60.0	6.7
Katete	Implementation camps	95.0	5.0	5.8	37.2	91.7	5.0
	Control camp	93.5	6.5	0.0	45.2	83.9	3.2
Petauke	Implementation camps	93.3	11.8	2.5	40.3	90.8	12.6
	Control camp	100.0	13.3	0.0	26.7	93.3	20.0
Nyimba	Implementation camps	96.7	7.7	5.5	39.6	93.4	18.7
	Control camp	98.4	4.9	1.6	39.3	96.7	18.0
Monze	Implementation camps	70.0	8.3	0.0	24.2	63.3	.8
	Control camp	66.7	10.0	0.0	13.3	53.3	3.3
Mazabuka	Implementation camps	82.8	18.0	2.5	22.1	63.1	1.6
	Control camp	86.7	6.7	0.0	13.3	60.0	0.0
Kaoma	Implementation camps	80.8	8.3	1.7	19.2	67.5	15.8
	Control camp	73.3	13.3	0.0	26.7	70.0	10.0
Mongu	Implementation camps	22.3	9.1	2.5	22.3	62.0	5.8
	Control camp	16.7	3.3	0.0	26.7	73.3	10.0

Acronyms

CA	Conservation Agriculture
CASU	Conservation Agriculture Scaling Up
DAPP	Development Aid from People to People
FAO	Food and Agriculture Organization
FCS	Food Consumption Score
FRA	Food Reserve Agency
Ha	Hectare
HDDS	Household Dietary Diversity Score
HH	Household
IYCF	Infant and Young Child Feeding
KG	kilograms
MAD	Minimum Acceptable Diet
MDD_W	Minimum Dietary Diversity Score for Women
MoA	Ministry of Agriculture
M&E	Monitoring and Evaluation
SfC	Savings for Change
VSL	Village Savings and Loans

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