



ASSESSMENT OF THE EXTENT OF INCLUSIVENESS OF YOUNG AGRI-PRENEURS IN THE POULTRY VALUE CHAIN IN LESOTHO

Commissioned by Lesotho National Farmers Union (LENAFU)

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**Assessment of the Extent of Inclusiveness of Young
Agripreneurs in the Poultry Value Chains
in Lesotho**

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LIST OF AGRONYMS

AEO	Area Extension Office
AfCFTA	Africa Continental Free Trade Area
ARC	Agriculture Resource Centres
BAPOFA	Basotho Poultry Farmers Association
BEDCO	Basotho Enterprises Development Corporation
BOS	Bureau of Statistics
DAO	District Agriculture Office
DEO	District Extension Officer
KII	Key Informant Interview
FGD	Focus Group Discussion
FO	Farmers Organisations
FO4ACP	Farmers' Organization for Africa, Caribbean, and Pacific
HACCP	Hazard Analysis and Critical Control Point
LENAFU	Lesotho National Farmers Union
LENAFUSP	Lesotho National Farmers Union Strategic Plan
NFO	National Farmers Organisations
NSDP	National Strategic Plan
OBS	Observations
PWDs	People with Disabilities
RSA	Republic of South Africa
SACAU	Southern African Confederation of Agricultural Unions
SPSS	Statistical Package for Social Science
UNDP	United Nations Development Programme

EXECUTIVE SUMMARY

A survey study was conducted in Lesotho with the aim to assess the extent of young agripreneurs' participation in poultry value chain by documenting challenges and opportunities. The study was conducted in all ten districts of Lesotho, covering at least two Agricultural Resource Centres (ARC) per district. The two-stage sampling procedure was used to select Agriculture Resource Centres and respondents for the study. The purposive sampling method was used to select agripreneurs within the resource centres.

Data collection was done with face-to-face interview for individual youth using closed ended questionnaire. Focus groups were conduct using Focus Group Guide for youth groups. The key informant guide was used to collect data from the relevant stakeholders such as banks, animal feed manufacturers, government departments and the street vendors selling poultry products. A total of 204 youth were conducted with 13 focus groups and 60 key informants. Data was analyzed with the aid of IBM Corporation (2011) Statistical Package for Social Science (SPSS Version 20) where data was subjected to descriptive statistics analysis (frequencies and cross tabulations), Logistic regression analysis was used to identify factors influencing youth involvement in poultry value chain. Data outputs were presented in the form of bar charts, and pie charts.

Findings

The findings on the effects of demographic characteristics on youth participation in poultry value chain indicated that the majority of youth (57%) were female between 25 and 35 years of age with secondary education, and were married (54.5%) with an average family size of four people. The major source of income was self-employment and farming. The majority of them (85.2%) were not members of farmers groups/ associations. Mobile phone ownership (97%) and participation in social media (73.3%) were very high.

The majority of young farmers (96.1%) were participating in production segment of poultry value chain specializing with broiler (54.4%), layers (14%) and dual purpose (17.9%). Most of them (85.3%) were operating as sole traders with their own source of funding for the business. The most popular production system was intensive system for broilers and layers. The most common stocking density for broiler was 100 birds with an average of M4500.00 as input costs per cycle. Feeds were sourced from town suppliers dominated by Makhulo (43.5%) and Itau feed (50%) brands. Young agripreneurs were selling eggs, live and slaughter chickens, baby chicken, and very few were processing broiler into braai pack. The products were sold at farm gate, small and medium local market, processing plant and national market.

With regard to access to services for improvement and productivity, the majority of young farmers (92.9%) highlighted that they don't have access to credit and they don't have business accounts that could facilitate their access to credit. Number of them (74.4%) also indicated that they did not receive any training on the type of business they are engaged in as well as technical support from the extension services. However, it was observed that some of them were not aware of role of extension service.

Table 1: Findings Summary

Respondents Characteristics							
Age (Years)	15 to 25	25 to 35					
	17%	83%					
Sex	Male	Female					
	43%	57%					
Education Level	Primary	High School	Tertiary	Tertiary Agriculture			
	10,5%	44%	38.5%	7%			
Marital Status	Single	Married	Divorced	Widowed			
	39.5%	54.5%	3%	3%			
Membership to Farmers' Cooperative	Yes	No					
	14.8%	85.2%					
Source of Income	Formal Employment	Self-Employed	Farming	Not working			
	13.4%	48.5%	29.2%	8.9%			
Youth Participation in Poultry Value chain							
Participation in Major Segments of Poultry Value Chain	Production	Inputs Suppliers	Processing	Marketing			
	96.1%	2%	1%	1%			
Area of specialisation	Broiler	Layers	Dual Purpose	Baby Chicken	Feed Suppliers	Chicks Suppliers	Others
	54.4%	14%	17.9%	6.7%	1.5%	1.0%	
Business Model	Sole Trading	Cooperatives	Retailing of Products				
	85.3%	12.7%	2%				
Business Registration	Yes	No					
	15.9%	84.1%					
Source of Funding	Self-Funding	Bank Loans	Government Funding	Family Funding	Others		

	66.8%	2.5%	0.5%	25.5%	4.5%		
Production System	Intensive	Semi-Intensive	Extensive				
	68.5%	23.2%	8.4%				
Stocking Density (birds)	50 to 100	100 to 500	More than 500				
	44.1%	51.5%	4.5%				
Sources of Feeds	Own Formulation	Local Retailers	Town Suppliers	Feed Manufacture	Other Sources		
	10.4%	30.3%	55.7%	1.0%	2.5%		
Preferred Feed Brand	Makhulo	Itau	Meadow	Nutri	Tripot		
	43.5%	50%	3.3%	2.2%	1.1%		
Marketed Products	Live Chicken	Slaughtered Chicken	Processed Braai Packs	Live & Slaughtered	Live, Slaughtered & Eggs	Eggs	Plastic Wrapped Eggs
	27,5%	10%	0.5%	31.5%	15.5%	13.5%	1.5%
Marketing Channels	Home Consumption	Farm Gate	Small local Market	Medium Local Market	Processing Plant	National Market	
	9.9%	66%	15.3%	7.9%	0.5%	0.5%	
Access to Support and Services							
Access to Credit	Yes	No					
	7.1%	92.9%					
Business Account	Yes	No					
	12.7%	87.3%					
Extension Services	Yes	No					
	26.3%	73.7%					
Training Received	Yes	No					
	25.6%	74.4%					

The pull and push factors affecting youth participation in poultry value chain are shown in Table 2 with their order of preference as determined by regression analysis. Young agripreneurs are surrounded by a number of opportunities to engage in poultry value chains because the country has placed agriculture as one of its priority areas for investments according to National Strategic Development Plan II. The country is also having youth sensitive policies that promote their inclusiveness in entrepreneurship and agriculture. Findings indicated that there is high demand for poultry products in Lesotho, justified by high rates of imports estimated around 80%. There are abundant untapped businesses opportunities within the poultry value chain such as poultry breeding, processing, value addition as well as animal feed manufacturing. The majority of youth have access to land for farming which is an added advantage. Financial assistance in the form of loans and grants are available even though limited in number and their stringent conditions.

Youth challenges are revolving around access to finance, lack of skill and exposure to modern poultry technologies. The majority of youth (92.6%) have cited financial constraints as major challenge affecting their involvement in poultry. The other challenge raised by youth was shortage of market outlets for their products. However, other stakeholders such the Department of Marketing indicated that there is a big market for broiler but the main drawback is the fact that young farmers are not meeting quantity and quality standards for big wholesalers like Shoprite and Pick & Pay. The big wholesalers require poultry from accredited slaughter houses but according to LENAFU rapid assessment of the status and prospects of poultry production and trade (2020), out of the six slaughter houses in Lesotho non had attained accreditation status and this means Lesotho will continue to import poultry products unless something is done.

Table 2: The Pull and Push Factors

Opportunities or Pull Factors	Hindrances or Push Factors
Funding and grants even though limited	Lack of access to start-up capital
Land availability	High feed costs
Training background agribusiness	High initial costs for layers
Abundant market for poultry products	Lack of entrepreneurial skill
Untapped business opportunities within the poultry value chain	Lack of marketing channels
Rapid capital turnover	Unavailability of replacement stock
Agriculture is one of the country priority areas	Diseases, Avian Influenza
Supportive policy	No accredited slaughter facility
Technical support	Foreign-source dependency on inputs
Access to information	Inconsistent product quality
Consumers oriented towards value added poultry products	Mortality and Poor management
	Land unavailability
	Negative perceptions about agriculture

A number of national policies are supporting youth entrepreneurial activities and are also highlighting the need for financial support for such activities. However, Lesotho doesn't have a specific policy on poultry production to guide the industry nonetheless, Basotho Poultry Farmers Association (BAPOFA) represent farmers in all poultry related issues. The number of stakeholders reiterated that national policies are good but challenge rely with their implementation.

The majority of young agripreneurs 73.5% believed that NFOs are in a good position to mentor them in skills and technologies applicable to businesses along poultry value chain; link them with the financial institutions where they can access loans or start-up capital for the business and link them to the market channels where they will sell their produce. Young poultry producers (60%) expectations are that NFOs will pave way by developing new business ideas, advocate for cost sharing amongst members by joint purchasing of inputs and lastly be their mouth piece by representing them in government forums and policy formulation for change to the better in poultry industry

Recommendations

- In conjunction with the relevant government ministries, NFOs to facilitate sensitization of young agripreneurs about the roles of extension services, government policies that affects them and on the available business opportunities within the poultry value.
- To improve young farmer's linkages with other farmers or associations, NFOs in concurrence with Ministry of Gender and Ministry of Agriculture to promote awareness about the importance of working together with other farmers and stakeholders. Working together will promote peer-to-peer learning, mentorship, and information sharing.
- Capacity building of youth in poultry production and agribusiness to improve their management skill. Also training on key areas affecting functionality of the value chain such as poultry breeding, products processing and feed manufacturing.
- With regard to untapped businesses like poultry breeding, product processing and feed manufacturing there is a need for partnership amongst young farmers to make joint investment and seek a sponsor.
- Stakeholders also recommended that since Shoprite and Pick N Pay are major consumers of poultry imports from RSA they should be encouraged to finance local businesses in production of poultry products such as poultry breeding and slaughter facilities.
- To address product standardization issue which is a widespread problem amongst the producers, there is a need to invest in research to assess the impact of different feed brands on nutrient utilization and growth dynamics for fat and muscle deposition.
- The NFOs and Department of Marketing to continue and expand their coverage to reach the majority of young farmers in facilitating producer and buyer meetings to

create awareness of potential business that can be explored and as a marketing tool.

- To improve access to finance there is a need to lobby for more funding for young agripreneurs from potential sponsors and banks and to lower the collateral value in the form of equity especially for unemployed youth.
- The upgrading and accreditation of underrated slaughter facilities will promote a market outlet for young farmers challenged with market unavailability. It will also enable products to meet stringent requirements by big buyers such as Shoprite and Pick N Pay.
- Concerning unavailability of poultry breeder feeds, it is recommended that Lesotho Farm Feed Mill being the sole accredited feed manufacturer should blend feeds for all categories of poultry.
- Negative perception about agriculture requires youth to be trained on social capital to change their mindset.
- Need to support livestock producers particularly youth in poultry production with inputs subsidy especially for layer production with high initial costs. Malabo Declaration (2014) advocated for agriculture inputs across all sectors including livestock.
- Young agripreneurs should be encouraged to insure their business so that they will be compensated after a natural disaster strike in order to ensure sustainability of their businesses.

BACKGROUND

The Southern African Confederation of Agricultural Unions (SACAU) is implementing a Farmers' Organization for Africa, Caribbean, and Pacific (FO4ACP) project whose goal is to increase incomes and improve livelihoods, food and nutrition security and safety of smallholder and family farmers in the region. The project has four components, one of which is "supporting farmers' organizations (FOs) to deliver economic services along priority (selected) value chains". The objective of this component is to enhance the capacities of FOs in the provision of economic services to their members in selected value chains. Activities under this component aim at empowering FOs to effectively impart skills and competencies to their members to enable them to increase their production and productivity and engage in fair and profitable markets. In addition, the activities ensure that all categories of farmers (women, youth, and men) are integrated into priority value chains in their respective countries.

At both region and country levels, FO4ACP is implemented within the SACAU and national strategic frameworks (SFs) respectively. The SACAU SF has three Strategic Areas of Work (SAW) and one of which is aimed at promoting investments, growth, and sustainability as well as advocating for an enabling environment for increased productivity and competitiveness in the agriculture sector. For effective implementation of activities under this SAW, SACAU resolved to identify and target for growth to regional and global significance few commodity value-chains. Consequently, poultry was selected as one of such value chains. The choice was based on, among others, the potential of the value chain to spearhead the development and transformation of the agriculture sector due to its inclusive nature as well as its flexibility regarding production systems. Furthermore, poultry value chain has potential of addressing health and nutrition challenges as it is the main source of animal protein in many southern African countries. Its short production cycle, low capital intensity and low demand for land, and the attractiveness of the high value market makes it attractive to the youth and women as an enterprise option.

It also has strong backward linkages with the production of maize and soya for animal feed which are key inputs in the poultry production process. Additionally, the deficits in both poultry and poultry feed ingredients presents an opportunity for greater regional integration and growth through the creation of sustainable regional poultry value chains, thus internalising the benefits of trade within the region. This also augers well with the Africa Continental Free Trade Area (AfCFTA) agreement which is promoting free movement of goods and services among Africa countries. Lastly, the poultry value chain is also regarded as one of the value-chains with less carbon footprint as compared to other food commodities.

1.0 INTRODUCTION

In Lesotho youth is considered to be a person between 15 and 35 years of age and this range is used for the purpose of facilitating proper targeting and provision of material assistance to the youth. Spatially, the majority (72.9%) of Lesotho's youth reside in the rural areas with 58.7% and 20.7% being in the lowlands and mountains respectively United Nations Development Programme (UNDP, 2012). Unemployment is one of the key challenges facing youth in Lesotho estimated at around 23.9% for youth aged between 20 and 24 years and 39% for youth between 25 and 34 years (Bureau of Statistics BOS, 2016). The hardest hit is the male youth accounting for 65.8% of total youth unemployment (BOS, 2016). The main reason behind the high unemployment in Lesotho is slow economic growth.

In an effort to bailout youth unemployment, a number of policies, declaration and strategic plans such as [Lesotho National Youth Policy (2017-2030), National Strategic Development Plan (NSDP) II, 2019, Vision 2020, Food Security Policy, 2005, Livestock Policy,2020, Malabo Declaration, 2014, National Climate Change Policy, 2017-27] support youth development initiatives and advocated the provision of young people with access to finance and financial education to enable youth entrepreneurship. The majority of youth reside in rural areas where agriculture accounted for 40% of the economically active population (15-65 years) engaged in subsistence farming. Rural households rely on agriculture for most of their income mainly from smallholder farming, which produces the majority of Lesotho agricultural output. Agriculture contributes 6.8% to the Gross Domestic Product(GDP). During the second quarter of 2021, agriculture GDP grew by 6.9% (BOS, 2021). Livestock production share of country GDP accounted for 62% of total agriculture contribution. In order to proof their commitment to financing agricultural activities, Malabo Declaration of 2014 stipulated that member countries should target 6% annual growth in agriculture and should contribute 10 percent of their national budget to agriculture for which 3% is allocated to livestock. The growth in agriculture is a key factor for overall performance of the economy and poverty reduction (Poulton and Kanyinga, 2014).

Business opportunities for youth to invest in agriculture cannot be over emphasised when considering that NSDP II had earmarked agriculture as one of the priority areas for investment. Another justification for potential business opportunity is the fact that Lesotho imports the majority of food items such as poultry meat and eggs as well as staple cereals. Prior to 1941, Lesotho poultry production evolved around rearing of small scale indigenous breeds that contributed significantly to problems of malnutrition, food insecurity, low income and poverty as a whole. Commercial poultry production started around 1941 when Department of Agriculture introduced improved layer breeds (Basotho Enterprises Development Corporation BEDCO, 2019). In order to improve access to replacement stock by farmers, Poultry Plant was established around 1953 and it sold improved breeds to farmers (BEDCO, 2019).

It was reported that Lesotho imports more than 80 percent of its poultry products from South Africa (NSDP II, 2019-2023). Therefore, the local demand for poultry products could support poultry production. It is upon this premise that Lesotho National Farmers Union (LENAFU) seek to find means to engage young agripreneurs to invest more in poultry production value chains because of the available business opportunities as well as to create employment. However, it was observed that youth engagement and interest in agripreneurship including poultry production has been low recently (Basotho Poultry Farmers Association BAPOFA, 2021) even though this category of Lesotho citizens is the most productive of any society as they are in the prime of their lives physically and mentally.

Generally, youth worldwide have lacked motivation to enter and persist in the agro enterprise (Food and Agricultural Organization, 2017). Youth participation assumes that young people are competent citizens rather than passive recipients of services and it involves young people in the institutions and decisions that affect their lives. Therefore, youth participation in agriculture entails the engagement of youth in the sector through entrepreneurial activities, participation in value-chain activities, policy formulation, and advocacy in structures and systems linked to the food system (Geza et al., 2021). BAPOFA committee member and District Extension Officer Butha Buthe both estimated youth participation in poultry value chains at around 20%.

1.2 Problem statement

- Considering that about 60% of Africa's population is under the age of 24 and that most of them are unemployed and at the same time the average age of a farmer is currently at 60, thus, there is a growing concern that agricultural activity will decline with this ageing cohort.
- Poor linkages among young poultry agripreneurs within the country and across the region.

1.3 Objectives

1.3.1 General Objective

To conduct situation analysis (environment scan) on the extent of inclusiveness of the youth in the poultry value chain and the nature and type of businesses and business models deployed at various segments of the value chain.

1.3.2 Specific Objectives

- I. Assess and identify potential business areas/ventures where young agripreneurs in Lesotho can invest along the poultry value chain.
- II. Assess and establish the extent to which young agripreneurs are investing in business ventures along the poultry value chain.
- III. Provide an overview of opportunities (enablers) and bottlenecks (hindrances) for the youth to effectively establish businesses along the value chain
- IV. Propose mechanisms that will enable youth to take advantage of the opportunities as well as to address the challenges.

- V. Identify relevant national poultry value chain related policies and regulations and their (positive or negative) impact in promoting inclusiveness of the youth in the poultry industry.
- VI. Identify and document key business models for poultry value chain the youth are deploying
- VII. Identify key ecosystem players (key actors) and their roles in promoting inclusiveness of the youth in operating businesses along the poultry value chain,
- VIII. Establish current and anticipated role of NFOs in promoting the participation of the youth in poultry value chain.
- IX. In liaison with NFOs organize a young poultry agripreneurs meeting (virtual or physical) to share and validate the results of the environmental scan and discuss the establishment of national forum for the young agripreneurs that will culminate into regional forum

1.4 The Scope of the Study

- The overall goal of the study was to assess and establish the state of participation of young agripreneurs along the poultry value chain in Lesotho. Identify potential business opportunities for the youth along the value chain and conduct an analysis on the level of youth participation in those business areas.
- The study targeted individual young agripreneurs in poultry value chain, youth organisations, farmer's organisations, government ministries, Non-Governmental Organisations, Traders and other important stakeholders.
- Study was conducted between October and November 2021 covering all ten districts of Lesotho.
- The initial findings of the study were presented to a selected group of young agripreneurs and other stakeholders for verification before production of final report.

1.5 Justification of the Study

- The study was implemented in conjunction with NFOs in member countries after realising that poultry production was in the hands of elderly people. SACAU through its various interventions is working towards building a new generation of farmers to succeed the current generation and eventually reduce the average age of farmers in the region.
- Given the changing nature of agricultural practices where technology and appropriate application of information is key, the youth are well placed to enter and thrive in the global agricultural industry than their elderly counterparts. In addition, youth have greater potential of thinking beyond primary production, thus, creating more employment opportunities along the value chain in the sector. Their exposure and capacity to easily understand the operatives of new technologies is advantageous for the growth of any industry including agriculture.

- SACAU has gathered evidence pointing to the potential for young poultry agripreneurs to establish successful businesses and play a leading role in the growth of the poultry sector in the region. For example, with well targeted support, they have potential to address unemployment, poverty, and nutritional challenges the region is faced with. LENAFU and SACAU intend to facilitate the linkages among young agripreneurs within the country and across the region to enable them share technologies, information, business opportunities and their day-to-day experiences in the poultry value chain.
- The study is very important to LENAFU and the country as whole because it addresses LENAFU strategic plan of 2019-2024 that promote active participation of youth, women, People with Disabilities (PWDs) and other vulnerable sectors of society in agriculture and research on farmer's challenges and opportunities. The strategic plan also advocates for farmer-led policy response & implementation of farmer's access to inputs, markets, finance, insurance and other enabling credit support.
- In Lesotho the study assessed the extent of young agripreneurs participation in poultry value chain by documenting factors that hinders and promote their participation. The study also recommended mechanisms that can be utilized to remedy the challenges and promote youth participation as well as facilitating their linkages with each other and other relevant stakeholders within the country.

1.6 Hypothesis

Null Hypothesis; Lack of finance and poor linkages among young poultry agripreneurs within the country and across the region have no influence in the extent of young agripreneurs involvement in poultry value chain.

Alternative Hypothesis; Lack of finance and poor linkages among young poultry agripreneurs within the country and across the region have significant influence in the extent of young agripreneurs involvement in poultry value chain

1.7 Limitation of the Study

Data collection coincided with month end payday and the majority of key informants in the mountainous districts of Lesotho were not found for face to face interviews and telephonic interviews and rescheduling were opted. In the low lands the majority of youth were not available during the week due to work related engagements and data collection team visited them during weekends.

2.0 METHODOLOGY

2.1 Study site

The study was conducted in all the ten districts of Lesotho whereby the two Agriculture Resource Centres per district were targeted.

2.2 Experimental Design

A Cross-Sectional study was proposed using mixed methods research design characterised by use of both qualitative and quantitative research tools.

The survey approach was participatory in nature and it focused on young agripreneurs. It relied on both quantitative and qualitative data provided by young agripreneurs individually and in groups as well as important information provided by the key stakeholders in poultry value chains. Young agripreneurs population was identified based on age segment, gender, location, education level and/or profession.

- Structured interviews using Youth Questionnaire were used for individual youth while semi structured interviews were used for groups of young agripreneurs directed by Youth Focus Group Guide. The lists of young agripreneurs and their physical addresses were established with the help of LENAUFU.
- Key Informant Guide was used to collect data from stakeholders.

2.3 Sampling techniques and sample size

A multi-stage sampling procedure was used to select Agriculture Resource Centres (ARC), Sub Centres and respondents for the study. The purposive sampling method was used to select two Agricultural Resource Centres (ARC), two Sub Centres per ARC and agripreneurs within a district. A total of 204 agripreneurs, 13 Focus Group Discussions and 68 Key Informant Interviews were conducted during the study.

2.4 Data Collection

Data collection on individual youth agripreneurs and their focus group discussions as well as key informant interviews started on the 18th October to 12th November 2021. The sampled Agriculture Resource Centres are shown in the Appendix Table 7.

2.5 Data Analysis

Data was analysed with the aid of IBM Corporation (2011) Statistical Package for Social Science (SPSS Version 20) where data was subjected to descriptive statistics analysis [frequencies and cross tabulations] and Logistic regression analysis was used to identify factors influencing youth involvement in poultry value chain. Data outputs were presented in the form of bar charts, and pie charts.

2.6 Structure of the Report

The report is divided into six sections starting with executive summary, background and introduction to the study, methodology which outlines the approaches to the study. The findings of the study are arranged according to the specific objectives and followed by cross cutting issue and conclusions and the recommendations. The last section is the references and lists of respondents contacted.

3.0 FINDINGS OF THE STUDY

3.1 Young Agripreneurs Demographic Characteristics

The demographic characteristics of the youth such as geographical location, age, sex, level of education and marital status had a significant effect on their participation in poultry value chain. The total of 204 young agripreneurs were conducted during the study and 57% were females while male represented 43% of the population. Geographical location was divided into two altitudes zones being highlands and lowlands based on poultry requirement and performance in each zone. The findings discovered that the majority of young agripreneurs were operating in the lowlands of Lesotho where they dominated primary production, marketing and processing segments of value chain, Youth in the highlands were focused more on production and inputs suppliers.

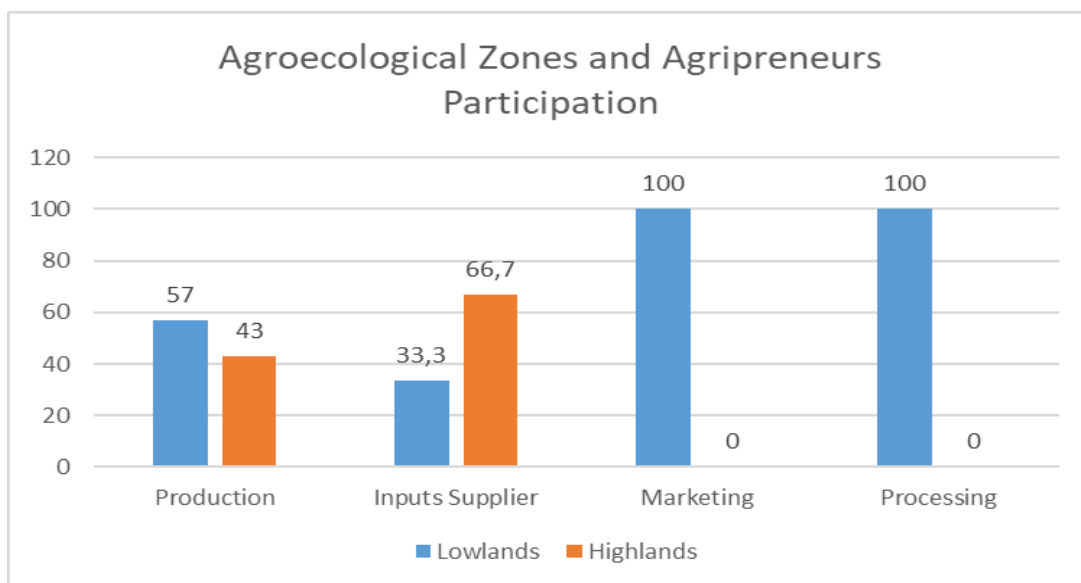


Figure 1: Influence of Agroecological Zone on Youth Participation

Youth participation within major poultry value chain segments (Figure 2) revealed that production or rearing segment accounts for 96.1% while other important segments such as inputs suppliers, wholesaling and retailing, and processing remains untapped at the rate of 2%, 1% and 1% respectively. According to QachasNek Farmers Association secretary, youth are very enthusiastic about poultry farming but due to lack of financing they cannot afford appropriate housing infrastructure for the birds. He went further and cited the impact of chick unavailability on poultry business. Adesina and Favour (2016) assessed participation of youth in agribusiness and observed that there were more youth in crop production versus livestock due to early maturity periods of most crops cultivated and possibly because of quick turnover. The reason cited was that livestock project take a long time while youth prefer a quick cash. The similar trend in Lesotho was reported by a number of stakeholders.

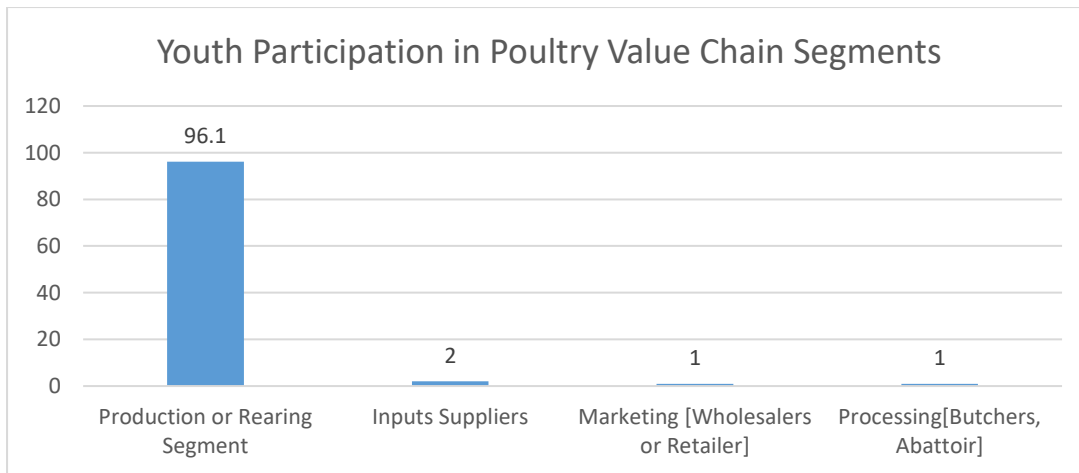


Figure 2: Youth Participation in Poultry Value Chain Segments

When considering the effects of age on youth participation in poultry value chain, it was found that youth in 25 to 35 age category were the largest at 83% participation in production segments while 15 to 25-year age category accounted for 17%. These findings are similar to one of Nmeregini et al. (2020) who observed that involvement of the youths in poultry value chains increased as their age increases and this could be due to the fact that increase in age among youths could involve increase in maturity and responsibility. Hence, the aged youths might have more responsibilities which could make them engage more in production activities so as to meet their day to day family needs.

Youth participation by sex results indicated that there were more women participating by 57% while male agripreneurs were at 43%. The results on the influence of youth agripreneurs marital status (Figure 3) on participation in poultry value chain showed that majority of youth were married (54.5%) especially those in the production, inputs supplier and marketing segments. The average household size of four was recorded by 25% of the participants.

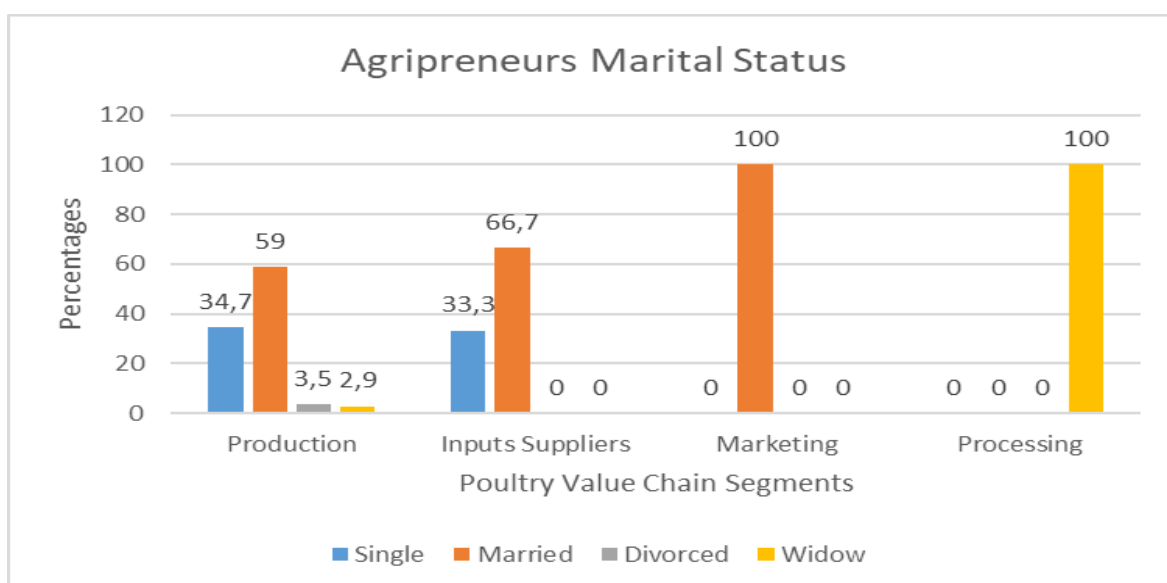


Figure 3: Agripreneurs Marital Status

The majority of youth agripreneurs participating in poultry production were found to have completed high school education level (44%), followed by those with tertiary education level (38.5%) while those with primary and tertiary agriculture were the lowest with 10.5% and 7% respectively. The findings verified that the majority of the respondents were literate, hence, literacy is expected to influence their perceptions about the information received and utilized for agricultural activities. The findings are consistent with Cheteni (2016), who found that a number of youth in agribusiness possessed at least a secondary qualification in the Eastern Cape. The results signified that formal education enhances participation and adoption of modern agricultural technologies and innovations. Adesina and Favour (2016) confirmed that youth participation in agribusiness increased with increase in education attainment.

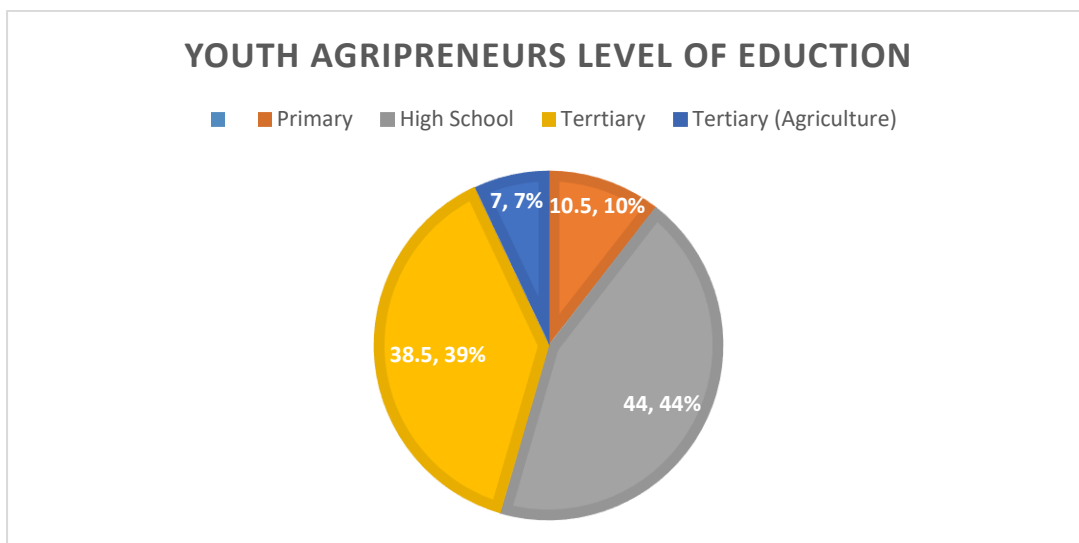


Figure 4: Youth Agripreneurs Level of Education

Youth source of income results indicated that 13.4% had formal employment, whereas self-employment and farming accounted for 77.7% and youth with no clear source of income constituted 8.9%. It was observed that the majority (85.2%) of youth were not members of the cooperative and other community organisations. The lack of participation in cooperative and community based group is the biggest challenge of young agripreneurs because active linkages with other farmers and stakeholders will ensure information sharing and mentoring. Cellular phone ownership was very high amongst the youth with 97% while those joining social media groups sum up to 73.3%. The ownership of cellular phones and participation in social media is applauded. The results on youth employment are in corseted with the findings of Osabohien et al. (2021) who confirmed that the majority of youth are self-employed in agriculture while the small fraction of 9.53% had a formal job in civil service.

3.2 Potential Business Areas

There are several potential businesses where young agripreneurs in Lesotho can invest in within the poultry value chain because Lesotho rely heavily on poultry inputs imported from neighbouring Republic of South Africa (RSA). Table 5 below depicts typical broiler value chain and the available business opportunities where investments can be

established. However, the results of the current study (Figure 5) pointed out that the majority of young agripreneurs (96.1%) are participating in primary activities such as production or growing out segment of poultry value chain only while the other important business ventures such processing and value addition remains untapped. Dimelu et al. (2020) in Nigeria observed similar pattern where the majority of youth more than 60% participated in primary production of the value chain while the processing and marketing segments were left with only about 35% of the youth. Development Centre Studies (2018) confirmed that investing and building capabilities in agri-food industries (processing, preservation and other handling processes, as well as packaging and marketing) remain largely underexploited. It is therefore recommended that youth should be capacitated in the area of poultry processing, preservation, value addition, packaging and marketing using Junior Farmer Field and Life Schools.

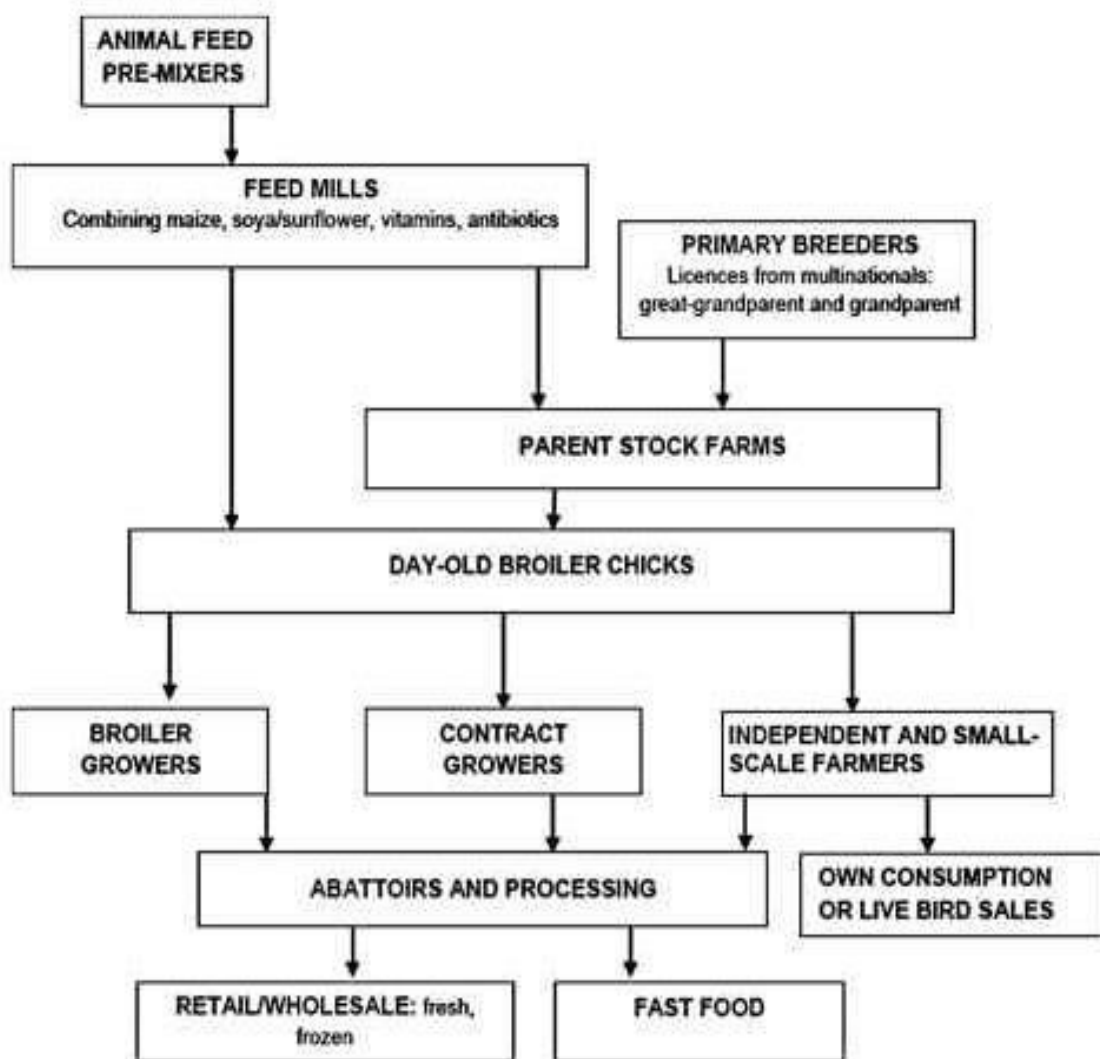


Table 3: Sample broiler value chain

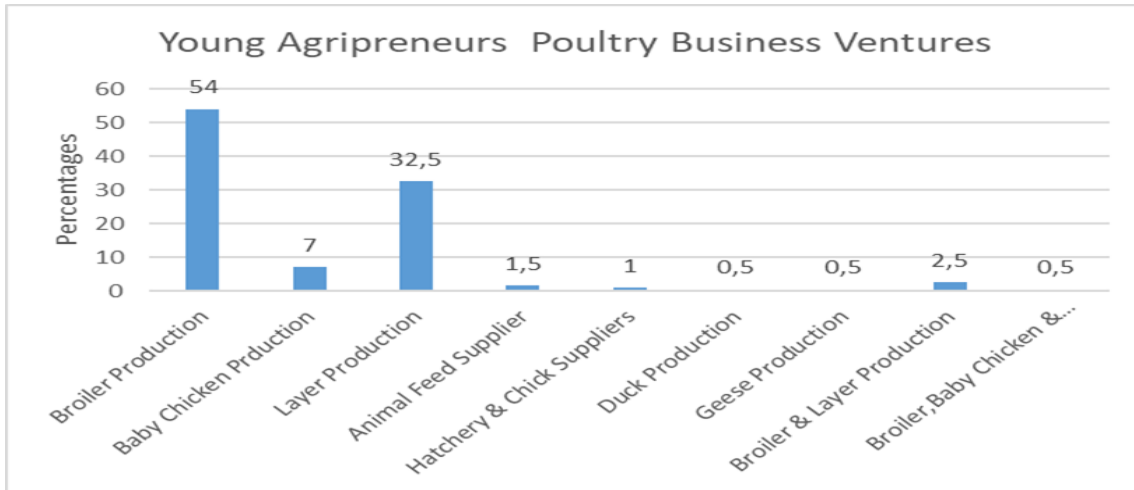


Figure 5: Young Agripreneurs Poultry Business Ventures

Poultry producers in Lesotho are currently suffering from unavailability of day-old chicks and point of lay pullets because the country is importing them from the neighbouring RSA and the short supply was a result of avian influenza and Covid19 movement restrictions and the majority of farms have been closed as a result. Basotho Poultry Farmers Association (BAPOFA) reported that they were forced to close their poultry slaughter facility in Butha Buthe district because there were no farmers rearing broilers because of the day-old chick's unavailability. It was also reported by the majority of farmers in all districts that they had never had day-old chicks since July 2021 up to now November 2021.



Figure 6: Empty Refrigerators in BAPOFA Slaughter Facility

It is clear from the above justification that young agripreneurs should invest heavily in broiler parent stock and hatchery combo because the majority of hatcheries are also suffering from the unavailability of fertile eggs which they import from the neighbouring RSA. The Post Bank Agriculture Investment Specialist highlighted that the bank is aware of local hatcheries potential but pinpointed that parent stock production either broiler or layers are the only permanent solution for poultry industry in Lesotho. The other

untapped business opportunities within poultry chain included investments in Animal Feed Premixes, Animal Feed Manufacturing, Broiler inputs supplier such as equipment, medication and packaging material, Broiler breeder production, Broiler Parent stock Production, Day-old chick's hatchery, abattoir or slaughtering facility, retailing and wholesaling and fast food restaurant. The other niche area of investment is the frozen eggs as suggested by the Department of Marketing Officer based on the number of importing licence requested for this commodity.

3.3 Youth Investments in Poultry Value Chain

The extent of youth investment in poultry value chain was evaluated using a number of indicators such as business model, the scale and size of business, methods of production, inputs costs and profitability. The SWOT analysis results revealed that poultry is one of the businesses where youth can invest along because there are more opportunities and strength than the weakness and threats. The Analysis favoured broiler, dual purpose but layers had potential but high costs of initial capital in terms of cages and pullets are the main threats.

Business Model

A business model describes how any given enterprise, large or small, informal or formal does' business, markets its products and sources inputs and finance. The mostly adopted business model by youth is Sole Trading which represents 85.3% while cooperative accounted for 12.7% and lastly, Retailing of Poultry and Products was responsible for 2% of total business. Sole trading was the most dominant because youth revealed that cooperatives or joint ventures are highly susceptible to failure because the majority of youth lack cooperative skills and honesty. When coming to business registration with the Department of Trade and Industry very few (2.5%) young agripreneurs indicated that they had formally registered their businesses.

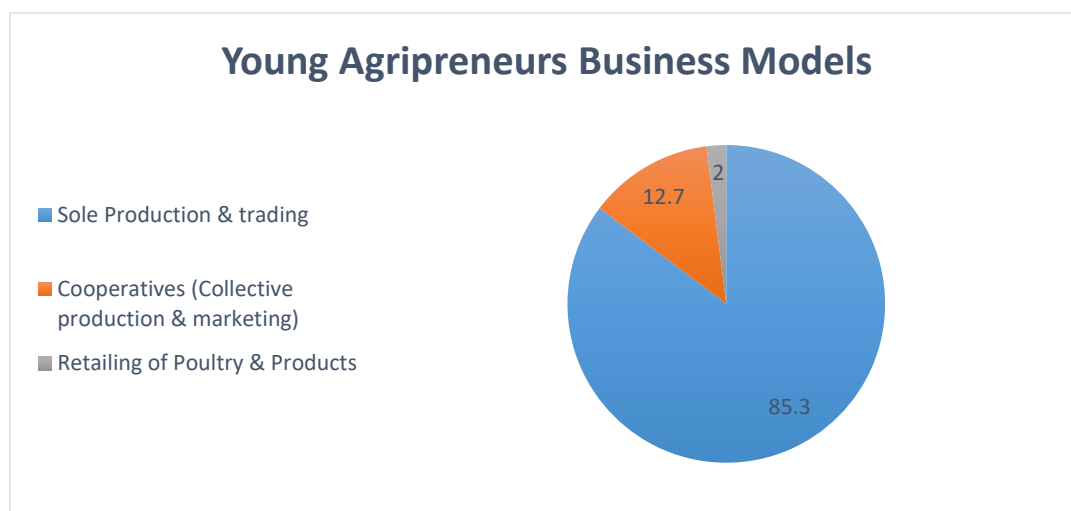


Figure 7: Business Models Deployed Youth

Source of Funding

The source of funding (Figure 8) for youth poultry business was mainly by self-funding (66.8%) and family funded (25.5%). Access to credit or loans as well as government funding were not very popular sources of capital. Funding for youth projects was noted by the majority of stakeholders as major barrier limiting participation of youth in poultry value chains. Poultry production was envisaged as capital intensive enterprise when compared to crop production and therefore need financial assist of some sort.

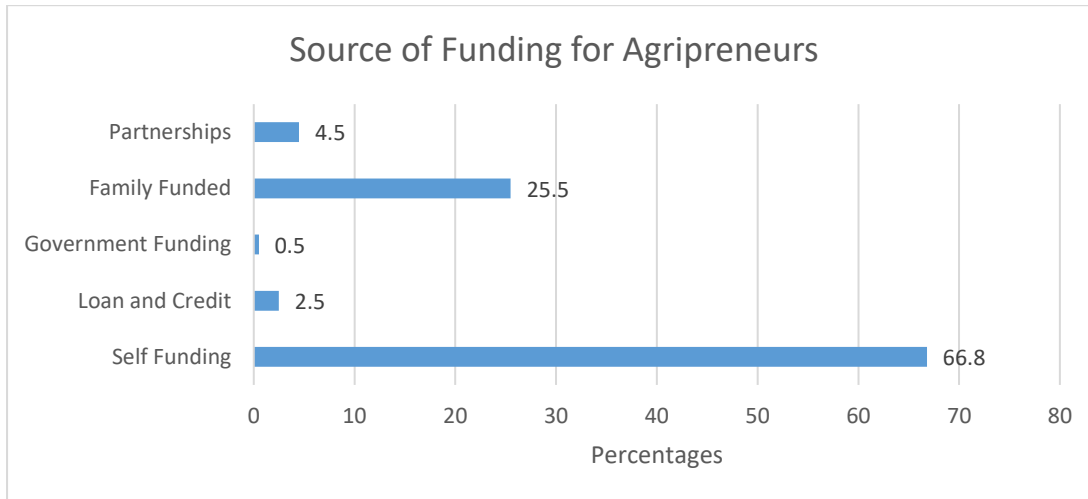


Figure 8: Source of Funding for Young Agripreneurs

Production Systems

The most common production systems used by young farmers were intensive production of broiler and layers and this accounted for 68.5%. The most common production system for dual purposes layers such as Koekoeck chickens and Boschveld was semi-intensive production and it constituted 23.2% of production systems. Extensive production system was also practiced by 8.4% of dual purposes producers. When asked about their rate of production in individual undertaking, 69.3% reported they are always in production, while 16.7% indicated that they produce seasonally.



Figure 9: Broiler under intensive production system in Maqhaka RC Berea

Stocking Density

The stocking density for the majority (51.5%) of broiler producers was 200 day-old chicks per cycle which qualifies them as smallholder's producers and they were followed by those rearing 100 day-old chicks per cycle (44.1%) and only 4.5% of youth were in the category of commercial producers with more than 500 chicks per cycle. The stocking density is influenced by financial capability as well as investment in infrastructure such as poultry housing. Below (Figure 10) is the picture of typical housing facility for broiler and layer production. There is a need to subsidize poultry inputs just like crop production. Livestock producers benefit during diseases outbreaks only while crop producers are regularly subsidized at the beginning of each growing season. Livestock producers were left out of 2003 subsidy policy.



Figure 10: Housing infrastructure for young agripreneurs in Kolo RC in Mafeteng district

Source of Feeds

The majority of young agripreneurs producing broilers and layers obtain their feeds from nearby towns (55.7%) and local retailers (30.3%). The dual purpose chicken producers feed a mixture of commercial feeds and own formulation which comes in the form of fowl mix made up of maize, wheat and sunflower. Small fraction (1%) manufacture feeds for sale and home consumption. Amongst the feed brands used by young agripreneurs 50% used Itau feeds while Makhulo followed with 43.5% and the rest of other feed brands such as Meadow, Nutrifeds, Tripot and Voere were not so popular. Dual purpose breeders also raised a concern that Makhulo is not producing breeder meal and pullet grower for them and hence why they rely on Itau. The reason for brand preference could be due to associated carcass quality, feed prices and availability. It is therefore recommended that Makhulo should be advised to diversify its feed products to cover all types of production systems and all different stages of production in Lesotho.

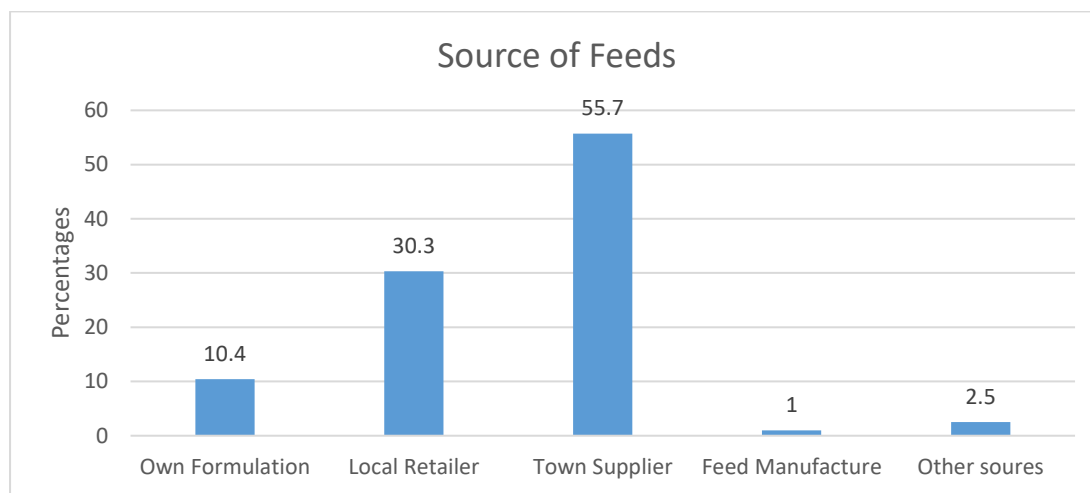


Figure 11: Source of Feeds

Inputs Cost & Profits

The most common stocking density for broilers by young agripreneurs was 100 birds per batch. The majority (50.2%) of youth estimated inputs costs for 100 broilers from day-old to six weeks' maturity to be in the range of M1000.00 to M4500.00. The inputs costs cover price for day-old chicks, feeds, medication and heating costs. The reported profit margins were in the range of M1500.00 to M4000.00 per 100 broilers but also influenced by selling price which is quiet variable amongst the producers. It is very important that young farmers should be capacitated with elements of pricing.

Marketing of Poultry Products

The broilers were sold as live chickens and as carcass and the majority (66%) of young agripreneurs indicated that they sold their products at farm gate market, while (15.3%) reported that they sold in small local market. The other producers (9.9%) used it for home consumption. Marketing is one key issues reported to affect poultry business negatively. Youth Development Officer from Ministry of Youth and Gender highlighted that they used to have a Seed Grant to support youth to start their own business and she mentioned that one of the factors that led to the downfall of the programme was poor market linkages.

The Marketing Officer from the Department of Marketing reiterated that one of the factors affecting the acceptability of poultry products by big retailers is the lack of slaughter facilities in Lesotho. The big retailers prefer broilers from slaughter houses where hygienic protocols and meat inspections are prerequisite. However, informal slaughtered broilers are still making it to the informal markets and are the main suppliers to the street vendors who specialise in broiler meat. Enrich Store in Maseru is offering a handy market for its shareholders who are given opportunity to supply eggs and meat to the store. The store is selling most of its broiler products to street vendors who specialises in poultry meat. The store claimed that broiler products business is doing very well. However, the egg business was not doing very well because of eggs shortages within the country and the store therefore recommended youth to invest more in layer production.

In order to assess the quality of young agripreneurs products, the researcher visited some of the consumers to ascertain the quality. The majority of them indicated that they were buying Basotho products but their biggest challenge was the inconsistent supply. They went further to say that supply was good during summer months and was literally absent in winter and they were forced to look for other suppliers. The other consumers Big 6 and Come Back Shizanyama in Maseru district indicated that they were making good profits when buying from farmers directly than from the supermarket but big challenge was inconsistency in quality such as small birds size and sometimes too fatty. Young Lesotho Farmers Association member stressed that their major concern was the lack of standardization of products because this could be a problem when young farmers need to share a market. There is a need for research to be conducted on the influence of feed types on carcass quality and fat deposition and organoleptic characteristics of meat. The Lesotho Standards Institute officer pinpointed that to address the issue of standards for livestock products they offer training to farmers and producers on Hazard Analysis and Critical Control Point (HACCP) which ensures that food safety is not compromised and their office is working hand in hand with DLS and DAR to test the quality of products and offers accreditation.

3.4 Bottlenecks Affecting Youth Participation

There are numerous factors affecting the involvement of youth in poultry value chain but on top of the list is the lack of access to finance where the majority (92.6%) of youth reported that lack of start-up capital is the major challenge affecting their participation. Some of the recent graduate of Lesotho Agricultural College who did poultry enterprise specified that they are willing to continue with the project but due to lack of finance they are unable to start the business. The other important factor when considering funding for youth in agriculture is the political landscape whereby nepotisms based on party politics led to undeserving beneficiaries being given grants to start projects and this is marked by the high failure rates of such projects because of the lack of passion and experience. It is therefore very important when awarding grants or financial assistance to consider those youths that are already practising. It is therefore a need to formulate a policy to address agricultural financing for youth projects. The policy should advocate for youth farmers' access to no interest and collateral free loans.

Lack of marketing channels was also identified as one of the bottlenecks affecting youth participation by 75% of the youth. On the other hand, street vendors buying broiler meat from the farmers reported that the supply is inconsistent and often do not meet their requirements in terms of numbers and quality. A member of the executive committee for Quthing District Farmers Association stated that marketing of poultry products is not a problem but the challenge is the low productivity and seasonal production. One of the reasons for seasonal production is the poor performance and high mortality associated with poor heating systems during cold winter season. Therefore, youth agripreneurs lose valuable customers in this manner because during the off-season customers had to look for other suppliers.

Lack of entrepreneur skills was also cited by 74.5% as a challenge limiting youth participation in poultry value chain. Amongst the interviewed youth only 25.6% reported that they received some training in agribusiness while 26.3% acknowledged receiving technical support in the field of their production. It is clear from the information that the majority had knowledge gap in their respective fields of production. It was observed during the visits to different districts that some dual purpose chicken producers do not understand the cock to hen mating ratios. The need for training of young agripreneurs in agribusiness and poultry production is very important. Member of Lesotho Young Farmers Association stated that youth are lacking behind in technological skills needed to improve production and quality of poultry products. Therefore, there is a need for a policy on wider skill development with possible industrial attachment with renown companies in poultry industry.

Land for production purposes was also mentioned as one of the bottlenecks affecting youth investing in poultry production. The greatest need for the land was mentioned in the lowlands of Lesotho where 32.2% proclaimed the fact. Very few (14.9%) of youth in the highlands had land issue. The issues of land encroachments by houses is quite alarming and this reduces the available land for agriculture.

The other conceivable issues that affect youth partaking in poultry value chains such as low profitability, negative perception, lack of technical knowhow, poor access roads to farms and policies seemed not to be the major challenges for youth because less than 50% of the youth considered them as challenges. One of key informants from World Vision Matlameng AP in Leribe district stated that government policies are in fully support to the youth, the only challenge could be associate with the actual implementation of such policies.

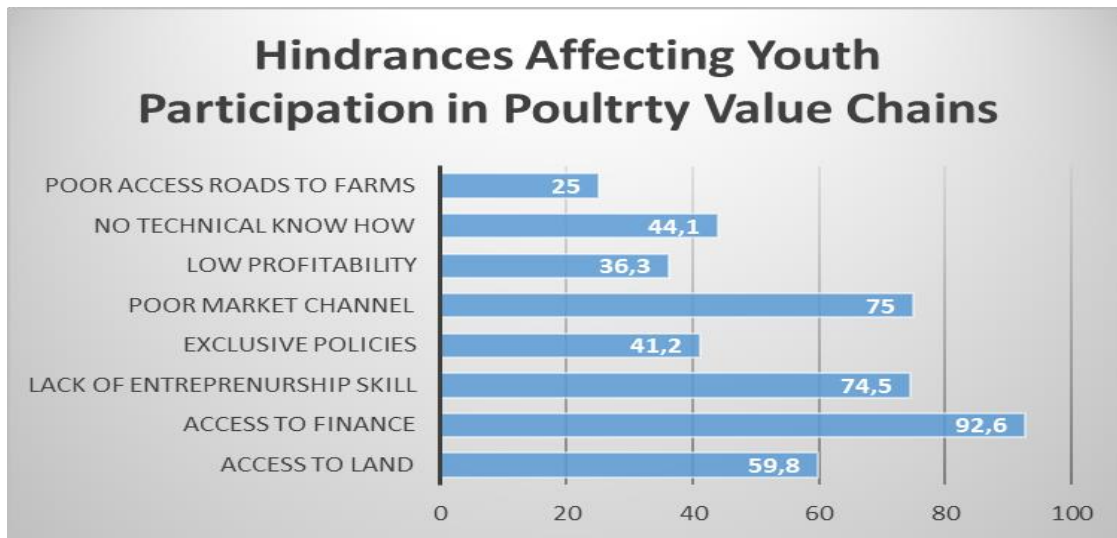


Figure 12: Hindrances Affecting Youth Participation

Lack of day-old chicks and layer replacement stock affected so many young agripreneurs and it was also a national problem because all the districts suffered the same problem. Since broiler production is the commonest enterprise amongst youth, availability of day-old chicks had led to the closure of many broiler enterprises. The severe shortage was document around July and August in 2021 and the predisposing factors were the Avian Influenza which led to prohibition of all bird's importation to Lesotho. The local hatcheries were also overwhelmed because they depend on importation of fertile eggs from the RSA. With regard to point of laying hens the suppliers promised to start supplying birds around end of November or early December. Below is the picture of empty layer house with stocking capacity of 1500 layers but due to short supply of replacement stock youth cooperative don't know when they will receive the next batch of point of lay pullets.



Figure 13: Young Agripreneurs Cooperative awaiting point of lay pullets Mohaleshoek

The hatchery producers in the number of districts were negatively affected by electricity failures which leads to low hatching rating. In Qachas Nek the issue of electricity was top of the agent in Letlapeng Resource, where youth focus group indicated that the source of electricity for the whole town is coming from the neighbouring RSA and they highlighted that their town is equally suffering electricity load shading affecting RSA. They went further to point out the significance of this problem on heating costs for day-old chicks and its impact on day-old chick's mortality.

Clean water for livestock and for hygienic purposes was also submitted as one of the challenges. Below is young agripreneur from Maqhaka Resource Centre in Berea district who is keeping layers under deep litter system. He emphasized that in order for the flock to drink he had to travel to other village to collect water and this cost him about M1000.00 per month. One youth at Hloahloeng in Mohales Hoek district pointed out that broiler production is a good enterprise for youth but for her lack of water and poor housing infrastructure are discouraging because she had to travel in order to obtain water for her flock.



Figure 14: Young Farmer struggling with high costs of cages & drinking water

Youth mindset was also enlisted among other challenges limiting youth participation in poultry value chain. Lack of interest in agricultural activities was mentioned as a bottleneck by a number of stakeholders; ATO Livestock Mahobong, World Vision Area Programme Coordinator Matlameng, Maphohloane Poultry Association. DEO Quthing highlighted that the majority of the youth migrated to South Africa Ceres where they are employed as casual labourers and the few that are left behind don't attend agricultural activities including the public gatherings when they are being invited. United Nation Development Programme (UNDP) provided social compact for youth by training them on design thinking in order to change their mindset (Youth Development Officer Ministry of Gender).

The findings of the current study are in agreement with the findings of Lesaane and Akintule (2020) who did a similar study in Lesotho on the constraints of graduate to undertake business in agriculture. The researchers documented the following as hindrances that affected youth participation in agriculture; land availability, inputs availability, financial support, technical support in the form of extension services and training and poor marketing of agricultural products. Nmeragini et al. (2020) in Nigeria stated that potential entry into the poultry enterprise by the youth has carried a host of

challenges and entry barriers such as insufficient access to knowledge, information and education and limited access to land, financial services, markets, disease outbreaks, poor quality chicks, high cost of feed, and concerns about environmental pollution from poultry manures. Mulema et al. (2021) carried out a similar study in Zambia and Vietnam and also verified factors that limits young agripreneurs partaking in agribusiness as: access to land, access to finance, possession of agriculture-related skills, lack of market access and lack of functioning infrastructure.

3.5 Business Opportunities in Poultry Value Chain

Agriculture has huge and diverse opportunity potentials that can not only transform the national economy but also tremendously impact the personal lives of the farmers particularly the youth (Adesina and Favour, 2016). Growth in demand for value-added food and processed agricultural products in developing countries is an opportunity to develop the agro-industries for youth employment creation (Development Centre Studies, 2018). However, challenges remain in the empowering small-scale farmers and low-skilled rural youth to integrate into local and global agricultural value chains and move up the ladder to meet the quantity and quality standards required for both national and export markets ((Development Centre Studies, 2018).

In Lesotho poultry value chain development had been earmarked as the strategic investment area for the country according National Strategic Development Plan II, 2018/19 – 2022/23. There are numerous business opportunities for youth to invest along poultry value chains. There are many untapped businesses with a ready to go market opportunities. The number one untapped business opportunity is broiler and layer parent stock. Data on poultry imports had clearly shown that Lesotho depends entirely on South Africa for replacement stock either day-old chicks or point of lay pullets. The financial institutions are more than ready to finance this type of undertaking because it will solve the national problem for replacement stock.

The untapped potential business within poultry chain where youth can invest includes inputs supplier which covers animal feeds, equipment, medication, packaging materials and value addition processing such slaughter houses and butcheries. Hatcheries are also playing a significant role in the supply of dual purpose chicks but this area is also not well represented by youth. However, youth are not investing in the above potential business because of the technical knowhow and lack of finance to start such projects.

Government and Non-Governmental Organisation seed grants are amongst the available opportunities for the benefit of youth. The seed grants are aimed at assisting youth in groups to support their businesses. World Vision Area Programme Manager for Matlameng AP indicated that this grants comes in the form of inputs and infrastructure needed for the business. It is therefore very important that youth should form association in order to access these grants. Ministry of Gender under Youth Development Programme also had a similar grant for youth and it was offering a maximum of M40 000.00 per project. BEDCO is also offering best business proposal for 30 youth valued at M100 000.00 start-up grant. Government through its agricultural projects such as Smallholder Agriculture Development Project (SADP) is offering matching grants for smallholder business where youth can write-up a business proposal which upon approval

will provide the youth with all necessary inputs to develop their business. Currently the matching grants are valued at M400 000.00 to M450 000.00 and M451 000.00 to M1 500 000.00 and each with 25% and 40% cash equity respectively. The Grants manager SADP indicated that youth participation was small and their major hindrance was cash equity which majority of youth could not afford. Something should be done to assist youth to access these grants either by full exemption or policy change.

Retailing and wholesaling of poultry products is also another big opportunity for youth when considering that the bulk of poultry producers are in the lowlands of Lesotho. Youth should consider collecting products from place of plenty and supply them to area of scarcity. One youth in QachasNek was collecting day-old chicks in Maseru and supply them to other farmers in QachasNek. Other business opportunities recorded included frozen eggs and this was supported by Department of Marketing which offers permits for importers of frozen eggs. Chicken ovals also are big potential business where youth can serve as middlemen between slaughter houses and consumers.

The presence of agriculture based training institutions and ministry of agriculture extension service are advantage to the youth because this institution provide training in all areas of poultry value chain. Access to land for farming is also a bonus for young poultry farmers because land unavailability is a big challenge for youth in urban areas. In Zambia youth considered agricultural skills and access to credit as the major opportunity to attract youth to invest in agribusiness (Mulema et al., 2021).

3.6 Mechanisms to Improve Youth Participation in Poultry Value Chains

The majority (82.8%) of agripreneurs reiterated that there is a need to offer training to youth as form of empowerment. Training in agribusiness as well as poultry production are vital for the success of youth businesses. During the data collection the team was able to interact with young agripreneurs and visited their production sites. The need for further training on poultry production was obvious especially when elements of management such as feeding and the role of litter material were not well understood. The majority of youth (74.4%) also indicated that they had never received any training and technical support from relevant ministries.

Financing and start-up grants for youth agribusiness tops the list with 77% of youth attesting finance as the number one bottleneck that hinders their progress within the value chain. However, a number of sponsors were identified even though not adequate when considering the number of youth in the country. The source of funding comes in the form of loans provided by the banks such as Lesotho Standard Bank and Post Bank. Post Bank financial service is offered to a wider clientele such as Banked, Underbanked and Unbanked. The bank is also having poultry product for its banked clientele. The product financial assistance covers costs for inputs such as birds and feeds, covers assets such as cages, processing equipment and retailing services. Finally, the products cover health services for medication and veterinary services. Agriculture Financing Officer asserted that to date the service has not been accessed. Lesotho Standard Bank is offering the

credit service for the farmers however, they prefer farmers who are already in production because they don't offer start-up capital. They offer services to all farmers based on their business record and require 10% cash equity. The other banks such as Boliba and Nedbank don't have special packages tailor made for farmers. Animal Production Officer Department of Livestock verified that financial assistance by the banks is of great value however this is not adequate and more funders should invest in youth poultry projects.

The other important strategy advocated by 67.6% of youth was to organise youth into groups and form cooperative. Organised youth groups will have a big advantage when it comes to accessing financial assistance in the form of grants and soft loans than when they are operating individually. Organised youth can also share skills, important information such as marketing of products and can also start joint business ventures in the niche areas of poultry value chain such as parent stock production and feed manufacturing.

The number of stakeholders and farmer's association highlighted the importance of sensitizing the youth about the importance of poultry business and agriculture in general. Maphohloane Poultry Farmers Association Coordinator emphasized that there were no youth in their group and appealed that youth needed to be sensitized because they neglect agriculture yet the majority of them are unemployed. In the number of districts and resource centres it was surprising to find that young agripreneurs in poultry production were not even aware of the agriculture service arrangements like resource centres or the name of resource centre where they are supposed to receive service. It is therefore very important to sensitize the youth about importance of agriculture and the type of services provided by the ministry through its resource centres and personnel.

Poultry production insurance as means to ensure sustainability was also important strategy to help young agripreneurs to sustain financial losses due to natural disasters such disease outbreaks, fire and strong hurricane winds that can blow away poultry structures (Ibrahim, 2012). Agricultural Financing Specialist Post Bank highlighted the importance of insuring agricultural business and gave an example of the poultry farmer who has encountered a major financial loss as a result of the disease outbreak that wiped out all his layer flock. It is against this premise that we recommend that young agripreneurs should insure their business so that they will be compensated after a natural disaster strike in order to ensure sustainability of the business.

The issue of marketing was received with mixed feelings because there were those farmers and stakeholders that proclaimed the marketing of poultry products not to be a problem and the others believed that there was a shortage of market. The market related issue raised was that farmers were not meeting the standard required by retailers and wholesalers as a result their products could not reach such markets. Retailers and wholesalers required a standard slaughter facility with a provision for packaging, branding and meat inspection. Therefore, it was recommended that there should be one slaughter facility per district. There was also a concern about the eight underrated slaughter facilities and it was recommended that they should be upgraded and certified. During validation session it was revealed by Marketing Department Officer that a newly proposed slaughter facility for poultry and piggery is underway in Maseru and visibility

study had been completed. Marketing strategies suggested by the youth focus groups included; use of social media platforms, radio advertisements, packaging of products which should bear stickers that provide information about the product as well as the business contact details. Department of Marketing is also facilitating market days usually month-end where products are marketed and sold.

Need to encourage Public Private Partnership to offer services that were offered by farmers training centre for youth who were not formally trained in agriculture so that they could acquire necessary skills and practice. The training programmes should be drawn and to address the needed skills by the labour market. The training should cover aspects such as product selection, marketing and bookkeeping.

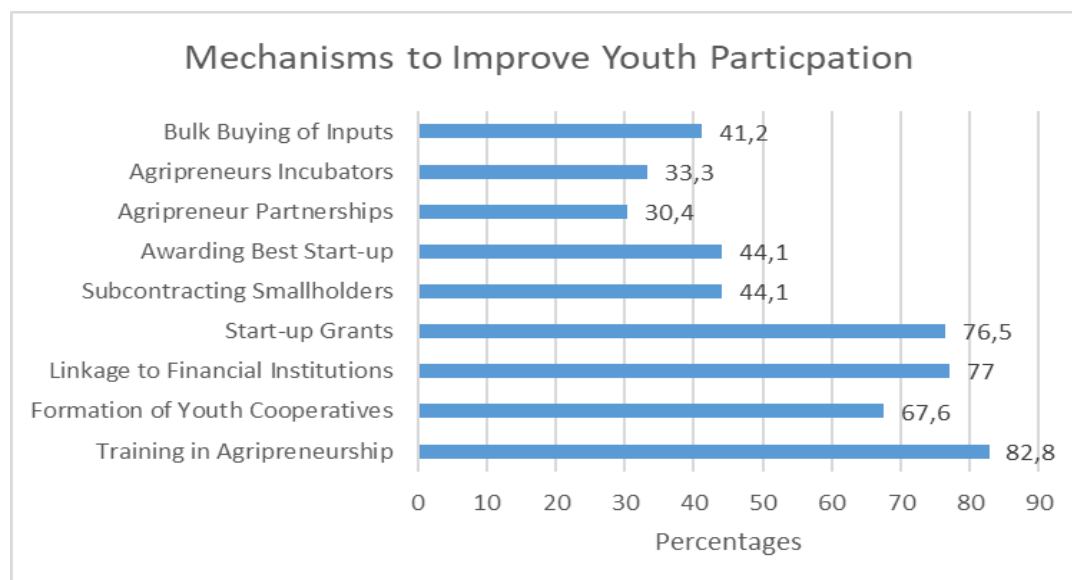


Figure 15: Mechanism to Improve Youth Participation

3.7 Policies and Regulations in Poultry Value chain

Youth in Lesotho enjoys a wide support from the government in the form of inclusive policies. A number of policies and strategic plan have been adopted and the following are the examples; 2017- 2030 Lesotho National Youth Policy which advocates that young people should have access to finance and financial education to enable youth entrepreneurship. Livestock Policy of 2020; seeks to promote gender mainstreaming, youth and vulnerable groups to participate in the livestock industry. Policy on Rural Savings and Credit,1999 which addresses the problem of commercial banks being hesitant to offer credit to rural communities because of the associated high risk and high transaction costs. The Policy has the objective of promoting rural financial intermediation. The Policy aims to link the informal sector with the banking sector to encourage more borrowing for income generating activities. Lesotho Food Security Policy, 2005 which acknowledges the role of youth in food production. Rural Savings and Credit Policy,1999 which advocated improvement of access to finance to rural communities to

support their agricultural activities. NSDP II 2018-2022 focus on youth participation in agriculture and other productive sectors through incentives targeted at youth enterprises. In line with SACAU objectives NSDP II also endorses formation of youth associations and networks locally and regionally.

More than 60% of the key informants believed that government is one of the actors that regulates poultry value chain in Lesotho and it is supporting youth participation through their inclusive policies. However, the only challenge that affects participation by youth is the implementation of such policies and strategic plans. World Vision Area Programme Coordinator for Matlameng, Gender Youth Development Officer, AEO Khukhune Resource Centre Butha Buthe and DEO Mokhotlong indicated that the Lesotho policies are very good but their implementation drags behind which in reality will appear like there are no policies at all. The majority of youth (90%) also were found not to be familiar with a number of policies that governs their day to day business activities and this makes it very difficult to discuss this issue.

The recent findings on promoting youth inclusiveness in poultry value chain suggested that part of the solution for promoting youth participation should include supportive policies and frameworks that promote capacity building, stakeholder investment, and creating innovative spaces in agriculture in a way that takes into account youth aspirations (Auta et al., 2010; Chinsinga and Chasukwa, 2018). Such policies and frameworks should be inclusive and recognise at the onset young people as key players in policy formulation (Kadzamira and Kazembe, 2015; African Union, 2011).

3.8 Key Actors Promoting Inclusiveness of the Youth Poultry

The poor state of agricultural production due to lack of government support in Africa has resulted in the low interest of youth in agriculture (Mthi et al., 2021). In order to improve country's economic development, youth should be encouraged to participate in agricultural activities because they constitute an important component in society and are the greatest assets of any country globally (Kimaro et al., 2016). All poultry value chain stakeholders are responsible for driving the sector growth and subsequently promoting youth participation in poultry value chain either individually, in partnership or in collaboration. The figure below depicts different stakeholders and how their influence promotes youth participation.

The majority of the youth (75.5%) submitted that the financial institutions such as bank and Non-Governmental Organisation (Donor Community) that offers financial support to youth projects in the form of loans and grants are the main stakeholders to promote youth involvement in poultry value chain. Financial institutions were rated much high because most of the youth were challenged by lack of access to finance in the form of start-up capital. The use of digital finance had been one of the big solutions for youth without formal bank accounts to access short term loans eg Khetsi from Post Bank. The other common sources in Lesotho are Mpesa and Ecocash for the similar purpose.

Government influence in the promotion of youth inclusiveness in poultry value chains was rated second best after financial institutions. Faced with the daunting youth employment challenge, governments are increasingly promoting youth entrepreneurship as a way to expand employment and earning opportunities. Government role in poultry value chain is in the following areas; development, financial support, technical support and regulation through its departments of marketing, trade and industry, small business, and livestock and ministry of gender. However, the biggest challenge is coordination and sharing of information between the government ministries. Government is also responsible for policies that are drafted to facilitate enabling environment for youth to participate in business. The number of donor community's funds also comes through government in the form of developmental projects to assist farming communities that included youth, an example is Smallholder Development Project (SADP) that offers financial grants to the farmers in the various fields of agriculture including poultry production.

Private sector was cited by 55% of the youth as best stakeholder to stimulate youth participation in poultry value chain. Private sector includes all stakeholders in poultry value chain that supply necessary inputs to support the business such as feed manufacturers, poultry breeding companies, poultry equipment suppliers, transport and logistics and veterinary services. The private sector can support youth by providing them with incentives to engage in agriculture, and more specifically, agribusiness, through internships, market linkages, and training programs to prepare youth to lead and manage agribusinesses.

Poultry producers and processors participating both in primary and secondary activities of poultry value chain where they are involved in the raising of chickens and processing them for the final market. However, youth did not consider them as important promoters of young agripreneurs into poultry value chain.

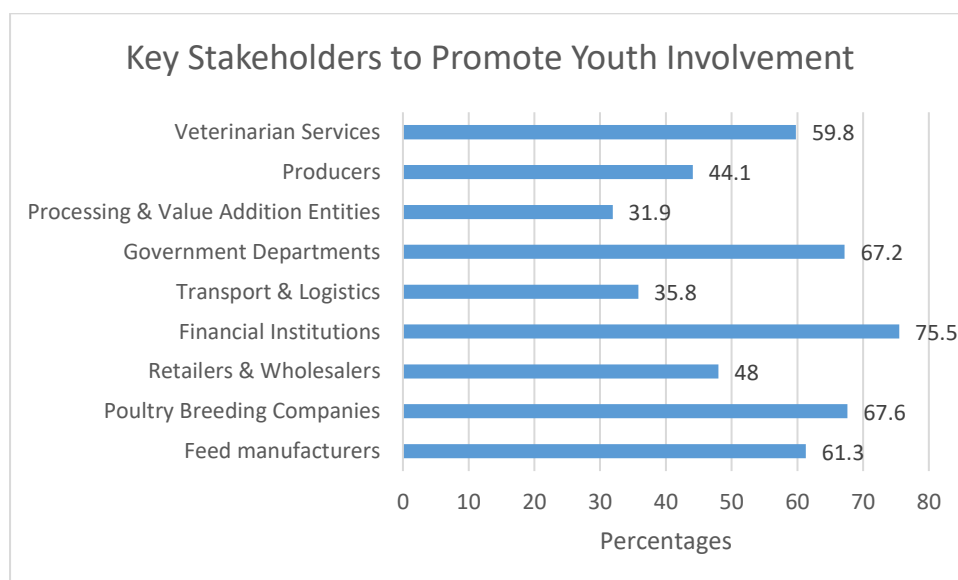


Figure 16: Key Stakeholders to Promote Youth Involvement

3.9 The Role of NFOs in Promoting Youth in Poultry Value Chain

The National Farmers Unions (NFOs) are tasked to protect and enhance the economic well-being and quality of life for farmers and rural communities through the advocacy. There three basic principles that guide organisation being education, cooperation and legislation. Education of members and others is considered the foundation of farmer's union's success in all areas of the organization. The cooperation side represents members working together to achieve common goals and farmer's union's commitment to cooperative education and cooperative business development. The legislation side represents farmer's union's lobbying efforts in the legislative arena.

In Lesotho, LENAFU is a mother body of farmer's associations in Lesotho and as such it is in a good position to exert influence on youth participation in poultry value chains. Lesotho National Farmers Union Strategic Plan (LENAFUSP), 2019-2024, through its strategic pillar 1 & 2 which deals with farmers mobilisation, mentoring, empowerment, advocacy & policy engagement. In line with youth participation, Strategic Pillar 1 support active participation of youth, women, PWDs and other vulnerable sectors of society in agriculture and promote business entrepreneurial services and support to farmers. Strategic Pillar 2, on the other hand, support research on farmers' challenges and opportunities and advocate for policy response as well as advocacy for farmer-led policy response & implementation on farmer's access to inputs, markets, finance, insurance and other enabling credit support.

The National Farmers Organisations (NFO) plays important part as role model for young agripreneurs. Young agripreneurs participation will be enhanced when the outputs of NFOs are visible. The majority of young agripreneurs 73.5% to 80.4% believed that NFOs were in good position to mentor them in skills and technologies applicable to businesses in poultry value chain; link them with the financial institutions where they could access loans or start-up capital for the business and link them to the market channels where they could sell their produce. Young poultry producers to some extent about 60% expect NFOs to pave way by developing new business ideas, advocate for cost sharing amongst members by joint purchasing of inputs and lastly be the mouth piece by representing them in government forums and policy formulation for change to the better in poultry industry.

BAPOFA secretary confirmed the perceived roles of NFOs and pointed-out that they seek funding for business development especially those businesses that could relief the country from reliance on RSA. They utilized their annual subscription money to create saving groups with a potential to offer short term loan or credit to members. BAPOFA secretary Berea went further that youth involvement in poultry value chain was affected by success of the poultry business in the neighbourhood and if it is successful and managed well it will attract the youth. He however, lamented the fact that people join the poultry sector without any training in business management and poultry production and this led to project failure and that in itself is a bad indicator for youth. ATO livestock Maputsoe Resource Centre stressed that some farmer's organisations are not productive and hence youth see no future such in such groups and in what they are doing.

Nmeregini et al. (2020) observed that the tendency of youth involvement in poultry production activities increases with membership to co-operative societies. Hence, youth

who belonged to co-operative societies were likely to be involved more in poultry production activities.

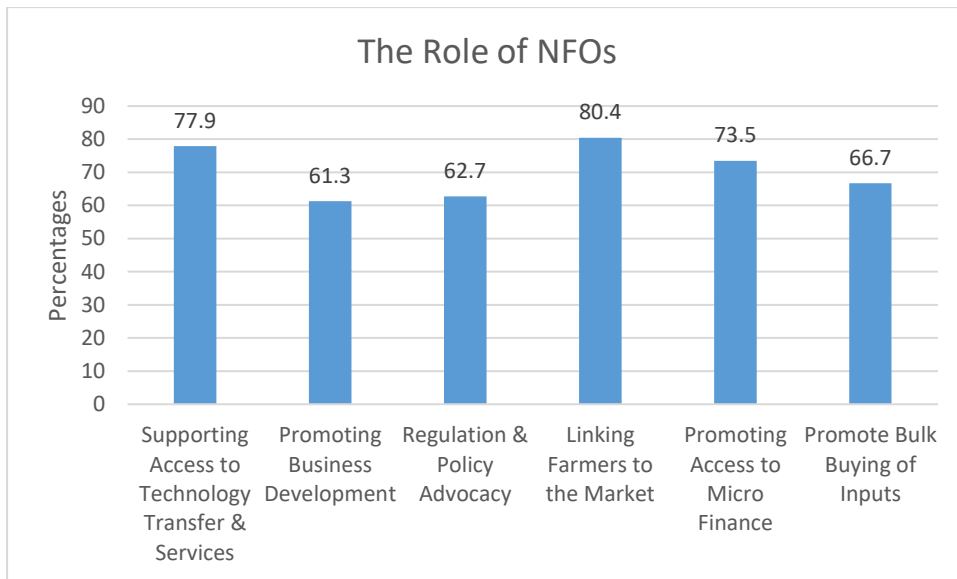


Figure 17: The Roles of NFOs

4.0 CROSS CUTTING ISSUES

4.1 Effects of Covid19 on poultry value chain

The pandemic had a negative impact on the youth agripreneurs particularly movement restriction part of it. The neighbouring RSA closed its borders with Lesotho and even within the country people were forced to stay at home. The effects of covid19 had affected youth business negatively because 55% of the youth indicated there was a reduction in poultry products sales, 47% of the youth reported they experienced high inputs costs such as feeds, while 37% pointed out that they were running short of inputs such as day-old chicks, point of lay pullets and fertile eggs (Figure 18). Young agripreneurs in layer production reported that there were no sales and their products got spoiled due to expired shelf life. From QachaNek young poultry producers indicated that they used to buy poultry inputs from Matatiele in RSA but because of border closures they were forced to buy inputs from Maseru which were very expensive especially animal feeds. The majority (85%) reported that they lost business during this period because a number of people especially casual labourer lost jobs and they could not afford to buy poultry products. Those that have bought goods on credit could not manage to make payments as a result.



Figure 18: Hatchery Producers with his incubator

4.2 Youth Decision Making on Business Management

Parental social involvement promotes youth's participation by transmitting civic values to children, while a farm background encourages children to broaden their social options to include farm-related groups such as cooperatives (Chan and Elder, 2001). The majority of youth (87%) reported that they were empowered enough to making decision concerning their businesses although the source of funding came from their parents. Their parents also wanted their youth to stand on their own feet.

4.3 Effects of Youth Participation in Poultry on Crime Reduction

The active engagement of young people in agriculture can turn them away from a life of crime. The findings indicated that 93% of the youth understood that participation in poultry value chains could have a significant influence in reducing crime committed by the youth. Youth from Masianokeng in Maseru district confirmed that rearing of poultry was keeping them very busy and there was no time for roaming idle in the streets. Another youth from Mahobong in Leribe district indicated that taking care of the birds was daily routine and it requires attention and time so there was less time for other activities such as committing crime,

5.0 CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusions

The overarching findings of the current study revealed that the majority of young agripreneurs in Lesotho are participating in primary activities of the poultry value chain which encompass rearing or production of broilers, layers, dual purpose with small number engaging in hatchery production. The majority of young agripreneurs were

females, married and aged between 25 and 35 with secondary school training. Their main source of income being self-employment and farming. The majority of them were operating sole trading type of business with their own funding. The majority of these businesses were not formally registered with the Ministry of Trade and Industry.

The number of youth were deploying intensive type of production for broilers and layers while dual purpose was produced under semi intensive. Based on their stocking densities of up to 200 birds the majority of young farmers were categorised as smallholder producers. The most common type of feeds used were commercially blended feeds dominated by Makhulo and Itau feed brands. The average inputs costs for 100 day-old chicks were estimated at around M4500.00 covering feeds, chicks and initial medication. Poultry products were sold in the neighbourhood market, in the form of live birds, slaughtered chicken and eggs. The dual purpose eggs were mostly bought by hatchery producers. The quality of poultry products was also a concern amongst consumers indicating inconsistent production and quality.

Young poultry farmers were challenged by various production factors such as high mortality of chicks due to poor heating, high feed costs, unavailability of day-old chicks and point of lay pullets, shortage of fertile eggs for hatcheries, lack of clean drinking water for animals and slaughter facility for broilers. The other challenges effecting youth involvement in poultry value chain were basically related to access to finance such as lack of start-up capital to finance other important aspects of poultry such as housing, equipment and expansion. Lack of training and skill impacted youth participation in poultry value chain negatively because the other business ventures beyond production require a certain skill and level of training. Hence need to train youth in skill and technology. Other challenges were perception related such as lack of interest by the youth and the perceived ideas that poultry production is not profitable.

Despite, the above mentioned challenges, youth were surrounded by numerous business opportunities within the poultry value chain. The fact that Lesotho relies on RSA for poultry inputs, youth can invest in businesses that provide essential inputs for poultry such as broiler and layer parent stock, animal feed manufacturing, poultry equipment supplier (cages, broiler feeders, drinkers, brooders). The other investment could be done on processing and value additions such as poultry abattoir and butchery. Basotho youth are well placed because they have access to training to improve their business skill because Lesotho have training institution that offers training in agriculture and agribusiness. Even though not enough, financial support from the banks, NGOs and other government development projects enabled youth to access the needed finance in the form of loans and grants to support businesses. The majority of youth have access to land for farming which is a bottleneck for youth in other countries. Government of Lesotho is also supporting them through inclusive policies to enable them to operate their businesses. Government departments are also supporting farmer's businesses from foreign competitors by regulating amount of poultry imports. Other departments offer technical and financial support (grants) to youth in poultry business.

In order to improve their participation youth should be sensitized about the importance of poultry as a viable business covering all the important segments of the value chain and

possible areas of investment. Stakeholders have recommended that youth should organise themselves into business groups or cooperatives or join the existing farmer's groups. It was mentioned that the number of advantages exist for youth in association because things like funding are usually directed to groups rather than individuals, sharing of inputs costs and marketing as well mentorship are some of the advantages. Youth within social groups also enjoy platform where emerging ideas and innovations can be shared. Lack of access to finance by the majority of youth was the major hindrance affecting youth participation in poultry. Policy intervention is needed to ensure access to finance by the youth for expansion of poultry value chain and start-up grants. However, the existing youth policy still addresses issues related to access to finance and hence a need for policy revision. The policy revision should take into consideration youth farmers' access to no interest and collateral free loans, increase youth financial sponsors, broad capacity development of youth as well as policies to encourage membership in social organizations.

The national policies are taking care of youth involvement in development initiatives such as role in agriculture and they are also advocating for improved access to finance. The following policies and strategic plan are in support of youth participation and access to finance; Lesotho National Youth Policy, 2017-2030, Livestock Policy of 2020; Rural Savings and Credit Policy, 1999, Lesotho Food Security Policy, 2005 and NSDP II 2018-2022. The findings of the study also suggested that the majority of youth are not familiar with the current policies governing them and need to sensitize youth about the policies that affect them. There was a concern amongst the stakeholders that the policies are very good and supportive to the youth but their implementation is very slow. It was highlighted that formulation and revision of any policy that affects youth should recognise at the onset young people as key players in policy formulation and should consider youth aspirations, contributing factors, challenges facing youth under different contexts.

It was acknowledged that all poultry value chain stakeholders were responsible for driving the sector growth and subsequently promoting youth participation in poultry value chain either individually, in partnership or in collaboration. However, youth felt that financial institutions and sponsors were the main influencers because access to finance was considered the major bottleneck limiting youth participation in poultry value chain. Without access to start-up capital and cash to pay equity/collateral required by the banks and other sponsors such as SADP many unemployed youths cannot afford to start a business along poultry value chain. With access to finance many youths can participate and expand their businesses and explore the untapped business within the poultry value chain. Government role in regulating and promoting poultry value chains was considered important to influence youth participation by providing training, and technical support, business registration and licencing, regulating poultry imports and standardization of products and finally designing policies to improve enabling environment for investment by the youth. To some extent government also facilitate access to finance in the form of grants through its development projects. Private sector is chief source of poultry inputs and was highly considered as a promoter of youth participation because without inputs like chicks, feeds, medication, and equipment there will be no production. Private sectors also play role in capacitation of youth in poultry production and this make them very

influential to youth because they can capacitate and provide inputs and that is all needed to start production. Lastly producers or farmers play a significant role in their own farms producing and managing life birds and selling products directly to the neighbouring communities. However, youth did not perceive them to be strong influencers to them to participate in poultry value chain yet they are role models depicting poultry production at village level.

The National Farmers Organisation are tasked with huge responsibility to regulate and manage activities of poultry producers. They are also a linkage between poultry farmers and other stakeholders. In terms of sustainability of the industry the NFOs are tasked with mandate to promote the involvement of youth as the replacement for ageing farmers. The findings of the study on the perceived role of NFOs by the youth indicated that majority of young agripreneurs 73.5% to 80.4% believe that NFOs are in good position to mentor them in skills and technologies applicable to businesses in poultry value chain also to link them with the financial institutions where they can access loans or start-up capital for their business as well as the linkage with market channels where they can sell their produce. Young poultry producers to some extent (60%) expected NFOs to pave way by developing new business ideas, advocate for cost sharing amongst members by joint purchasing of inputs and lastly be the mouth piece by representing them in government forums and policy formulation for improvement of poultry industry.

5.2 Recommendations

- In conjunction with the relevant government ministries, NFOs to facilitate sensitization of young agripreneurs about the roles of extension services, government policies that affects them and on the available business opportunities within the poultry value.
- To improve young farmer's linkages with other farmers or associations, NFOs in concurrence with Ministry of Gender to promote awareness about the importance of working together with other farmers and stakeholders. Working together will promote peer-to-peer learning, mentorship, and information sharing.
- Capacity building of youth in poultry production and agribusiness to improve their management skill. Also training on key areas affecting functionality of the value chain such as poultry breeding, products processing and feed manufacturing.
- With regard to untapped businesses like poultry breeding, product processing and feed manufacturing there is a need for partnership amongst young farmers to make joint investment and seek a sponsor.
- Stakeholders also recommended that since Shoprite and Pick N Pay are major consumers of poultry imports from RSA they should be encouraged to finance local businesses in production of poultry products such as poultry breeding and slaughter facilities.
- To address product standardization issue which is a widespread problem amongst the producers, there is a need to invest in research to assess the impact of different feed brands on nutrient utilization and growth dynamics for fat and muscle deposition.

- The NFOs and Department of Marketing to continue and expand their coverage to reach the majority of young farmers in facilitating producer and buyer meetings to create awareness of potential business that can be explored and as a marketing tool.
- To improve access to finance there is a need to lobby for more funding for young agripreneurs from potential sponsors and banks and to lower the collateral value in the form of equity especially for unemployed youth.
- The upgrading and accreditation of underrated slaughter facilities will promote a market outlet for young farmers challenged with market unavailability. It will also enable products to meet stringent requirements by big buyers such as Shoprite and Pick N Pay.
- Concerning unavailability of poultry breeder feeds, it is recommended that Lesotho Farm Feed Mill being the sole accredited feed manufacturer should blend feeds for all categories of poultry.
- Negative perception about agriculture requires youth to be trained on social capital to change their mindset.
- Need to support livestock producers particularly youth in poultry production with inputs subsidy especially for layer production with high initial costs. Malabo Declaration (2014) advocated for agriculture inputs across all sectors including livestock.
- Young agripreneurs should be encouraged to insure their business so that they will be compensated after a natural disaster strike in order to ensure sustainability of their businesses.

6.0 APPENDIX

6.1 References

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6.2 List of key informants

Table 4: List of key informants contacted

NO	Position	District
1	AEO Khukhune	Butha Buthe
2	AEO Morija RC	Maseru
3	AEO Maqhaka	Berea
4	Agriculture Financing Specialist, Lesotho Post Bank	Maseru

5	Atang Animal Feeds	Quthing
6	ATO Livestock Mahobong RC	Leribe
7	ATO Livestock Maputsoe RC	Leribe
8	ATO Livestock Peka RC	Leribe
9	ATO Livestock Teyateyaneng RC	Berea
10	ATO livestock Maqhaka RC	Berea
11	ATO Livestock Masianokeng RC	Maseru
12	ATO Livestock Morija RC	Maseru
13	ATO Livestock Matelile RC	Mafeteng
14	ATO Livestock Ramokoatsi RC	Mafeteng
15	ATO Livestock Thabang RC	Mokhotlong
16	ATO Livestock Mapholaneng RC	Mokhotlong
17	ATO Livestock Nqabeni RC	Butha Buthe
18	ATO Livestock Khukhune RC	Butha Buthe
19	ATO Livestock Tele RC	Quthing
20	ATO Livestock Central RC	Quthing
21	ATO Livestock Letlapeng RC	Qachasnek
22	ATO Livestock Mekaling RC	Mohaleshoek
23	ATO Livestock Lilala RC	Thaba Tseka
24	BAPOFA Secretary	Leribe
25	BAPOFA Chairperson	Maseru
26	BAPOFA Chairperson	Butha Buthe
27	BeeHive Farm Feeds	Maseru
28	Boliba Bank	Maseru
29	DAO	Mokhotlong
30	DAO	Mohaleshoek
31	DAO	ButhaButhe
32	DAO	Quthing
33	DAO	Thaba Tseka
34	DAO	QachasNek
35	DEO	Mokhotlong
36	DEO	Butha Buthe
37	DEO	Quthing
38	DEO	Mafeteng
40	DAPO	Thaba Tseka
41	DLS Animal Production Officer Piggery	Maseru
42	DLS Animal Production Officer Piggery	Maseru
43	Department of Marketing- Marketing Officer	Maseru
44	Department of Marketing Statistician	Maseru
45	Farm Feeds Supplier Lilala RC	Thaba Tseka
46	Farmers Organisation Nqabeni RC	Butha Bothe
47	Jandrell & Company	Quthing
48	LAC Poultry Production Lecturer	Maseru
49	LENAFU	Thaba Tseka

50	LENAFU	Mokhotlong
51	LENAFU Treasurer	Quthing
52	LENAFU Coordinator	Maseru
53	LENAFU Secretary	QachasNek
54	LENAFU Chairperson	Leribe
55	Lerodz Farm Feeds	Butha Buthe
56	Lesotho Floor Mills –Feed Marketing Officer	Maseru
57	Letsatsi Farm Feeds Maseru	Maseru
58	MADAU Secretary	Maseru
59	Majantja Farm Feeds	Mohaleshoek
60	Maphohloane Poultry Farm	Mohaleshoek
61	Mokaloba Hatchery Makhaleng RC	Mohaleshoek
62	Mokhele Farm Feeds	Butha Bothe
63	Motjoli Farm Feeds	QachasNek
64	NedBank Lesotho	Maseru
65	Young Lesotho Farmers Association	Maseru
66	Youth Development Officer Ministry of Gender	Maseru
67	Lesotho Standards Institution, Ministry of Trade	Maseru
68	Product Quality Testing Laboratories DAR & DLS	Maseru

Table 5: List of Restaurants & Street Vendors

Restaurants & Street Vendors	
1	Big Mama
2	Big six
3	Chiefs fast Foods
4	Chilla Nathi Maseru
5	Come Back chisanyama
6	Dion Butchery
7	Enrich Maseru
8	Ha Malibatha le Libatha
9	Jaase
10	Kamohelo Butchery Maseru
11	King's Kitchen
12	Libaba's fast food
13	Maputsoe Shesanyama
14	Mashabathe Chesanyama Maseru
15	Mat catering
16	Mathato Kinela shisanyana Maseru
17	Mr. Vors Butchery
18	Sakeng chesa nyame Maseru
19	Twisters

6.3 List of focus groups

Table 6: List of Focus Groups Conducted

1	Central RC Quthing
2	Khukhune RC Botha Buthe
3	Letlapeng RC Qacha'sNek
4	Lilala RC Thaba tseka
5	Mahobong RC Leribe
6	Makahaleng RC Mohale'shoek
7	Mapholaneng RC Mokhotlong
8	Maqhaka RC Berea
9	Mekaling RC Mohale'shoek
10	Nqabeni RC Botha Buthe
11	Qhoalinyane RC Qacha'sNek
12	Tele RC Quthing
13	Thabang RC Mokhotlong

6.4 Sampled Agriculture Resource Centres

Table 7: Sampled Resource Centres

District	Resource Centre	Time	Field visit date
Berea	Teyateyaneng Maqhaka	Morning 8.00a.m Afternoon 2.00p.m	19 OCTOBER 2021
Maseru	Masianokeng Moriya	Morning 8.00a.m Afternoon 2.00p.m	20 OCTOBER 2021
Leribe	Maputsoe Mahobong	Morning 8.00a.m Afternoon 2.00p.m	21 OCTOBER 2021
Mafeteng	Matelile Ramokoatsi	Morning 8.00a.m Afternoon 2.00p.m	22 OCTOBER 2021
Mokhotlong	Thabang Mapholaneng	Morning 8.00a.m Afternoon 2.00p.m	25 OCTOBER 2021
Butha Buthe	Nqabeni Khukhune	Morning 8.00a.m Afternoon 2.00p.m	26 OCTOBER 2021
Quthing	Tele Central	Morning 8.00a.m Morning 9.00a.m	27 OCTOBER 2021
QachasNek	Letlapeng Qoalinyane	Morning 8.00a.m Afternoon 2.00p.m	28 OCTOBER 2021
MohalesHoek	Mekaling Makhaleng	Morning 8.00a.m Morning 8.00a.m	29 OCTOBER 2021
Thaba Tseka	Lilala Mantsonyane	Morning 8.00a.m Afternoon 2.00p.m	1 NOVEMBER 2021