## Evaluating Gender Differences in Accessing Subsidies of Agricultural Inputs by Small Scale Women Farmers in Zambia

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# 잠비아 소규모 여성농업인의 농업투입요소에 대한 보조금 접근도의 성차별 평가

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**요 약**: 잠비아의 농업지원프로그램에서 여성농가의 경우 남성농가에 비해 각종 혜택에서 소외받고 있다는 지적이 많다. 본 연구는 소규모 여성농업인이 옥수수 씨앗이나 비료 등의 농업투입요소에 대한 보조금의 혜택에서 어느 정도 차별을 받고 있는 지를 잠비아의 농업투입지원프로그램을 사례로 검증하고자 한다. 즉 농업투입요소 보조금에 대한 성차별의 영향을 주 는 요인을 규명하고자 하였다. 본 연구 목적을 달성하기 위하여 관련 문헌조사가 선행되었고, 잠비아 마자부카지역의 소농 가 100가구를 대상으로 설문조사를 실시하였으며 빈도분석, T-test 및 분산분석 등을 실시하였다. 그 결과 농경지의 소유 유 무나 규모가 중요한 요인 중의 하나로 나타났다. 남성농가의 경우 여성농가에 비하여 자가농이 많았으며 농지 소유 규모 또 한 큰 것으로 나타났다(남성농가: 평균 2.03ha, 생산량 4.43Mt, 여성농가: 평균 1.63ha, 생산량 3.15Mt). 기아의 경험 정도는 여 성농가에 비해 비교적 남성농가가 높게 나타났으며, 옥수수 생산에 있어 같은 양의 투입요소라고 하더라도 여성농가가 남성 농가에 비해 식량 안보력이 높은 것을 의미한다. 그러나 남성농가에 비해 여성농가의 낮은 수입이 결국 농업투입요소의 접 근에 장애가 되는 중요한 요인이라 할 수 있다. 이와 같은 남성농가와 여성농가의 농업투입지원프로그램에 대한 불공평성의 문제를 해결하기 위해서는 정부 정책가들의 인식의 변화가 무엇보다도 중요하고, 여성농가를 위한 농업정보나 농작물 재배 지식 등의 전달 및 훈련 등에 대하여 보다 적극적이고 체계적이며 계획적인 접근 노력이 필요할 것으로 사료된다.

핵심용어 : 농업투입지원프로그램, 농업투입요소, 보조금, 접근도, 소규모 여성농업인

## I. Introduction

Like in most developing countries, the majority of the population in Zambia relies solely on agriculture and its related activities for their livelihood. Agriculture however, is underperforming for a number of reasons. Among these is the fact that women lack the resources and opportunities they need to make the most productive use of their time (FAO, 2011). Despite the critical role they play in farming,

women face more severe constraints than men in accessing productive resources (FAO, 2005). In Zambia, despite women contributing over 65% of agricultural labor, they are disadvantaged by their lack of equal access with their male counterparts to agricultural resources such as information, credit, fertilizer and improved seed, land, technology and decision making power (MACO, 2005). This certainly hinders agricultural production and productivity in Zambia.

In an effort to boost agricultural productivity, the Zambian Government introduced a subsidy program in 2002 which was then called Fertilizer Support Program but

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is now referred to as Farmer Input Support Program (FISP). The program is aimed at improving access of small-scale farmers to inputs (fertiliser and improved seed) through a subsidy as well increasing their incomes (MACO, 2010). The assumption being that both Female Headed Households (FHH) and Male Headed Households (MHH) who are small scale farmers have equal access to the subsidized inputs.

In this regard, the research focused on evaluating whether FISP, a program that aims at improving access to inputs and ensuring food security has improved the female small scale farmers' access to inputs. As indicated in the National Poverty Reduction Strategy Paper (PRSP), 60% of female-headed households are classified as extremely poor as opposed to 51% of the male-headed households (MoFNP, 2002). The central statistics office adds that food poverty was more prevalent among female-headed households with the proportions of stunted children (under5 years of age) being higher in female-headed households at 54% than in male-headed households at 49%(CSO, 2004).

Considering that women are disproportionately represented among the extreme poor, it was necessary to assess whether the government subsidy program has contributed to improving their access to the subsidized agricultural inputs which in turn would contribute to their food security. The study centered on identifying factors that influence gender differences in accessing the subsidized inputs. It examined the implications of such gender differences in agricultural production, particularly maize production among the female and male heads in the sample.

## II. Literature Review

#### 1. Women in Agriculture in Developing Countries

It is recognized that agriculture is an important engine of growth and poverty reduction in countries where it is the main occupation of the poor. But the agricultural sector is underperforming in many developing countries in part because women, who are a crucial resource in agriculture and rural economy, do not have equal access to the resources and opportunities they need to be more productive. Yet, women produce between 60% and 80% of the food in most developing countries and are responsible for half of the world's food production (Ministry of Foreign Affairs of Denmark, 2008, FAO, 2012). Studies reveal that though women are the mainstay of small-scale agriculture, the farm labour force, and day-to-day family subsistence, they have more difficulties than males in gaining access to resources such as land, credit and productivity-enhancing inputs and services (FAO, 2012).

Such persistence of gender inequalities has directly resulted in poorer agricultural and human development outcomes. In Africa and many other developing countries, new technologies are needed to significantly increase agricultural production. Such technologies are usually based on the use of agricultural inputs, especially fertilizer, seed and extension services or other sources of information. On the other hand, credit is required to finance most of these inputs.

#### 2. Zambia's Case

In Zambia, the role of agriculture in reversing poverty has been recognized in the national development plans. Such efforts are seen in such government supported programs as the FISP that are meant to improve access to agricultural inputs among the small scale farmers who are the majority. It is reported that almost two thirds of total arable land under cultivation is cultivated by subsistence farmers with an average farm size of less than two hectares (Byrne, 1994).

It is noted that though FISP has recorded some achievements, agricultural productivity is still lagging and access to agricultural inputs still remains a challenge especially among small scale women farmers. Agricultural productivity, especially among female headed households, is affected by inadequate access to productive assets among others; limited access to agricultural inputs such as fertilizer and improved seed; inadequate access to agricultural service support, such as credit and markets(GRZ, 2006).

According to Milimo(2004), women account for some 60 percent of subsistence farmers and the majority of the rural women bear major economic responsibility for the support of their families. Although women are responsible for not less than 65 percent of the agricultural labour (MACO, 2005), the gender division of labour, resources and control

over the crops and incomes in agriculture is clearly unequal. For instance, though there could be regional variations, men are predominantly in control of cash crop production, while women are responsible for production for household consumption (Byrne, 1994). According to Farnworth(2010), men are generally responsible for governing the access of each family member to household and farm resources. They are able to command female labour, decide upon the use of the fields and decide upon the spending of income. Women cannot take any decisions in the absence of their male partners. Women in female-headed households are able to at least retain control over what they produce and over any income they earn (Byrne, 1994).

However, it was noted that women in female headed rural households often face severe labour problems (Byrne, 1994). Constraints on the ability of female-headed households to mobilize labour mean that they are often unable to grow cash crops which are labour-intensive crops. Thus, the majority of female headed households grow a narrower range of crops, have lower yields, and are less integrated into cash-crop production than male household heads who have the labour of possibly multiple wives as the main source of input (Byrne, 1994). The inability to grow cash crops based on labour constraints may further limit female-headed households' opportunity to access technological inputs such as hybrid seed and fertilizer which are labour intensive.

In addition, women in female-headed households continue to face sharp inequalities in accessing particular resources due to their lack of male kin (Farnworth, et al., 2010). As such, their ability to increase agricultural productivity is critically limited by their lack of resources and prevailing gender roles and responsibilities. To a large extent, women's increased access to resources still depend on their ability to maintain their relationship to the male head of households and to wider kinship networks.

#### 3. Female-Headed Households

In examining the gendered nature of agriculture and the effects of policy changes in the agricultural sector, it is imperative not to overlook the significant proportion of households that are female headed. According to Byrne(1994), a distinction should be made between two

types of female-headed households: (i) de facto, i.e. those in which an adult male partner is working away from the household but remains involved through remittances and other economic and social ties and (ii) de jure, i.e. those which have no male partner, such as women who are widowed, divorced or never married. In Zambia, a distinction is made for those women that are married in polygamous marriage. According to CSO(2004), in polygamous households, the husband is assigned to the most senior wife's household and other wives as separate households. Though, it is sometimes difficult to distinguish between these types of households, most cases in this study are female-headed households by de jure and a few cases of those in polygamous households (de facto).

While it is recognised that most farms are managed by husband and wife together, there are a considerable farming households run solely by women in Zambia. It is estimated that, on average, 33% of all rural households in Zambia are female headed (Byrne, 1994) and that at national level, one in five households are female headed (CSO, 2003). Although it is necessary to note that households are more implied by male-headed diverse than is versus female-headed dichotomy (World Bank , 1992), female headed households are typically poorer than male-headed households (Central Statistics Office, 1998). Generally, they tend to produce less than male-headed households because of labour constraints, especially for such tasks as clearing land, which are considered men's jobs. They further face difficulties in gaining access to other resources required to raise their household welfare.

It is for such reasons that in this study, the female-headed and male-headed households have been used as units of analysis. According to CSO(2003), the distinction of household heads by sex is very important because it is often associated with aspects of household welfare.

#### Summary from above Literatures

From the literatures revealed above, it can be summarized that access to resources is essential to improving agricultural productivity of both men and women farmers. Because women play crucial roles in agricultural production, improving productivity will depend to a great extent on ensuring that women farmers, as well as men farmers, have sufficient access to production inputs and support services. While both men and women smallholders lack sufficient access to agricultural resources, women generally have much less access to resources than men. The causes of this are rooted, to a great extent, in: gender-blind development policies research; and discriminatory legislation, traditions and attitudes; and lack of access to decision-making. In general, women have insufficient access to land, membership rural in organizations, credit, agricultural inputs and technology. training and extension, and marketing services.

## III. Methodology

The methodological approach of this study is based on a case study of gender differences between MHH and FHH in a FISP project site in Mazabuka district of Zambia. The data set for this study was collected through a survey conducted in May, 2012 by a team of Zambian agricultural district officers. The target group was small scale farmers who benefited from FISP during the 2010/11 farming season. The data were collected from a total of 100 households that were interviewed.

#### 1. Site and Sample Selection

The district was chosen for the study because it is closer to Lusaka where the researcher works from. It was selected based on convenience for the researcher in terms of time available to collect data and also financial resources. The district is implementing programs on agricultural subsidies, thus is representative of other areas as it provided the required information. The area also has farmers with varying socio-economic status thereby qualifying it for this type of study.

The sample was drawn from five villages in Mazabuka district to ensure representativeness of the population. To ensure a good representation of FHH, purposive sampling was used. The sample aimed at at least 40% representation of FHH close to the population average of 42% of farming communities (FAO, 2005).

Sampled households were selected using the circular systematic sampling method. This method assumes that households are arranged in a circle (G. Kalton, 1983).

With the aid of computer programmes such as excel the households for the survey were selected based on the strata - type of household.

#### 2. Data Collection

The study employed three types of data collection strategies; desk review of information pertaining to the research topic, a survey of households and focus group discussions. The desk review was conducted to have an insight of women in agriculture and their challenges in access to agricultural inputs. A survey was employed to collect household level information on household crop production and access to fertilizer and seed, household livelihood options and food security. This was achieved by designing a questionnaire that guided the interview schedule during the survey.

#### 3. Data Analysis

Three types of variables were considered for analysis and the results were reported as differences between MHH and FHH for all key variables considered in the study. For nominal variables, column wise percentages were determined to distinguish the two types of households. The significance of the differences was determined using the t statistics.

Ordinal variables were measured on a 5 point Likert scale to determine the degree of the perception of equal access for each respondent. Likewise, the score for each group were reported using column wise percentages and the significance of the differences between the groups was determined using the t - statistics. Averages, trends and dispersion measures were used to report quantitative variables and the differences in the two household types determined. The ANOVA(Analysis Of Variance) test was used to determine the significance of the differences of the results.

## IV. Results and Discussion.

#### 1. Marital Status

The marriage pattern in the sample can be divided into two main categories; Married and Unmarried. Most MHH

Type of	Marital status of Household head							
Household	Married Monogamous	Married Polygamous	Single	Divorced	Widowed	Total		
MHH	45	10	2	2	0	59		
FHH	0	6	11	6	18	41		
Total	45	16	13	8	18	100		

Table 1 Type of Household disaggregated by marital status of the household head

is in the married while the majority of the FHH is in the unmarried category. The married category is split into two subcategories, married monogamous and married polygamous. The unmarried category is split into three main categories; singles, divorced and widowed. Most FHH fall in the latter three subcategories and the majority of the heads of these households are either single or widowed. Furthermore, the subcategory married monogamous is entirely dominated by MHH while widowed is entirely dominated by FHH. These two classes also reflect the mirror imagine of vulnerability of the two types of households. Apart from the category married polygamous, MHH almost always has a spouse while FHH rarely has spouses. The absence of a spouse in FHH reinforces vulnerability in these households in the context of farm labor, financial resources and the ability of the household head to engage in other activities.

As observed by Doss(1999), some cultural norms classify farming activities such as ploughing and spraying as men's activities. In Zambia for instance, reports that clearing land is considered as men's job while draft power is seen as the preserve of men (Byrne, 1994). This therefore implies that, women farmers require male labor for ploughing and clearing the land but FHH often lack

male family members who can do the work. As put by Doss(1999), FHH has a harder time gaining access to labor because they have less male labor within the household and may have limited resources for hiring non-family labor.

From MHH in the study, labor constraint is not as severe a constraint as in FHH because male heads have the additional labor of possibly multiple wives as they tend to be in a polygamous marriage. In fact, polygamous marriage in the study area tends to be encouraged for the same purpose of mobilizing cheap yet reliable labor from the wives.

There is a significant difference in marriage pattern between MHH and FHH (Table 1). The two types of households tend to be mutually exclusive in matrimonial pattern, with MHH and FHH being split by the married and unmarried respectively.

#### 2. Land Ownership and Access to Land

Ownership and access to land was determined to assess the differences between MHH and FHH in land provision and how access to land constrains equal access to FISP inputs. All households have access to land for crop production although ownership differs considerably

				Are	a (ha)					
1	V	Aver	Averages		Quartiles					
Fr	req	Mean	SD	Min	Q1	Md	Q3	Max	Total	
MHH	59	3.23	2.59	0.50	1.00	3.00	4.00	12.00	190.51	
FHH	41	2.60	1.83	0.50	1.25	2.00	3.00	10.00	106.50	
	100	2.97	2.32	0.50	1.13	2.00	3.50	12.00	297.01	

Table 2 Differences in average and trends of land area between FHH and MHH

 $(F = 1.807, \rho = 0.182)$ 

N = Number of Household, Q1 = First quartile deviation, Q3 = Third quartile deviation

SD = Standard Deviation, Md = median, Min = Minimum value and Max = Maximum value

depending mainly on marital status. For households that do not own land, access was mainly through rental, borrowing or temporary use of relative's land. Though there was no statistical difference between MHH and FHH in terms of access to land for crop production, on average, male heads tend to own and cultivate larger size of land than their female counterparts (Table 2).

Further analysis of marital status and access to land showed a relative significant difference in terms of how the two types of households accessed the land for crop production. This entails that when a woman loses a spouse, there is great likelihood for her to lose her husband's land. This is so because according to Byrne(1994) and Doss(1999), ordinarily, Zambian women do not own land in their own right. They only acquire the use of land through marriage, male relatives or village headman. When a marriage dissolves, the land reverts to the lineage and the woman has only limited claim on some land.

It is not surprising therefore, that the study finds a significant relationship on the perception of difference in

access to land by type of household and access to inputs. This rightly shows the restrictions that limited access to land by FHH impose on their access to inputs. This tally with Doss and Morris' (refer to FAO, 2011) study in Ghana that found that, only 39% of female farmers adopted improved crop varieties compared to 59% of male farmers because they had less access to land, family labor and extension services. In Kenya, land constraints explained the limited access of FHH to improved seeds and fertilizer. FAO adds that even when women own land, it is of poor quality and smaller size.

#### 3. Maize Production

All dimensions of maize production in the sample indicate that MHH tends to produce more maize than FHH. The averages and trends tend to favor MHH than FHH (Table 3). The total area cultivated by MHH (119ha) is almost twice that cultivated by FHH (67ha). The difference is largely attributed to the fact that the MHH

Table 3 Statistics of averages, trends and total for Area, Harvest, Household consumption, Portion sold and Maize productivity by Household type

Type of		N	Ave	rages			Quartile			<b>T</b> + 1
Household		Freq	Mean	SD	Min	Q1	Md	Q3	Max	Total
MHH	N <sup>a</sup>	59				1	1			
	Area <sup>b</sup>		2.03	1.27	0.50	1.00	2.00	3.00	5.00	119.48
	T/Harv <sup>c</sup>		4.43	3.17	0.50	2.05	4.00	6.00	18.00	261.20
	T/Consumption <sup>d</sup>		1.66	0.88	0.25	1.00	1.50	2.50	4.25	97.70
	T/Sold <sup>e</sup>		2.75	2.68	-	1.00	2.00	2.50	15.00	162.15
	Productivity <sup>f</sup>		2.33	1.14	0.29	1.50	2.00	2.75	5.50	137.55
FHH	N	41								
	Area		1.63	1.01	0.50	1.00	1.00	2.00	5.00	67.00
	T/Harv		3.15	1.92	0.75	1.68	2.60	4.25	10.00	129.35
	T/Consumption		1.40	0.68	0.50	0.93	1.50	2.00	3.00	57.55
	T/Sold		1.84	1.51	-	0.63	2.00	2.75	7.50	75.30
	Productivity		2.24	1.29	7.00	1.40	2.25	3.00	8.00	91.99
Total	N	100								
	Area		1.87	1.18	0.50	1.00	1.50	3.00	5.00	186.50
	T/Harv		3.91	2.79	0.50	1.81	3.13	5.00	18.00	390.55
	T/Consumption	]	1.55	0.79	0.25	1.00	1.50	2.15	4.25	155.25
	T/Sold		2.37	2.31	-	0.75	2.00	3.00	15.00	237.45
	Productivity		2.30	1.22	0.29	1.50	2.03	2.85	8.00	229.54

a = Proportion of Sample

b = Area of Maize field cultivated

d = Total Maize consumption in household Mt

c = Total Harvest from Maize field in Mt e = Portion of Maize harvest sold in Mt

f = Maize yield in Mt/ha

Variable	F	Significant
Area	2.68	0.11
T/Harv	5.24	0.01
T/Consumption	2.52	0.12
T/Sold	3.89	0.05
Productivity	0.12	0.73

Table 4 Summary of F - Tests on Maize production - Area, Total Harvested, Total consumed, total sold and Productivity between MHH and FHH

own larger size of land as customary rights regards land ownership are biased towards men. Additionally, the averages and trends of MHH tend to be higher than the sample averages indicating a high productivity in MHH (Table 3).

There is generally no significant difference between MHH and FHH in Area cultivated, maize consumed, and productivity (Table 4). The similarity in productivity levels between the two types of household implies that FHH when given the same amount of inputs, they are just as efficient and productive as men.

However, there is a significant difference in the maize harvested ( $F = 5.24, \rho = 0.012$ ) and a relative significance in the portion of the harvest sold( $F = 3.89, \rho = 0.052$ ). The larger size of fields cultivated by MHH gives them the impetus to harvest more.

Furthermore, disaggregating findings by marital status, polygamous households in MHH tend to be more productive and harvest more maize than FHH. This can be attributed to the fact that these households have to produce more maize to feed their large size household on the limited land. The singles and divorced MHH tend to be less productive mainly due to the smaller household sizes.

In terms of the portion of the harvest sold, MHH tends to sell more of their maize harvest than FHH because of the high demand on incomes to meet housing expenditure on school fees, drugs, agricultural chemicals and other needs. FHH tends to store more of the harvest to ensure food security. This is consistent with the findings under food security below.

#### Food Security

Food security was measured to determine the differences in vulnerability between male and female headed households during periods of food shortages. In Zambia hunger is common during the onset of the rainy season (FEWSNET, 2010).

While over half of the MHH experienced hunger during the onset of the rainy season of the period under review, less than half of FHH experienced hunger during the same period.

Table 5 shows that more MHH experienced hunger during the hunger period than FHH. Although the difference is statistically insignificant it can be deduced that FHH tend to be more food secure.

Though the F-statistics are showing no statistical difference regards the number of months a household experienced hunger, the mean differences(Table 6) shows that FHH are more food secure compared to their male

Table 5 Number of households between MHH and FHH that experienced hunger period

Type of Household	Did you experience a hunger period betw	Total	
Type of Household	Yes	No	Totai
МНН	32	27	59
FHH	19	22	41
Total	51	49	100

 $(\chi^2 = 0.603, \rho = 0.437)$ 

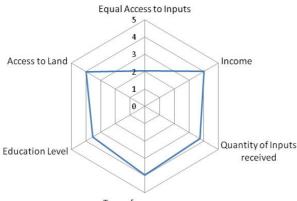
Hunger Period (Months)						
Tours of Hanashald	Ν	Averages				
Type of Household	Freq	Mean	SD			
MHH	59	1.47	1.55			
FHH	41	1.24	1.43			
Total	100	1.38	1.50			

Table 6 Number of months Households experienced hunger

 $(F=0.573, \rho=0.451)$  N = Number of Household SD = Standard Deviation

counterparts.

FHH tend to cope better during hunger periods with all resorting to buying food as a coping mechanism than MHH who had to reduce the number of meals per day, with even a case of stopping children from going to



Type of crops grown

1 = Strongly disagree 2 = Disagree 3 = Neutral 4 = Agree 5= Strongly agree

Figure 1 Representation of the dimensions of the concept of Equal access to FISP on a Radar plot.

school. The reason according to Doss(1999), is that FHH tends to be more concerned with retaining adequate food supplies than their male counterparts who are more interested in obtaining cash to purchase other goods. Also the fact that female heads in the study are much older than their male counterparts, may justify their ability to approach hunger more cautiously than the younger male heads.

Overall, these differences disclose that given the same quantity of agricultural inputs as is the case for beneficiaries under FISP, FHH tend to be more food security as well as cope better when hunger strikes.

## Results in Farmer's Perception on Equal Access to Inputs

The five dimensions of the concept of equal access to FISP inputs are represented on a Radar plot (Figure 1). The axes of the radar represent the Likert values and the points on the graph were plotted using the average Likert scale values. The graph shows that most respondents' disagreed that MHH and FHH have the same access to FISP inputs.

The graph illustrates that income, types of crops grown and access to land do strongly affect the access to inputs as most respondents tend to agree that the difference in these dimensions affect access to FISP inputs in MHH and FHH. The income dimension has a stronger effect on equal access than the other two dimensions. Education level and the quantity of inputs received have a weak impact on the equal access between MHH and FHH as most respondents tend to be neutral on this perception.

From these Likert values, it can be deduced that there is unequal access to FISP inputs between MHH and FHH as all the dimensions measured in the research are highly skewed to agreement. The major reason put forward by most respondents in this regard was that FHH has generally been in the low income bracket and this limits their ability to access FISP inputs. Additionally, it was generally agreed that top leadership positions in cooperatives are mostly dominated by heads of MHH. This implies that men dominate most decisions in cooperatives and can contribute to disadvantaging FHH access to subsidized inputs.

### 6. Farmers Policy Recommendations on Equal Access to FISP Inputs

The first aspect was to capture farmers' suggestions on what the policy makers should do to ensure that MHH and FHH have equal access to FISP inputs. Below is a summary of recommendations as suggested by respondents in the survey.

More than half of the farmers suggested that the government should put in place deliberate policies to ensure that more women access FISP inputs and a quarter recommend that government should improve women's access to information on inputs distribution (Table 7). The high polarization of responses on the first reason shows that the current policies are inadequate to address the needs of vulnerable groups in society.

The most effective way of information dissemination of FISP to both FHH and MHH is through extension workers and cooperatives. Most respondents recommended improvement of information dissemination through extension workers as the most effective way of ensuring equal access of information on FISP regulations (Table 7). About 78% of FHH are inclined to the first reason compared to only 63% MHH. Improving dissemination of information through cooperatives emerged as the second most important reason with a quarter of the sample recommending it.

The two major reasons suggested by both FHH and

MHH for government to ensure greater participation by FHH are reduction of the contribution fee for FHH and more sensitisation on the programme (Table 7). More women tend to favour a reduction of the contribute fee for FHH implying that income is a very acute dimension in FHH. This recommendation coincides with the statistics earlier that show that FHH is more vulnerable due to low income levels.

## V. Conclusion and Recommendations

The findings reveal that marital status is the most important clustering variation of the two types of households. The MHH and FHH can be distinctly classified into a household with spouses and households without spouses. These two groups are mutually exclusive and define the vulnerability categories in the sample.

MHH are mostly in the category with spouses and have more access to FISP while FHH are mostly without spouses. The latter group tends to be generally vulnerable and has less access to FISP inputs. This distinction defines the concept of "equal access to FISP inputs" in the context of this study. Most respondents in the survey disagreed with the perception that FHH and MHH have equal access to FISP inputs as seen from the results.

Table 7 Farmers Policy Recommendations on Equal Access to FISP Inputs

Person(%)

	Recommendations	MHH	FHH	Total
	Deliberate policies to ensure that more women access FISP inputs	28(43)	32(74)	65(56)
Inputs	Deliberate policies to ensure that more women take up leadership positions in cooperatives	14(22)	5(12)	19(18)
	Women's access to information on inputs distribution should be improved	22(34)	5(12)	27(25
	Women should be more sensitized about FISP regulations	1(2)	1(2)	2(2)
	Total	65(100)	43(100)	108(100)
	Information dissemination through extension workers should be improved	52(63)	39(78)	91(69)
	Information dissemination through the radio in local languages should be improved	4(5)	2(4)	6(5)
Information	Information disseminated through the women's club	3(4)	2(4)	5(4)
	Information dissemination through cooperatives should be improved	23(28)	7(14)	30(23)
	Total	82(100)	50(100)	132(100)
	Government should reduce the contribution fee for FHH	33(56)	23(61)	56(58)
D (* * /*	Cooperatives must remove registration fees	2(3)	0(0)	2(2)
Participation	There should be more sensitization of the programme	24(41)	15(39)	39(40)
	Total	59(100)	38(100)	97(100)

The difference in access to land between FHH and MHH has a significant impact on equal access to FISP inputs. There was a consensus by respondents that access to land by MHH and FHH affects access to FISP inputs. The main reason put across was cultural barriers that restrict women from accessing land which is a requirement for one to access FISP inputs. In this way, most decisions for FISP allocation is biased to MHH than FHH as it is a requirement that one proves that they have a portion of land before they can acquire the subsidized inputs. The extent to which cultural barrier restricts access to land and equal access to FISP inputs was however, beyond the scope of this study and is a subject for further research.

The other reason for limited access to land include FHH lacks adequate information on how to buy and secure land for productive crop production. The major policy recommended by farmers to improve equal access to FISP inputs between FHH and MHH are outlined below:

- The government should have deliberate policies to ensure that more women access FISP inputs
- Government should reduce the contribution fee for FHH
- Information of FISP through extension workers should be improved
- Women's access to information on input distribution should be improved
- The government should have deliberate policies to ensure that more women take up leadership positions in cooperatives
- Information dissemination through cooperatives should be improved
- There should be more sensitization of the programme

In order to clear the respondents' perception on equal access to FISP as well as deal with issues discussed in the paper, it is imperative to ensure that deliberate action is taken to enable both FHH and MHH households have equal access to the subsidized inputs provided under FISP. This would enhance agricultural production that has continued to lag behind its capacity. Ultimately, it would not only contribute to narrowing the gender disparity in access to agricultural inputs but would significantly contribute to reducing the prevalent poverty levels among FHH.

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