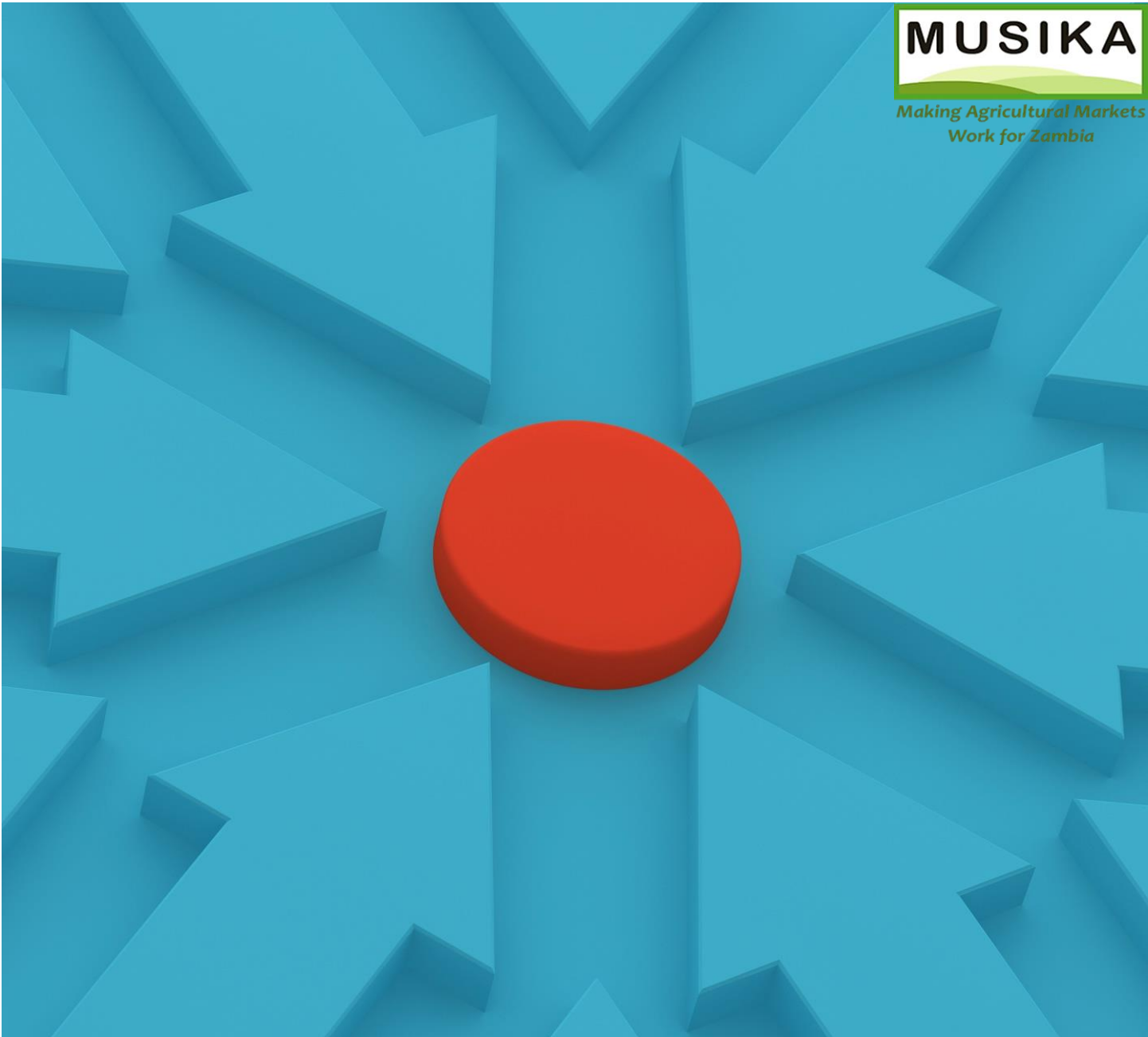




MUSIKA

Making Agricultural Markets
Work for Zambia

FACTORS AFFECTING WOMEN AND YOUTHS' PARTICIPATION IN AGRIBUSINESSES.

*A CASE OF THE POULTRY AND GROUNDNUT
VALUE CHAINS, AND WOMEN AND YOUTH-OWNED
AGRIBUSINESSES.*

©Musika Development Initiatives Ltd - 2022

FOREWORD

Musika is an independent Zambian non-profit company that stimulates and supports private sector investment in the smallholder market. Musika uses the Market Systems Development (MSD) approach to fundamentally change the way agricultural markets work through establishment of mutually beneficial commercial linkages between the corporate clients and the relatively marginalized rural farming communities. Musika wishes to acknowledge the financial support of Musika acknowledges and appreciates the financial support from the Swedish Embassy in Lusaka.

DISCLAIMER:

The views and information expressed in this report are those of the author(s). Whilst due diligence was employed in preparing this document, Musika accepts no liabilities for any losses or damages of whatsoever kind which any person or institution may suffer because of any action or decision taken based on information contained herein.

Questions and comments should be directed to the Research Manager, 6, Tukuluho Road, Long acres, Lusaka: +260 211 253 989; fax +260 211 255 502; email: timothy@musika.org.zm

ACKNOWLEDGEMENTS

The authors would like to thank professionals and individuals under the Ministry of Agriculture, Ministry of Livestock and Fisheries both at District and Provincial level, Small and Medium Enterprises (SMEs), Processors, Ward Development Committees (WDCs), District Women Associations (DWAs). Many thanks also go to the Musika staff, enumerators and farmers across the country that participated in this data collection exercise.

EXECUTIVE SUMMARY

This study was conducted by Musika to gain a broader understanding on various factors that affect the women and youths' participation in agribusinesses in Zambia, particularly, in the groundnut and poultry value-chains. The study interviewed Key Informants (KI) and farmers through Focus Group Discussions (FGDs) as well as quantitative data using Agribusiness Accelerate Initiative (AAI) endline survey data collected in 2021. The data was then analyzed for the variables of interest. Some of the key findings included:

- **Groundnuts:** farmers rarely used hybrid groundnut seed. The majority did not know of any input suppliers or firms that supplied improved groundnut varieties on the market nor where to find the improved seeds. This was equally observed by key informants that cited having limited knowledge on suppliers of groundnut seed (improved varieties) as well as the prevailing market prices for such inputs. Farmers also felt that there was inadequate availability of an assured market for groundnuts.
 - **Key Challenges:** some of the key constraints highlighted by farmers in this sub sector included: inadequate access to properly structured output markets, lack of access to affordable farming implements i.e., shellers and processors that makes the production process less labor intensive, lack of improved seed and agro-chemicals which often resulted in lower yields, equally price instability on the market which discouraged participation in the groundnuts market.
- **Poultry:** despite most rural households being engaged in poultry, mostly free-range indigenous chicken rearing, the rural poultry sub sector remains highly underdeveloped with informal linkages between producers and consumers. Farmers were significantly constrained in production resources and support much needed in improving their production levels. Most of the farmers did not receive veterinary extension services on poultry production neither from public (87%) nor private (54%) extension service providers.
 - **Key Challenges:** for farmers that were engaged in the production of poultry, disease prevalence was cited as a major obstacle. The farmers cited three major reasons for high disease occurrence; firstly, most of the farmers had inadequate training on poultry production. Secondly, farmers felt that the local veterinary service providers were not prompt enough in providing response to poultry related diseases as compared to cattle

diseases, this resulted in high mortality rates. Thirdly, farmers stated that they lacked access to most of the inputs (feed, vaccines and drugs) in their local/village markets. They had to cover long distances to district markets to access such production resources.

- **Factors affecting operations of SMEs:** despite the critical role that Micro, Small and Medium Enterprises (MSMEs) play in contributing to the local economy, the study found that operational costs and access to credit facilities were the most critical factors that affected their participation in agribusinesses.
 - **Youth:** operational costs and access to commercial finance were found to be critical factors that significantly, and negatively affected the participation of youths in agricultural enterprises. Considerable improvements, particularly in enhancing access to credit facilities can play a key role in facilitating improved business performance and possible expansion.
 - **Women:** operational costs, access to credit and financial skills and trainings were found to be important factors for women run SMEs. Access to credit by businesses has been a major constraint for a long time.
 - **Youths and Women:** these key stakeholders remain largely marginalized as their access to credit averaged 23% and 20% between 2017 and 2021, respectively, and this trend has remained relatively unchanged. And this is despite MSMEs registration and formalization having improved by 156% between 2017 and 2020.

Table of Contents

<i>Foreword</i>	i
<i>Disclaimer:</i>	i
Acknowledgements.....	ii
Executive Summary	iii
List of FIGURES	vi
List of TABLES	vi
Abbreviations and Acronyms	vii
1.0 INTRODUCTION	1
1.1 Background.....	1
1.2 Study Objectives	2
1.2. 1 Specific Objectives	2
1.3 Methodology	3
2.0 Key Findings.....	4
2.1 Demographics	4
2.2 Factors Affecting Women Participation in The Groundnuts Value Chain	6
Major Challenge: Access to assured output markets by smallholder farmers	11
Other Challenges – <i>Groundnuts (Women)</i>	12
2.3 Factors Affecting Women’s Participation in The Poultry Value Chain.....	13
Major Challenge: High Disease Prevalence.....	16
2.4 Factors Affecting Youth Participation in The Groundnut and Poultry Value Chain	18
Poultry - Youth	18
Poultry – Challenges (Youth)	19
Groundnuts - (Youth).....	20
Groundnuts - Challenges (Youth)	20
2.5 Factors Affecting the Participation and Growth of Women and Youth Run-Agribusinesses.....	21
Factors Affecting Operations of SMEs	21
Recommendations.....	23
Appendix.....	24

LIST OF FIGURES

Figure 2. 1 Age distribution of women and youth SMEs.....	5
Figure 2. 2: Major livestock reared by women groundnuts farmers.....	7
Figure 2. 3: Main reason women farmers cultivated groundnuts	8
Figure 2. 4: Household labor involvement in the groundnut value chain by gender.....	9
Figure 2. 5: Major Varieties grown by farmers.	10
Figure 2. 6: Major input suppliers for groundnut farmers	10
Figure 2. 7: Received support or extension promoting the production of groundnuts.	11
Figure 2. 8: Main reason women farmers reared poultry.....	13
Figure 2.9: Household labor requirements for groundnut production.	14
Figure 2. 10: Major Poultry Output Markets	14
Figure 2. 11: Source of Extension/Support.....	15
Figure 2. 12: Poultry Household Labor Requirements (Youth)	19
Figure 2. 13: Groundnuts Household Labor Requirements (Youth)	20
Figure 2. 14: Number of loan application Vs disbursement by MSMEs (2017- 2021).....	22
Figure 2. 15: Credit access by women Vs Youths (%) between 2017 and 2021	22

LIST OF TABLES

Table 2. 1: Distribution and Composition of FGDs, KIIs and Farmer Interviews	4
Table 2. 2: Years in Business.....	5
Table 2. 3: Type of SMEs	6
Table 1. 1: Factors Affecting SMEs Using OLS method.....	24

ABBREVIATIONS AND ACRONYMS

AAI	Agribusiness Accelerate Initiative
AWARE Project	The Accelerate Water and Agricultural Resources Efficiency Project
BoZ	Bank of Zambia
EU Commission	European Union
FAO	Food Agriculture Organization
FISP	Farmer Input Support Program
FGDs	Focus Group Discussions
KI	Key Informant
MoA	Ministry of Agriculture
MoLF	Ministry of Livestock and Fisheries
MSMEs	Micro, Small and Medium Enterprises
NGOs	Non-Governmental Organizations
RALS	Rural Agricultural Livelihood Survey
SMEs	Small and Medium Enterprises
SIFAZ	Sustainable Intensification of Smallholder Farming Systems in Zambia
SNV	Netherlands Development Organization

1.0 INTRODUCTION

1.1 Background

Agribusinesses, which include both Small and Medium Enterprises (SMEs) and farming enterprises, have the potential of fomenting economic activities for rural communities. SMEs constitute a major proportion of all firms in Zambia. They are also a focus of policy attention in relation to employment creation and poverty alleviation. Simuchimba *et al.*, (2020) estimates that employment by Micro, Small and Medium Enterprises (MSMEs) between 2019 and 2020 increased by 1.6%. Furthermore, the majority of MSMEs can employ between one and five full time employees (Lubinga and Sichilima, 2021). MSMEs are particularly important in the agricultural sector as not only do they encourage competitiveness and help in achieving a more equitable distribution of the benefits of economic growth but also act as a critical source of product and service information for smallholder farmers. Farming enterprises are, on the other hand, the most common economic activities for nearly 50% of Zambia's population that lives in rural areas (IAPRI, 2017). However, only 11% and 28% of youths¹ and women, respectively, are engaged in agriculture as rural households' main decision makers (RALS, 2019).

Like in many agribusinesses, women and youths face unique constraints in accessing enterprise resources. The constraints are more acute among women entrepreneurs who also face cultural barriers in their access to, ownership of, and control over resources which are all critical elements in determining their capacity to run agribusinesses (Sichilima *et al.*, 2016). And this is despite women playing a critical role as they own an estimated 42% of MSMEs and 36% of SMEs even though they are disadvantaged in starting and growing their businesses (World Bank, 2021). Nonetheless, huge potential for women led enterprises to contribute to the national economy remain; the estimated size of the women's market in Zambia is at ZMW 2.2 billion (USD 168.8 million), based on existing customers who have applied for loans and have not been able to access credit and women SMEs that have expressed demand for credit (World Bank, 2021). The other resource constrained key stakeholders are the youths who make up 75% of the country's population, but 28% of these youths who are economically active remain unemployed (Chigunta, 2013). And in terms of farming enterprises, there have been dynamics in terms of women's

¹ Refers to a person aged between 15 and 35 years old (National Youth Policy, 2015).

involvement in different enterprises and level of participation thereof. However, key value chains showing significant potential specifically for women involvement include legumes like groundnuts and small livestock (Mpundu and Sichilima, 2019).

The foregoing narrative therefore implies that women and youth entrepreneurs face distinct challenges that restrict the growth and sustenance of their businesses. Whilst different literature could be found especially on women involvement in agriculture, most of the analysis so far has been either at SME or farmer level (Ngoma and Sichilima, 2016; Mpundu and Sichilima, 2019; Lubinga and Sichilima, 2021; Lubungu et al., 2021). In most instances, especially at SME level, there has been little focus on factors affecting the participation of women and youths in agribusinesses. And this is despite the potential that enterprises have in providing key economic avenues that could improve the livelihoods and welfare for women and youths in general.

This study was conducted to identify pertinent factors affecting women and youths' participation in agribusinesses and offer recommendations that could help in addressing the key constraints. In providing focus to this study, the proposed value chains included groundnuts and poultry. The selection of these enterprises at farmer level was purely based on the potential these could provide for women and youth.

1.2 Study Objectives

This study sought to identify and analyze factors affecting women and youths' participation and growth in agribusinesses.

1.2. 1 Specific Objectives

- Identify factors affecting the participation and growth of women and youth run agribusinesses in Zambia.
- Assess perceptions of women and youth run agribusinesses on access to trainings and mentorship/coaching for their businesses.
- Evaluate the extent to which women and youth run businesses realized commercial linkages.
- Determine the main lines of businesses for women and youth entrepreneurs.
- Assess the extent of credit access (as well as access to information on credit facilities) by women and youth entrepreneurs.

1.3 Methodology

In order to answer the above objectives, a mixed methods approach was used (qualitative and quantitative methods). A qualitative study was conducted in four (4) provinces: Central, Northern, Eastern and Southern province. The study generated insights which cut across regions without necessarily capturing all provinces, as a representation to obtain significant points of reference for SME development. The quantitative research specifically relied on two sources of data: secondary data from Agribusiness Accelerate Initiatives (AAI) data collected in 2021, while the qualitative research relied on Focus Group Discussions (FGDs) with farmers and Key Informant Interviews (KII) with agro-dealer associations, distributors, processors, traders, government officials and other private sector players i.e., Non-Governmental Organizations (NGOs) etc.

2.0 Key Findings

2.1 Demographics

A total of 60 FGDs were held with smallholder farmers and 30 KIIs in the poultry and groundnuts value-chains in 7 districts: Chipata, Choma, Chisamba, Kasama, Monze, Mungwi and Shibuyunji, across 4 provinces (Central, Eastern, Northern and Southern). A total of 581 smallholder farmers were interviewed. Furthermore, close to half of the participants were female (287 women participants) whereas the least represented group was that of the youth with a total of 88 participants. The breakdown is as follows in table 2.1.

Table 2. 1: Distribution and Composition of FGDs, KIIs and Farmer Interviews

Category	Central	Eastern	Northern	Southern	Total
Total number of FGDs and KIIs	<i>16</i>	<i>24</i>	<i>22</i>	<i>28</i>	<i>90</i>
<i>Number of Groundnuts FGDs</i>	6	12	5	8	31
<i>Number of Poultry FGDs</i>	5	7	7	10	29
<i>Number of KIIs</i>	5	5	10	10	30
Individual (Farmer) Level					
<i>Total Number of Participants</i>	95	214	99	173	581
<i>Number of Women Participants</i>	38	99	63	87	287
<i>Number of Men Participants</i>	42	82	22	60	206
<i>Number of Youth Participants</i>	15	33	14	26	88

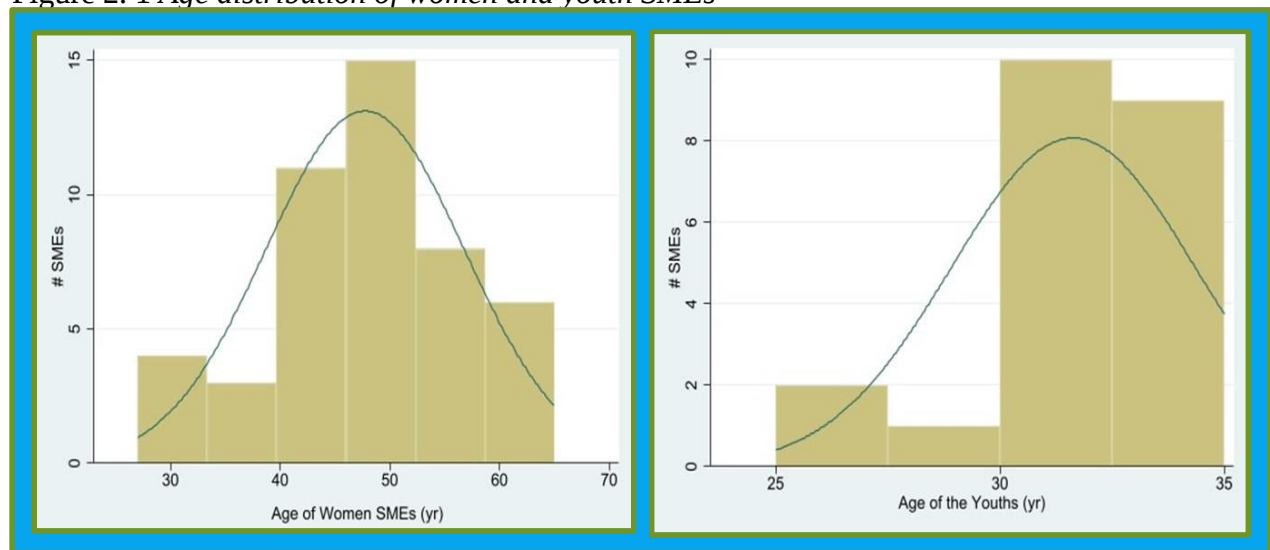
Source: Field Study 2022.

Age distribution of the SMEs

A total of 196 women and youth SMEs² were also sampled and interviewed during the 2021 AAI SME survey across six (6) regions: Central, Eastern, Northern, North-Western, Southern and Western province. And from the total sample, 24% of the SMEs were women owned (n=48) while 11% (n=22) were owned by youths. The average age of women SMEs was 48 years. The average age of SMEs who were youths was 32 years, only 10% of women SMEs (n=5) were youths. The distribution is as shown below.

²SMEs were categorized according to the classifications by the Ministry of Commerce Trade and Industry (MCTI) through the Micro, Small and Medium Enterprise (MSME) Development Policy-turnover was mainly used. Most of the enterprises captured fell under the medium enterprises, however, this study adopted the term “SME” loosely to also include micro enterprises.

Figure 2. 1 Age distribution of women and youth SMEs



Source: Musika - AAI SME Study 2021

Years in Business

On average, both male and female SMEs had been in operation for 7 years. Majority of the youths had been in business for 4 to 6 years just like the majority of the men and adult women, see table 2.2 below. The majority of youthful women however, had been in business for 1 to 3 years.

Table 2. 2: Years in Business

Years in Business	Youths	Adult Women	Women (Youths)	Adult Men
1-3	32%	17%	40%	12%
4-6	45%	31%	20%	36%
7-9	18%	17%	20%	21%
10-12	5%	21%	20%	15%
13-15	0%	6%	0%	7%
16-18	0%	6%	0%	4%
19-21	0%	2%	0%	4%

Source: Musika - AAI SME Study 2021

Type of SMEs

Most SMEs were operating agro-dealership type of businesses, and this was also the most common type of business that youths and women were engaged in. This was followed by aggregation across the board except in the case of youthful women who had no one involved in that type of business as all of them (100%) were involved in agro-dealership. Co-operatives were only ventured into by females as can be seen below.

Table 2. 3: Type of SMEs

Type of SME	Youths	Adult Female	Women (Youths)	Male
Transport	0%	2%	0%	1%
Agro dealer	91%	85%	100%	87%
Food Processing	0%	2%	0%	3%
Cooperative	0%	4%	0%	0%
Aggregator	5%	4%	0%	5%
Fish Farming	0%	0%	0%	2%
Horticulture	0%	2%	0%	1%

Source: Musika - AAI SME Study 2021.

2.2 Factors Affecting Women Participation in the Groundnuts Value Chain

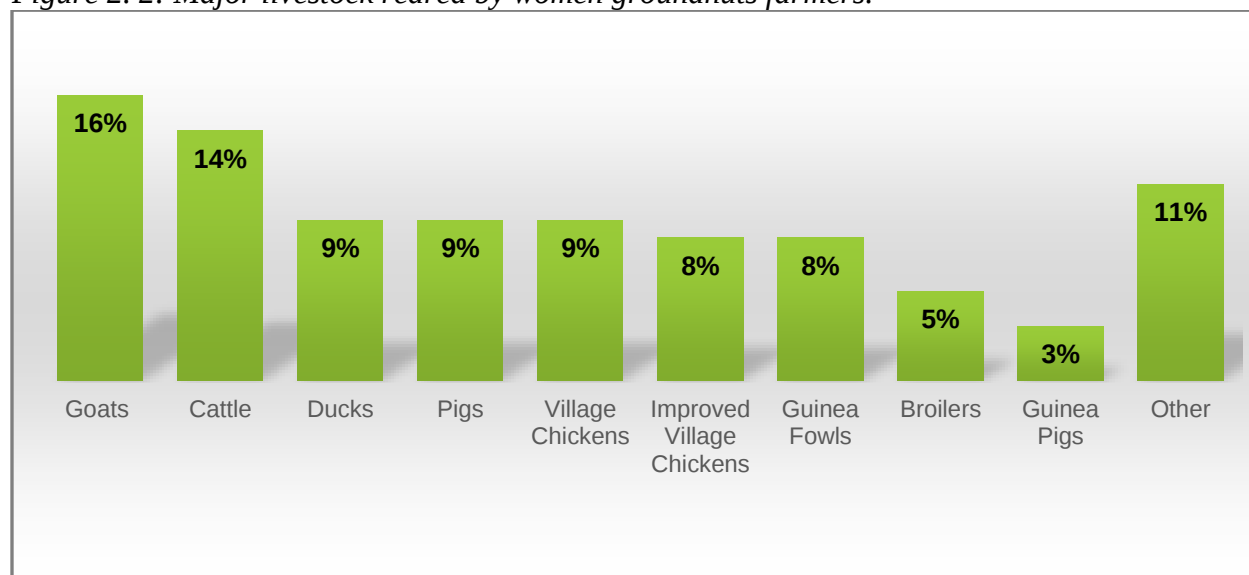
2.2.1 Major crops grown by Women Groundnut farmers

Most of the farmer groups interviewed cited maize as the most grown crop. It was also noted that most male farmers had focused on the cultivation of maize as it was considered a major cash crop. This finding is corroborated by the Rural Agricultural Livelihood Survey (2019) that showed that the majority of households in Zambia grew maize, with a national average of 90%. It was also observed that farmers had also engaged in the production of legumes (groundnuts 14% and soyabeans 12%). It was found that smallholder farmers were cultivating soyabeans due to increased demand for soyabeans, in the past decade (2010-2020), the production of soyabeans has grown by 165% (ZSA, 2021). Key informants in Central Province noted that farmers were slowly transitioning to growing soyabeans as it was observed to be more profitable to cultivate.

In terms of livestock, most of the farmer groups interviewed indicated that goats were the most reared livestock, with 16% of the groups interviewed stating that they were engaged in rearing goats. While it was also observed that farmers reared cattle (14%), most of the households were reported to have engaged in poultry production. For women farmers engaged in the production of poultry, the majority stated that they participated in making decisions over the revenue generated from poultry sales, with generally higher participation/control on revenue earned from poultry observed on revenue earned from village chickens compared to broiler chickens. Additionally, fewer women stated that they did not need to obtain permission to sale poultry and further they could use the revenue earned in any manner they preferred. They also stated they were able to use the income earned from poultry to cater for personal expenses as women. Poultry farming was also the most widely adopted income and climate change coping mechanism. Furthermore, women

farmers mostly reared goats and village chickens compared to cattle as they felt that small livestock were easier to manage and were comparatively less costly, see figure below.

Figure 2. 2: Major livestock reared by women groundnuts farmers.



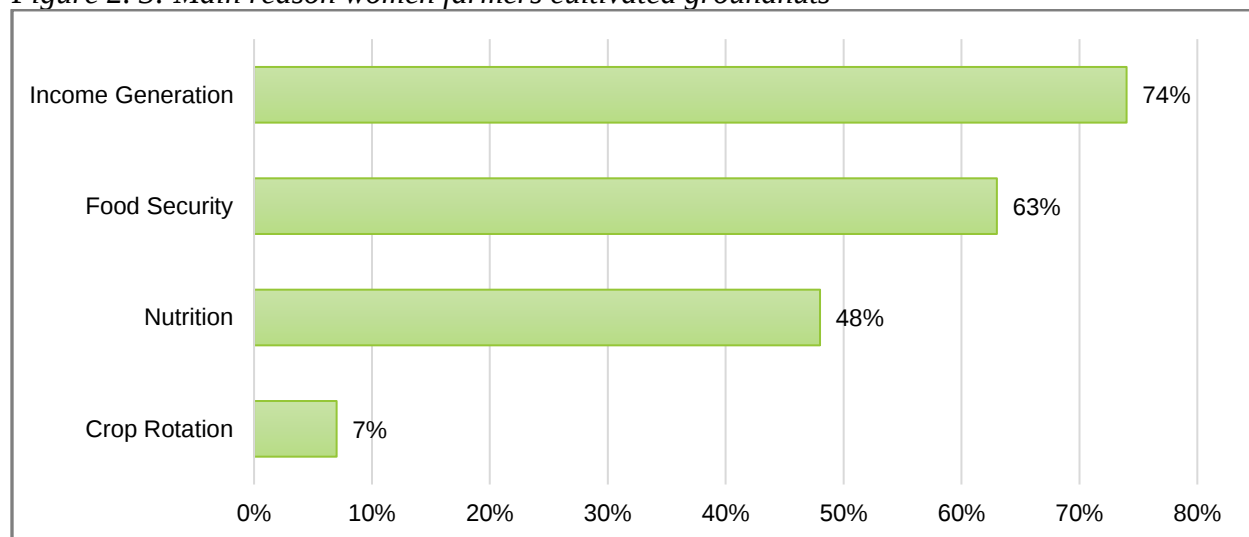
Source: Factors Study Data and Author's compilation

Most of the women farmer groups interviewed (75%) cultivated groundnuts for income generation purposes. As earlier stated, most of the women farmers cultivated this crop as an income coping mechanism as it assisted women to supplement income for household food requirements and non-food requirements i.e., groceries, income for personal use. One woman farmer stated,

“I usually just sell a Meda of groundnuts to carter for small expenses in the household such as, replacing pens and pencils for my children during the month”.

Women farmer groups also cultivated this crop to safeguard household food security (63%) as well as to guarantee household nutrition (48%), high participation of women farmers in groundnut production was also due to the cultural perceptions around the crop groundnuts as it was considered a feminine crop. See graph below for reasons in engaging in groundnut production by women.

Figure 2. 3: Main reason women farmers cultivated groundnuts

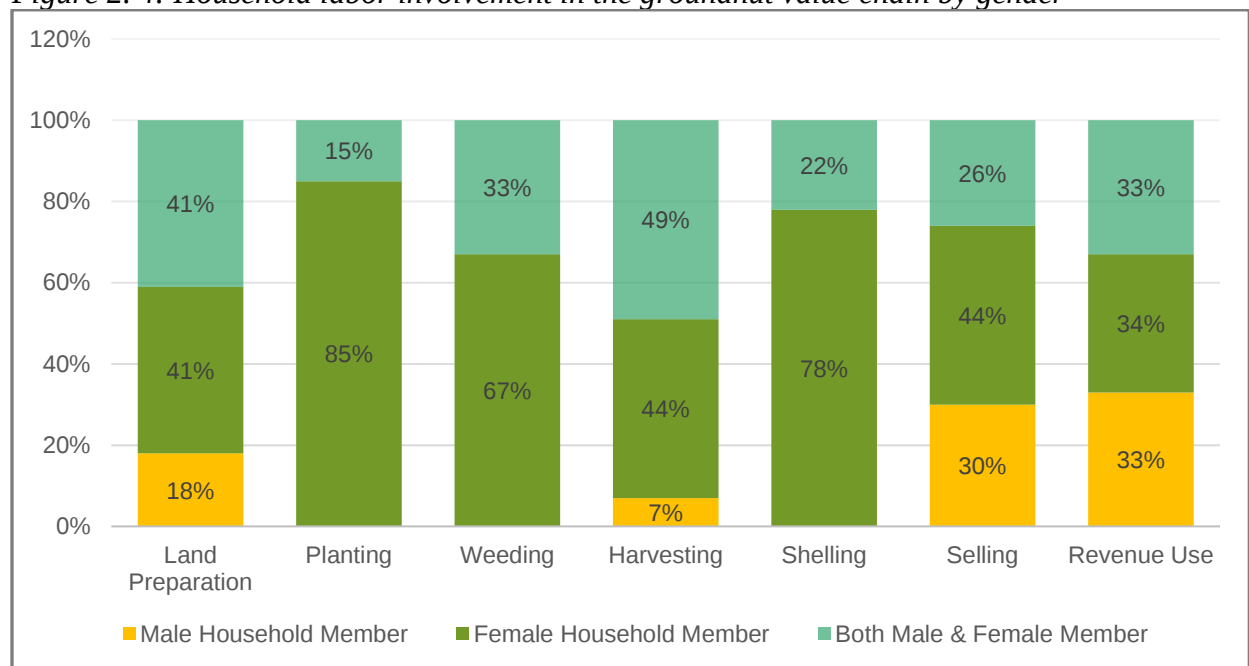


Source: Factors Study Data and Author's compilation

In terms of production activities, and level of women participation, it was revealed that female household members contributed most of the labour at planting (85%), weeding (67%) and shelling (78%). Women farmers also stated that groundnuts were a labor-intensive crop and this inhibited increase in land size required for production, as such, most women farmers usually cultivated small pieces of land. The average land size apportioned for groundnut cultivation by women farmers was a Lima (0.25 Hectares). Furthermore, it was observed that male household members had the highest participation at land preparation due to the intensity of labour required and during marketing activities.

Although, men contributed labor for land preparation, it was mostly women and children that were known to sow seeds as the men ploughed especially when animal draught power was used. During harvesting (49%) and land preparation (41%) it was observed that both male and female household members contributed labour for the stated activities. Despite women's relative dominance in production activities for groundnuts, decision making over revenue use was fairly split. In certain instances, women felt that they had little authority over the use of revenue generated from groundnut sales. As can be seen below, the highest participation levels of male household members in the value-chain were at revenue use.

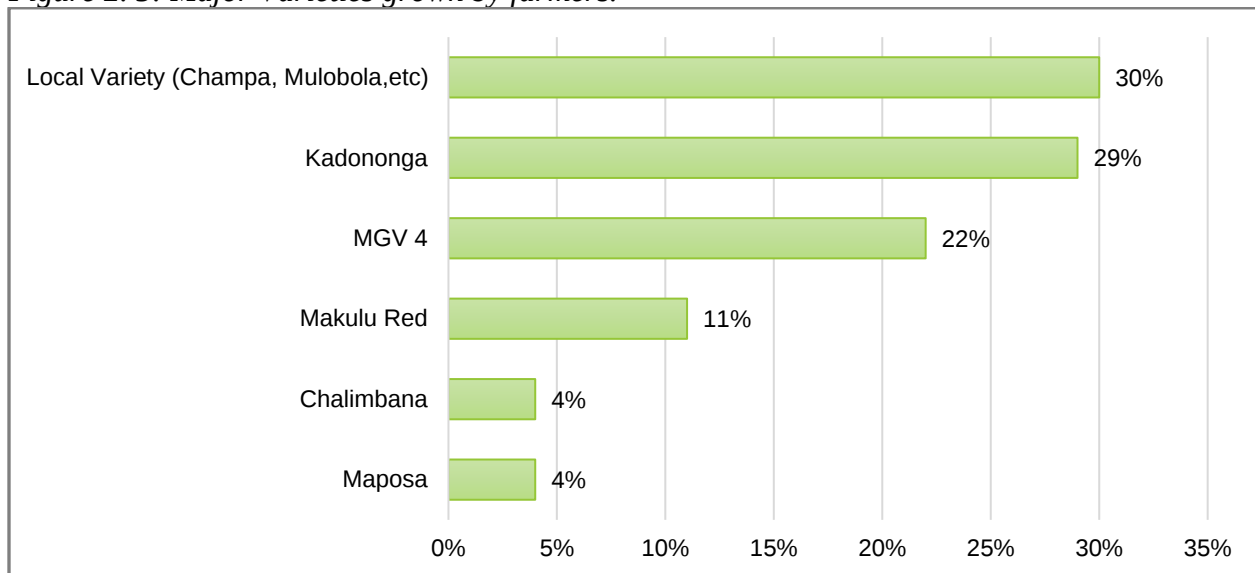
Figure 2. 4: Household labor involvement in the groundnut value chain by gender



Source: Factors Study Data and Author's compilation

Use of recycled seed amongst farmers was high. Most of the farmers interviewed stated that they used recycled seed sourced from fellow farmers or stored from previous harvest, and this was the case even when they claimed to have used improved varieties as the hybrid seed varieties were recycled. It was noted that farmers rarely used hybrid seed as the majority did not know of any input suppliers that supplied improved varieties on the market nor where to find the improved seeds. This was equally observed by key informants that cited having had limited knowledge on local suppliers of groundnut seed (improved varieties) as well as the prevailing market prices for the inputs. This was especially observed in some parts of Northern, Central and Southern Provinces. In certain instances, farmers mentioned they had access to improved varieties of groundnut seed through the Farmer Input Support Program (FISP). In the case of Eastern province, Good Nature Agro was singled-out as a firm that offered improved seed varieties and sold it on loan basis with payment plans that included payments in kind through grain exchange of harvested produce. Strangely, some farmers also stated that they had noted lower yields when they used improved variety of groundnuts in contrast when they had used recycled seed. Although this observation was purely based on the perception of the farmers, such perceptions if not well investigated can reinforce and sustain the low adoption rates of improved seed varieties as farmer might not appreciate any value proportion of the latter.

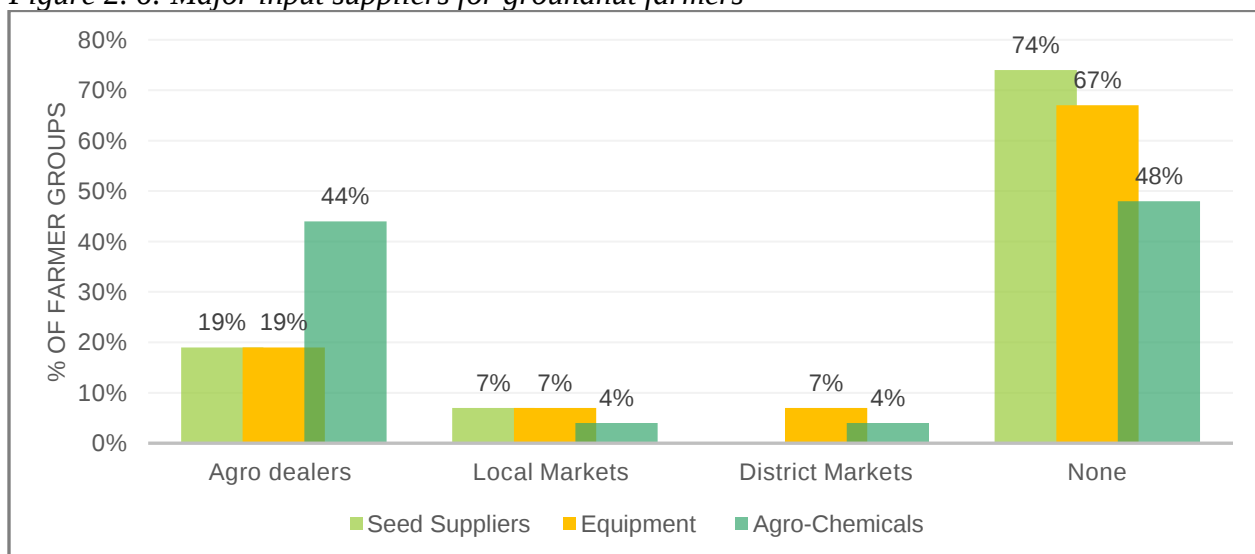
Figure 2. 5: Major Varieties grown by farmers.



Source: Factors Study Data and Author's compilation

Generally, farmer groups interviewed, felt that there was lack of access to improved groundnut seed varieties (74%) and agricultural equipment in their communities. It was observed that women typically did not have access to inputs for groundnuts such as improved seed and agro-chemicals. It was also deduced from the key informants that mechanization services were mostly offered by individuals who privately owned tractors and offered tillage services at a fee to smallholder farmers. Agro dealers (44%) were the most common source of inputs for the farmers, see graph below.

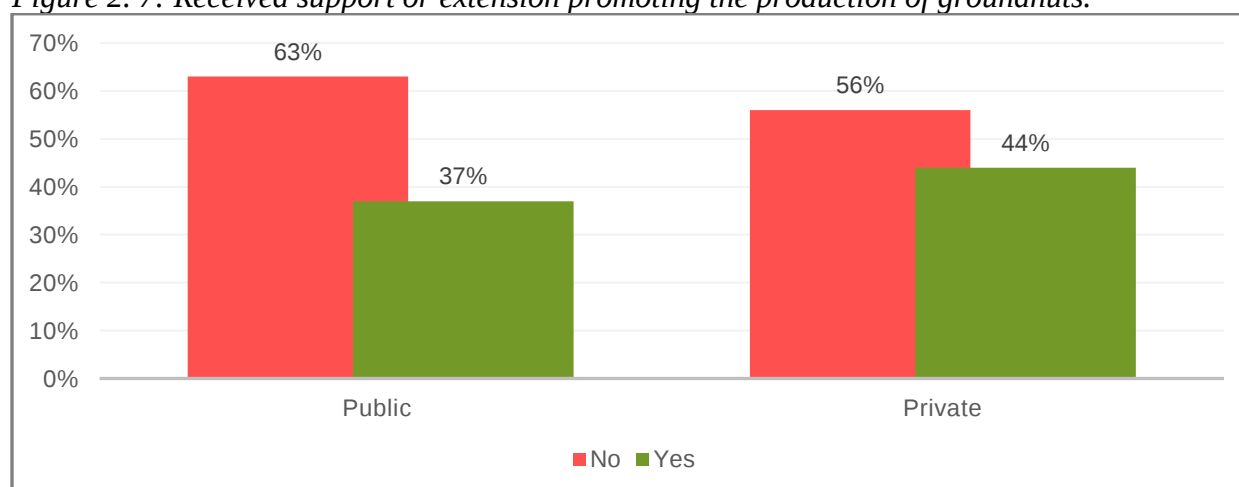
Figure 2. 6: Major input suppliers for groundnut farmers



Source: Factors Study Data and Author's compilation

Generally, smallholder farmers did not access extension services for groundnuts production whether from public (63%) or private (56%) extension sources on groundnut production and management. Most women felt that they had inadequate training on groundnuts production. This observation was corroborated by Key Informants who stated that they had limited knowledge on programs and projects that offered support for groundnuts production. However, some of the notable projects cited that offered either support and/or training included; CARE International, SIFAZ Project implemented by FAO in collaboration with MoA, Self-help Africa, Caritas Zambia, AWARE Project implemented by the EU Commission in collaboration with GIZ, MoA, Good Nature Agro, COMACO etc. Women farmers also stated that since groundnuts production was labor intensive, they preferred support that ensured that production was less intensive.

Figure 2. 7: Received support or extension promoting the production of groundnuts.



Source: Factors Study Data and Author's compilation

Major Challenge: Access to assured output markets by smallholder farmers

Generally, farmers stated that they usually had to cover long distances to viable markets located in the district central business areas. This was due to a lack of assured output markets in their localities. This meant that farmers had to incur high transportation costs. Other market challenges included inadequate access to affordable farming implements i.e., shellers and processors that could have made the production process less labor intensive, lack of improved seed and agro-chemicals which often resulted in lower yields. Another critical challenge was price instability on the market which discouraged participation in the groundnuts market. And for farmers linked to FISP or out grower schemes, late supply of inputs also affected their yields and production. Some

farmers also stated that apart from the out-grower schemes, there was no alternative output market for groundnuts in their communities. Some women farmers also observed that those that did not belong to a cooperative were unable to find alternative output markets within their communities. Farmers also observed that there was a lot of distrust and lack of transparency between the farmers and some vendors who came to buy in the community. The vendors often purchased from farmers at low prices and re-sold to off takers at much higher prices. Farmers also cited that the prevailing market prices were too low compared to other cash crops like soya beans.

Other Challenges – Groundnuts (Women)

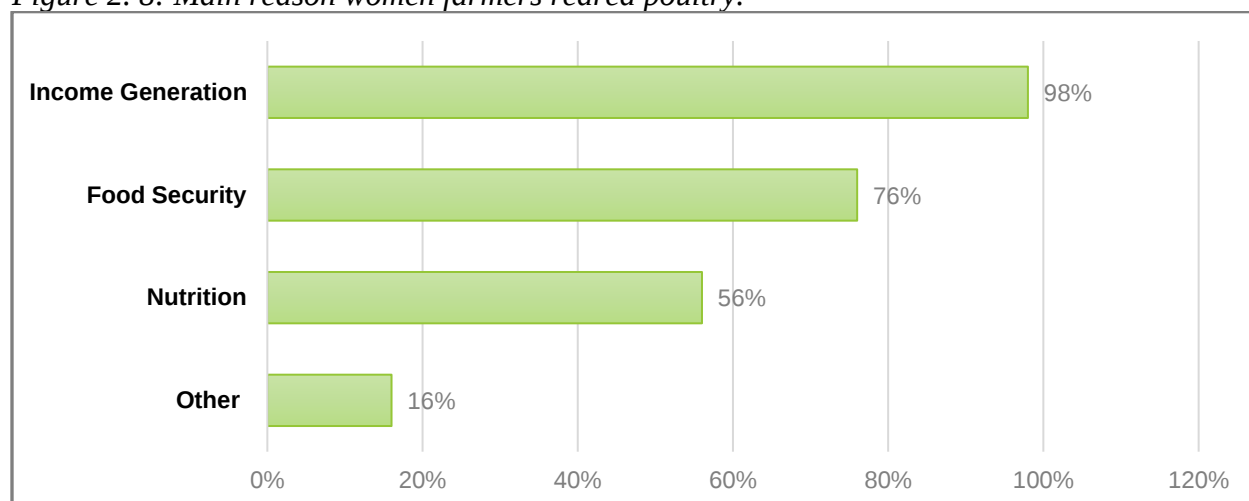
- *Climate change effects:* climate change effects such as poor rainfall and/or inconsistent rainfall patterns coupled with poor soil fertility contributed to stunting of the crop, which also affected yields.
- *Labor intensive:* farmers felt that groundnuts production was labor intensive especially at cultivation, land preparation and weeding. This was especially the case for farmers that did not have animals for draught power and had to hire labor which was usually expensive.
- *Lack of inputs:* generally, farmers lacked appropriate inputs for their production and processing of groundnuts. Farmers lacked inputs such as lime, lack of machinery or equipment (farming implements) e.g., ploughs, shelling equipment etc., lack of improved seeds, delayed farming inputs especially for farmers under FISP. Part of the reason for the inadequate access to inputs was the lack of access to finance. This also contributed to low yield levels.
- *Lack of training/extension:* farmers observed that there was less support for groundnuts production compared to maize as it was regarded as a cash crop. Extension service provision, especially by the public sector was much more concentrated on maize production.
- *Land Rights:* most women did not have land rights; they mostly used their spouses' land for farming. This essentially meant that land allocated to the cultivation of groundnuts was less compared to other cash crops such as maize and soyabeans. Groundnuts production was also given lesser priority as it was perceived to be a feminine crop and labor intensive. This observation was more pronounced for women from male headed households who usually had little decision-making authority in land allocation towards crops.

- *Diseases and Pests:* farmers experienced a lot of diseases and pests which affected groundnuts production. Some of these diseases were due to the continued use of recycled seeds from own harvest which led to lower yields, this was especially true for farmers in Eastern and Southern.

2.3 Factors Affecting Women's Participation in the Poultry Value Chain

Most women farmers (98%) reared poultry for income generation purposes, and considered poultry rearing as an income generating activity as it assisted women to supplement income for household food requirements and non-food requirements i.e., groceries, income for personal use. Women farmers also reared poultry to ensure household food security (76%) as well as to supplement household nutrition (56%). High participation of women farmers in poultry production was also due to cultural perceptions especially around village chicken, it was perceived that smaller livestock were to be reared by women. However, the observation did not hold for improved village chickens and broilers as male farmers were observed to have equally participated.

Figure 2. 8: Main reason women farmers reared poultry.

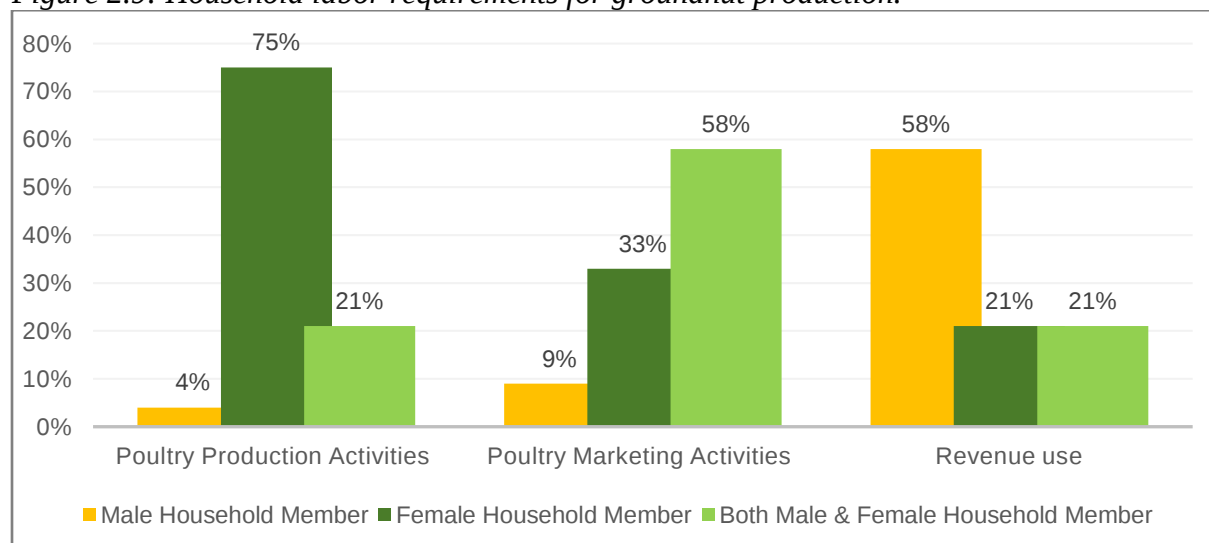


Source: Factors Study Data and Author's compilation

In terms of household labor provision, it was observed that female household members contributed the majority (75%) of the labour for poultry production activities such as feeding, administering drugs/vaccines etc. However, beyond rearing, it was observed that both male and female household members contributed labour for poultry marketing activities such as chicken dressing, selling, and marketing activities (58%). There was also an observed increase in the involvement of men at

decision-making levels on revenue use from sales. Most women did not have decision making authority when it came to revenue earned from poultry, see figure below.

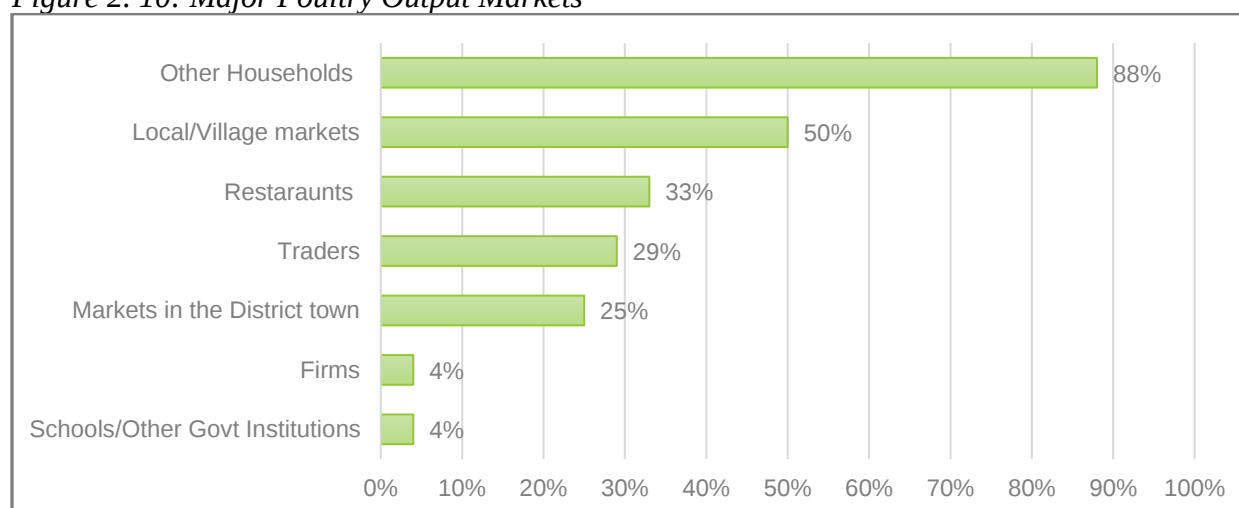
Figure 2.9: Household labor requirements for groundnut production.



Source: Factors Study Data and Author's compilation

Most (88%) of the farmers stated that they sold their poultry to nearby households, and in most cases the sales took place at the homestead. While half (50%) of the farmers sold their produce at the local/village market, only 25% of the farmers sold at the district markets. Farmer groups in Central Province (Shibuyunji – Mumbwa areas) and Southern Province (Choma area) that reared broiler/improved village chickens also stated that due to lack of cold storage facilities they could only rear in smaller quantities to meet the local market demand. As can be seen below.

Figure 2. 10: Major Poultry Output Markets

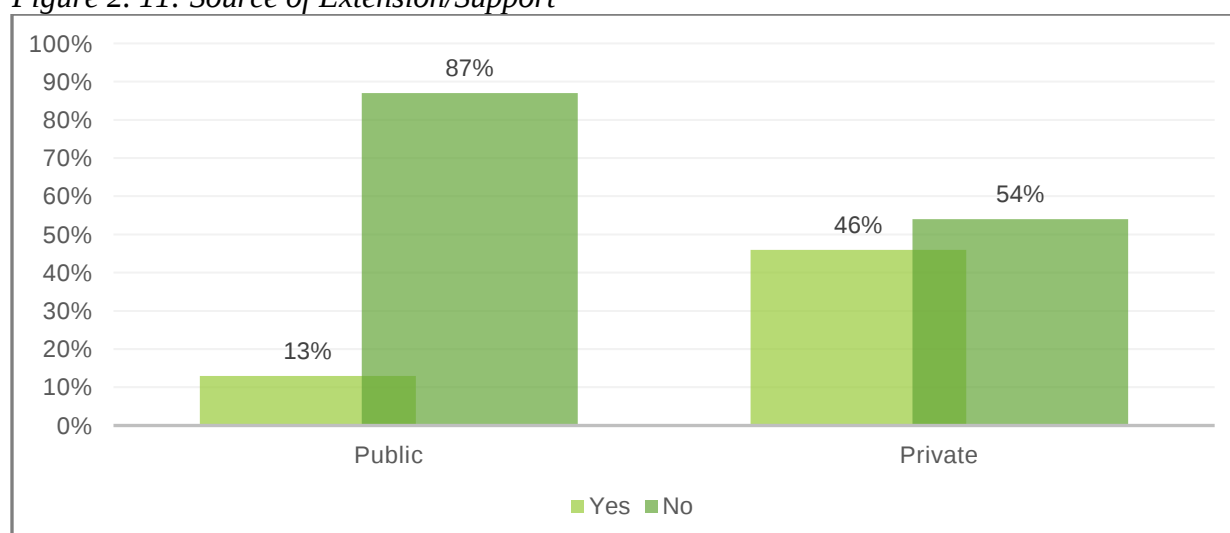


Source: Factors Study Data and Author's compilation

Most farmers did not access veterinary extension services for their poultry neither from public (87%) nor private (54%) extension sources on poultry production and management. Most women felt that they had inadequate training in poultry production especially for village chicken, which was equally noted by majority of the Key Informants interviewed who cited having had limited knowledge on programs and projects that offered support for poultry production. However, some of the notable projects cited that offered either support and/or training mostly for broiler/improved village chicken included but are not limited to; Ross Breeders, Hybrid poultry, Tiger feed, Nutri feed, Novatek, etc. Other firms that offered support in terms of finance and/or inputs (feed and chicks) included, Agora and Vision Fund.

However, the farmers were skeptical of using microfinance institutions to fund poultry farming activities as they were perceived by most farmers to have steep payment conditions. Most of them had opted to access funds from village banks or other local initiatives to fund their activities. Other notable projects which offered support included Zambia Agribusiness Trade Project (ZATP) that offered parent stock and feed to lead farmers that later distributed the offspring to other members of the group. Further, large input suppliers (e.g., ETG, Farmarama, Farmserve, Omnia) and agro-dealers/agrovets as well as chemists were cited as poultry input (chicks, feed, drugs/vaccines) access points by the farmers.

Figure 2. 11: Source of Extension/Support



Source: Factors Study Data and Author's compilation

Major Challenge: High Disease Prevalence

The majority of the poultry farmers stated that they had disease management challenges. They noted a high prevalence of diseases such as Newcastle, growths and coughs. The farmers cited three major reasons for high disease occurrence.

Firstly, most of the farmers lacked adequate training on poultry rearing and poultry production, most of the trainings the farmers stated to have attended were organized by private individuals outside their local community and usually required a payment or fee for attendance.

Secondly, farmers stated that the veterinary department was not prompt enough in responding to poultry related diseases as compared to cattle diseases, this caused high mortality rates due to poor disease management. As one poultry farmer stated,

“I have to take my sick/deceased bird to the veterinary department on my bicycle for diagnosis, as the veterinary department does not offer in-community services i.e., diagnosis, vaccinations and treatments”

Thirdly, farmers cited that they lacked access to most of the inputs (feed, vaccines, and drugs) in the local/village markets and as such had to cover long distances to districts markets. This was also cited by Key informants that stated that most of the community based agro dealers did not have the necessary facilities to store the inputs (vaccines/drugs) such as refrigerators. Equally most of the community based agro dealers did not have the technical know-how of disease management and diagnostics and as such could not offer in-community veterinary services to rural based poultry farmers.

Other Challenges – Poultry (Women)

- *Access to Inputs:* poultry farmers generally lacked access to inputs i.e., improved breeds, feed, drugs/vaccines. This was exacerbated by the distances that they had to cover to access drugs/vaccines, in addition to fluctuating prices and high cost of feed. Farmers in Shibuyunji and Choma that reared improved village chickens stated that they lacked access to incubators within their rural communities and could only access incubators at district markets which at times resulted in loss of chicks during transportation. Similarly, farmers

in Shibuyunji were made to buy sunflower cake used to make feed from local processors even when they used the sunflower from their own produce, this increased the cost of feed even from own production.

- *Lack of Proper Infrastructure:* farmers lacked access to proper infrastructure for poultry production/rearing. This limited their levels of productivity and expansion. This also contributed to their birds' susceptibility to diseases, and it made disease management a difficult task in the event of an outbreak.
- *Lack of assured market;* farmers also stated they experienced marketing challenges in poultry production as they lacked an assured market (off-taker) that would purchase large quantities at once as most of the poultry farmers sold their produce at the district market where the prices fluctuated, and this made it difficult to estimate anticipated profit. In the case of Northern province, the supermarkets and other large firms selling poultry products had the capacity to buy all their poultry products from the locals but did not for various reasons. Some reasons were that they produced their own poultry, and in certain instances, the farmers did not simply produce enough quantities as they were not organized in cooperatives or engaged in out-grower schemes. Other firms found it more profitable to produce their own stock to sell.
- *Theft:* the majority of the farmers stated that due to lack of proper infrastructure to house the birds most of them experienced theft of chickens in their communities. Theft also discouraged participation and expansion.
- *Lack of capital:* farmers also cited lack of financial capital or financial support as an inhibitor to starting up poultry production or expanding production.
- *Lack of training:* most poultry farmers stated they lacked the necessary skills, training or knowledge in poultry production especially on disease management due to lack of extension on poultry.
- *Transportation challenges:* due to lack of cold storage facilities and local/village market, farmers had to transport live birds to district markets. This was costly as it directly added to the production costs. Unfortunately, it was only at larger markets in town that they were able to off-take larger quantities compared to local/village markets.

2.4 Factors Affecting Youth Participation in The Groundnut and Poultry Value Chain

Generally, the youth usually worked with/for parents and guardians, the youth did not take a major role in agricultural enterprises because they rarely owned resources required to run and operate agricultural enterprises. It was observed that the youth had low levels of participation in the groundnuts value-chain.

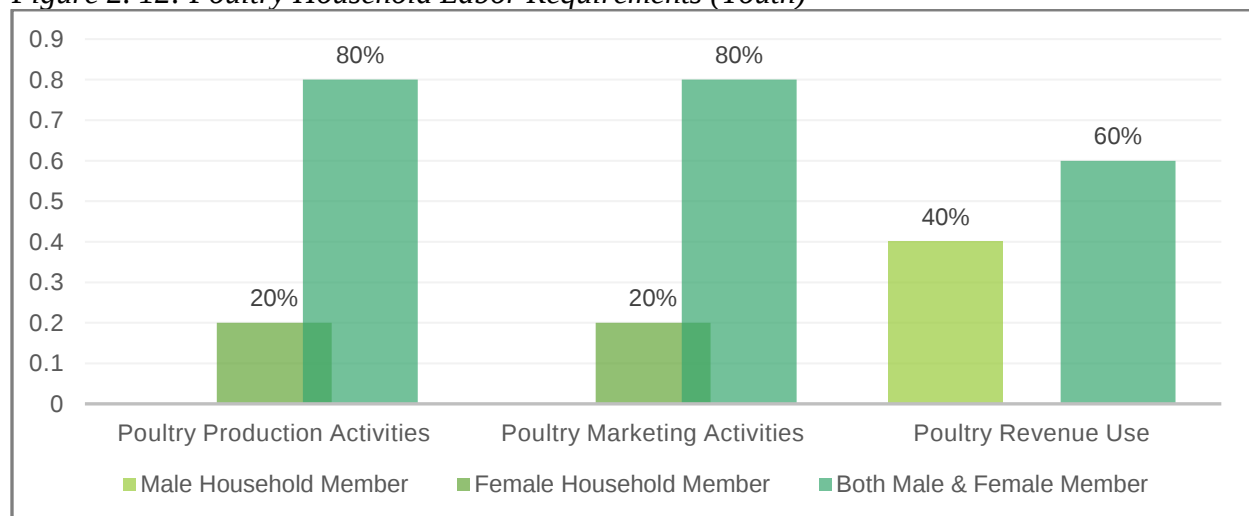
Similarly, in the poultry value-chain, youths were observed to have lower participation in poultry farming due to the high cost of feed and non-availability of an assured market to offtake poultry and poultry products. Furthermore, culturally goats and village chickens were perceived to be less prestigious compared to cattle, and this was why there were higher participation levels of women in smaller livestock compared to men.

Some of the notable projects that offered support to the youth included SNV which provided support to the farmer groups whether youth, women or men. However, the projects were supporting more women and the youth in the following ways: provided chicks, fingerlings and goats to the women and youth groups using a seed capital model (Parent stock) that passes on the offspring to members of the group until the entire group benefited.

Poultry - Youth

Most (80%) of the labour for poultry production activities such as feeding, administering drugs/vaccines etc. were provided by both male and female youth household members. Likewise, it was observed that both male and female household members contributed labour for poultry marketing activities such as chicken dressing, selling, and marketing activities (80%). However, when it came to involvement at decision-making on revenue use from sales, no youths participated as women in the household usually had little decision-making authority when it came to revenue earned from poultry.

Figure 2. 12: Poultry Household Labor Requirements (Youth)



Source: Factors Study Data and Author's compilation

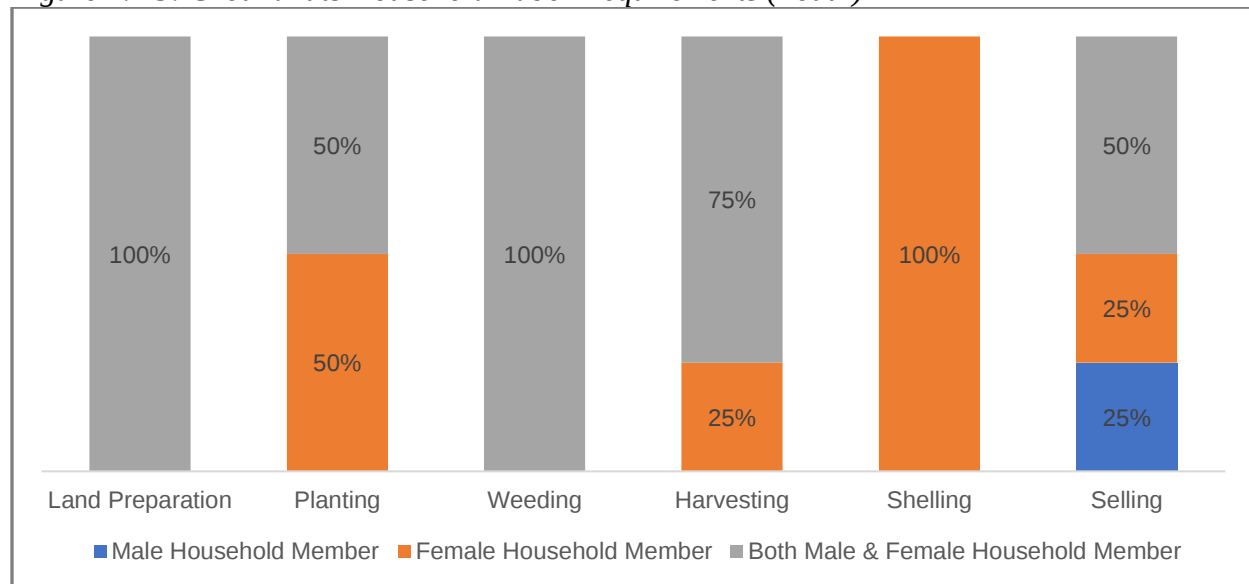
Poultry – Challenges (Youth)

- ❖ *High prevalence of disease*: this was due to lack of access to certain drugs and vaccines, especially in far flung areas that did not have access to electricity, making it difficult to stock vaccines at cold temperatures. Lack of proper shelter to house the birds and manage diseases also contributed to the high disease prevalence.
- ❖ *Access to inputs*: youth farmers lacked access to inputs i.e., drugs/vaccines, feed, due the high cost of the inputs that the youth could not afford.
- ❖ *Lack of extension services*: youthful farmers also stated they lacked technical skills necessary for proper poultry management. The youths also cited that there was unavailability of in-community trainings on poultry management/knowledge especially in rural areas as well as observed poor extension services by both public and private veterinary service providers.
- ❖ *Lack of financial capital*: the youth farmers also cited lack of capital to either start up or expand business as an inhibitor to participating in poultry farming.
- ❖ *Lack of assured markets*: unavailability of an assured market to offtake the poultry produce.
- ❖ *High cost of transportation*: transportation cost was high for both inputs and produce as inputs could only be accessed at district markets.

Groundnuts - (Youth)

In terms of labour supply, the study revealed that female youth household members contributed most of the labour at planting (50%) and shelling (100%). Youth farmers also stated that groundnuts were a labor-intensive crop and this inhibited increase in productivity and area cultivated, given their resource base. Furthermore, it was observed that male youth household members had the highest participation in selling and marketing activities (25%). While at weeding (100%) and land preparation (100%) it was observed that both male and female household members contributed labour for the stated activities. See figure below.

Figure 2. 13: Groundnuts Household Labor Requirements (Youth)



Source: Factors Study Data and Author's compilation

Groundnuts - Challenges (Youth)

- *Lack of capital*; the youthful farmers lacked the money to be able to buy the right inputs for some of the farming activities in groundnuts production. The youth also observed that prices of groundnuts were not as lucrative as soyabeans. The youth also stated that they lacked capital due to unemployment even in agricultural related sectors.
- *Diseases*: these were common in groundnuts production because of the continued use of recycled seed. This could have also contributed towards the low yields at harvest.
- *Lack of Assured Markets*: the youth observed that viable markets that could take up large quantities of groundnuts were located far away from their communities. Therefore, the

farmers had to take their groundnuts to markets in district centers as they offered a better price compared to small scale buyers that bought within their communities. This forced the farmers to travel long distances to sell their groundnuts.

- *Access to inputs:* the youth cited having little to no access to improved groundnut seed varieties as well as agro-chemicals i.e., weed killers, and used recycled seed which resulted in low yields. the farmers also observed that because most of them did not belong to any cooperatives, they were unable to access improved seed varieties because they were expensive.
- *Lack of training:* the farmers also stated that they lacked agricultural knowledge, skills, and training on groundnut production.
- ❖ *High cost of transportation:* transportation cost was high for both inputs and produce as both inputs and produce were bought and sold in district markets.

2.5 Factors Affecting the Participation and Growth of Women and Youth Run-Agribusinesses

Factors Affecting Operations of SMEs.

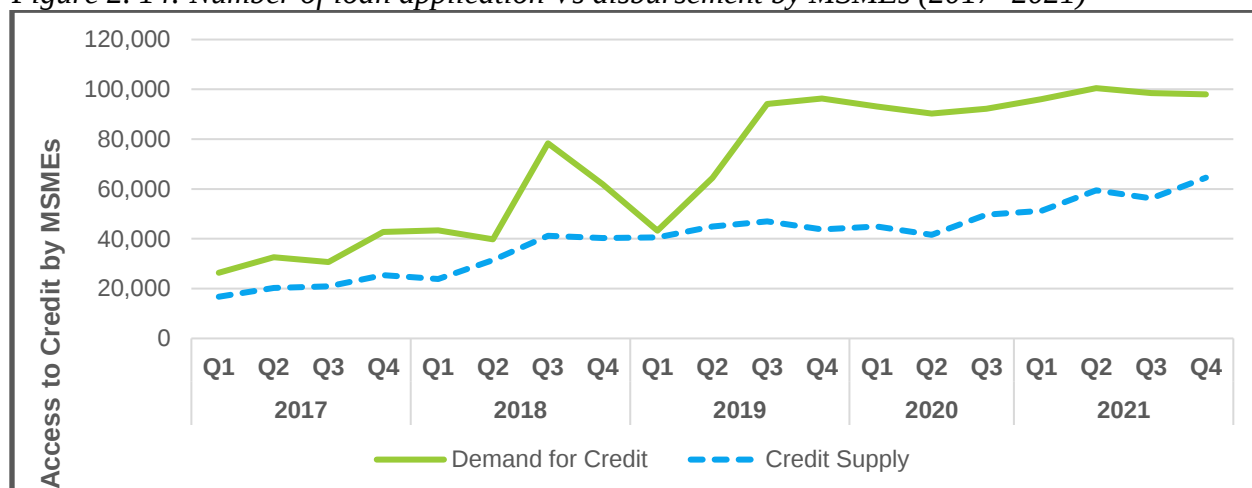
To understand the factors affecting the operations of SMEs, the study generated results from an econometrics analysis, see Appendix (table 1.1). The results indicate that operational costs and access to credit facilities were the most critical factors. Access to financial skills and trainings were also found to be an important factor for women run SMEs.

The study showed that operational costs significantly, and negatively affected the operations of the SMEs. Considerable improvements, particularly in enhancing access to credit facilities can play a key role in facilitating improved business performance and possible expansion. Access to credit by businesses has been a major constraint for a long time.

On average 57% of the loan applications by small businesses were cleared between 2017 and 2021. Over the past 4 years, the supply and demand ratio for credit has grown by 7%. In terms of the number of disbursements, 92% of the loans were given by Non-Banking Financial Institutions (NBFIs) and Microfinance Institutions (MFIs). However, in value, 78% of the total amount of the loans disbursed were issued by banks. This suggests that many of the loans accessed by small

enterprises may translate into relatively small amounts despite the volume of loan transactions, the value is estimated to be at least 3 times less than that of the large enterprises.

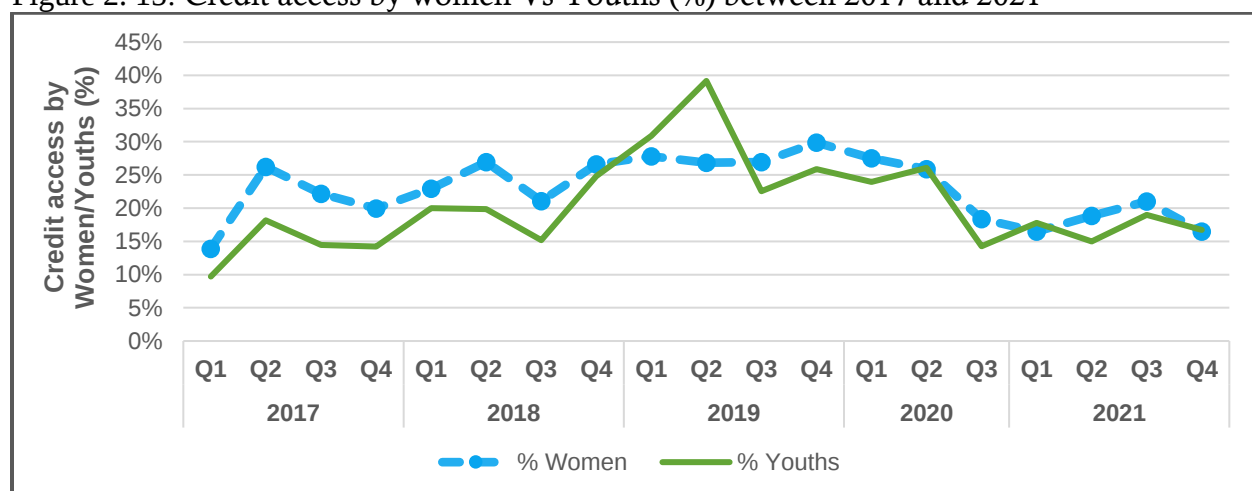
Figure 2. 14: Number of loan application Vs disbursement by MSMEs (2017- 2021)



Source: BoZ, 2022

Youths and women, remain largely marginalized as their access to credit averaged 23% and 20% between 2017 and 2021, respectively, and this trend has remained relatively unchanged. And this is despite MSMEs registration and formalization having improved by 156% between 2017 and 2020 (ZDA, 2020). This trend is expected to continue at a much more accelerated rate given the increase in Constituency Development Fund (CDF) from ZMW1.6 million to ZMW25.7 million in annual allocations (National Budget Speech, 2022). This has led to the proliferation of a wide range of cooperatives across the country with the hope of benefiting from the fund.

Figure 2. 15: Credit access by women Vs Youths (%) between 2017 and 2021



Source: BoZ, 2022

Conclusion

The results of the findings reveal that access to credit by businesses remains a major constraint. Operational costs significantly, and negatively affect the operations of the SMEs and this is a major contributor to most of the challenges SMEs face in the agribusiness sub-sector, these high operational costs are exacerbated by the high cost of living and post Covid-19 pandemic effects on the economy. While at farmer level, there are several factors across the board that affect women and youth from participating in the groundnuts and poultry value-chains such as lack of access to improved inputs, lack of assured and structured markets, diseases and pests and lack of consistent extension services.

Recommendations

Groundnuts and Poultry Value-chains

- Empowering youths and women with finance for farming inputs, as well as providing youths with opportunities to join cooperatives to get inputs at cheaper prices through shared value.
- Provision of training in entrepreneurship, agricultural production, and poultry production.
- Provision of assured markets to encourage participation/engagement in agriculture.

Agribusiness SMEs

- ❖ Awareness and sensitization activities should be held so that women and youth entrepreneurs could have knowledge about organizations that could offer support and credit facilities.
- ❖ The organizations can also support and engage women and youth entrepreneurs with training and development, as well as financial management of their business and other support for their entrepreneurial development.

Appendix

Table 1. 1: Factors Affecting SMEs Using OLS method

Variables	Women	Youths
Operational Costs	-26.3***	-34.4*
Age	0.11	-2.3
Access to commercial finance	2.7**	9.2*
Ownership of assets	18.9	10.1
Financial Skill	1.7*	2.1
Constant	8.7	8.4
Observations	196	196
Standard errors in parentheses *** p<0.01** p<0.05, * p<0.1		

Source: Musika – AAI SME Survey 2021.

References

- Simuchimba, B. Chansa, F. Banda, C. Simuchimba, W. Beyene, L. (2020). *Can a Wage Subsidy Be Used to Improve Women's Formal Employment in Zambia*. 10.2139/ssrn.3673274. SSRN Electronic Journal
- Lubinga, F. and Sichilima, T. (2021). *Musika-AAI SME Impact assessment Survey*. Musika Development Initiatives.
- Rural Agricultural Livelihood Survey Report. (2019) Indaba for Agricultural and Policy Research Institute. (IAPRI).
- Chigunta, F. Schnurr, J. James-Wilson, D. Torres, V. (2005). *Being "Real" about Youth Entrepreneurship in Eastern and Southern Africa Implications for Adults, Institutions and Sector Structures*.
- Ngoma-Kasanda, E. Sichilima, T. (2016). *Gender and Decision Making in Agriculture: A Case of smallholder Groundnuts sector in Zambia*. Musika Development Initiatives.
- Mpundu, C. Sichilima, T. (2019) *Annual Household Survey Report*. Musika Development Initiatives.
- Lubungu, M. (2021). *DEVELOPMENT POTENTIAL OF SMALLHOLDER LIVESTOCK PRODUCTION SYSTEMS IN ZAMBIA*. University of Hohenheim.