



Gendered Effects of Participation in Agricultural Subsidies on Rural Household Dietary Diversity in Zambia

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The Context

Investment in large-scale agricultural input subsidies emerged in Zambia in 2002 under Fertilizer Support Programme, which later was restructured to Farmer Input Support Programme (FISP) in 2009. The FISP aimed to increase access to and use of modern inputs, raise crop yields and production, improve food security outcomes and subsequently reduce persistent poverty both at household and national levels. To achieve the intended FISP goal, notable changes were implemented, including: increased private sector participation,

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timely farmers' access to inputs, improved beneficiary targeting, and promotion of agricultural diversification by shifting focus from hybrid maize seed and fertilizer to include a range of other crops and agricultural inputs. The programme has benefited 80-90% of Zambia's smallholder farming households (Ministry of Agriculture, 2020). While FISP is hypothesized to improve food security and beneficiary targeting, there is considerable contention about the programme impacts towards an equitable household participation. This could have negative consequences for desired outcomes in terms of improved agricultural productivity and diversification, and ultimately household food security.

The problem

Gender inequalities attributed to rural women's unequal access to and control of productive resources and services impact negatively on household food and nutrition security (Sraboni et al., 2014). Yet, if women had the same access to productive resources as men, they could increase yields on their farms by 20% to 30%, since they contribute as high as 60% to 80% of their time towards agricultural activities (FAO, 2011). According to Johnson et al. (2016), households with higher involvement of women in decision making on agricultural activities and incomes have better nutrition outcomes. However, in Zambia, the majority of female-headed smallholder farmer households (28%), who rely on agriculture as their main source of livelihood, are identified as mostly poor, living on less than US\$ 1.25 per day and are also likely to be food insecure (Kuteya et al., 2016). It is therefore imperative to understand the interplay between gendered access to FISP inputs and rural household food security in order to help policy makers streamline FISP to achieve its food and nutrition security outcomes. This policy brief presents evidence on: (i) the extent of the gender gap in FISP participation; (ii) its effect on household dietary diversity score (HDDS); and (iii) the key factors that influence households of FISP participants to have high HDDS in Zambia.

Background

The study on which this policy brief is based used the nationally representative Rural Agricultural Livelihoods Survey of small and medium-scale farming households in Zambia collected in 2015. A total of 7,921 households were interviewed on: demographics; farmland use; crop sales; input and credit acquisition; livestock ownership and marketing; off-farm income sources; and dietary assessment. These data enabled inferences on changes in consumption patterns in terms of food groups consumed. Household dietary diversity scores (HDDS) were used to determine access to diverse foods among FISP households with either female decision-makers (FDMs) or male decision-makers (MDMs).

Key Messages

1. FISP remains skewed against women participation.
2. FISP involvement relates highly with dietary diversity among female headed households.
3. Engagement with food markets plus ownership of productive assets influences a high household dietary diversity.
4. Programme reform systems focusing on females head with limited production capacity should be underscored.

Findings and conclusions

Figure 1 shows that there was low involvement of female household decision makers at 38.9%.

The distribution of FISP inputs probably targeted at households with relatively stable capital assets, but lower incomes.

Female decision-makers on average owned 6.10 ha of land while their male counterparts owned 5.97ha. This implies that rural female-headed households with a poor resource base miss out on the opportunity to improve their food and nutrition security status.

Figure 1: Access to FISP inputs skewed against households with female decision-makers

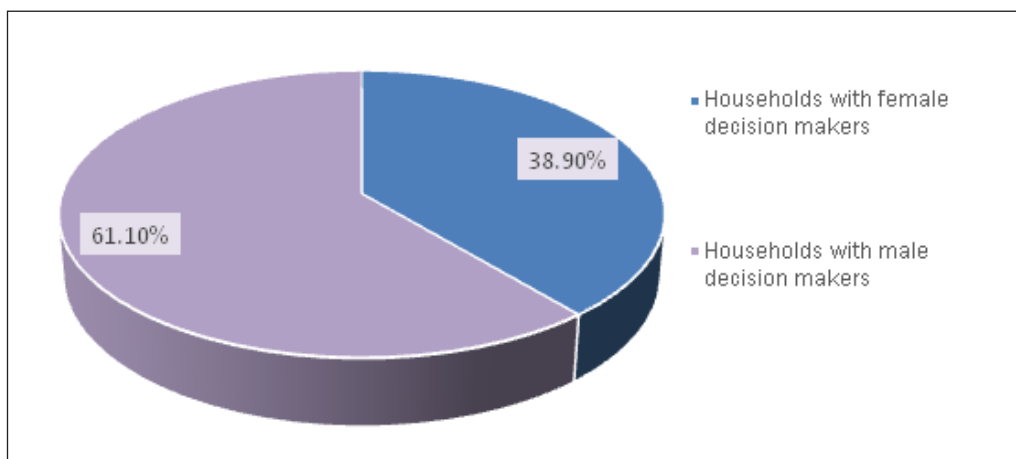


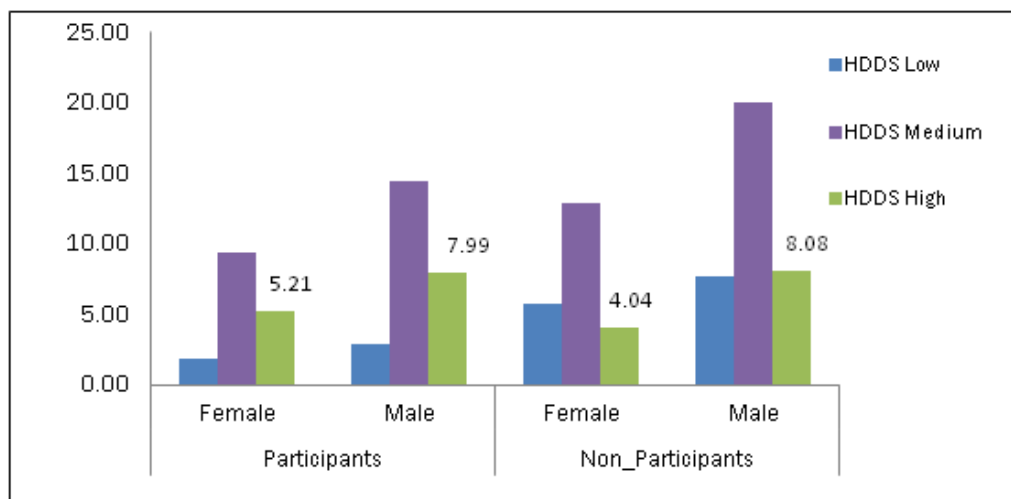
Figure 2 shows that of the surveyed households, 41.6% were FISP beneficiaries of which 13.2% (936 farmers) reported a high HDDS compared to 12.2% (565 farmers) of non-beneficiaries.

The proportion of households with FDMs having a high HDDS was at 5.2% among FISP beneficiaries as opposed to 4.0% for non-participants; the reverse was true for households with MDMs, implying that reducing FISP gender gap would increase household dietary diversification.

Although the crop diversification index is low, it is slightly higher among FDMs' households (0.438) compared (0.428) for MDMs' households, indicating that FDMs grow diverse crops which impact their nutritional outcomes.

More households with FDMs (35.6%) irrigate their crop or access wetlands for continued production compared to 29.9% for MDMs. Growing a variety of food and cash crops throughout the year improves food groups consumed and purchasing power.

Figure 2: Distribution of HDDS by gender of decision-maker and FISP participation



The relationship between enhancing production and food security through improving women access to inputs is mediated by several factors. The factors that influence a high HDDS for both gendered households included: education level which increases the probability by 11% and 6.9%, productive assets possession which increased by 8% and 6%, and off-farm income which increased by 1.4% and 1.5% for households with FDMs and MDMs, respectively.

Other factors such as total farm land accessed and access to extension agents increased the probability of having high HDDS by 3.4% and 2.8%, respectively, only among FDMs' households.

Policy implications

- Generally, crop diversification is low, hence the need to intensify agricultural diversification efforts aimed at improving food and nutrition security.
- Increasing access to land particularly for households with FDMs increases the cropping area, productivity and scope of agricultural diversification, thereby enhancing HDD.
- Educated decision-makers are aware and understand the nutritional health benefits, hence are likely to produce or allocate their household food budgets to food groups that are nutritionally rich in micronutrients.
- Bringing markets closer to rural households facilitates access to produce markets, thereby enhancing incomes that can be used to buy diversified foods.
- Increasing off-farm income results in enhanced households' purchasing power and improved diets.

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Mission

To strengthen local capacity for conducting independent, rigorous inquiry into the problems facing the management of economies in sub-Saharan Africa.

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