

Sunflower Value Chain in Mvomero District: Engendered Perspective

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Abstract : Gender inequality exists in many agricultural value chains. This study analyzed gender participation along the Sunflower Value Chain (SVC). A cross-sectional research design was adopted and the combination of systematic and random sampling techniques was used to select 132 respondents. The questionnaire and checklist for key informants were the main methods for data collection. Descriptive statistical analysis was used to compute the characteristics and distribution of respondents, gendered participation, processing and marketing of the sunflower products, and decisions making on income use. Conventional mapping was used to map SVC based on flow of products along the chain, and content analysis was used to analyze qualitative data collected from key informant's interviews. The study found that gender inequalities exist in the SVC in Mvomero District. The differences are attributable to differences in power relation with regard to access to and control of resources particularly those related to finances, decision making on income use and processing. The most lucrative nodes such as processing and marketing are dominated by men while women dominate less paying activities such as bird scaring, winnowing, grading and drying seeds. Thus, the study recommends to the government, non-governmental organizations and gender activists to continue advocate for the mainstreaming of gender issues along the SVC to ensure more women participation and benefit. The intervention should also ensure gender equity and equality among the actors in the chain so that women and men benefit equally or equitably due to their engagement in the SVC.

Keywords: *Gender, value chain, sunflower, participation*

1.0 INTRODUCTION

While gender equality of opportunity and women's empowerment are now widely recognised as integral and inseparable parts of any sustainable strategy for pro-poor development and decent Work (Mayoux and Mackie, 2008); yet, gender inequalities in agriculture are widely reported among Sub-Saharan African countries. The gender inequalities and differences are reported in the areas involving farmers' access to adequate productive resources such as land, credit, agricultural inputs, education, extension services, and appropriate technology which results in relative inefficiencies of male and female farmers (Ayoola *et al.*, 2012). Participation in the agricultural value chain in Tanzania is characterized with gender differentials from production, access, control and ownership of resources to marketing of raw and processed agro-produce (Spence, 2012). These differences between women and men in agriculture as well as Sunflower Value Chain (SVC) are a stumbling block which affects productivity and economic development of the involved community and country at large.

In Tanzania, 8 million smallholder farmers are involved in sunflower production. Sunflower is an attractive crop because it is relatively cheap to produce and tolerates drought (Abdallah, 2010; Ndongole, 2014). Traditionally, sunflower is considered as women's and poor man's subsistence crops, with small yields between 135 and 225 kg per acre (SNV, 2010). However, it is reported that at the household level, women have the role of crushing the pulp of sunflower and extracting oil for household consumption and small retail sales while men dominate transportation, marketing and processing of sunflower at the industrial level (Khahima, 2015).

Equal gendered participation in agricultural value chain plays an important role for household livelihood and poverty reduction. But it is reported that many value chain programmes are commonly designed and implemented without taking into consideration of

gender roles. A number of studies on sunflower production have been conducted (MUVI-SIDO, 2012; Liberio, 2012; MMA, 2010; Ugulumu, 2008) and some empirical evidence explaining gender inequalities and differences in sunflower production have been documented; but it is findings do not show the extent of gendered participation along the sunflower value chain. According to USAID (2015) in order to achieve sustainable improvement of productivity, and profitability inclusive value chain should not be taken for granted. Thus this paper was set to examine the gendered participation and differences among actors in the SVC. The findings may be useful to policy makers, researchers and other development partners espousing for gender equity and equality especially in the SVC in the study area.

The paper draws on social relations framework developed by Kabeer (1994). Different aspects of social relations shared by institutions and the relationships between socio-economic factors and gender participation were analysed basing on the framework to understand how gender inequalities influences rules (how things get done), resources (what is used and what is produced), people (who is in and who is out), activities (what is done) and power (who decides and whose interests are served) embedded in the sunflower value chain. According to Coles and Mitchell (2011) gender dynamics in value chains depicts how individual interacts at the household level through clusters of horizontally linked households and participation related issues versus factors such as land, labour, capital and other factors and assets that govern levels of gains from participation. Basing on its main idea that the aim of development is human well-being, which consists of survival, security and autonomy; then the strengths of the framework includes: one the framework sees poverty as not just material deprivation but also social marginalisation; second the framework conceptualises gender as central to development thinking, not an add-on to mention just few (ILO, 1998). However, despite its strength the framework has some limitations which include: one the framework examines all cross-cutting inequalities, gender can get

subsumed under other analytical categories; second is that the framework can appear complicated, detailed and demanding. Therefore, the reason behind adopting this framework is that since the objective of the study was to examine gendered participation and differences among SVC actors, then by using this framework it was possible to understand the existence of marginalisation and its impacts to development.

2.0 METHODOLOGY

The study was conducted in Mlali ward, Mvomero District in Morogoro Region. The ward was selected purposively because sunflower is among the main cash crops produced in the district and has attracted many smallholders' farmers to engage in its production. Mlali ward is also the second leading in sunflower production at district level (Liberio, 2012; EPINAV, 2012; Kawamala, 2012). Four villages Mlali, Manza, Vitonga and Yowe that are actively involved in sunflower production and processing were purposively selected based on actual production, and potential production from farm expansion. A cross-sectional research design was adopted in this study. A combination of systematic and random sampling techniques was used; and a sample of 132 SVC's actors was selected to participate in the study. The questionnaire, which was the main tool for data collection was used to collect information on socio-demographic characteristics of the respondents, input supply, volumes produced, processing and refining, retailing, prices and sunflower products and by-products. Key informant interviews were conducted with sunflower processors, traders, input suppliers, agricultural extension officers, and village and ward leaders to supplement information collected through structured questionnaires. Conventional mapping was used for mapping SVC whereby the key actors and their roles at different nodes of SVC were identified. Descriptive statistics were used to show the distribution of respondents, product flow, prices, and products markets and their characteristics.

3.0 RESULTS AND DISCUSSION Socio-Economic Characteristics of Respondents

Findings on the socio-economic characteristics presented in Table 1 reveal that majority of respondents had lower levels of education. Slightly more than half of the respondents were males and farming was their main economic activity. The family sizes of the surveyed household were in the range of 2 and 13 with the mean family size of 5.6. The study also found that relative older people were engaged in sunflower production. Similar findings have also been reported by other scholars where youth were less likely to be attracted and involved in agricultural production (Lekunze *et al.*, 2011; African Agricultural Technology Foundation (AATF), (2009).

Table 1: Socio-economic characteristics of the respondents (n=132)

Characteristics	Frequency	Percentage
Sex		
Male	69	52.3
Female	63	47.7
Education level of husband		
Illiterate	10	6.9
Primary	46	66.7
Secondary	11	23.4
Post-secondary	2	3.0
Education level of spouse		
Illiterate	15	23.8
Primary	43	68.3
Secondary	4	6.3
Post-secondary	1	1.6
Primary occupation		
Farming	120	90.9
Civil servant	5	3.8
Business	7	5.3
Total	132	100

Mapping of Gendered Participation Differences in Sunflower Value Chain

Findings on gendered participation and flow of sunflower in the chain are presented in Figure 1. The sunflower value chain in Mvomero District is characterized by the following nodes: farming, processing, trading and consumption. The upstream flow of goods involves inputs suppliers, farmers, processors, retailers and ultimate consumers, and the downstream flow involves farmers and input suppliers, processors and farmers, consumers and retailers and retailers and processors as well as farmers who sell the refined products to retailers and consumers at local markets. Sunflower products (seeds, sunflower, cooking oil and animal cakes) exchange many hands before they reach their final consumers. This study identified the two major channels through which the sunflower and its products moved from the point of inputs supply to the final consumers: input suppliers, smallholder farmers, processors and retailers.

Input supply

Through interview the study identified five input suppliers. The main inputs supplied that determined productivity of sunflower in the study area were seeds and pesticides. These were supplied by the programme for Enhancing Pro-poor Innovation in Natural Resources and Agricultural Value Chain project (EPINAV), Agriculture Seed Agency (ASA), agro shops processors and individual farmers. Moreover, extension officers also helped in supplying the inputs or linked the farmers to input suppliers, mostly through established farmer groups. In this node there is less participation of women, because females are less involved in buying and selling cash oriented crops this is due to gender roles and other cultural factors such as men's control on women mobility. Similar trends of gender based constraints particularly in agricultural value chain have also been reported (Wyrod 2008; Sambrook, 2011; Riisgaard *et al.*, 2011; Leavens and Anderson, 2011; Jeckoniah *et al.*, 2013).

Sunflower production

Production is a labour intensive enterprise; it involves a diversity of procedures such as land preparation, ploughing, sowing seeds, weeding, bird scaring, harvesting and transporting before sale. Traditionally, some activities are perceived as men's or women's activities. Findings as presented in Table 2 revealed that land preparation was perceived (90.7%) by many as men's work while only 54.2% perceived it as women's work. However, other activities are performed by both men and women; for instance land ploughing, sowing seeds, weeding and harvesting of sunflower. This gender division of labour might be due to socio-cultural contexts as perceived in the study area. Similar findings have also been reported in literature (Jeckoniah *et al.*, 2013).

Table 2: Gendered participation in SVC activities (n=132)

Activity	Gender categories	Percentage	
		Yes	No
Land preparation	Husband	90.7	9.3
	Wife	54.2	45.8
Land ploughing	Husband	88.2	11.8
	Wife	79.0	21.0
Sowing	Husband	90.0	10.0
	Wife	95.8	4.2
Weeding	Husband	87.5	12.5
	Wife	88.3	11.7
Bird scaring	Husband	30.1	69.9
	Wife	74.3	25.7
Harvesting	Husband	95.0	5.0
	Wife	97.5	2.5
Crashing	Husband	60.8	39.2
	Wife	96.7	3.3
Transportation	Husband	95.8	4.2
	Wife	22.5	77.5

Processing and refining

The participation in sunflower oil processing has a gender dimension. Sex-wise the processing and refining of crude sunflower oil is usually

done by men, but at household (individual) level refining of crude oil is done by women. However, the interview with a key informant, and relying on the processors' register revealed that the participation of men and women in the two areas was influenced with the distance from home to the processing unit. For example, while 20% of women went to the processing unit compared to 80% of men in Kipera which was 8 to 10 km from Manza and 3-4 km from Vitonga, the experience in Yowe which took 0-0.5 km from home to the processing unit, shows that 70% of customers went to the processing unit were women compared to 30% who were men (*Sunflower processing machine operator at Kipera village, 9th January 2015*). Due to other that women are mostly involved in household chores and are therefore less likely to actively participate into processing. Other scholars including Zahoor *et al.* (2013) found that women have barriers that affect their participation in the post-harvest activities particularly processing.

Table 3: Participation in sunflower processing and marketing (n=132)

Activity	Gender categories	Percentage	
		Yes	No
Drying	Male	10.2	89.8
	Female	98.3	1.7
Winnowing and grading	Male	14.2	85.8
	Female	98.3	1.7
Packaging	Male	95.0	5.0
	Female	23.3	76.7
Processing	Male	95.0	5.0
	Female	10.8	89.2
Marketing	Male	93.3	6.7
	Female	21.8	78.2

In most cases after processing the sunflower seeds, the crude oil is returned to the owner of the produce for refining. However, before sending sunflower seeds to the processing unit, women are responsible for drying, winnowing and grading at the households level. These activities are mainly done by women (Table 3).

Marketing of sunflower products

As it has been identified earlier there were three sunflower products produced by the smallholder farmers. These were sold to final consumers by retailers, individual farmers and processors. There were two major markets or customers for sunflower products: local and urban consumers (Figure 1). However, the most leading market where the majority of farmers said to be selling their sunflower by-products was the neighbouring village. Marketing of sunflower were also dominated by men.

Decision making on income use

The findings on decision making over the use of income are presented in Table 4 where it was revealed that men dominated the household decision final use of the income accrued from sunflower production. This finding implies that male in the study area had more power of decision making at the household level compared to their female counterparts.

Table 4: Decision over income use at the household level (n=132)

Activity	Gender categories	Responses in %	
		Yes	No
Decision making on income use	Male	99.2	0.8
	Female	68.3	31.7

Sunflower products consumption

The sunflower products that are produced in Mlali ward pass through many hands before they reach the final consumers in both local and urban markets. It was observed that consumers in different markets would have influence on the quality of the sunflower oil produced and sold. According to one of the small traders; *“Customers from Mlali preferred buying oil from Singida to those from Kipera village due to colour and bad test”* (A trader from Mlali village highlighted on 9th January, 2015). But this information contradicts with the information

from one Kipera processing unit staff who says; “*customers coming to Kipera from Mgeta, Mzumbe and some from Morogoro urban and Dar es salaam make sure that they do not leave the area without sunflower oil from Mlali, due to assurance of quality of which to him even Tanzania Food and Drugs Authority (TFDA) have already visited them and recommended the quality of oil being good for human consumption.*” (Processor from Kipera village 9th January, 2015).

4.0 CONCLUSION AND RECOMMENDATIONS

On the basis of the findings presented in this study, it is concluded that there is gender inequalities in some nodes of the sunflower value chain in Mvomero District. The differences are attributable to differences in power relation with regard to access to and control of resources particularly activities that have financial implication, decision making on income use and processing. The most lucrative nodes such processing and marketing are dominated by men while women dominate less paying activities such as bird scaring, winnowing, grading and drying seeds.

The paper therefore recommends to the government, non-governmental organizations and gender activists to continue advocate for the mainstreaming gender along the SVC to ensure more women participation. The intervention should also ensure gender equity and equality among the actors in the chain so that women and men benefit equally or equitably due to their engagement in the SVC.

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