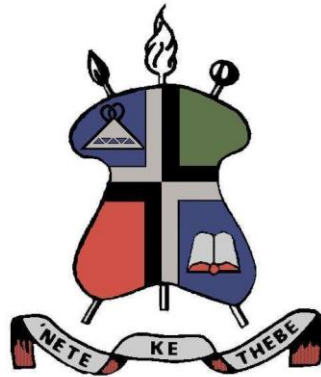


NATIONAL UNIVERSITY OF LESOTHO



**THE IMPACT OF COVID-19 ON THE LIVELIHOODS OF WOOL AND MOHAIR
FARMERS AT KORO-KORO IN THE MASERU DISTRICT, LESOTHO.**

BY

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JULY 2023

DECLARATION

I hereby declare that this thesis is my original work and has not been presented for examination in any other university for the award of an academic certificate, except where otherwise indicated and due acknowledgment is provided.

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ABSTRACT

The COVID-19 pandemic came as a health crisis to the rest of the world. In Lesotho, the government's response to curb the pandemic was implemented in March 2020. The measures taken were social distancing, lockdown, closure of borders, and shutdown of all activities with room allowed for provision of essential services. Although the measures were intended to curb the spread of the virus, they also had unintended consequences on the economy where the livelihoods of the people have been impacted; wool and mohair farmers were not an exception. Despite contributing positively to the GDP and job creation, the sector was affected by lockdown, and closure of borders where farmers could not cross borders to buy livestock medication and food supplements. Mohair shearing was delayed; as a result, income from the sale of wool and mohair was also delayed. The income was also little compared to the previous year prior to COVID-19. Animals' health was compromised to some extent, and some died. There was a loss of livelihoods and employment to herders due to the pandemic as most farmers rely completely on wool and mohair. The government needed to intervene as a remedy and booster to the wool and mohair sector for it to recover.

LIST OF ACRONYMS

AGOA	African Growth Opportunity Act
BKB	Boeremakelaars Koöperatief Beperk
COVID-19	Corona Virus Disease-2019
ET	Enterotoxaemia
EU	European Union
FAO	Food and Agricultural Organisation
GDP	Gross Domestic Product
GNP	Gross National Product
GOL	Government of Lesotho
GSP	Generalised Systems of Preferences
HIV/AIDS	Human Immune Deficiency Virus/ Acquired Immune Deficiency Syndrome
HS	Haemorrhaging Septicaemia
ICRISAT	International Research Institute for the Semi-Arid Tropics
LDF	Lesotho Defence Force
LNDC	Lesotho National Development Corporation
LNWMGA	Lesotho National Wool and Mohair Growers Association
NACOSEC	National Coronavirus Secretariat
NECC	National Emergency Command Centre
NGO	Non-Governmental Organisation
PPR	Peste des Petits Ruminants
SADC	Southern African Development Community
SARS-CoV-2	Severe Acute Respiratory Syndrome Coronavirus 2
TCP	Targeted Credit Facility
USA	United States of America
WHO	World Health Organisation

WAMP Wool and Mohair Project

WFP World Food Program

YFV Yellow Fever

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CHAPTER ONE

INTRODUCTION

1.1 Background to the study

The origin of health pandemics can be traced long time back in history. It is reported that, the negative impact of some communicable diseases remains a serious threat to the public health in developing and developed countries. The diseases affect the livelihoods of people in all spheres negatively. Some of the communicable diseases include Ebola, HIV/AIDS, Spanish flu, cholera and COVID-19. Most of these diseases have impacted negatively on the economies and livelihoods of the people. The negative impact is mostly felt on different sectors such as agriculture, education, health and tourism to mention a few.

The world has experienced different pandemics that affected production in different sectors of the economies. Firstly, cholera is mentioned to be a world pandemic which affected the lives of people. There are seven pandemics of cholera. The first pandemic started in 1817-1823 at Jessore in Bangladesh and spread to many countries while other pandemics occurred concurrently with the last outbreak in 1961. Several countries in Africa such as Somalia, Nigeria, Ghana and Tanzania reported the outbreak of cholera in 2011-2017. The outbreak of cholera in all the seven pandemics killed millions of people in different countries. Cholera has been spreading mostly through immigrants. For instance, in North America, the outbreak occurred due to the Irish immigrants arriving by ships from England (Ramamurthy & Ghosh, 2020).

People with cholera suffer from profuse water diarrhea, vomiting which can lead to dehydration and ultimately death if treatment is not given immediately (Mandal et al., 2011; Sack et al., 2004). Outbreaks of cholera occur mainly due to poor sanitation, hygiene and limited access to safe drinking water (Nelson et al., 2009). These authors state that the disease has existed for more than 2000 years under different names.

According to Kohnert (2021), there was an outbreak of yellow fever. It is reported that the Yellow Fever (YFV) originated in Africa. The shipping routes connecting commerce are most likely to blame for the disease's arrival to the New World from Africa. Numerous people were killed by

YFV in the cities like Philadelphia, Memphis, Charleston and the economy was affected (Barrett & Higgs, 2007) in Africa. Since 1948, there have been significant yellow fever peaks in Nigeria and Ethiopia between 1960-1962 and 1985-1995 simultaneously (Cavdaroglu et al., 2021). Yellow fever is a zoonotic infection transmitted by mosquitoes that live in forests. It causes haemorrhagic illness in humans, often with a fatal consequence. It also has a history of transmission in temperate regions (Reiter, 2010). The World Health Organisation (WHO) estimated about 200,000 per annum become infected worldwide and 30,000 die per annum due to YFV, and over 90% of cases occurred in Africa as explained by Kohnert (2021). Quarantine was instituted and there were vaccinations to control the spread of yellow fever (Barrett & Higgs, 2007). In the past twenty years, yellow fever has violently re-emerged to become a significant public health issue in Africa. Numerous hardships and indescribable suffering have been brought about by the sickness among various African people. Tomori (2002) highlights that this sickness is one of the obstacles to the economic and social growth of Africa, where agricultural productivity has declined dramatically, leading to an increase in poverty.

Moreover, the first outbreak of Ebola was experienced in the 1970s, and there have since been about 20 outbreaks. The virus is believed to be transported from wild animals to human (Kalra et al., 2014). Guenno et al. (1995) report that the 1996 Ebola outbreak in Gabon in the Minkouka area place was associated with people butchering dead chimpanzees. It is noted that contact from animals to human can be in the form of animal bite, contact with the body fluids or blood from the animal and ingestion of raw bush meat. Transmission is also through direct physical contact with the ill person or contacting their body fluids (Dowell et al., 1995). The virus has caused economic turmoil on the population of Africa as mentioned by Kalra et al. (2014). Ebola has yielded in low income, agricultural production decreasing as compared to the previous year's production before the outbreak. Agriculture and food security was severely affected by the epidemic in Liberia (Gatiso et al., 2008).

Furthermore, HIV/AIDS started in the USA in the early 1980s. It caused a notable public concern as HIV at the time inevitably advanced to AIDS and proximately to death (Huremovic, 2019). According to World Health Organisation (2022), there were an estimated 38.4 million people living with HIV of which two-thirds (25.6 million) are in the WHO African Region and 650 000 people died from HIV-related causes by the end of 2021. The HIV prevalence in Lesotho is

approximately 330 000 aged 15 to 59 (Pace & Frater, 2017) and Lesotho became third by 25.1% in the five leading countries with the proportion of deaths attributes to HIV/AIDS in 2017 in SADC countries (Gona et al., 2020). It is noted that agricultural productivity declined because of HIV in rural Uganda. Land was left fallow as the active households were sick and some passed away due to the virus. In some instances, productivity was low as families affected with HIV/AIDS had to take care of the sick members which therefore resulted in little time participating in agriculture (Parker et al., 2009). Murphy et al. (2005) adds that there is decline in income, farm production and labour. Evidence to that is the fact that widows are displaced from land, orphans are hungry and unschooled while fields are abandoned.

Considering what has been said, pandemics have existed since time immemorial, and they had an impact on the livelihoods of masses of people. The previous pandemics had an enormous impact on agriculture and the livelihoods of the people. The study's primary claim is on the idea that wool and mohair farmers are the victims of the pandemic COVID-19.

1.2 Problem statement

Many people in Lesotho reside in rural areas and make a living out of subsistence agriculture (crop and livestock production). However, subsistence farming has been affected negatively by changing climate conditions since the past centuries; as a result, there is low agricultural production. When agriculture failed to make the means of living, many Basotho migrated to South Africa for employment opportunities. Many of them worked in the mines, industries and plantations. However, there has been downsizing in the South African mines, and this contributed to the high unemployment rate that is estimated at 32.8% by Bureau of Statistics (2016). Declining employment in South African mines also contributed to low agricultural production. This is because the migrant labourer remittances were invested in agriculture. Resulting from this is high poverty rate that is aggravated by food insecurity.

The above social and economic challenges facing the country were intensified by the advent of COVID-19 in March 2020. The Government of Lesotho introduced lockdowns and imposed restriction of movement to cope with the impact of the pandemic. The impact of national lockdowns was witnessed with the closure of businesses and different activities. This meant no access to shearing centres for the export of wool and mohair. Similarly, it meant there was no

income for wool and mohair farmers to cater for their households' needs. Although the businesses were closed to access medication for the livestock, the lack of wool and mohair trading meant no income for farmers. So, wool and mohair production that contributes to the livelihoods of farmers was affected negatively by the COVID-19 pandemic.

1.3 Statement of purpose

The study investigates the impacts of COVID-19 on the livelihoods of wool and mohair farmers at Koro-Koro in the Maseru district.

1.3.1 Objectives of the study

- To assess the impact of national lockdowns on the lives of wool and mohair farmers.
- To investigate the means of farmer's livelihood during the climax of the COVID-19 pandemic.
- To analyse the government's relief interventions in assisting farmers during the apex of COVID-19 pandemic.

1.3.2 Research questions

- How has the national lockdown affected the daily lives of wool and mohair farmers?
- What livelihood strategies wool and mohair farmers adopted during the climax of COVID-19 pandemic?
- What were the government's relief interventions in assisting farmers during the apex of COVID-19 pandemic?

1.3.3 Hypotheses

- National lockdowns affected the daily lives of wool and mohair farmers negatively.
- Wool and mohair farmers adopted different means of livelihood during the climax of COVID-19 pandemic.
- The government intervened in assisting farmers during the apex of COVID-19 pandemic.

1.4 Significance of the study

The wool and mohair industry plays a pivotal role to the economy of Lesotho and Basotho farmers as most Basotho, especially in the rural areas depend heavily on the industry for economic purposes. Due to COVID-19, economies have been affected including the wool and mohair industry. The existence of new research on COVID-19 as a pandemic that affects the performance

of the wool and mohair industry will contribute to policy formulation and on how challenges of pandemics can be addressed and mitigated by the government and the farmers in the production of wool and mohair. The study will also contribute to the literature in Lesotho.

1.5 Delimitations of the study

Though COVID-19 affected different sectors in the country, this research only focuses on farmers who are wool and mohair producers at Koro-Koro in Maseru and do not only shear their sheep and goats in the government sheds, but also as private traders, who use informal channels in the Koro-Koro area.

1.6 Definition of key terms

1.6.1 Pandemic

In accordance with Honigsbaum (2009), the term pandemic is frequently used to describe an epidemic of an infectious disease that spreads rapidly over a whole nation or one or more continents. Pandemic is the form of epidemic that spreads through human population affecting large number of people (Muthu, 2005).

1.6.2 Globalisation

Giddens (2008) defines globalisation as the intensification of worldwide social relations which link distant localities in such a way that local happenings are shaped by events occurring many miles away and vice versa. According to Pannilage (2016), globalisation refers to a complex process of increasing interdependence, integration, and interaction among individuals, societies, cultures and institutions around the world in the spheres of economy, culture, knowledge, technology and politics.

1.6.3 COVID-19

COVID-19 is an airborne transmission where there is likely inhalation exposure to viruses in microscopic respiratory droplets at short to medium distances (Milton, 2020). Meyer (2020) defines COVID-19 as a disease that is caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). Coronavirus are enveloped, positive single stranded large RNA virus that infect humans.

1.6.4 Livelihood

A livelihood comprises people, their capabilities and their means of living which include income, assets and food. When a livelihood can cope with and recover from stresses and shocks, it is considered sustainable and can provide for future generations (Chambers, 1991).

1.6.5 Lockdown

As stated by Lewis (2022) and Jarman (2020), lockdown is staying at home of ordinary people where there are restrictions on social contacts and where events such as sporting and cultural are cancelled, while retailers, restaurants and schools are closed.

Wool and mohair industry in Lesotho is basically sheep producing high quality wool and goats producing mohair. Such animals are managed in household farmers with the industry forming a bedrock of the economy of Lesotho (Dietz, 2021).

1.7 Summary

The chapter entailed introduction and background to the study which shows the origin of pandemics and their impacts on agriculture and wool and mohair farmers. It showed that within such a short space of time, the world at large changed from normal ways of interacting to completely distant ones due to COVID-19. It highlighted that COVID-19 began in 2019 in China, Wuhan and it spread all around very rapidly. The government intervened to stop the spread of the virus by imposing strict measures such as lockdown which restricted movement. The pandemic brought many negative effects on the world economies and the livelihood of the people, as their lives changed. Wool and mohair farmers also suffered severely because of the negative effects brought by the COVID-19 pandemic. The chapter also covered the statement of the problem, aim, objectives, research questions, and definition of key terms.

CHAPTER TWO

THE IMPACT OF COVID-19 ON THE LIVELIHOODS OF SMALL-HOLDER FARMERS IN DEVELOPING COUNTRIES: THE LITERATURE REVIEW

2. Introduction

This chapter focuses on reviewing literature on the impact of COVID-19 on the livelihoods of small-holder farmers in developing countries. The reviewed literature is based on the objectives and aim of the study. The chapter also discusses the theory relevant to the study.

2.1 Theoretical Framework

2.1.1 Livelihood portfolio theory

Neubourg's (2009) livelihood portfolio theory is practically based on two core assumptions. The first assumption is that, individuals as well as their families make a living under different restrictions. The second assumption indicates that all families are faced with a risk of being poor at some point in the future (Neubourg, 2009). Based on the theory, a household is faced with a risk of being poor due to losing their income and then not having ability of fulfilling the various needs of individuals in the household, presently or in the future. In this case, according to Neubourg (2009), it is imperative for every household to be able to avoid the risks, where the consumption in the household has to be levelled, while also setting apart some of the resources that can be sustainable future livelihoods. Being able to reduce consumption is deemed as a significant aspect for well-being. This is because an individual is inclined to be able to satiate the basic sustainably, regardless of the available risks as well as the occurrences of shocks (Neubourg, 2009).

Livelihood portfolio by Neubourg (2009) is derived from the Welfare Pentagon. This includes five fundamental institutions, being the households or the family, the markets, the social networks, the membership institutions as well as the public authorities. In this case, the household utilises the institutions in the welfare pentagon in their livelihood strategy so as to make an income, while also smoothing the consumption. Here labour markets, the product markets as well as the capital markets permit the household to work and interchange so as to secure means to gratify the core necessities at a certain moment. The households, the social networks as well as the membership

institutions aid in addressing the livelihood risk through different apparatuses of harmony (Neubourg, 2009).

2.2 Empirical literature

2.2.1 Forms of livelihoods in developing countries

Based on Khatun and Roy (2012), a person's livelihood refers to their means of securing the basic requirements of life which can comprise food, water, shelter and clothing. It also involves the dimensions in which people may attain the said livelihood, done through utilisation of different tools and mechanisms in different forms and settings. Based on DFID (2000), the concept of livelihood is also seeking to express the non-economic characteristics of the forms of survival of the farmers. Thus, this does not entirely refer to the economic means of survival but can be based on the relations in the social arena as well as the linkages between the social institutions that serve as a link between people accessing various resources and them creating income from the said resources.

Fieldsend and Kerekes (2015) note that due to the nature as well as the environmental aspect of most developing countries, the economic factor is largely based on agriculture production and the agriculture services that are normally the main source of employment for the rural poor. According to Madzivandila (2021), agriculture and smallholder farming is commonly considered as the strategy that helps to alleviate poverty in developing countries. This is because agriculture guarantees the poor people a form of living where revenues generated from the agricultural activities can thus be utilised in running the households through making purchases of utilities like food, clothing and many others. This means that in the process, many challenges that usually face the rural areas are mitigated, with food insecurity challenge also included. The OECD (2005) further indicates that farming also ensures welfare of majority of the poor and unburdens the country as many rural farmers are able to produce food, thus reducing government spending on social transfers and food hand-outs.

There are different forms of livelihood in different countries around the world. Different developing countries also engage in different livelihood methods, with agriculture being the most

active form of livelihood. Based on Sherifa (2021), the principal base of livelihood in Ethiopia is agriculture. The most practised agriculture activity is smallholder farming, which in Ethiopia is an agricultural system practised by farmers with land less than one hectare. The smallholder farming accounts for 90% of the whole agriculture production, as well as about 95% of the crop production system. As a result, the agriculture is fairly used to reduce the indices of poverty as well as in the improvement of livelihood (Sherifa, 2021).

Also in Nigeria, the ultimate livelihood strategy is agriculture. In this case, the agriculture sector is deemed as significant in the economic development of the country. This is based on the fact that it contributes considerably on the overall Gross Domestic Product (GDP) of the country. The agriculture sector is also responsible for offering employment for majority of individuals in the population (Etuk et al., 2018). There are also other non-agricultural forms of livelihood practised in Nigeria due to inadequate land resources. Those include activities like selling firewood, engaging in quarrying activities, handicrafts, small trading and many other activities meant to complement their main sources of income (Ayantoye et al., 2017).

Drawing from Svotwa et al.'s (2009) observance, the most practised livelihood strategy is agriculture through organic farming. Organic farming is indicated to be an activity that contains adopting the common agricultural activities as well as the agronomic features that include crop rotation, composting, use of livestock manure, cover crops, straws and the green manure. According to the African Organic farming (2004), organic farming is mostly practised by the rural dwellers as well as the smallholder farmers who normally lack enough capital to purchase artificial pesticides and the fertilisers that are non-organic.

Abebe (2018) states that agriculture is a predominant form of livelihood in Kenya, and 84% of the population are engaged in production activities in agriculture. Livestock is indicated to be the most dominant agricultural activity practised in Kenya, and it is considered to be an activity that has an important impact on livelihoods of those dwelling in rural areas. Those who practise livestock production are said to have the ability to employ larger proportions of people as compared to families engaging in different types of agriculture activities. The study by Abebe (2018) further demonstrates that livestock production was also one important factor used in sourcing food and generating income.

2.2.2 Impact of COVID-19 on agriculture

The USAID (2018) indicates that the smallholder commercial farming in developing countries is largely faced with varying threats. Based on Löhr et al. (2022), it is mostly small-scale farmers who are indicated to be susceptible to peripheral challenges that often involve unforeseen damaging threats to their welfare and livelihoods. It is these threats or risks that often cost them incomplete incomes, low consumption or even force them to dispose of their assets through selling them. Therefore, the existence of COVID-19 has caused adverse social and economic challenges for smallholder farmers in developing countries since it was declared a public health emergency in 2020 (Nchanji & Lutomia, 2021). Due the COVID-19 restrictions, most of the small-scale farmers also experienced stress of having their routines disordered (Löhr et al., 2022).

2.2.2.1 COVID 19 and subsistence farmers in developing countries

Dasanayaka (2013) states that agriculture is an activity that is mostly practised by poor people in developing countries. The poor rural dwellers are said to lack resources in terms of creating livelihood. Literature suggests that poor rural dwellers are faced with a number of challenges concerned with their helplessness, feeble physiques and geographical remoteness which draw attention to their exposure to poverty, a term coined as a “deprivation trap”. In that case, Dasanayaka states that subsistence farmers are mostly the rural poor that are faced with the challenges of small production, inadequate food resources and pitiable nourishment. As a result of impoverishment, subsistence farmers in most developing countries lack appropriate resources that can increase their production and are the ones which are most vulnerable to different shocks socially, economically, and environmentally (Siamabele & Phiri, 2021).

The lack of resources makes subsistence farmers vulnerable to shocks like COVID-19 that took place in 2019. COVID-19 is one of the risks that affected the welfare of subsistence farmers. Musviro and Rahmawati (2022) indicate that COVID-19 affected subsistence farmers in both long-term and short term. The COVID-19 restrictions imposed in different countries caused subsistence farmers to experience shortages in terms of input resources needed for farming and its sustainability. As mentioned by Ullah et al. (2022), this was also the same situation in Ghana where during the country-wide lockdown, farmers were not able to have access to various inputs that include seeds, fertilisers and insecticides, and restricted access to markets.

Moreover, in Kenya where agriculture is regarded as the main economic activity that aid in the overall development of the country, David et al. (2020) note that the COVID-19 disorders were more antagonistic for poor farmers residing in urban areas who largely consumed self-produced food items or sold in informal food markets. On the one hand, the middle as well as the poor households of subsistence farmers were forced to purchase food from the stores, online marketplaces, and greengrocers that remained open during the restrictions. On the other hand, Yongish (2020) states that the subsistence farmers in South Africa during mobility restrictions were struggling to acquire agriculture inputs that include seeds for seasonal farming, as well as experiencing shortage in pesticides which caused most of the farmers to have food insecurity issues in the following years.

Additionally, the other effect of COVID-19 was the disruption in the food security. COVID-19 prohibited subsistence farmers from producing enough to feed their families, and most developing countries in Africa reported having experienced forms of drought even before the COVID-19 hit making the impact of COVID-19 worse (Eng et al., 2021). Consequently, Malawi reported an increase in food shortages as a result of interrupted ploughing schedules by COVID-19. To make matters worse, the farmers had to deal with inflation of food prices especially staples that included food items like rice, beans, millet, sorghum and many other food items that most subsistence farmers produced for themselves. Despite not being able to produce for themselves, the findings of the study by Barichello (2020) in Kenya, highlighted that COVID-19 restrictions caused distractions in normal trading which limited the ability of the farmers who were already suffering from food shortages to struggle in accessing diverse nutrient dense food items.

On the other hand, the study by FAO (2022) showcased that the COVID-19 pandemic and its restrictions added to the problems of subsistence farmers who were also dealing with the problems of locust attack in other areas in Kenya. The findings of the study revealed that several subsistence farmers reported that they were not prepared for the blow after blow that was caused by these disasters which led to a lot of farmers losing money and getting into debt. FAO (2022) further highlights the issue of heavy rains that took place in Malawi, Kenya and several southern African countries in the midst of COVID-19 in March to May. Consequently, in consideration of the COVID-19 and majority of developing countries in Africa, the issue of food security for

subsistence farmers was also mostly endangered by the alterations in economic activities, the locust invasion as well as the flooding and landslides.

Additionally, on the issue of inflation of food prices, the study by David et al. (2022) highlighted that due to the vulnerable situations created by the COVID-19 such as lack of information and awareness, most subsistence farmers faced challenges. Studies on the awareness of information sources among rural smallholder subsistence farmers have been reported in Sri Lanka, Nigeria and Tanzania, among others. The studies demonstrated that the shocks of COVID-19 on subsistence farmers in the aforementioned regions were intensified by the lack of information and awareness concerning the measures that farmers can employ to protect themselves from the unintended shocks. In addition, Eng et al. (2021) echo that the COVID-19 aftermaths were mostly gruesome to subsistence farmers in Nigeria due to lack of information and awareness about preparing for shocks.

A study conducted by Nurlaela et al. (2023) in Malawi revealed that most subsistence farmers faced impoverishment during the pandemic due to lack of financial manpower that could help them revive themselves from the state of shock caused by the pandemic. A similar study by Siche (2020) in Malawi also showed that scarce economic funds as well as restricted sustenance from other farmers presented subsistence farmers with challenges of maintaining their production even after the pandemic hit. The findings were consistent with the study conducted in Zambia by Workie et al. (2020) who reported that subsistence farmers in rural areas also had financial challenges that prohibited them from being able to access the required information because of low penetration of information and technological infrastructure in the rural areas.

Another study by Roy and Ghosh (2022) in India and South Africa further demonstrated that pre-COVID-19, subsistence farmers relied on their friends, neighbours as well as relatives for funding which caused most of the farmers to stay indebted to the people they owe. Also, on the significance of personal contact, Singh et al. (2020) and FAO (2022) assert that neighbours and friends also served as an important aspect in the lives of subsistence farmers in Nigeria as they helped pass around information. Thus, the COVID-19 restrictions that prohibited social interaction prohibited farmers from gaining appropriate information that could have helped elevate their production in those challenging times. The study further highlights the lack of government support in disseminating the required information for the farmers.

2.2.2.2 Impact of COVID-19 on commercial farmers in developing countries

Bera (2020) states that commercial farmers have diverse attributes as compared to the traditional farmers. This is based on the fact that their agriculture activity is embedded with the economic gains and most of the activities are done for business purposes. Based on FAO's (2022) declaration, commercial farmers were also affected by the pandemic though the sector was not fully shut down in most developing countries. However, on account of the pandemic restrictions that prohibited mobility and the social interactions, most farmers had to adopt technology so as to keep their agri-businesses afloat during the pandemic. Despite that effort, many studies have showcased that the farmers still felt the impact of the pandemic.

Kamuri (2021) carried out a study on the effect of COVID-19 on farmers in Kenya. The study found out that as a result of the social restrictions, commercial farmers encountered constraints that included inadequate production supplies, inadequate funds, lack of labour, as well as marketing. Consequently, all these constraints led to a substantial drop in their turnover. One other study by Kulumkani (2021) in India highlighted that the effects of COVID-19 restriction were mostly devastating to women who were not able to stay ahead of planting time due to letting go of employees. Based on the study, women commercial farmers in India have always been confronted with several issues which include funding, climatic conditions and natural disasters.

Due to COVID pandemic, many commercial farmers in developing countries faced reduced agriculture production due to disrupted supply chain. The study by Workie et al. (2020) in Nigeria revealed that farmers experienced reduced income as they were not able to properly sell their produce due to mobility that was restricted. As a result, most farmers incurred debts and loss while some of the farmers struggled to overcome the challenges even after COVID-19. Similarly, Mudur (2020) carried out a study in Zimbabwe. His study showed that commercial farmers experienced greatest shocks due to COVID-19 as well as the fact that agriculture sector is stated to be embedded with many problems that deemed it "high risk" even pre-COVID-19. Resulting from this, majority of commercial farmers reported very low income as compared to their production between 2019 and 2020.

The Organisation for Economic Co-operation and Development (2020) also reported that COVID-19 impacted the buying power which has elevated the risk of food security and added to it was the halted supply chain. Another study by Broadway and Wolnik (2020) echoed that COVID-19 restricted the market in South Africa. Due to the restrictions that the public agency altered frequently, commercial farmers lost their production and were not able to revive what they lost. This is because the commercial farmers had to incur high costs in order to access the market that was limited due to the imposed restrictions.

It was further observed that due to COVID-19, commercial farmers in India, faced challenges in terms of marketing their produce. Other commercial farmers whom their market was not interrupted by the pandemic reported experiencing problems in transportation as they could not find appropriate transportation that could deliver their produce due to a lot of establishments being closed (Rozaki, 2020). A study by Siamabele and Phiri (2021) showed that the commercial farmers in Kenya reported abandoning their cultivation midway due to unavailable workers that were forced to confine in their homes for fear of being infected. Some farmers claimed that they recorded massive loss during the pandemic because they did not have appropriate storage for their perishable produce which ended up going bad and being disposed.

The study conducted in Hawaii revealed that the COVID pandemic also impacted commercial farmers, especially the farmers who operated small, family-owned agri-businesses. Cheang et al. (2020) explain that several studies reported that many farmers suffered from mental health and anxiety challenges in the middle of the seclusion from stay-at-home remits. Their findings revealed that the challenges were intensified by lack of support from the government as pre-pandemic, commercial farmers relied on the provisions from extension workers who provided tangible information, evidence-based approaches as well as resolutions on various issues that farmers faced (Cheang et al., 2020).

2.2.3 Impact of COVID-19 on livestock farmers

The COVID-19 pandemic as well as the implementation of lockdowns have generated exceptional crisis as they caused sudden distress on different economic segments, including livestock production (Saravanan et al., 2021). The origin and causes of COVID-19 are well documented in

literature. For instance, Zhu et al. (2020) explain that the virus commenced in China. It is also stated by World Health Organisation (WHO) that COVID-19 posed a threat to various industries, including health, agriculture, and manufacturing (ILO, 2020). In particular, COVID-19 pandemic has been characterised by the intense effect on the outlook of the present-day world. This is because it has raised candid concerns regarding the basis of ordinary life disrupted by increased death toll as well as the increased rate of disease (Zhu et al., 2020).

In this case, the disease as well as the danger of its spread have caused governments to enact severe constraints universally. Onyeaka et al. (2021) argue that the lockdown was embraced through the double criteria, domestically and internationally. In the domestic sphere, governments constrained and limited people from moving freely and then propelled them to confine in their family units. This limitation of free movement negatively impacted the social interaction of many societies around the world. In the international sphere, the lockdown was implemented by countries through closure of national borders, thereby prohibiting people as well as commodities from either entering or leaving their countries. Limiting movement in terms of travelling and the halt in commercial activities were said to have caused momentous weakening of the economic sector, particularly the agriculture sector, where markets were halted and the supply chain of foodstuffs was disrupted (Hashem et al., 2020).

Globally, COVID-19 pandemic harmed the agricultural sector of many countries, and activities that seemed to be impacted severely were the crop and livestock producing sectors. This produced a very damaging effect to the livelihoods of many who depended on the said activities. Lenzen et al. (2020) estimate that about 60% of the population worldwide depend on the said agricultural activities. In a global sphere, the agriculture sector subsidizes over one-third of the global GDP. This means that the effects of COVID-19 tremors in the agriculture sector have produced disturbances on both the demand as well as the supply edges. Furthermore, this is because of the matters raised by the disrupted production chain which affected the availability of the inputs and workforce as well as the sluggish alteration of transportation (Triggs & Kharas, 2020).

FAO (2020) reiterates that closing of both the governmental and the non-governmental productions, restricting movement and implementing lockdowns have impacted the economic development negatively and have limited the prospects of livestock products. Also, the mobility

restrictions and lockdowns have caused a reduction on the available and the well-timed supply of veterinary materials such as medicines and feeding materials. FAO further states that the damaging effect brought by the COVID-19 pandemic and lockdowns to the agriculture sector is labour needed for livestock production.

The study emphasised that due to restricted access to raw materials, markets and consumers, the lives of rural sheep farmers were affected. Some livelihoods have been lost in the shake-up while other traditional livelihood norms have been disrupted. The pandemic added to the already existing challenges of wool and mohair farmers in most developing countries. For instance, the pre-existing challenges included low price and proliferation of game farming in the primary mohair production areas. These challenges resulted in farmers leaving the industry and production levels dropping from 4,300 metric tons to 3,300 metric tons. It is noted that there has been a downward trend since.

2.2.3.1 COVID-19 on wool and mohair farmers

David et al. (2020) articulates those actions meant to help in reducing the spreading of the virus that caused the wool and mohair industry to suffer greatly. It is observed that wool and mohair farmers rely on international market to market and sell their produce. David et al. argue that this causes a great stress for farmers' produce and livelihoods since they are faced with poverty and vulnerability. The World Bank (2020) indicates that farmers and their households deal with the livelihood blows formed by COVID-19 pandemic in such a way that the blows have a probability of shaping the pandemic's lasting effects on the welfare of many wool and mohair farmers.

Livestock production is often associated with a social and cultural way of life for many farmers in South Africa. Lohani and Bhandari (2021) point out that this includes members of rural homesteads that are livestock keepers and are not seen by policy makers as farmers. USAID (2020) describes that South Africa's mohair industry is primarily situated in the semi-arid areas of the Eastern Cape, covering approximately 10 million hectares. The Western Cape, Northern Cape, Free State and Mpumalanga provinces also produce significant volumes of mohair. Furthermore, there is some mohair production in KwaZulu Natal, but it is relatively small. It is estimated that the mohair industry supports 800 farms and 30,000 employees and dependents across the value chain and generates close to R1.5 billion in foreign currency. It is generally noted that South Africa

holds a dominant position in the global mohair market, and the industry is responsible for the livelihoods of many South Africans.

On the other hand, lockdown increased animal diseases that affected the Angora goats. This was due to high immobility of animals where some animals died due to diseases like heart-water (IPAR, 2022). Also, lockdown forced farmers to let go of their staff, and animals were locked in one space in a farm or at home. In this case, sheep and goats were made vulnerable to wildlife. There were reports that jackals, caracals, bush pigs and even crows took a toll on their kids. Specifically, the Black Eagle opportunistically fed on Angora goat kids. Thus, many farmers who could not control this human-agriculture wildlife conflict suffered large losses that threatened their operations (Lohani and Bhandari, 2021).

In India, Cely-Santos and Hern'andez-Manrique (2021) indicate that the sheep rearing in the country is one of the widespread agribusiness activities. This is where the sheep keepers are usually referred to as nomads. Nomads are described as people who leave their homesteads with their herds past wintertime searching for pastures so as to provide increased access for feeding their sheep. Thus, in certain places, like in Jammu and Kashmir, the lockdown caused an interruption on the spring migration of quite a number of nomadic pastoral tribes. The consequence of this disturbance has then caused a reduction in the availability of food for sheep, a factor which greatly affected the livelihoods of the sheep farmer.

In addition, lockdowns disturbed forms of transportation. For instance, sheep farmers were not able to reach the polyclinic for their animals' medicine. This factor led to increasing levels of diseases and death toll of the sheep. Consequently, the inaccessible healthcare and veterinary services impacted the production efficiency as well as the production of the animals. Furthermore, the routine vaccination program carried out by the governments at 6-monthly intervals for both sheep and goats were not undertaken in any of the states during the COVID-19 lockdown period. This had high ramifications in regulating the disease outbreaks even after lockdowns were lifted (Cely-Santos & Hern'andez-Manrique, 2021) .

According to Ayantoye et al. (2017), the Central Bank of Nigeria is injecting funds into fisheries and aquaculture sectors, crop and livestock production. The facility is meant to help with food

availability, employment creation along the value chain, and stimulate demand and pave some way to economic recovery post-COVID-19. These authors assert that the facility is meant to ensure that casual labourers, staff earning salaries and business entities can work and stay afloat. The Central Bank of Nigeria, in furtherance of its financial stability mandate, recently came up with the N50 billion Targeted Credit Facility (TCF), as a stimulus package to smallholder farmers in the face of the adverse economic impact of the novel COVID-19 pandemic. It is reported that no few than 3,256 individuals and small businesses have so far benefited from the TCF to cushion effects of COVID-19 (Ayantoye, et al. (2017).

2.2.4 Lesson learned from COVID-19 pandemic

Despite the enactment of lockdown measures by various governments around the world, the effects of the pandemic were still very much damaging because of the intensity of the outbreak. It is clear that this ‘role’ of the virus in the global lockdown has affected the production of food and the overall food chain security (Fernandes, 2020). Hence, it can thus be articulated that the universal lockdowns generated and continued to generate novel scopes in the route of the human existence. Based on Hashem et al. (2020), the economic costs of lockdowns worldwide are indicated to be extensive and, have since ignited terrors regarding the emanating financial crisis as well as the economic recession. Accordingly, it is on the said developing countries where the COVID-19 has had impact on the livestock farmers that usually create livelihoods over it. This includes farmers of wool and mohair who are often classified as small-scale farmers.

As a result, different sectors, including agriculture sector, around the globe had to be creative in dealing with challenges brought by the pandemic. To exemplify, to mitigate the impact of COVID-19 and contribute to building sustainable food systems and food security, International Research Institute for the Semi-Arids Tropics (ICRISAT) developed a three-phase response plan with Recovery and Coping Phases, Adaptive Phase and Transformative Phase in West and Central Africa. Here seeds were provided by the ICRISAT for Nigeria as a palliative to reduce the impact of COVID-19 pandemic on smallholder farming households and agricultural activities in Nigeria. In this case, seed support initiatives are a part of the coping and recovery phase of ICRISAT's interventions. It prioritises increasing agricultural production through adequate supply of targeted

breeder seed to ensure continued support in production of quality certified seed in partnership with governments and other partners in the region (Reliefweb, 2022).

As stated by Lussenhop (2020), in many developing countries, the pandemic impacted the livestock sector by reducing farmers' ability to access animal feeds. On account of this, farmers in Kenya reverted to pastoral form of feeding as well as implementing the system of agroecology. Tobias and D'Angelo (2020) indicate that agroecology is indicated to be a factor that has ability to promote the systems of livestock production through Silvopastoral systems (SPS). Through agroecology, fodder plants are combined with grasses, leguminous herbs, shrubs and trees for animal nutrition and complementary uses. This means that COVID-19 has taught us that Silvopastoral systems guarantee healthy animal production.

2.2.5 Government interventions on apex of COVID-19

In the context of COVID-19, without resources and under extreme pressure, small-scale farmers demonstrated their flexibility and ability to meet the food needs of local people. Because of the COVID-19, the lockdown period has been extended in many countries of the world. Therefore, it was and still is the responsibility of governments to make sure they put interventions in place, not only to help farmers sustain their livelihoods during the times of crisis, but also to ensure that people do not revert to poverty. Nonetheless, for livestock producers, COVID-19 lockdowns came with lack of marketing opportunities, which were the utmost significant matter for wool and mohair farmers. This in turn impacted the livelihoods of many farmers who depended entirely on the income generated through wool and mohair production for their households (Habtewold, 2021).

Against this backdrop, many governments were inclined to provide forms of support for different sectors of the population. DAHD (2020) indicates that to bring back the sector into the state of normality in India, both the Union Government as well as the State Government took numerous approaches. The approaches included announcing the supply of livestock and poultry products under essential services. This was done to ensure limited struggles in transporting of livestock and poultry produce interstate. It also included facilitating the production of increased quantity of milk through dairy cooperatives and providing several advisories for stakeholders associated with the sector through different organisations. Both the Ministry of Fisheries, Animal Husbandry and Dairying, and the Government of India are reported to have written letters to the chief secretaries

of all states and UTs underlining the importance of formulated feed and feed ingredients to produce livestock and poultry birds and seeking necessary facilitation for their assured supply (DAHD, 2020).

In addition, due to damage made by the wildlife in South Africa on sheep and goats, the government established Predation Management SA. On the one hand, this is because agriculture-wildlife conflict control measures are more affordable if procured in bulk, and the establishment of a support system to provide this assistance could reduce costs and limit losses. On the other hand, farmers were provided with jackal fencing but was later criticised that the jackal proof fencing is related to the increase in warthogs in the area (game farming) since they create holes in the fence that are swiftly exploited by jackals. However, the Predation Management SA was established to ensure that the humane control measures introduced are in line with acceptable market procedures as described by Ceballos et al. (2020).

Notwithstanding, to upsurge the longstanding feasibility of wool and mohair farmers in South Africa, a set of development finance initiatives were established. In this case, an affordable loan system, underwritten by the Government of South Africa and relevant provincial governments was developed to provide concessionary loans to farmers who are undertaking the sustainable farming criteria. Thus, control over support organisations that have a trail of recording and dealing with credits was provided as a form of practical maintenance to farmers. Establishments that included ECRDA as well as the Humansdorp Cooperative were also significant in guaranteeing that the appropriate form of financing is disbursed timely (Ceballos et al., 2020).

2.3 Chapter summary

This chapter discussed the theoretical framework being the livelihood portfolio theory, which was used to guide this study. With utilisation of the aim of the study as well as its objective, the empirical literature entailing the impact of COVID-19 on the livelihood of wool and mohair farmers was also discussed. The next chapter will focus on reviewing literature on livelihood strategies, agriculture and poverty, and the impacts of COVID-19 on wool and mohair farmers in Lesotho.

CHAPTER THREE

THE ROLE OF AGRICULTURE TO DEVELOPMENT IN LESOTHO

3.1 Introduction

Basotho relied heavily on agriculture for their livelihoods, but production in the last decades has declined dramatically. The decline can be debated as due to environmental change (drought, climate change, and soil erosion) (Leduka et al., 2015). In support of Leduka et al., (2015), Rantšo (2023) adds that the Basotho men used to rely on South African Diamond and gold mines to finance their agriculture in the 1800s, but that changed in the late 1980s and early 1990s when the mines started to downsize their foreign labour force, where suddenly there was a loss in remittances that used to be invested in farming. The decline in agricultural productivity has birthed non-farm income. From his study, Rantšo (2016) indicates that 57.0% of the people derived their livelihood from non-farm income activities while agriculture accounts for 18,5%. The main livelihood strategies in Lesotho are non-farm and farm sector.

3.2 Non-farm sector

Non-farm refers to activities undertaken away from the household's own farm (Gordon & Craig, 2001). Basotho households participate in non-farm activities as many families are faced with food insecurity. People participate in non-farm activities to finance subsistence agriculture and purchase the basic needs in their families. The rural non-farm contributes to poverty reduction and employment creation. The sector is growing rapidly as it accommodates less educated people in society (Rantšo, 2016). This author outlines that non-farm activities in Lesotho include *fato-fato*, crafts and weaving, hair salons, shops, constructions, dressmaking, herb selling, motor mechanics and repairs, as well as agro-processing enterprises. In non-farm sector, there is often rural-urban migration in search for employment.

3.2.1 Migration

A drop in remittances from migrant labourers and rural underdevelopment such as water for irrigation, supporting services and assets which are crucial to use the arable land productively and lack of income opportunities all combined make the livelihood of rural people censorious. Therefore, there has been migration to urban areas or to South Africa for employment (Rocchi & Sette, 2016).

Migration continues to be a dominant livelihood strategy for the households in Lesotho. There has been an increase in female migration to the garment sectors in Maseru and Maputsoe for domestic and informal work; they also migrate to South Africa for similar jobs. Female migration has increased due to a halt in hires for Basotho men in the South African mines and retrenchment of other men. Female migration is driven by economic push factors (Botea et al., 2018; SAMP, 2010).

The Lesotho textile and apparel factories access the US market under the African Growth and Opportunity Act (AGOA) and Generalised Systems of Preferences (GSP), which provide duty free access to the US market for Lesotho export (UNDP, 2020). There are almost 46500 workers in factories. With closure in borders due to COVID-19, the country could not access the markets. About 100,000 labour migrants returned from South Africa at the beginning of the pandemic meaning that COVID-19 increased long-term unemployment (Government of Lesotho, 2020). This implied that, with unemployment, there will be no remittance sent to Lesotho; therefore, the livelihood of Basotho and the economy will suffer.

3.2.2 Employment

Wage employment is seen as a livelihood strategy by Basotho, who believe that a livelihood without wage is unfulfilled. For employed household, there are skilled, semi-skilled, low skilled, self-employed, and informal employment. Examples of skilled are civil servants, teachers, health workers. Semi-skilled compose of mine workers, truck drivers, and military. Low skilled include domestic workers, manual workers and agricultural workers. Business owners fall under self-employed while informal employment translate into informal economy (Leduka et al., 2015). 49% of the Lesotho's labour force is employed in services, 42% in industry and 9% in agriculture (World Bank, 2020). Unemployment in Lesotho was recorded at 18.04% in 2022 (Bureau of Statistics, 2023).

3.3 Farming sector

In Lesotho, agriculture continues to be valuably important, especially for the people's livelihoods (Rantšo & Makhobotloane, 2020) and contributes enormously to the economy of the country (Motšoari, 2015). Motšoari et al. (2015) add that smallholder agriculture is more traditional. In 2017, the agricultural sector contributed 5.7% to the gross domestic product (GDP) of Lesotho (The World Bank, 2017). It is noted that despite the declining performance of the agricultural sector, it continues to be dominant. Agriculture, which contributes 5.7% of GDP, is a major source

of livelihood for 80% of the population living in rural areas (FAO, 2020). The dominating agricultural activities which will be discussed are crop production and livestock.

3.3.1 Crop farming

Crop production is one of the important components of farming systems in Lesotho. The main cropping areas are the north and south-western lowlands, the Senqu River valley, the foothills, and the mountain regions. With the Lesotho's weather which is warm in summer and cool in winter, there is summer and winter cropping in Lesotho. Practical crops in summer months are maize, beans, pumpkin, sorghum, and watermelon while winter crops are peas, wheat and potatoes. The farmers usually use animal manure and wood ash as fertilizers (Mekbib et al., 2017).

Agriculture production has declined significantly since 1980. The production is such that most households last up to 2-3 months with their harvest. That being the case, most of our crops are imported from South Africa (Lesotho Desk Review, 2013). The agricultural sector has low-input, low-output cereal production and extensive animal grazing (Government of Lesotho, 2020). Crop production relies only on rainfall, and it is subsistence (Mojaki & Keregero, 2019). For instance, over the past three decades, there has been insufficient production of maize to meet the country's requirements, thereby importing supplementary maize grain from South Africa (Bureau of statistics, 2019). The chronic and acute decline in local agricultural production is adversely affecting the poor and very poor households because agricultural production plays a critical role in the livelihoods of these households, both as a source of food and income (Lesotho Desk Review, 2013).

3.3.2 Livestock farming

Livestock farming entails rearing of large and small stock. Large stock as cattle is kept as drought animals where they are used for work in the fields such as ploughing instead of using farming machinery such as tractors. They are also used as traditional assets for ceremonies, for instance, burial ceremonies, feasts, sacrifices, and bride wealth (*lobola*). Employment is provided to the herd boys with households that have large families. Moreover, cow's milk is used to feed the family (Morapeli-Mphale, 2006).

Livestock contributes positively to the livelihood of many households in that it is used as food security. It is also used as cash income from the sale of livestock or sale of animal products such as milk and meat. Livestock also provides manure and transport services. It is a form of savings

and insurance as the sale of animal provides cash to address important and unforeseen matters in the household. In his study, Lichaba (2022) posits that farmers' livelihood has changed completely through selling pigs and piglets, as they could overcome food security and also pay school fees for their children. He further mentions that manures from pig farming are sold to enrich crop production.

3.4 Wool and mohair sector

The wool and mohair industry is the backbone of the rural community. It is the major export in Lesotho and contributes vastly to the livelihoods of the Basotho people (Mokhethi, 2015; Mochebelele, 1992). Wool and mohair industry has high Gross Domestic Product (GDP) and Gross National Product (GNP) percentages as compared to other agricultural products (Khotso, 2020).

3.4.1 Historical development of the wool and mohair industry

The wool and mohair industry was introduced in the mid-1800s when the Merino sheep and Angora goats were acquired by the Basotho (Mochebelele, 1992). The Merino sheep originated from Spain while Angora goats were from Turkey (Shelton, 1993). Research further reveals that some farmers acquired Merino sheep and Angora goats from South Africa, mainly through livestock theft and purchase by migrant labourers (Mokitimi, 1989; Rantšo, 2015). It is further stated that the flock of Merino sheep and Angora goats grew rapidly in number such that they far surpassed the indigenous breeds (Mokhethi, 2015).

3.4.2 The contribution of wool and mohair industry to economic development

The marketing of wool and mohair ensures farmers earn an income for their livelihoods. Also, the sale of wool and mohair on the international markets brings foreign exchange into the country that also increase the national income (Rantšo, 2015).

The level of employment in the wool and mohair industry is not clear as the national statistics do not record employment in the industry since most workers in the industry are informal wage earners. Most of the sector employment is seasonal under contractors that run the shearing sheds. In the country, employment brought by wool and mohair is very little as the production level is through self-employment or herders that are hired to tend the sheep. They are normally paid in the form of a flock of sheep per year. Besides that, they benefit from shearing and selling of their

sheep for meat. The NWMGA estimates that 30% of the farmers' income comes from the sale of wool while 70% comes from selling of sheep for meat. There is a cycle of employment and creation of wealth at the subsistence level, as the herders end up becoming sheep owners and also hiring other people to herd their livestock after some years of service. The wool industry is experiencing reduced export volumes, with price dropping, which indicates that the industry is in decline. In 2019, price of wool was 8234 and in 2020, 6017 price in USD per ton. The decline is due to improved performance and affordability of synthetic fibres.

3.4.3 Profile of the Lesotho wool and mohair

Wool and mohair are the main agricultural exports, and Lesotho is the world's second producer of mohair after South Africa. It produces 14% of mohair globally (Rath et al., 2014). In Lesotho, more than 28,000 smallholder producers have their sheep and goats shorn. 1.2 million sheep and 500,000 goats were shorn, and their fleeces were marketed on the international market. Lesotho's production of mohair increased in the period of 1990 to 2009 by 25% as compared to the other leading fiber producing countries such as the United States of America which declined by 93.2% and South Africa that declined by 74.3%. The market shares of Lesotho in the production of mohair increased from 7.3% in 2000 to 14.3% in 2009 and this has made Lesotho the second largest producer of mohair in the world (Mokhethi, 2015).

3.4.5 Main export for the Lesotho wool and mohair

For more than 40 years, Basotho sold their wool and mohair by sending them to Port Elizabeth and Durban for marketing by the South African brokerage company Boeremakelaars Koöperatief Beperk (BKB) (Mokhethi, 2015). There are different channels through which wool and mohair are re-exported to the international market. There are farmers that use the government shed where we have Lesotho National Wool and Mohair Growers Association (LNWMGA). There are individual farmers who sell their wool and mohair to the private traders while there are also marginal groups that use the informal channel.

The production of wool and mohair in Lesotho has a long history. In addition to its contribution to the agricultural GDP, the industry plays a crucial role in the livelihoods of an estimated 250,000 households, whether directly or indirectly through their participation in allied commodity chains. In Lesotho's largely rural and poor mountainous areas, the main source of income is raising sheep and goats for wool, high-quality mohair, and meat. Furthermore, since the production of wool and

mohair is predominantly in the hands of smallholder farmers in the mountainous areas of the country, the industry holds considerable potential to alleviate rural poverty and food insecurity in Lesotho (MAP, 2021).

3.5 The impact of COVID-19 on agriculture in Lesotho

Lesotho declared the first case of covid-19 exactly a week after the lockdown was lifted which had been from 30 March to 5 May 2020. During the lockdown, there was restriction in movement where all services were suspended except the essential services (Mpaki, 2020).

It is significant to mention that Lesotho is a landlocked country surrounded by South Africa. All goods in Lesotho's formal and informal sectors are imported from, or pass through, SA. Illustratively, 95% of the imports and 40% exports go to the neighbouring country (Bureau of statistics, 2019). As a result, what happens in South Africa in one way or another, affects Lesotho. With South Africa, lockdown began on the 26 March 2020 where agricultural activities were deemed non-essential and could not operate: such included wool and mohair among others (Pienaar, 2020). Wool and mohair could not be transported to South Africa as Pienaar outlines that seaport were not running smoothly due to lockdown, there was shortage of staff because of the country's regulations, there were few containers and the capacity of shipping was either lowered or ports closed.

Lockdown restrictions have disrupted the food supply chain, resulting in an absurd situation where many farmers lost millions of dollars from wasted food crops that could not be delivered to the market, while many more urbanites starved because they could not access food. The measures also have entailed deprivation of economic rights, freedom, friends, and support networks (Mickiewicz, 2021). For instance, the government restrictions to limit movement might have affected the movement of maize between countries that supplement Lesotho's requirement leading to increased scarcity of maize flour as well as panic buying, and price spike (Nhlengethwa et al., 2020). It is important to note that maize is the country's major food staple, and it is produced by all farming households for household consumption.

3.5.1 Impacts of COVID-19 on wool and mohair sector

The closure of the country's borders with only one neighbour, South Africa, disrupted the goods supply chain which is central to informal trade in Lesotho. The disruption has led to acute shortages

of goods, which in turn, have led to a skyrocketing of prices, thereby further undermining the capacity of poor informal traders to survive in those hard times. In a word, alarmist responses to the COVID-19 pandemic have led to many more pandemics of unemployment, poverty, and crime (Mickiewicz, 2021).

With lockdown and closure of borders, wool and mohair farmers could not purchase the animal medication and animal feed, as medications are bought from South Africa by farmers or purchased from local outlets that import them from South Africa. As a result, animals were at health risk, which did not augur well for the quality of wool and mohair product (The Reporter News Paper, 2020). Medication that was sold in the country for the livestock was very expensive. Lockdown came at a time of mating, but with borders closed, it became impossible for the farmers to import the best breeds of animals from other countries (The Reporter News Paper, 2020). COVID-19 came at a time when the season for shearing goats was to begin. In the country, lockdown was declared at the beginning of the shearing of mohair. This meant that shearing of goats was delayed, and the products quality and quantity degraded, and income for the farmers was delayed. Also, extension support from the government was put on hold due to restrictions in movement (LENAFU,2020).

3.6 Agriculture and poverty in Lesotho

According to the World Population Review (2020), Lesotho is one of the poor countries. In Lesotho, poverty is rooted in the rural areas. Mokhothu (2004) articulates that Basotho view poverty as defined by lack of livestock and agricultural assets. The next section discusses enforcement of law to the farmers, stock theft, climate change and land degradation are factors that lead to poverty.

3.6.1 Government policies impact on production

Unfair and ill-defined property law sort the poor enforcement of the laws in place, especially those pertaining to agriculture and use of natural resources (Khan, 2001). Government policies may hinder in the sale of wool and mohair (Nkholise, 2020). The COVID-19 pandemic came immediately after wool and mohair farmers had suffered due to the 2018 regulations. To substantiate, Emecheta (2020) articulates that in 2018, the government of Lesotho enacted regulations banning the export of locally produced wool and mohair unless they were prepared, brokered, traded, and auctioned in Lesotho. A Chinese-owned company, Lesotho Wool Centre,

was given a monopoly to auction Lesotho's wool and mohair. This move caused an uproar in the country, including protests by 40,000 members of the Lesotho National Wool and Mohair Farmers Association. The farmers were not happy because instead of prompt, high returns on their products promised by the government, many experienced delayed or reduced payments (Emecheta, 2020). In the face of repeated protests, the government reversed the ban in November 2019 and allowed people to sell their wool and mohair to the places of their choice (Government of Lesotho, 2019).

3.6.2 Livestock theft

Livestock theft has exacerbated the problem of poverty in Lesotho, especially in the rural households. The effects of livestock theft are a loss of livestock, and reduced or completely no returns in the sale of animal products such as wool and mohair (Khoabane & Black, 2012).

3.6.3 Poor land and range degradation

In Lesotho, rangelands are crucial for supporting the livelihoods of the people and the country's economic growth, as they play a vital role in social, cultural, ecological, and economic demands. The rangeland is particularly used for livestock grazing; therefore, wool and mohair production solely rely on the rangelands (Ministry of Forestry and Land Reclamation, 2014a).

Wool and mohair production has declined tremendously due to poor land and rangeland conditions in Lesotho. In the early seventies, production capacity of a sheep was 5kg on average per year. In the recent years, production capacity of a sheep is 2,5 kg. Rangelands have weakened hence the low productivity. Therefore, rearing animals in large numbers has become challenging as the carrying capacity of the rangelands has dropped. In addition, the decline in the rangelands has a strong effect on nutritional value of the range where there is high mortality and low carcass weights are being experienced. There are also low birth weight, low reproduction rates, and low fleece quality of sheep and goats (Woodfine, 2013).

On the basis of all these, rangeland degradation has resulted in poor production in sheep and goats, poor reproductive performance, low yields of wool and mohair and ultimately low returns that are generated from the market by farmers (Khotso, 2020). Human activities that promote rangeland degradation are projects and overgrazing. Khotso's study argued that rangeland degradation can also be affected by projects. For instance, with the Katse and Mohale dam construction, there has been road infrastructure, which resulted in high population that settled in that area and reducing

the grazing pastures of the livestock. All the activities have increased pressure on rangelands that support the pastoral lifestyle (Turple et al., 2021). Excessive grazing has detrimental effects not only on rangeland site stability, but also on plant species diversity, and rangeland productivity, which ultimately affect primary production hydrological functioning, and nutrient recycling as explained by (Rampai, 2017).

3.6.4 Climate change

Global warming is a great concern to the whole world (Mofolo, 2021). Lesotho, specifically, has been experiencing change in climatic conditions characterised by extreme reduction in rainfall, increase in the rate of heat and dryness, with exhaustion of water, flora and fauna resources.

The country was remarkably affected by 2015/2016 El Nino related to drought which impacted heavily on agricultural production of the season. Water sources were depleted (dams and rivers) leading to severe water shortage (United Nations, 2016).

The 2015/16 droughts imposed harmful effects on rangelands, thereby affecting livestock production. The study observed that livestock population (sheep, goats and cattle) declined over the years, where the decline was further escalated in 2015/2016 by the severe drought of that year (Ramasing, 2019). Many sheep and goats died due to drought, which also affected grain food products such that the farmers had to slaughter sheep and goats for food to compensate for the decreased food production (Jordaan, 2004).

3.7 The government of Lesotho relief measures during the apex of COVID 19

Lockdown measures imposed included restrictions in movement, the prohibition of public gatherings, closure of all businesses excluding essential services and limitation of funeral attendees to 50. To ensure compliance, the Lesotho Defence Force (LDF) was deployed and authorised (Shale, 2020). The National Emergency Command Centre (NECC) was established for COVID-19 specific response and mitigation. The NECC was later restructured and renamed the National COVID-19 Secretariat (NACOSEC) (Boloetse, 2020).

As a direct means of lowering the risk of contracting and spreading the disease, Lesotho launched then first and second batches of COVID-19 vaccine containing 36 000 doses each in March 2021 and June 2021, respectively (Government of Lesotho, 2021). At 10 months, the country recorded

her first case of Coronavirus. His Majesty King Letsie III launched COVID-19 vaccination roll-out at Scott Hospital in Morija. First batch was received on 04 March 2021 (Government of Lesotho, 2021).

3.7.1 General livelihood improvement measure/interventions

There was a COVID-19 subsidy for factory workers that was provided by the government of Lesotho. A total of M121,609,200 was provided by the government of Lesotho, administered by the Lesotho National Development Corporation (LNDC). A payment of M800.00 was given to factory workers for three months, being April, May and June 2020 (LNDC, 2021).

European Union (EU) allocated \$5.5 million to help mitigate the socio-economic effects of COVID-19 pandemic and lockdown. The cash transfers were expected to reach 56,000 households (50 000 vulnerable children and 6 000 vulnerable households) across the country, for a period of 3 months from February 2021 (European Union, 2020). Disaster Management Authority (DMA) assisted the 338 vulnerable households that were affected by heavy rains during the COVID-19 pandemic and were offered corn and beans (that were purchased from the local farmers) in January 2022 (Likotsi, 2022). The Ministry of Social Development subsidized the 60+ year old a relief of M831.00 per month and seeds for gardening for three months (Velaphi, 2021).

The government of Germany through the German Federal Office donated 1.5 million euros for the years 2021-2023 to the United Nations World Food Programme (WFP) in Lesotho. This is according to the WFP press release, which further states that the purpose of the donation was aimed to support the highly vulnerable people who were struggling to meet their basic food needs during the COVID-19 pandemic. The press release states that the donation is part of an 18 million euro's contribution to Southern Africa for 2021-2023. Again, it explains that the WFP Director said this aims to assist 122, 000 food-insecure people through emergency response assistance until the end of March 2022. The beneficiaries were said to receive USD 47 per month to help meet their basic food needs (Velaphi, 2021).

3.7.2 Livestock livelihood improvement measure/interventions

During the national lockdown in Lesotho, livestock farmers were not able to buy animal feeds due to access challenges and the fact that prices of the feed had been hiked. The Food and Agricultural Organisation of the United Nations (FAO), with financial support from the World Bank,

distributed emergency fodder seeds to the vulnerable livestock farmers affected by the COVID-19 pandemic. The farmers received animal fodder seed, including grazing vetch, lucerne, barley, rye and oats aimed to protect their animals and restore their livelihoods (Africa Press Release, 2021).

3.8 Conclusion

Wool and mohair are very important to the economy of Lesotho and the livelihood of the farmers. However, there are some of the factors which impede the growth of the wool and mohair sector; such factors are climate change, stock theft and the government rule of law. The mentioned challenges were further intensified by the COVID-19 pandemic, which left the wool and mohair sector vulnerable.

CHAPTER FOUR

RESEARCH METHODOLOGY

4.0 Introduction

The chapter encompasses the research methods used for data collection with justification for the chosen approach on the effects of COVID-19 on the livelihood of wool and mohair farmers at Koro-Koro, in the Maseru district.

4.1 Research paradigm

Post-positivism asserts that one can accurately assess a phenomenon by integrating logical reasoning and empirical observation. Post-positivists believe that science is probabilistic, because it is based on many possible outcomes. Instead of being certain, they frequently look to these possibilities in order to better understand social reality (Bhattacharjee, 2012).

According to Creswell (2014), post-positivists' research reflects the need to recognise and evaluate the factors that affect outcomes. He claims that the world is governed by rules and theories, and that in order to fully understand it, these laws and ideas must be tested, validated and enhanced. Therefore, in a post-positivist, a researcher starts with a theory, collects data which will either support or refute the theory and then revisions and conducts will be made for additional tests.

4.2 Research methodology

According to Kothari (2004), research methodology can be thought of as a science that studies how research is conducted in a scientific manner or as a method for systematically dealing with the research challenge. Research methodology is basically talking of the logic behind methods used in the research and reasoning for using particular methods. It is simply a guide to research and how it is conducted.

4.3 Research design

A research design is a procedure that a researcher undertakes to produce reliable, accurate, and economical answers to questions. It is simply giving a detailed procedure and plan on how the researcher will obtain answers on the research questions. Qualitative designs are often based on

deductive as they mainly focus on understanding, discovering and exploring situations (Kumar, 2011). Data was collected through the use of questionnaires where answers were filled on the questionnaire. The recorder was also used. Answers given by the respondents were analysed, thematised and presented tables, charts and percentages.

4.4 Population and sampling

Population relates to the total number of people living in each area (Taherdoost, 2016). The population of the study is the wool and mohair farmers of Koro-Koro, Maseru. The researcher used simple random sampling and purposive sampling methods. Purposive sampling means that the selection of respondents follows some judgement or arbitrary ideas of the researchers looking for a kind of representative sample. Therefore, with purposive sampling, a village chief referred a researcher to one wool and mohair farmer who then referred the researcher to other farmers (Wolf et al., 2016). The use of simple random sampling is whereby every individual has an equal chance of being selected in the sample from the population. In the Koro-Koro area, there are households who own only sheep, goats or both of them; therefore, the use of the two sample techniques was appropriate.

A selected portion of a population that has been chosen to be representation of the whole population is referred to as a sample. A sample is selected because it is impractical to study the whole population. Two basic categories of sampling procedures are probability and non-probability sampling. By using probability sampling, the researcher generalises the sample's results to the target population. Simple random sampling, and stratified random sampling are types of probability sampling (Acharya et al., 2013). A sample of 66 wool and mohair farmers was selected from the population of wool and mohair farmers. A sample of 66 was chosen as it was accessible, and time was limited to access a larger population.

4.5 Research instruments

The research instruments that were used are interview guides, questionnaires, and recorders.

4.6 Data collection procedure

The focus of qualitative research is on words rather than figures; this type of research consists of interpretative practices that make the world visible. It enables interpreting situations to understand

the meanings that people make from day-to-day life in their natural setting (Walia, 2015). Therefore, the ideal data collection procedure in a qualitative study is interviews. Data were collected through questionnaires that were administered face-to-face from house to house. Data were also collected through the use of phone calls and focus group discussions using unstructured interviews with participants of wool and mohair farmers.

A questionnaire is a collection of inquiries the researcher will make. It is a set up where every respondent is asked the same questions in the same way. There are various methods for administering it. An “interview schedule” is a set of questions that are asked face-to-face during a “structured interview” by a researcher. The interviewee frequently has little to no control over the questions they ask or the order in which they are asked. However, other surveys employ semi-structured interviews, which offer some freedom and latitude within a framework that is consistent each time. When dealing with “unstructured interview,” the interviewer has a great lot of discretion over the format and flow of the interview. Therefore, an interview schedule can range from being entirely planned to being completely unstructured, and it may contain questions of various categories within the same schedule. The unstructured interview is preferred by those who are interested in elucidating the social meanings behind social activity, whereas the researcher who place considerable significance on the objective scientific status of the study technique and process choose the structured interview (Mcneill & Chapman, 2005).

4.7 Data presentation procedure

Data were presented in themes, tables and charts. After the collection of data through interviews, qualitative data were transcribed, classified and categorised where themes were used in coding. Stuckey (2015) articulates that in qualitative research, coding is a process that is used to analyse data. It involves three steps to facilitate the process: create a storyline through reading the data and use memos to provide explanation and interpretation while classifying data into codes. The researcher indicated the total number of questionnaires that were filled by the wool and mohair farmers and those that were not illegible. All the 66 questionnaires were filed correctly with the help of the researcher.

4.8 Ethical considerations

Being ethical means been coherent to the standards of conduct for proper professional conduct that have developed over time (Bhattacharjee, 2012). A researcher got ethical clearance from the supervisor to collect data. Participants were made aware that the study is educational and they would not be compensated for participating. A consent was given to the participants informing them that their participation is voluntary and that they can always withdraw anytime they want to. Identities of participants was not disclosed, and appropriate language was used. Pictures were taken with consent from the participants.

4.9 Conclusion

The chapter discussed methods in which data were collected using the above-mentioned research methods, how they were analysed and presented. Research design, population and sampling, research instruments and data collection procedures, and ethical considerations were also discussed.

CHAPTER FIVE

THE IMPACT OF COVID-19 ON THE LIVELIHOOD OF WOOL AND MOHAIR FARMERS AT KORO-KORO, IN THE MASERU DISTRICT

5.1 Introduction

This chapter presents and analyses qualitative and quantitative data collected from Koro-Koro wool and mohair farmers in the Maseru district. Data were collected from the wool and mohair farmers through semi-structured and closed-ended questionnaires. The first section presents the demographic characteristics of the informants while the second section looks at the livelihood challenges of the wool and mohair farmers during lockdown and if farmers got any form of aid during COVID-19 pandemic.

5.2 Demographic characteristics of wool and mohair farmers

COVID-19 impacts have been felt in every sector all around the world in different ways. It is important to look at the demographic information of the wool and mohair farmers at Koro-Koro to determine how COVID-19 affected them in relation to gender, age, marital status, number of household members, and educational background.

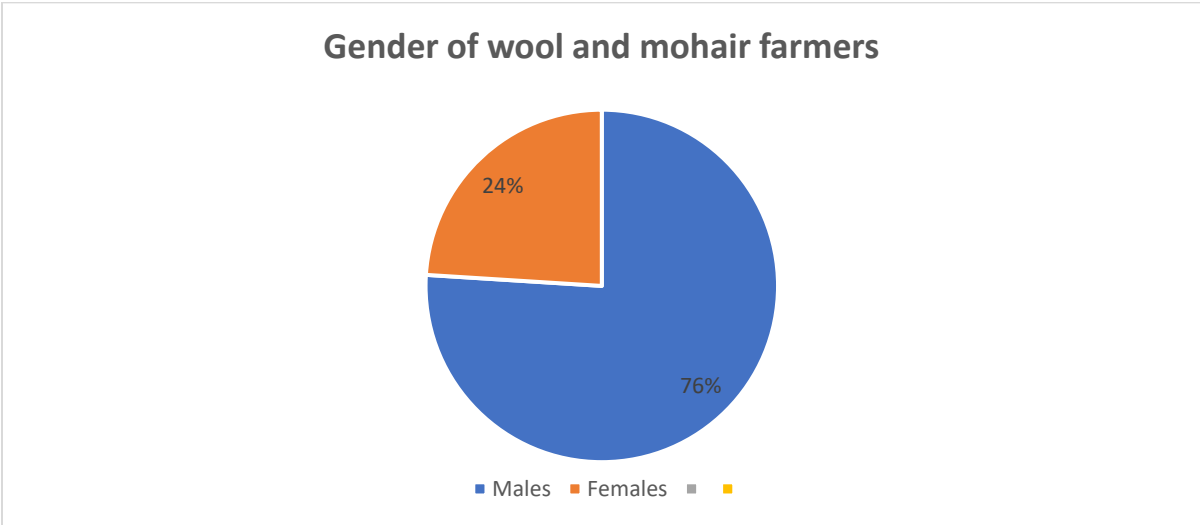
5.2.1 Gender of wool and mohair farmers

In African countries, females are responsible for household chores and taking care of the children while males participate in activities outside the household. In agriculture, females participate in seeding, weeding, and taking care of domestic animals like chickens and goats. Most of the tasks they deliver in agriculture production are unpaid. Men have more opportunities to work with livestock outside of the household. Women are less integral than men. Research shows that lack of mobility for women demands their time for household and childcare responsibilities and social norms impede their interactions with participants in the value chain (Njuki et al., 2016).

According to Figure 5.1, the majority (76%) of wool and mohair farmers are male. Livestock rearing in Lesotho is mostly done by the male people. This is because most of them grew up as

shepherds and taking care of the family's livestock. Many of them keep this family legacy as they grow up. The large number of males as wool and mohair farmers can also be ascribed to the economic opportunities coming with it. Wool and mohair is a lucrative business. So, most males participate in it to maintain their households. Research on Lesotho further shows that the males were once employed in the South African mines in large numbers. So, when the South African gold mines started to retrench foreign labour in the 1980s and 1990s, many Basotho men participated in farming upon their arrival at home. Some practise crop production while others engage in livestock farming or both. In this case, wool and mohair farming is considered the main source of income for many Basotho men.

Figure 5. 1: Gender of wool and mohair farmers in Koro-Koro, July 2023



Source: Field work data

5.2.2 Age distribution of wool and mohair farmers

To provide a clear picture of different age groups in the study of wool and mohair farmers at Koro-Koro, age has been a crucial factor as individuals become more responsible when they grow and ought to determine their choice of livelihood.

The adults and elderly make 58% while those aged between 18-40 make 42%. Therefore, the adults and elderly make a large number of wool and mohair farmers. The active group ranging from 18-

40 are migrating to urban areas and South Africa to look for employment while the adults and the elderly are left at home to look after the livestock.

Table 5. 1: Age of wool and mohair farmers at Koro-Koro, July 2023

Age category of wool and mohair farmers	Frequency	Percentage
18-30	6	9
31-40	22	33
41-50	21	32
51-60	6	9
61 and above	11	17
Total	66	100

Source: *Field work data*

5.2.3 Marital status and number of households

It is important to look at the marital status of the wool and mohair farmers in the study. Marital status gives a clear picture that there is the likelihood of increased household members in the family. Married people are more responsible as they have spouses, children, and extended family members to take care of.

Table 5. 2: Marital Status of Wool and Mohair Famers at Koro-koro July 2023

Marital Status	Frequency	Percentage
Single	4	6
Married	53	80
Widowed	4	6
Separated	4	6
Divorced	1	2
Total	66	100

Source: *Field work data*

Table 5.2 shows that 80% of the wool and mohair farmers are married. The findings are in line with the Vital Statistics Report in Lesotho where the highest numbers of marriages are registered in Maseru as compared to other districts with 63.3% (Bureau of Statistics, 2023). This validates the findings of a study.

The table also shows that 2% of the wool and mohair farmers are divorced. This also affirms that there are widows who are wool and mohair farmers; however, married farmers form the largest part of the respondents who have been affected by COVID-19.

5.2.4 Household size of wool and mohair farmers

A household is defined as a group of persons who make common provision of food, shelter and other essentials for living (United Nations, Department of Economics and Social Affairs, Statistics Division, 2017). People who live together usually share a budget and account for maintaining a household. It is important, therefore, to look at the size of household for wool and mohair farmers to study their livelihood in respect to wool and mohair.

Table 5. 3: Size of household for wool and mohair farmers

Number of households	Frequency	Percentage
1-5	34	51
5-10	27	41
11 and above	5	8
Total	66	100

Source: *Field work data*

Table 5.3 shows that 51% of the wool and mohair farmers have 1-5 members of the household. Wool and mohair is the backbone of the rural communities in Lesotho. Most families depend on wool and mohair as the source of income to support their household members.

Data also show that 8% of the sample consists of 11 and above members of the household. It can be concluded that wool and mohair is the main source of household income for Koro-Koro residents and that COVID-19 has affected married wool and mohair farmers of 1-5 households.

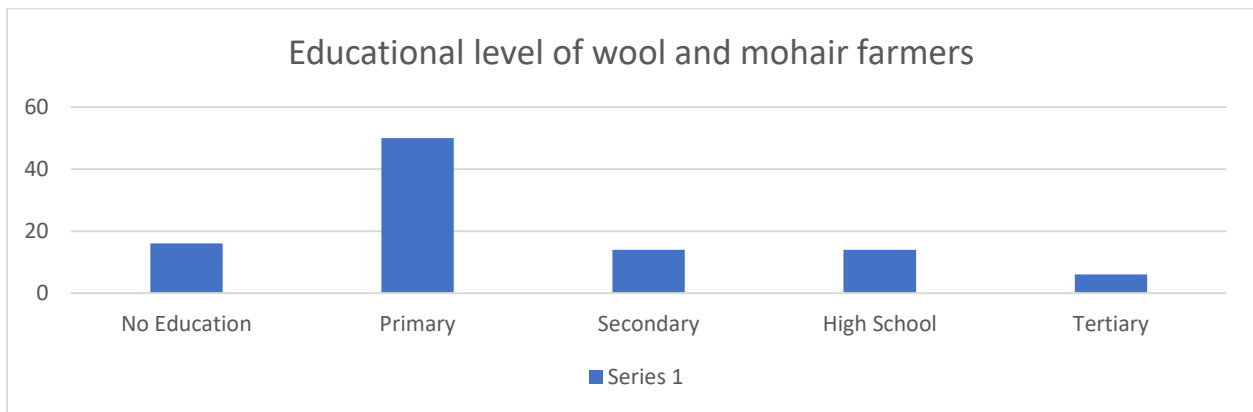
5.2.5 Education background of wool and mohair farmers

Education is considered a key to success, and it is a priority all around the world. Agricultural development and growth are influenced by the level of education and knowledge of the farmers.

It can be observed that wool and mohair farmers at Koro-Koro have attained only the primary level. Most of the male population accounting for 75.4% in comparison with female population 24.6% are reported to have completed pre-school as their highest level of education (Bureau of Statistics, 2016)

The results show that the wool and mohair farmers are not in any position to be absorbed in the formal sector due to their low level of education even if some would want to add on their options of earning income through employment apart from farming and other forms of hard labour as technology has advanced a lot. Most farmers are indeed dependent on wool and mohair as it requires no educational background but only farming passion. Most children, especially boys living in rural communities grow up as herd boys and do not pay much attention to formal education. This is caused by communities' influence emanating from norms and habitual practices, and sometimes prevailing life circumstances in which they live.

Figure 5. 2: Education level of wool and mohair farmers at Koro-Koro, July 2023



Source: *Field work data*

Sometimes factors like parents' poverty hinder children from attending school for formal education. For this reason, they naturally feel a need to contribute to helping their families' survival by being employed as herd boys if they are boys and/or domestic workers if they are girls. For families to survive, poor parents subject their children to child labour (Mestry & Plessis, 2019).

With a low level of education, the farmers have little information about the markets, and they can be easily manipulated by traders. Even though the farmers only have a primary education background, they claimed that they are still learning how to conduct the sector with training from the Ministry of Agriculture and Food Security who use extension workers, from WAMMP. They are also learning from the successful farmers.

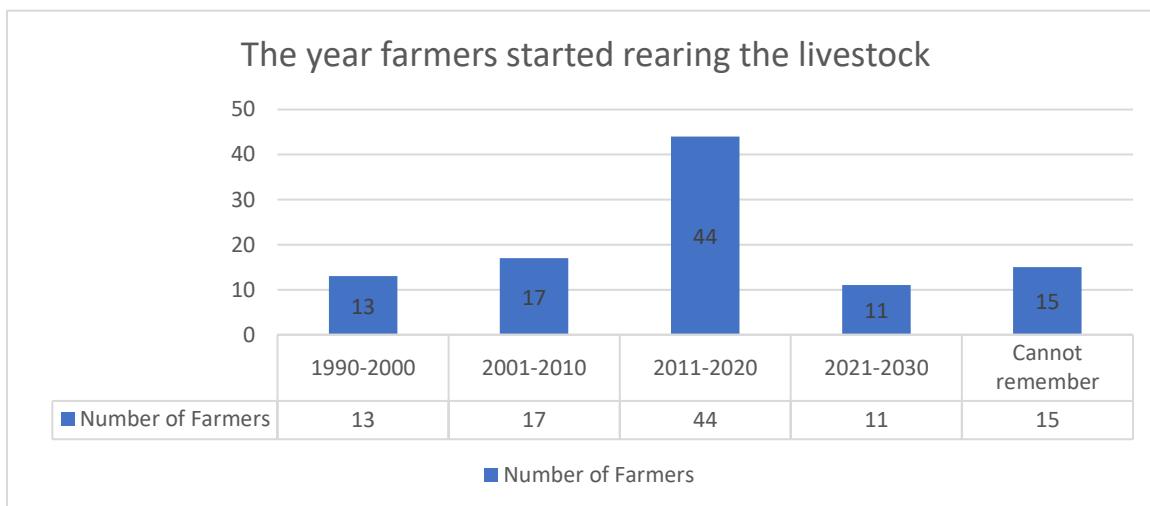
5.3 Wool and mohair production

The section is about wool and mohair production. It includes the year of establishment, how livestock was acquired, the initial and current size of livestock, and management of livestock.

5.3.1 Year when the respondents became wool and mohair farmers

As stated in the literature, wool and mohair contribute enormously to the GDP of the country. It is important to look at the year in which wool and mohair established a sector. This will help to identify challenges in the lengthy periods in which the sector was established until the period of COVID-19.

Figure 5. 3: The year farmers acquired started rearing sheep and goats



Source: Field work data

From the figure above, it can be derived that 44% of the wool and mohair farmers established their journey between 2011 and 2020. Most wool and mohair farmers at Koro-Koro are adults and elderly.

In the 1990s, most migrants from Lesotho were young men working in the South African gold mines and over 50% of households had a migrant mineworker. Since 1990, patterns of migration from Lesotho to South Africa have decreased dramatically for men due to retrenchments in the South African mines. The young men in the 1990s are now the adults and elderly who have come

home; they have opted for livestock farming as their source of income. It was during this time that women migrated, and men were left at home (Crush et al., 2010).

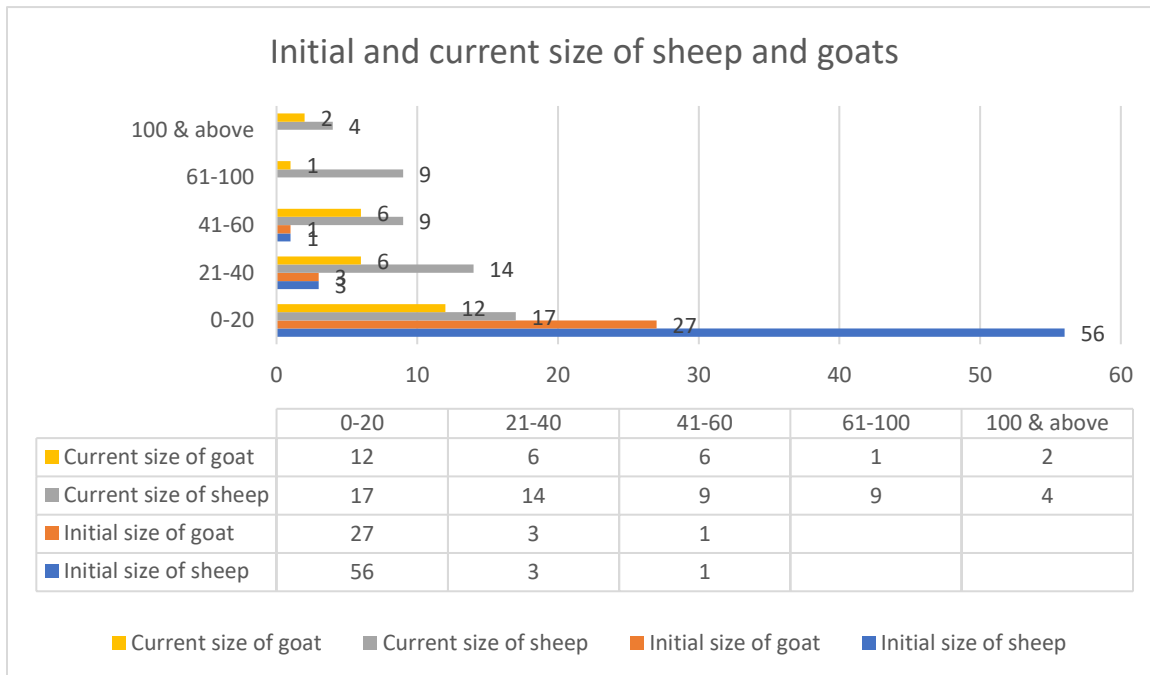
The results also reveal that the lowest percentage (11%) kept sheep and goats for wool and mohair production between 2021-2030.

Data from the study depict that 53% of the farmers acquired livestock while they were shepherds. During this time, shepherds were paid yearly or monthly with livestock. The results go in line with Chatelet (2008) who discovered that herding animals has become a norm in the rural area. Boys start to be herd boys from a young age and get paid every year with animals, 1 cow or 12 sheep/goats from the elders. The animals then constitute to wealth of the boys and are used to start a living on their own. Only 3% acquired livestock through borrowing *mafias*.

5.3.2 Size of livestock at establishment and currently in the wool and mohair farming

The trend from initial to current size of sheep and goats is an important factor as the researcher will identify if there is growth and decline in the number of livestock.

Figure 5. 4: The size of the livestock Initially and currently



Source: Field work data

The figure shows that there has been a growth in the size of sheep and goats. Initially, there were 428 sheep while there are currently 2750 sheep. There were 254 goats and there are currently 1190 goats. At Koro-Koro, there are more sheep farmers at 94% while goat farmers are at 44%.

Data collected show that the farmers prefer rearing sheep than goats. This goes in line with the study in the Matsoaing remote area, where wool and mohair are almost the main sources of cash income, making sheep and goats an important element of the farming systems. Sheep are more numerous than goats probably because Basotho people prefer mutton meat, meaning that it provides higher income while goats are more sensitive to cold (Chatelet, 2008).

5.3.3 People who take care of the livestock

People who take care of the livestock form an important base of the study as it is through their hard work and dedication that production and productivity are in place.

Table 5. 4: People who take care of the livestock

Person	Frequency	Percentage
Hired	33	50
My son	5	8
Myself	23	35
Other	4	7
Total	66	100

Source: *Field work data*

Data from the figure above show that 50% of the wool and mohair farmers hire shepherds to take care of their livestock. Hired shepherds are either paid monthly with cash ranging between M600 and M900 or paid yearly with 1 cow, 6-8 sheep/goats or M6000.00 upwards. Remembering that the wool and mohair farmers at Koro-Koro are still youths, this simply means that their kids, especially sons are still young to take care of the livestock, and that they are still in school. Also, the owners are too busy to go all day to look after the livestock as they still have to go to the fields. The results go in line with Chatelet's (2008) study where it is said that hiring a herd-boy is a standardised way. Herd boys take care of stock all year long and owners stay at home to work in the fields.

The majority (77%) of livestock farmers attested to being satisfied with their livestock. They mentioned that they are in good hands as the herd boys listen to instructions and do as they are told. As a result, any problem relating to the livestock is easily identified and dealt with or prohibited especially problems such as deteriorating animal health. Animals are healthy and strong and produce good quantity and quality of wool and mohair. While (23%) of the respondents mentioned that they are not satisfied with the livestock care in that the animals are prone to disease and ultimately die. They claimed that they get lost in the fields. In addition, the animals are very thin, and the wool and mohair quality is not good.

5.4. Factors affecting fibre growth rate and quality

Fibre quality is essential to the wool and mohair farmers. The quality of wool and mohair is influenced by a number of factors, in particular, animal breed, environment, nutrition and animal health. Khan et al. (2012) state that for wool to compete with other fibres, it is important to maintain efficient production.

5.4.1 Place where the livestock is kept

Normally, sheep and goats in Lesotho are either kept at home or in the posts. The posts are preferred as they enable animals to live in a free range while at home they are in a restricted area. However, noted are environmental faults such as stains produced by urine and vegetable contamination as well as exposure to heat or cold, which may result in death of the animals.

Data show that 70% of the farmers keep their livestock at home. From the collected data, 96% of the respondents attested to their livestock relying on communal grazing for feeding. Grazing pastures are burdened with the growing number of livestock. The pastures are deteriorating due to climate change, overgrazing and burning of the grass. To manage the grazing land, the traditional authorities enforced the *maboella* because of overstocking around the villages. The law consisted of setting aside a grazing free area for the regeneration and preservation of grass with its different species. The precaution allows grass to be available all year round (Chatelet, 2008).

5.4.2 Animal nutrition

Animal nutrition is important as supply of the nutrients can exert an influence on the fibre production and the characteristics of the fleece.

Major feeds commonly used for sheep and goats in the study include 96% of natural grazing while only a few provide supplementary feeding. Animal feeds on wheat bran and oat fodder 32% and other 26%. The other 26% is mainly for the farmers who cultivate crops. They feed their livestock on crop residue. Crop residue is crushed and mixed with salt. This helps for future use, especially in wet seasons when the land is cultivated. When it is drier and the animals are starving, they move to the live post where there is better grass and ample water.

As it is stated, there is seasonal cultivation. In dry seasons, most fields are free for grazing whereby animals freely graze and browse on crop residue and in wet season, the land is mostly cultivated and covered with crops and on-farm grazing is not possible.

Just like in Ethiopia, farmers in crop livestock farming store different crop residue (mainly from cereals and pulse crops) and natural grass for use during dry seasons. Green pastures are available during wet season and farmers do not provide supplementary feeds. In the dry seasons, when pastures and browse dwindle, farmers start supplementing their animal's diet with crop residue.

91% respondents said animal feed is not affordable, and alternatively, the farmers use crop residue to supplement the animal's diets. Only 9% said it is affordable.

5.4.3 Animal health/ diseases

It is very important that for wool and mohair, sheep and goats are vaccinated to prevent the diseases. Evidence shows that climate change affects animal health. It is, therefore, very important to know different kinds of the diseases that attack the sheep and goats.

Farmers at Koro-Koro cure their animals yearly with improved preventative injections against internal parasites. Curing is done by farmers with guidelines from extension officers. In the recent years, Lesotho has been experiencing frequency of natural disasters and extreme weather events such as droughts, storms and floods (Lesotho Meteorological Services, 2017). Lesotho has a continental temperate climate characterised by four distinct seasons. The average temperature ranges between -10°C in winter and 30°C in summer. The country receives most of its rainfall between the months of October to April, with an average of 700 mm per annum. Precipitation patterns are determined by regional and local climate controls. The lowest average annual

precipitation occurs in the Senqu River Valley (450 mm) and the highest in the Northeastern Mountain zone (1300 mm) (Bosch et al., 2021).

In Lesotho, the livestock producers and traders have been under pressure in 2019 due to an outbreak of anthrax across the country which prompted the immediate export ban of wool and mohair to South Africa and other countries due to fears of spreading the disease (Phakoana, 2019). There has been FMD in South Africa which was exported to China and other countries that was banned. Since Lesotho wool and mohair is transported through South Africa, Port Elizabeth, it was stuck over there even though Lesotho did not have FMD.

Table 5. 5: Common animal disease in Koro Koro and their treatment

Livestock Type	Diseases	Treatment
Sheep and Goats	Internal Parasites (<i>Manyooa</i>)	Endolint
	Liverfluke (<i>manyooa a sebeta/maphele</i>)	Lintex 1
	Lungworms (<i>Manyooa mats'oafo</i>)	Hardwarm Predose orange Falbanten Tramasoil, Hydat,Msomasine
Goats	Ticks (<i>Bosoleisi</i>)	Afermax
Sheep	Scab (<i>Lekhoekhoe</i>)	Afermax
Sheep and Goats	Enterotexemia (<i>Liphieo/Monyakane</i>)	Phalphivax
Sheep and Goats	Blue tongue	Blue tongue vaccine

Source: *Field work data*

The farmers indicated that they buy the medication for their livestock. Those who shed their livestock at the wool shed, there are deductions made when they are being paid. From those deductions, the Ministry of Agriculture and Food Security is accountable for buying the medication and distributing it through extension officers in various areas to the farmers. For the farmers who do not use the government shed, they pay a certain fee per sheep/goat in order to access the medication.

Data show that 52% of wool and mohair farmers buy medication from South Africa. Lesotho declared a state of emergency on 27 March 2020. Regulations were promulgated on government Gazette, with imposed closure of non-essential services. Citizens were not allowed to leave their places of residence (Kali, 2021). During this time, farmers could not cross borders to South Africa to buy medication. They could not buy them anywhere as movement was restricted and stores were closed. This brought a halt on farmers as the animal's health was affected, and some sheep and goats died. This, therefore, reduced the number of livestock and ultimately lowered their pay cheques on the shearing season. Later, when the lockdown regulations were lifted on the Gazette produced on 3 April 2020, there was allowed movement with restrictions such as social distancing, use of mask though borders were still closed. During this time, farmers were forced to buy medication locally and data shows that such medication was very expensive.

The results align with Govindaraj et al. (2022) who state that death cases in small ruminants (sheep and goats) were considerably high due to diseases like enterotoxaemia (ET), haemorrhagic septicaemia (HS) and peste des petits ruminants (PPR) in Karnataka. Wool and mohair farmers at Koro-Koro use medications for their animals and it yields positive results in the sale of wool and mohair.

5.4.4 Breed kept by wool and mohair farmers

For good quality of wool and mohair, it is important to select a breed that is best for the livestock. The adoption of improved breeds for goats and merino sheep is important for improving the resilience and productivity of the local wool and mohair (World Bank, 2018).

Wool and mohair farmers at Koro-Koro keep the merino sheep and angora goats. These types of sheep and goats produce good quality and quantity of wool and mohair. As stated in the literature review, most farmers in Lesotho acquired merino sheep and angora goats from South Africa in the mid-1800s mainly through labour migration. Improved animal breed improves the genetics of animals and livestock becomes sustainable to different climatic conditions. Therefore, produce of good quality of wool and mohair increases.

For breeding purposes, farmers use rams at 80% and billy goats. They use ewes and supplement the feeding. However, not all farmers can afford to buy rams, billy goats and ewes; therefore, they

borrow or hire them in exchange for sheep or goats. There are breeders in Lesotho located at Quthing but most of the farmers buy from South Africa. As Chatelet (2008) states, the rams and billy goats are bought from South Africa for their high production potential, both in terms of reproductive efficiency and fiber production. He further states that sometimes farmers do not buy improved rams or billy goats, but instead, they keep male descendants that have fine quality to be the next breeding animals, thus, limiting the production costs.

5.5 Shearing place, marketing and market access

It is important to know where wool and mohair farmers shed their livestock as that determines their marketing. This section is about the shearing of livestock, marketing and market access, and comparing wool and mohair income before, during and after COVID-19.

Data show that 76% of wool and mohair farmers shear their sheep and goats at the government sheds while 14% shear them at home. Those who shear at the government sheds benefit a lot as there is more money even though it comes after a long period. For those who shear at home, data reveals that they want instant cash even though it is very little as compared to those who shear in the woolshed.

Furthermore, data collected reveal that majority (75%) of the wool and mohair farmers marketed wool and mohair during COVID-19. Data demonstrate that regardless of the pandemic, life had to go on and farmers were adamant to shear their livestock so as to earn an income. They sold their wool and mohair to BKB company through the government sheds and Mokema government shed.

Lesotho's wool and mohair are processed and packaged for South Africa's domestic market as well as international markets. They are sold in South Africa's auctions. The main destination of Lesotho's wool and mohair is South Africa which also re-exports. The interconnectivity with South Africa has remained unchanged for four to five decades until in 2018 when the new regulation localised the industry. With localisation of the industry, a lot of complaints were raised about shortcomings of the marketing structure. Concerns were raised by the LNWMGA, traders and individual farmers that were being coerced into selling their produce to the Chinese-owned company (WAMPP/IFAD, 2020).

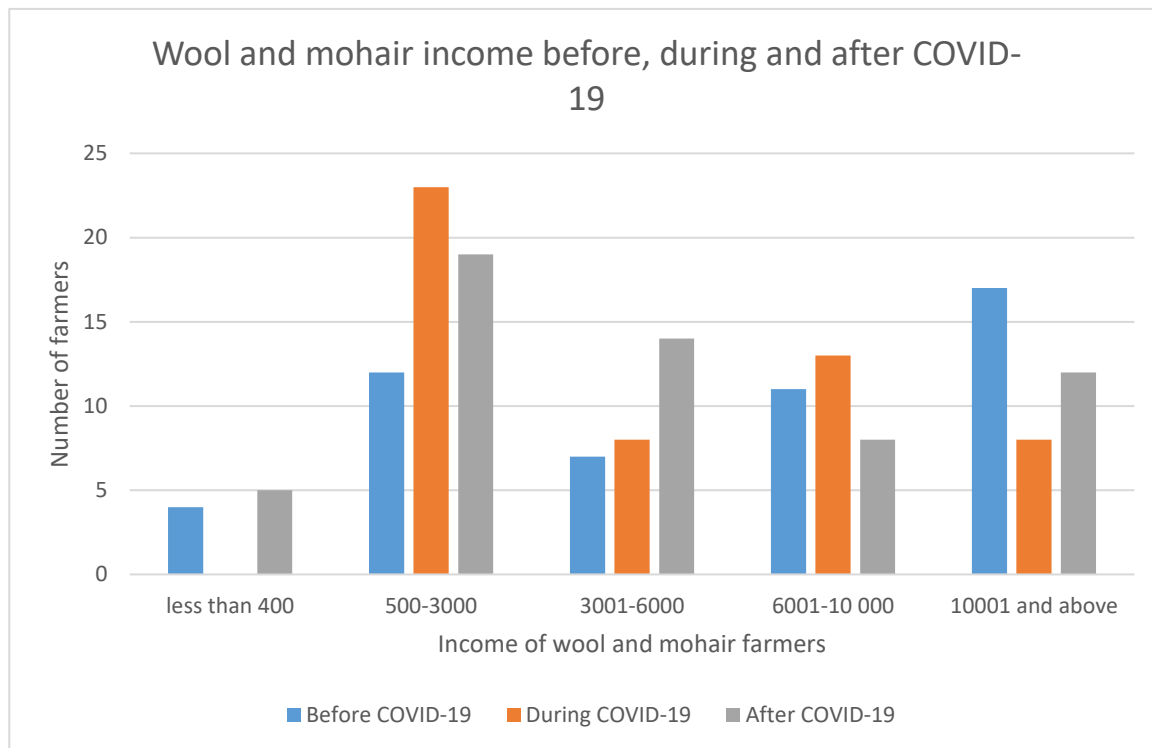
5.6 Livelihood strategies during COVID-19

The main objective of the research is to study the livelihood strategies of wool and mohair farmers amid COVID-19. The section looks at the income of wool and mohair farmers, and the effects of COVID-19.

5.6.1 Income for wool and mohair farmers

It is important to study the income of wool and mohair farmers so as to identify how COVID-19 has had an impact on it.

Figure 5. 5: Income for wool and mohair farmers



Source: Field work data

Income of wool and mohair farmers has declined significantly during COVID-19 due to measures taken to curb the virus such as closure of border and movement restrictions. The market has also gone down. In Lesotho, lockdown came exactly at the time of shearing goats. There was shut down of all activities. Shearing was delayed, and ultimately, mohair was stuck in the country as borders were closed. When the mohair was later sold, returns were very low, which caused adverse effects to the farmers which will be discussed in the next section.

5.6.2 Effects of covid-19 on wool and mohair farmers

The wool and mohair farmers in Lesotho and elsewhere in the developing countries were faced with socio-economic repercussions during COVID-19. Some farmers have not recovered from those repercussions. The repercussions were further exacerbated by the government interventions to curb the spread of the pandemic by lockdown, restriction in movement, quarantine and social distancing among others, which pushed a lot of farmers into poverty. The effects range from food insecurity, lack of clothes, lack of participation in agriculture, not affording school fees and buying of breeder animals, deteriorating animal health and lack of supplements.

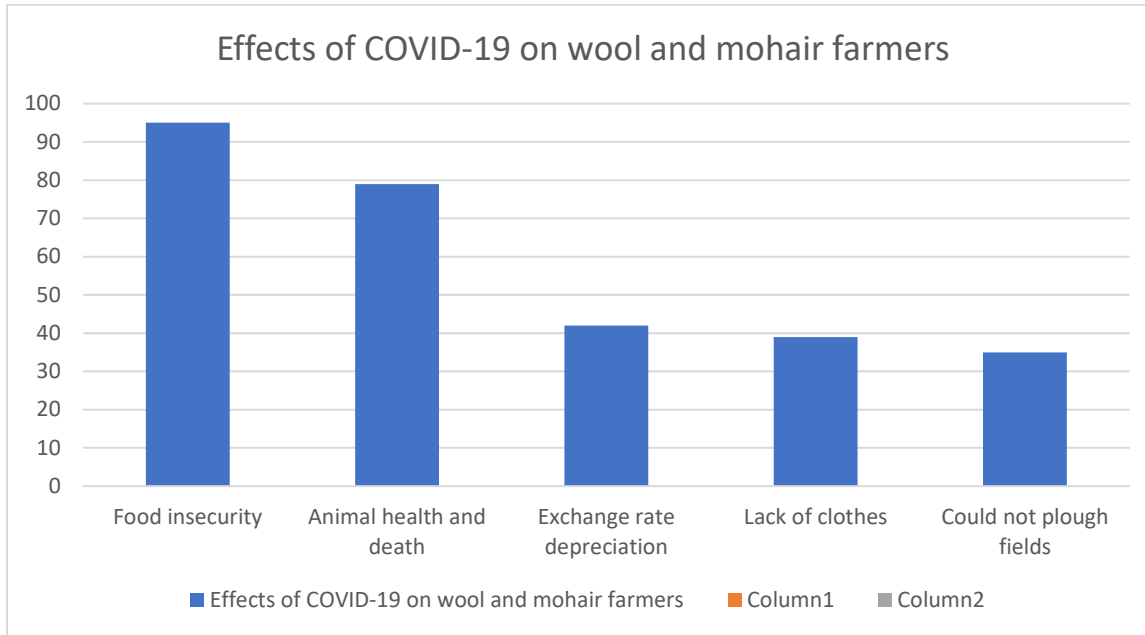
Income from sale of wool and mohair was not enough to meet the needs of all the household members. The pandemic has significantly put pressure on the livelihoods of the farmers. The findings depicted that the livelihoods of the farmers were affected by the COVID-19 pandemic to a large extent.

Data from the field show that the shut down and restriction in movement did not allow the farmers to buy agricultural products to sow crops. Also, there was a delay in payment for the sale of wool and mohair. When payments arrived, it was too little to afford essentials for their livelihoods. 52% of the farmers faced the challenge of food scarcity. Other factors that hindered farmers' access to enough food stocks are those indicated previously that the wool and mohair farmers did not have other sources of income for survival.

Farmers had limited access to inputs such as seeds, fertilisers and pesticides. As a result, more land had not been cultivated, according to literature (IGAD Centre for Pastoral Areas and Livestock Development, 2020). Closure of international borders along with a suspension of night travel has resulted in bottlenecks and delays in the movement of goods including animal health inputs, raw ingredients for animals (maize, soya, imported supplement), and live animals which all resulted in higher operation costs (Mercy Corps, 2020).

As observed from the results, animals' health was severely affected. Some sheep and goats died due to the complete shutdown leading to stores closures depriving farmers access to animal medication. Extension officers and animal veterans could not attend accordingly to animals for cure when sick.

Figure 5. 6: Effects of COVID-19 on wool and mohair farmers



Source: Field work data

Policy interventions to restrict human-to-human contact and to completely cease human activity in areas badly hit by the COVID-19 pandemic have attempted reduce the chance of the disease spreading, but they have also had detrimental impact on animal production, agricultural outputs, and market supplies. Farm animals that are well-managed have daily access to food, water, medicine, and other supplies needed for productivity. The welfare of farm animals, farmers’ livelihood, and customers’ access to goods and services were all be impacted as they were unable to freely engage in their raising activities or perhaps obtain access to agricultural inputs. Movement restrictions harmed nomadic/pastoral herdsmen, whose farming operations significantly rely on moving across grasslands in pursuit of natural resources. The ease of access to extension services and technical experts to troubleshoot farm problems was hampered especially in rural areas with inadequate access to digital service for timely access to information. Regular farm visitation by extension agents was therefore difficult to navigate, considering that this may be a possible route for farm-to-farm transmission of diseases (Bosch et al., 2021).

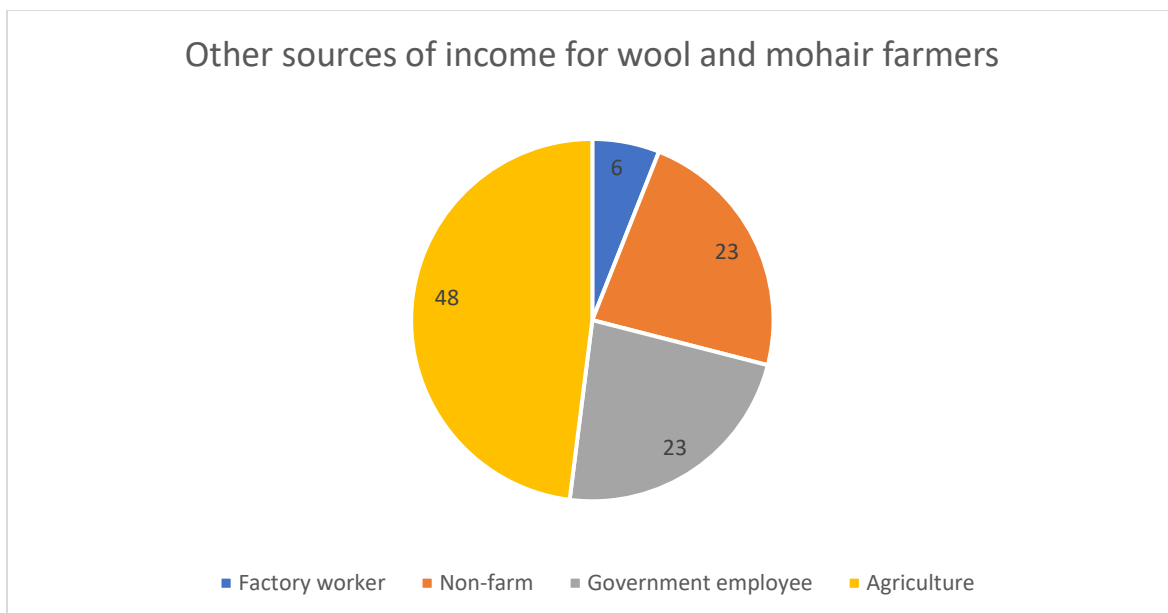
However, all the farmers in Koro-Koro did not receive any kind of support from the government of Lesotho (GOL) and the Non-Governmental Organisation (NGO). This has further pushed the

farmers into poverty as most of them are neither educated nor employed. The data from the field show that wool and mohair farmers were not empowered at all by relevant stakeholders.

5.6.3 Other sources of income

COVID-19 has negatively impacted the livelihoods of many wool and mohair farmers in Lesotho, in other developing countries and worldwide. It is, therefore, imperative to assess whether farmers depend only on wool and mohair farming. Data demonstrate that there are other alternative sources of income.

Figure 5. 7: Other sources of income for wool and mohair farmers



Source: Field work data

The figure above depicts that the majority (48%) of the wool and mohair farmers depend on crop farming for their livelihoods. They emphasised that to plough the fields, they are financed by cash from the sale of wool and mohair even though they get little income recently. They reported that sometimes they do not go to the fields due to hikes in prices for agricultural inputs. For that and other related challenges like climate change and its effects, they do not produce enough as expected.

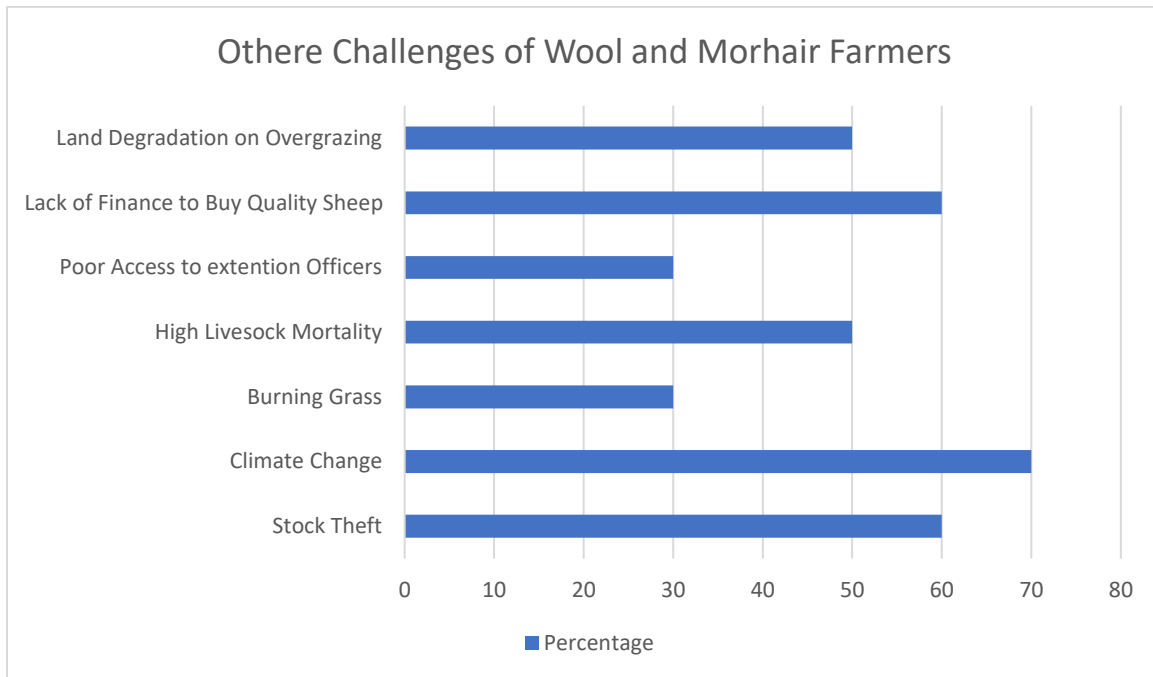
Rantšo and Seboka (2019) also attest that the majority of farmers in Lesotho's agricultural industry produce primarily for local consumption. However, recent droughts have had a significant negative

impact on agricultural productivity in subsistence farming. Food insecurity is consequently rising among a large number of rural households. Frequent incidences of drought and decreased rainfall have a negative impact on crop productivity. High temperature and droughts increase the prevalence of pests and diseases. Food shortages and famine are the result of subsequent crop failures (Bosch et al., 2021).

5.6.4 Other challenges of wool and mohair

The wool and mohair farmers emphasised that climate change is heavily impacting their livestock. They argued that they sometimes experience drought or weather change where it will be very hot and dry. Due to these, the animals die or starve if farmers go to the fields to plough despite the weather. This means that the animals' health is also affected due to climate change.

Figure 5. 8: Other challenges facing wool and mohair production



Source: Field work data

Livestock production is deteriorating due to the degradation of rangelands. The net effect has increased livestock mortality rates and decline in quality of livestock products. It is arguable that

extreme weather conditions are conducive to disease and pest incidences yet they are a danger to livestock production. This means that climate change surely also affects the health of rangelands which in turn affects livestock production. However, it is necessary to stress that this is also affected by the effect that livestock itself has on rangelands due to overgrazing. In the words of Bosch et al. (2021), frequent drought occurrences result in limited availability and quality of water which lead to disease outbreaks compounded by famine and malnutrition.

5.7 COVID-19 assistance or relief on wool and mohair farmers

Globally, governments adopted some interventions to lessen the effects of COVID-19 on the livelihood of wool and mohair farmers. Lesotho was not an exception in this. For instance, the Food and Agriculture Organisation of the United Nations (FAO), with financial support from the World Bank, distributed emergency fodder seeds to vulnerable Lesotho livestock owners affected by COVID-19 pandemic. The intervention seemed to make a quick impact on about 1,200 vulnerable farmers from wool sheds and livestock communities in five rangeland districts that were affected by COVID-19-related restrictions such as restricted movements and closure of some activities. During the national lockdown in Lesotho, livestock keepers were unable to buy animal feeds due to access challenges and also the fact that the prices of the feed had been hiked (FAO, 2021).

CHAPTER SIX

CONCLUSION AND RECOMMENDATIONS

6.1 Introduction

Wool and mohair contribute enormously to socio-economic development in the world and they are the bedrock of the Lesotho's economy. Wool and mohair is commended for its contribution in poverty alleviation, job creation and income generation. The industry creates jobs for the most illiterate people being the herd boys. After shearing of the sheep and goats, the income obtained contributes to poverty alleviation.

However, wool and mohair is faced with constraints that inhibit it to grow to its full potential. Such include stock theft, climate change, degradation of rangelands, animal disease and mortality, and lack of finance. World economy has drastically been rattled by COVID-19, while wool and mohair is also endangered. COVID-19 with the government policies to contain the pandemic has caused much distress to the farmers, affecting the productivity of wool and mohair.

6.2 Summary and discussion of findings

The aim of the study was to investigate the impacts of COVID-19 on the livelihoods of wool and mohair farmers at Koro-Koro, in the Maseru district. Mixed methods of collecting data were used to address the research questions and objectives of the study. The addressed objectives were assessing the impact of national lockdown on the lives of wool and mohair farmers, to investigate the means of livelihood during the climax of the COVID-19 pandemic and to analyse the governments relief interventions in assisting farmers during the apex of COVID-19 pandemic. The findings revealed that most of the wool and mohair farmers are married male adults and elderly with primary education as their highest qualification. Most farmers acquired the livestock while they were shepherds. Merino sheep and angora goats are the breeds kept by the farmers and they mostly shear their livestock at the Mokema government shed. Most farmers have been rearing livestock for more than 10 years. Factors that affect fibre quality and growth rate at Koro-Koro are inclusive of a place where livestock is kept, animal nutrition and health. Based on the research objectives, the findings will be briefed.

6.2.1 Impact of national lockdown on the lives of wool and mohair farmers

COVID-19 is said to have originated in China. The virus posed as a threat to various industries such as health, agriculture, manufacturing and tourism. COVID-19 was declared as a pandemic by WHO and countries implemented measures to curb the spread of the virus which included lockdown, restriction in movement, social distancing and the closure of borders. In Lesotho, the first lockdown was in March-April 2020.

Lockdown has affected global economies and caused major distress. Wool and mohair farmers purchase improved rams and billy goats from South Africa, medication and animal feed. With closure of borders, such goods were not bought; there was shortage of goods which led to the skyrocketing of prices such as animal medication and animal feeds. Animals were at health risk while some diet. The deterioration of animal health did not yield good quality and quantity of wool and mohair. Also, extension officers and animal veterinarians could not attend to animals for cure when sick due to restriction in movement.

COVID-19 came at the time when season for shearing goats was to begin, this meant shearing was delayed; as a result, payment was also delayed and very little. The farmers usually supplement the livestock feeding with crop residue; however, lockdown did not allow the farmers to buy agriculture products to sow crops.

The livelihood portfolio theory anticipates that a household is faced with a risk of being poor due to losing their income and then not having ability of fulfilling the various needs of individual in the household, presently or in the future. Lockdown has created a risk for families losing their income as there have been reductions in payments in the sale of wool and mohair thereby families unable to fulfil their various needs.

6.2.2 Means of farmers' livelihood during the climax of the COVID-19 pandemic

The findings revealed that COVID-19 has drastically affected the livelihood of wool and mohair farmers. During the pandemic, the farmers got little money from the sale of wool and mohair. Besides wool and mohair, the farmers depend on crop farming for their livelihoods. Crop farming

has been a challenge during COVID-19 as cash used to buy agricultural input was attained from the sale of wool and mohair, where income was very little as compared the other years.

Also, due to lockdown, agricultural input prices hiked in the country as borders were closed. Most farmers could not sow crops; as a result, there was high poverty and starvation, children could not go to school and there were no means to clothe the children. Generally, livelihoods of farmers deteriorated due to COVID-19. Farmers' decline in crop production due to hike in prices of agricultural inputs has led to poverty. The pattern fits to the livelihood portfolio theory.

6.2.3 Governments relief interventions in assisting farmers during the apex of COVID-19 pandemic

Most wool and mohair farmers reported little income they got from the sale of the fibre. They also reported the hike in prices of agricultural inputs such as fertilisers, animal medication and animal feeds. The increase in prices meant immeasurable loss of income for the wool and mohair farmers. All the farmers at Koro-Koro reported not to have received any form of aid from the government and the voluntary people either in the form of food parcels or money. Majority of the participants in the study urged for assistance from the government to overcome the adverse effects brought by the pandemic. The wool and mohair farmers are faced with poverty due to the risks presented by COVID-19 to their livelihood and also the government not intervening at all.

6.3 Concluding remarks

The study investigated the impacts of COVID-19 on wool and mohair farmers at Koro-Koro. Even though the COVID-19 restrictions have eased, the economy has not recovered fully. It is proven that wool and mohair are the backbone of the rural economy in Lesotho; however, COVID-19 has had adverse impacts on the sector. The government help is seriously needed to help curtail the effects of the pandemic for a much quicker recovery.

6.4 Recommendations

For the wool and mohair sector to overcome the hurdles brought by COVID-19, the study has identified key areas that need to be improved. The government should always be prepared to tackle

and deal with any pandemic in future. COVID-19 must be a lesson learned. The study recommends the following:

6.4.1 Educating the herd-boys to intensify unceasing of wool and mohair

Most farmers rely on communal pastures. The pastures must be kept in good conditions. Awareness should be raised to farmers, especially the herd boys in conserving the natural resources. They must be taught about climate change, rangeland management, soil erosion and conservation of natural resources. These will help in scenarios where there is restriction in a complete shutdown where farmers cannot afford animal feeds and are forced to rely only on communal pastures.

6.4.2 Lesotho must be independent and stop reliance from South Africa

Even though Lesotho is surrounded by South Africa, it must be independent and stop relying on South Africa because it is a sovereign country. The country imports most of consumable items from its neighbouring country from agricultural inputs, manufacturing, and health. For instance, the country must produce the agricultural inputs such as animal medication, animal feeds, improved lambs, and billy goats. With such production, even when pandemics are to occur, the wool and mohair sector would not struggle. There are many Basotho nationals who are sent to school by the government to study various technical sources. Such people should be used to produce essential goods to benefit the country instead of always importing goods.

6.4.3 Wool and mohair processing plant

Wool and mohair is exported to South Africa and overseas in its raw material. With COVID-19, shearing delayed due to lockdown, mohair could not be transported due to closure in borders, there was also delay in payment. With the wool and mohair processing plant in the country, even if borders are closed, business would still go on for the wool and mohair farmers. With the spinning, money would circulate in the country and not struggle for buyers if borders were to be closed.

6.4.4 Insurance

Wool and mohair farmers must insure their property in order to ensure that they do not struggle when there are pandemics, and the effects are felt. The insurance will ease the tension when there are emergencies.

6.4.5 Government relief

The government ministries must ensure that all industries in the country are prioritised, and money must be saved to cater for difficult times like pandemics. Wool and mohair farmers must also be given relief when there are hurdles like pandemics.

6.4.6. Measures to lessen the weight of expenses

Due to the increase in the cost of living after COVID-19, more especially on agricultural inputs, farmers have found it difficult to continue with farming. Comparing the pre-COVID-19 scenario to the current one, farmers are more vulnerable. The government must plough the idle fields for the farmers for food security and for animal supplements,

6.4.7 Wool and mohair auctioning

Wool and mohair are sold through auction through bidding. The first bidder is most of the time given access to buy wool and mohair regardless of the offer. Wool and mohair must be sold to the highest bidder not the first bidder, this will help with maximization of profits especially after the COVID-19 pandemic.

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QUESTIONNAIRE

SECTION A

Profile of respondents

Name of participant (Optional).....

1. Gender of wool and mohair farmers.

Female { }

Male { }

2. Age of wool and mohair farmers.

18 - 30 { }

31 - 40 { }

41 - 50 { }

51- 60 { }

61 and above { }

3. Marital Status of wool and mohair farmers.

Married { }

Widowed { }

Separated { }

Divorced { }

4. Educational Level of wool and mohair farmers.

No Education { }

Primary { }

Secondary { }

High School { }

Tertiary { }

5. Number of household members.

- 1-5 households { }
- 5-10 households { }
- 11 and above { }

SECTION B

Wool and mohair production

6. When did you become sheep and goat’s farmer?

.....

7. How did you acquire the livestock?

Bought { }

Inherited { }

Borrowed/ ‘Mafisa’ { }

Paid with while I was a shepherd { }

Other.....

8. What breed do you keep?

Merino sheep { }

Angora goats { }

Other

9. What was the size of your livestock when you first become a wool and mohair farmer?

Animals	Number
Goats	
Sheep	

10. What is the current size of your livestock?

Animals	Number
Goats	
Sheep	

11. How do you ensure a good quality breed?

.....

Management of livestock

12. Who takes care of your livestock?

Hired shepherd { }

My son { }

My self { }

Other.....

13. If you use hired shepherd, how do you pay him?

Per month.....

Per year.....

14. Are you satisfied with the livestock care?

Yes { }

No { }

15. If Yes or No in the above question, please explain.

.....

16. How does caring affects your livestock?

.....
17. Where do you keep the livestock?

Home { }

Own farm { }

Livestock posts (*motebong*) { }

Other.....

18. How do you feed the livestock?

Grazing on communal land { }

Animal feed { }

Other.....

19. If you use animal feed, is it affordable?

Yes { }

No { }

20. If no, what alternative do you use?
.....

21. If you use communal land, are pastures good?

Yes { }

No { }

22. If the answer is Yes or No in the above question, do good or deteriorating pastures affect your livestock?

.....

23. What are the common diseases that often attack your livestock?

Parasite { }

Scab { }

Other.....

24. How do you treat the above mentioned diseases?

Livestock type	Diseases	Treatment
Sheep		
Goats		

25. What type of medication do you use for livestock?

.....

26. How do you get medication?

Government assistance { }

Buy for myself { }

27. If it is government support, how often do you get the medication?

Once { }

Twice { }

Thrice { }

Other.....

28. If you buy for yourself, where do you get the medication?

Buy them local { }

Buy from South Africa { }

Other.....

29. How much do you spend on medication per year?

M 100.00 - M 200.00 { }

M 201.00 - M 300.00 { }

M 301.00 - M 400.00 { }

M 501.00 - M 600.00 { }

M 601.00 - M 700.00 { }

M 701.00 - M 800.00 { }

M 801.00 – M 900.00 { }

M 901.00 - M 1,000.00 { }

Other.....

30. How does medication expenditure affect your returns from wool and mohair selling?

Positively { }

Negatively { }

31. If it affects them positively or negative, please explain.

.....

32. If you buy medication from South Africa, how did closure of borders affect you?

Positively { }

Negatively { }

33. If positively or negatively, please explain.

.....

SECTION C

Shearing of livestock

34. Where do you shear your livestock?

Home { }

Government sheds { }

35. If you shear at home, do you have relevant shearing equipment?

Yes { }

No { }

36. If yes, do you have skills and tools for shearing?

Knowledge and equipment	Have	Don't have
Skills		
Tools		

37. If you do not have skills and tools, how does that affect your wool and mohair?

Positively { }

Negatively { }

38. If it affects positively or negatively, please explain.

.....

Marketing and market access

39. Through which channel do you do you sell your wool and mohair?

Government sheds { }

Private traders { }

Informal channel { }

40. Is the market reliable?

Yes { }

No { }

41. If the market is not reliable, what alternatives do you use?

.....

42. How did COVID-19 affect the market?

Positively { }

Negatively { }

43. If the answer is positively or negatively, please explain.

.....

44. How long do you wait for payment?

- Before COVID-19

1 hour - 5 hours { }

1 - 6 days { }

1 - 4 weeks { }

2 - 6 months { }

Other.....

- During COVID-19

1 hour-5 hours { }

1 - 6 days { }

1 - 4 weeks { }

2 - 6 months { }

Other.....

- After COVID-19

1 hour-5 hours { }

1 - 6 days { }

1 - 4 weeks { }

2 - 6 months { }

Other.....

45. How much do you get from wool and mohair marketing?

- Before COVID-19

Less than M 400.00 { }

M 500.00 - M 3,000.00 { }

M 3,001.00 – M 6,000.00 { }

M 6,001.00 – M 10,000.00{ }

Other.....

- During COVID-19

Less than M 400.00 { }

M 500.00 - M3,000.00 { }

- After COVID-19

Less than M 400.00 { }

M 500.00 - M3,000.00 { }

M 3,001.00 – M 6,000.00 { }

M 6,001.00 – M 10,000.00{ }

Other.....

46. Are the returns from selling wool and mohair satisfactory?

- Before COVID-19

Yes { }

No { }

- During COVID-19

Yes { }

No { }

- After COVID-19

Yes { }

No { }

47. If yes or no, explain?

- Before COVID-19

.....

- During COVID-19

.....

- After COVID-19

.....

SECTION D

Livelihood strategies during COVID-19

48. Did you market wool and mohair during COVID-19?

Yes { }

No { }

49. If yes, where did you market wool and mohair?

.....

50. How much did you get from marketing?

Amount	Tick \checkmark
--------	-------------------

< M 400.00	
M 500.00 – M 5,000.00	
M 5,001.00 – M 10,000.00	
M 10,001.00 – M20,000.00	
M 20 001.00 – M 30,000.00	
M 30,001.00 – M 40,000.00	
M 40,001.00 – M 50,000.00	
M 50,001.00 – M 60,000.00	
M 60,001.00 – M 70,000.00	
M 70,001.00 – M 80,000.00	
M 80,001.00 – M 90,000.00	
M 90,001.00 – M 100,00.00	
M 100,001.00+ (state amount)	

51. Was the income enough to meet the needs of all the household members?

Yes { }

No { }

52. Did the restriction in movement imposed by COVID-19 have an impact on the movement of livestock?

Yes { }

No { }

53. If the answer is yes or no, please explain.

.....

54. Do you have other sources of income?

Yes { }

No { }

55. If yes, what is that sources of income?

None { }

Factory worker { }

Non-farm { }

Government employee { }

Farming { }

56. Did the farmers receive any form of aid during the epic COVID-19 from the government?

Yes { }

No { }

57. If Yes, what kind of relief?

Money { }

Food Parcels { }

Others.....

58. If money, how much?

Below M 500.00 { }

M 500.00 and above { }

59. Are there any challenges facing the wool and mohair sector?

Yes { }

No { }

60. If yes, what are some of those challenges?

.....

61. To fully overcome the impacts of COVID-19, how can the wool and mohair farmers be supported?

Thank you

APPENDIX



The government wool and mohair shed where most farmers shed their livestock



Two gentlemen from fetching wood. Wood is used as a source of fuel to cook food,



A picture of sheep and 3 herd boys.