INTEGRATION OF SMALL-SCALE MOHAIR FARMERS INTO THE COMMERCIAL AGRICULTURAL ECONOMY IN LESOTHO: A NEW INSTITUTIONAL ECONOMICS APPROACH

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by

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ABSTRACT

Agriculture continues to be a strategic sector in the development of most low-income countries like Lesotho where small-scale farming is the dominant livelihood activity that provides income and employment to the people. Smallholder farmers' integration into the commercial agricultural markets is a crucial element for economic development and has become a part of development strategies for developing countries and the objectives of international development institutions. The integration of the smallholders into these markets is dependent upon a number of factors including formal and informal institutions. Factors like population growth and demographic changes, technological change and introduction of new commodities, development of infrastructure and market institutions, development of the nonfarm sector and broader economy, rising labour opportunity costs, and macroeconomic, trade and sectoral policies affecting prices and other driving forces determine market participation. In addition, development of input and output markets, institutions like property rights and land tenure, market regulations, cultural and social factors affecting consumption preferences, production and market opportunities and constraints, agro-climatic conditions, and production and market related risks are other factors that affect the commercialisation process. On the other hand, factors like smallholder resource endowments including land and other natural capital, labour, physical capital, and human capital among others are household specific and considered internal determinants of market participation.

Nevertheless, the decision to participate in agricultural markets lies with the individual farming household. Under the New Institutional Economics (NIE), this decision is influenced by institutional factors such as risk and preferences, factors which affect household production and the level of costs associated with market transactions. These market transactions are commonly referred to as transaction costs.

The study focused on investigating the institutions that limit the integration of small-scale mohair farmers into the commercial agricultural economy in Lesotho. The documentation and evaluation of the institutional structure of the mohair industry is performed whereby the institutional factors influencing participation of small-scale mohair farmers in formal, informal and illegal markets in Lesotho and factors contributing to transaction costs associated with the integration of small-scale farmers into the commercial mohair sector are investigated. Therefore, the investigation will help to address the institutional problems hindering the development of an effective marketing structure for the commercialisation of small-scale mohair producers in Lesotho.

The results of the study show that the small-scale mohair farmers that use the formal markets are integrated into the commercial agricultural economy and these farmers' integration into the mainstream economy is influenced by access to government support in the form of shearing sheds, transport subsidies and advisory services. They also have access to market information, marketing infrastructure, knowledge of grades and standards and secure property rights. Other factors that helped their integration into the commercial economy is their contractual agreements with mohair buyers, path dependent based decision making as well as the collective approach to mohair farming. The small-scale mohair farmers using the informal markets do not receive the advantages received by the famers in the formal markets. These small-scale mohair farmers are not integrated into the commercial markets and their only option is the informal markets and their participation in these markets is enhanced by their marketing arrangements with the informal traders, culture influenced decisions, social capital and prompt payments. Despite integration into the commercial agricultural economy, small-scale farmers that use formal markets face the challenges of power imbalances, mistrust and conflicts which may affect this integration into the commercial markets if left unchecked.

The study concludes that in the face of institutional challenges, the small-scale mohair farmers using the formal markets are integrated into the commercial agricultural economy and there is potential for improvement of their integration as well as the integration of the small-scale mohair farmers that use the informal markets if institutional challenges are addressed.

KEY WORDS: Small-scale mohair farmers, smallholders, mohair, informal market, formal market, market participation, market integration, New Institutional Economics, Institutional Analysis and Development Framework, institutions, transaction costs

DECLARATION

I, Montoeli Rantlo, hereby declare that this thesis is a result of my research investigations and findings. All the work that was written by other authors and used in the thesis is fully acknowledged and a reference list is included. This work has not been previously submitted in part or entirety for degree purposes to any other higher institution of learning.

Submitted in fulfilment of the PhD in Economics degree at Rhodes University.

Signature.....

Montoeli Rantlo

Date.....13 March 2018.....

DEDICATION

This thesis is dedicated to my daughter Nthati and son Mosololi Gustav for whom I did not have enough fatherly time during this study.

Trust in the Lord with all your heart and

lean not on your own understanding;

in all your ways submit to him,

and he will make your paths straight.

Proverbs 3:5-6

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TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF ACRONYMS

ACP-EU	Africa, Caribbean and Pacific- European Union
AGOA	Africa Growth and Opportunities Act
AIDS	Acquired Immune Deficiency Syndrome
ANOVA	Analysis of Variance
ASIP	Agricultural Sector Investment Programme
BOS	Bureau of Statistics
BNC	Basutoland National Council
CBL	Central Bank of Lesotho
DFID	Development Fund for International Development
DRRM	Department of Range Resources Management
DWMGA	District Wool and Mohair Growers Association
FAO	Food and Agricultural Organisation
FPTP	First-Part-The-Post
GDP	Gross Domestic Product
GICA	Goat Industry Council of Australia
GNP	Gross National Product
HIV	Human Immuno Deficiency Virus
IAD	Institutional Analysis and Development Framework
IFAD	International Fund for Agricultural Development
Kgs	Kilograms
Km	Kilometers
LBOS	Lesotho Bureau of Statistics

LIFDC	Low Income and Food Deficit Country
LMC	Lesotho Marketing Corporation
LMI	Lesotho Mohair Industry
LNDC	Lesotho National Development Corporation
LNWMGA	Lesotho National Wool and Mohair Growers Association
LPMS	Livestock Products Marketing Services
MAFS	Ministry of Agriculture and Food Security
MFLR	Ministry of Forestry and Land Reclamation
MLE	Ministry of Labour and Employment
MLOG	Ministry of Local Government
MMP	Mixed Member Proportional
MTICM	Ministry of Trade, Industry, Cooperatives and Marketing
NGOs	Non-governmental organizations
NIE	New Institutional Economics
R	Rand (s)
Tons	Tonnes
UNDP	United Nations Development Programme
WB	World Bank
WHO	World Health Organisation
WIA	Women in Agriculture
%	Percent

CHAPTER 1
INTRODUCTION

This chapter gives background information of the study and presents the premises for formulating the objectives of the research. The study focuses on investigating the institutions that limit the integration of small-scale mohair farmers into the commercial agricultural economy in Lesotho. It documents and evaluates the institutional structure of the mohair industry and identifies the institutional factors that influence participation of small-scale mohair farmers in formal, informal and illegal markets in Lesotho. The factors that influence the transaction costs associated with the integration of small-scale farmers into the commercial mohair sector are investigated. The institutional problems hindering the development of an effective marketing structure for the commercialisation of small-scale mohair producers in Lesotho are addressed.

1.1 Background to the study

Integration of smallholder farmers into the mainstream economy is critical for the economic transformation of developing countries. Africa has the potential to increase rural economic growth and poverty alleviation as it increases demand for hired labour since these areas are not endowed with capital resources, hence adoption of labour intensive production (Glover, 1994). It is expected that wage effects from increases in employment would spread the benefits for the increased labour demand in agriculture across all sectors of the economy (Randela, 2005; Benard and Spielman, 2008). The participating small-scale farming households receive more income due to increased demand and cash sales (Abera, 2009). This process is influenced by multiple factors, including government policies relating to infrastructure development, price controls and taxes. Cultural factors and external factors, such as the political stability of the nation and natural disasters, also affect their integration into the mainstream economy (Jagwe, 2011; Kirsten, Mapila, Okello and De, 2012; Randela, Alemu and Groenewald, 2008). These factors have positive and negative effects, which could have a bearing on the welfare of the economic actors. Greater integration of smallholder farmers into the formal agricultural sector may result in trade expansion that could lead to

more profit being generated by the participants (Jagwe, 2011). This motivates farmers to increase production and hence a positive supply response is achieved (Jari and Fraser, 2009; Randela *et al.*, 2008).

According to the Department for International Development (DFID) (2005) and the World Bank (2008), agricultural productivity and profitability, which lead to agricultural growth and poverty reduction, could be improved through the existence of well-functioning markets. Such markets are possible through a policy environment that ensures supply of and improvement in infrastructure, communications and removal of trade and market access barriers (Cabral and Scoones, 2006; DFID, 2005). The World Bank (2008), Cabral and Scoones (2006) and Matungul, Ortmann and Lyne (2002) have argued that investment in roads, water, telecommunications, an efficient legal system, and farmer support services would increase the efficiency and profitability of smallholder farming.

Nevertheless, the decision to participate lies with the individual household (Makhura, 2001; Jaleta, Gebremedhin and Hoekstra, 2009). New Institutional Economics (NIE), which is an economic paradigm that attempts to include the social and institutional aspects that guide economic activity into mainstream economics (Bush, 2009), is influenced by factors such as risk and preferences, factors which affect household production and the level of costs associated with market transactions (Randela *et al.*, 2008; Jagwe, 2011; Williamson, 2010). The NIE is sub-divided into two broad categories: institutional environment and institutional arrangements (Williamson, 1998). The institutional environment refers to the 'rules of the game' that guide households' behaviour, whereas institutional arrangements refer to the governance structures that are designed to mediate certain economic relationships (Gopalakrishnan, 2005; Kirsten and Karaan, 2009). The costs associated with economic relationships and market transactions are commonly referred to as transaction costs (Williamson, 2010; Jaleta *et al.*, 2009). Integration into the market typically involves transaction costs (Williamson, 1998), which are associated with the exchange of property rights and the enforcement of such rights (Hijdra, Woltjer and Arts, 2014; Makhura, 2001).

The transaction costs result from various activities, including gathering information on potential and suitable contracting parties and the price and quality of resources in which they have property rights (Makhura, 2001; De Bruyne and Fischhendler, 2013). They also result

from screening and bargaining with the trading partners to find their true position, especially when the prices are determined exogenously (Vega and Keenan, 2014) and negotiating the informal or formal contracts with the trading partners that define the obligations of each contracting partner (Jagwe, 2011). Monitoring of the contracting partners to see whether the parties are compliant with the terms and conditions of the contract (Vega and Keegan, 2014) and enforcing the contract and dispensing punishment when the parties fail to fulfil terms and conditions of contract also lead to transaction costs (Coggan *et al.*, 2014). Kropf and Suare (2014) added that legal and physical constraints on the movement and transfer of goods lead to transaction costs. This dimension includes handling, storage and transport costs, among others (Makhura, 2001).

Institutions emerge to reduce transaction costs, and superior institutions are those that minimise transaction costs in a particular context (Pagan, 2009). However, once they are in place, institutions are resilient to change and subject to positive feedback that results in path dependence (Widmark *et al*, 2013). From an economic point of view, agents will only change to a new arrangement or stick to a current one, if the benefits of doing so outweigh the costs (Schneiberg, 2007; Margolis and Liebowitz, 1999).

Integration of small-scale mohair farmers into the commercial economy is influenced by both formal and informal institutions (Kirsten and Karaan, 2009). Under New Institutional Economics (NIE), consideration is given to issues related to policy goals, human behaviour, learning and beliefs, and identifies the influence of the social aspects on economic activities (Williamson, 2000). Shared values, norms, rules, beliefs and procedures of the formal and informal institutions of the society influence economic action and decision making among people (North, 1990). Jaeger (2010) and Sartorious and Kirsten (2006) indicated that small-scale mohair integration into the commercial agricultural economy necessitates cooperation among these small-scale farmers, and NIE scholars encourage cooperation among economic agents in business transactions, stating that collective, rather than individual, action has the potential to increase economic benefits (Valentinov, 2007; Coase, 2000). The extent of integration and benefits that accrue to the transacting parties is influenced by the relationships between the farmer (agent) and the agribusiness/integrator (principal) (Kherallah and Kirsten, 2001; Baker, 2002; Gibbons, 1998).

Institutional analysis evaluates formal institutions, such as rules, resource allocation and authorisation procedures. It also evaluates informal rules of the game, power relations and incentive structures, which underlie current practices (Hagedorn, 2008; World Bank, 2007). It helps to identify constraints within a system that may undermine implementation of activities, initiatives and/or reforms and these constraints may exist at a level of internal processes, relationships among organisations, or may be system-wide (Hagedorn, 2008).

1.2 Theoretical Framework

This research analyses Lesotho's mohair industry in the contexts of New Institutional Economics (NIE) and Institutional Analysis and Development Framework. These two economic frameworks are aimed at economic development and suggested that it can be achieved through the cooperation of economic agents (Menard and Shirley, 2008; Ostrom, 2010). In addition, the frameworks are useful in identifying the major types of structural variables present to some extent in *all* institutional arrangements, but whose *values* differ from one type of institutional arrangement to another (Ostrom, 2010).

1.2.1 New Institutional Economics (NIE)

NIE is an economic paradigm, which attempts to include the social aspects/institutions that influence economic activity into mainstream economics (Bush, 2009). It is a new and multi-disciplinary field which is interested in social, economic, historical, psychological, business and political institutions that govern behaviour (Ritcher, 2005; Furubotn and Ritcher, 2000). Jari (2009) explained that though NIE draws from various fields it is primarily in the field of economics. Under NIE, the economic theories that were developed by neoclassical economics are merged into institutionalism and it extends and modifies neoclassical theory, such that institutions are analysed with tools of economic theory (Williamson, 2000; Posner, 2010).

NIE accepts the basic assumption of scarcity between individuals, and the issues of choice and competition (North, 2004). According to Chhotray and Stoker (2009), NIE moves beyond neoclassical economics because it acknowledges the importance of institutions. Moreover, NIE discards the neoclassical economics assumption, which states that actors involved in trade simultaneously maximise their gains from trade. Instead, NIE identifies disequilibria in markets, leading to market failures which require solutions that can be provided by institutions (Valentinov, 2007).

NIE considers issues related to policy goals, human behaviour, learning and beliefs, and identifies the influence of the social aspects on economic activities (Williamson, 2000). It states that shared values, norms, rules, beliefs and procedures of the formal and informal institutions of the society influence economic action and decision making among people (North, 1990). Further, NIE values cooperation among economic agents in business transactions, stating that collective, rather than individual, action has potential to increase economic benefits (Valentinov, 2007; Coase, 2000).

1.2.2 Institutional Analysis and Development Framework (IAD)

An institutional framework should identify the major types of structural variables that are present to some extent in all institutional arrangements, but whose values differ from one type of institutional arrangement to another (Ostrom, 2005). The IAD is a multi-tier conceptual map that includes the operational, collective-choice and constitutional tiers. At operational tier, actors interact considering the incentives they face to generate outcomes directly in the world. The collective-choice tier is where decision-makers repeatedly have to make policy decisions within the constraints of a set of collective-choice rules. The policy decisions then affect the structure of arenas where individuals are making operational decisions and thus impact directly on a physical world (Ostrom, 2010). There is a constitutional tier where decisions are made about who is eligible to participate in policymaking and about the rules that will be used to undertake policymaking. One part of the framework is the identification of an action arena, the resulting patterns of interactions and outcomes, and evaluating these outcomes (Mooya, 2009).

1.3 Problem Statement

Successful commercialisation can only be achieved through unified effort from both the public and private sectors (Leavy and Poulton, 2007; Spielman *et al.*, 2010). However, in Lesotho, the only notable effort has been from the side of the government, with the only private initiative from a South African cooperative, BKB, that ensures that some of the Lesotho mohair clip is marketed globally (Livestock Products Marketing Services (LPMS), 2010). Despite the government and BKB initiatives, a significant number of small-scale Basotho mohair farmers still cannot access markets and continue to live in abject poverty and others sell their mohair through illegal channels (MAFS, 2011). This has led to the study seeking to attain the following objectives.

1.4 The goals of the research

The main goal of the research is to investigate the institutions that limit the integration of small-scale mohair farmers into the commercial agricultural economy in Lesotho.

Several sub-goals will be addressed to realise the main goal of the study. The sub-goals include the following:

- To document and evaluate the institutional structure of the mohair industry in Lesotho.
- To identify institutional factors influencing participation of small-scale mohair farmers in formal, informal and illegal markets in Lesotho.
- To identify factors contributing to transaction costs associated with the integration of small-scale farmers into the commercial mohair sector.
- To address the institutional problems hindering the development of an effective marketing structure for the commercialisation of small-scale mohair producers in Lesotho.

1.5 Justification of the study

Commercialisation of agriculture is recognised as a crucial element for agricultural development and is increasingly becoming a part of development strategies for developing countries (Chapoto, Mabiso and Bonsu, 2013) and the objectives of international development institutions (World Bank (WB), 2009). However, there has been an argument that large-scale farms should be prioritised over smallholder farming to spur agricultural commercialisation in the developing world, in Africa in particular (Chapoto *et al*, 2013), because of the economies of scale that are a characteristic of agricultural production (Lerman, 2004). However, this was criticised by scholars and development practitioners who argued that any development strategy that ignores the majority, who are small-scale farmers, will leave many trapped in poverty, as most of the smallholders will not be able to compete in the market due to resource constraints (Wiggins, Argwings, Kodhek, Leavy and Poulton, 2011; Jayne, Mather and Mghenyi, 2010). Collier and Dercon (2009) indicated that due to the high degree of heterogeneity amongst smallholders, no one smallholder commercialisation strategy will fit all, and formulating strategies that will result in inclusive and commercially driven growth will require spatial creativity (Djurfeldt, 2013).

Lesotho has been characterised by a totally subsistence agricultural economy that is dominated by small-scale farmers across all sectors of the agricultural economy. The adoption of strategies and initiatives has been focused on food self-sufficiency (Van Schalkwyk, Van Zyl, Botha and Bayley, 1997). The government of Lesotho, upon realisation of the opportunities associated with globalisation and free trade, decided to shift from a policy of self-sufficiency to one of food security, which exists when all people at all times have access to sufficient, safe, nutritious food to maintain a healthy and active life (World Health Organisation (WHO), 2013). Some of the policy shifts included deregulation of the marketing of agricultural products, enhancing farmers' participation in markets, as well as support of the farmers (Ministry of Agriculture and Food Security (MAFS), 2003). There have been some programs aimed at achieving these national goals, the most influential being input supply schemes and improved extension services (MAFS, 2011). However, Pingali (2007), Poole, Chitundu and Msoni (2013) and Von Braun, Bouis and Kennedy (1994) argued that access to other factors, such as adequate and good quality land, irrigation resources, capital, reliable and rewarding markets and other farmer support services, are equally critical in empowerment and integration into the commercial agricultural economy.

Lesotho is perennially ranked the second largest mohair producer (after South Africa) in the world. In the period 2005 up to 2014, South Africa has on average been producing 49.5% of the total world production followed by Lesotho at around 25% with Argentina at third with around 10%. The rest of total world production came from the United States of America, Turkey, Australia and New Zealand in a descending order (Department of Agriculture, Forestry and Fisheries (DAFF), 2015). For the past decade, the major destinations of mohair from Lesotho and South Africa are Europe followed by Japan, China and Korea (DAFF, 2011). However, over the past three years, the trends have changed with China currently a leading market destination for the mohair from Lesotho and South Africa (Central Bank of Lesotho, 2015).

Mohair is an important source of revenue and economic growth for Lesotho as it contributes about 20% of the Agricultural Gross Domestic Product (GDP) and contributes significantly (around R40 milllion) to the value of exports from Lesotho (Central Bank of Lesotho (CBL), 2012) while it contributed around R60.8 million and R27million to the value of exports from South Africa and Argentina respectively (DAFF, 2015). It is also an important source of

employment as it provides jobs (mainly informal) to thousands of Basotho as it is produced by many small-scale farmers (Ministry of Labour and Employment, 2013). Integration of small-scale agriculture into the commercial agricultural economy could thus be important for stimulating economic growth and development in this country, hence improving of the livelihoods of these small-scale farmers (Fischer and Qaim, 2012).

1.6 Methods/Procedures

The research analysed the institutions that limit the integration of small-scale mohair farmers into the commercial agricultural economy in Lesotho by evaluating and documenting the institutional structure of the mohair industry. The institutional factors that influence participation of small-scale mohair farmers into the formal, informal and illegal markets were identified. The factors that contributed to transaction costs associated with integration into the commercial mohair markets were identified. The study focuses on the small-scale mohair producers that use formal markets and the small-scale mohair farmers that use informal markets. Some information on the illegal mohair marketing activities is gathered, although it was limited because of the sensitive nature of the illegal activities.

1.6.1 Data Collection

The research utilised secondary data, which was collected from various sources including journals, books, records, documents, and internet, among others. The research also made use of primary data, which was collected from sampled smallholder mohair producers in Lesotho. The small-scale mohair farmers that used formal mohair markets and those that used informal markets were included in the study. In choosing the two groups, the study seeks to maximise inter-group variation and allow for comparative institutional analysis (Weaver-Hightower, 2013) whereby within group and cross-group analytical techniques based on rival explanations strategy (Patton, 2002; Menard, 2001) were used. From the population of small-scale mohair farmers that used formal mohair markets, 28 representatives were chosen while 22 representatives were chosen from a group that used informal mohair markets. The sample was chosen using purposive sampling techniques after which the technique of simple random sampling was used to choose sampling units within each stratum of small-scale mohair farmers in the study area. In each stratum, the heads of households or any family member who is above the age of 18 years and knowledgeable about household farming issues were interviewed. A semi-structured questionnaire was engaged as a tool for data collection and it

was administered to the selected respondents through conversational interviews. In addition, interviews with stakeholder representatives were used to provide additional data that might have been missed during the interviews with the selected households.

Table 1.1: Small-scale mohair farmers in Lesotho

Market channel	Total population	Sample farmers
Formal	280	28
Informal	220	22
TOTAL	**500**	**50**

1.6.2 Data Analysis

The research adopted a predominantly qualitative approach to data analysis due to the qualitative nature of data collected from the questionnaire and informal interviews. Nevertheless, quantitative techniques were employed where necessary. The study employed a deductive analysis, a method which, according to Patton (2002) and Jari (2012), analyses data under an already existing framework. Data were analysed under the NIE and IAD frameworks. To document and evaluate the institutional structure of the mohair industry in Lesotho through IAD, data related to demographics and mohair farming environment was utilised. In the NIE context, the study analysed the significance of institutional factors influencing smallholder participation in formal, informal and illegal markets. The study also analysed the significance of factors contributing to transaction costs associated with the integration of smallholder mohair farmers in the commercial mohair markets and data related to mohair marketing was used. The study applied a descriptive analysis in which frequencies and mean values as well as t-test were used as main statistical indicators while Fisher exact and ANOVA tests were used to determine the statistical significance of the variables.

1.7 The definition of terms

Integration is the act of bringing together smaller components into a single system that functions as one. In the agricultural marketing context, it refers to the result of a process that aims to bring together different and often disparate components including even the small-scale or emergent farmers to become part of the main market system (Rapsomanikis *et al.*, 2007).

Small-scale/smallholder/emerging farmers are farmers who practice agriculture on relatively small areas of land and characterised by great dependency on family labour for carrying out farm operations and the labour-intensive nature leads to production of small yields in comparison to large-scale farming (Hazell, Poulton, Wiggins and Doward, 2007).

Mohair is the woolly coat covering the goats and, usually when people mention mohair, reference is made to a silk-like fibre or yarn made from the hair of the goat, usually the Angora breed. The word mohair was adopted into English before 1570 from the Arabic word "Mukhayyar" which means a type of haircloth (Goat Industry Council of Australia (GICA), 2014).

Commercial agriculture is the farming that is oriented towards market participation whereby participants' main purpose is to sell commodities and the participation can be in output as well as input markets (Poulton *et al.,* 2008).

New institutional economics is an economic paradigm, which attempts to include the social aspects/institutions that influence economic activity into mainstream economics (Bush, 2009). It is a new and multi-disciplinary field which is interested in social, economic, historical, psychological, business and political institutions that govern behaviour (Ritcher, 2005).

Institutional analysis and development framework is a multi-tier conceptual map that includes the operational, collective-choice and constitutional tiers. It draws on the foundations of many disciplines and provides a useful tool that can be used to analyse any type of institutional arrangement (Ostrom, 2005). At an operational tier, actors interact considering the incentives they face to generate outcomes directly in the world. The collective-choice tier is where decision-makers repeatedly must make policy decisions within the constraints of a set of collective-choice rules. The policy decisions then affect the structure of arenas where individuals are making operational decisions and thus impacting directly on a physical world. At the constitutional tier, decisions are made about who is eligible to participate in policymaking and about the rules that will be used to undertake policymaking (Ostrom, 2010). One part of the framework is the identification of an action arena, the resulting patterns of interactions and outcomes, and evaluating these outcomes (Mooya, 2009).

Institutions are the "rules of the game" of a society that are devised by humans in order to structure interaction of individuals and groups involved in economic and transactional activities (Chibanda, Ortmann and Lyne, 2009). Institutions comprise of formal and informal rules of conduct that facilitate transactions between, or govern economic decisions within organisations (North, 2000; Kherallah and Kirsten, 2001).

Transaction costs are defined as the costs that are associated with the exchange of property rights and the enforcement of such rights. These costs result from various activities including information gathering, negotiation, and monitoring and enforcement of contracts (De Bruyne and Fischhendler, 2013). The legal and physical constraints on the movement and transfer of goods lead to transaction costs (Kropf and Suare, 2014). The dimension includes handling, storage and transport costs among others (Makhura, 2001).

Formal markets in agriculture can be described as the markets governed by high quality and food safety standards and where the activities of participants can easily be monitored. These are regulated and characterised by high level of formalisation of transactions (Ferris *et al.*, 2014).

Informal markets are markets where exchange takes place outside the regulated system and this involves the activities of intermediaries such as relatives, friends and traders among others (Steiner, 2008; Rajiv, 2010) with low formalisation of transactions.

Market participation refers to any market related activity which promotes the sale of produce (Sigei, 2014).

1.8 Outline of the study

This research is comprised of eight chapters. After the introductory chapter, the second chapter presents the background on smallholder farming and challenges facing the sector. The same chapter discusses the NIE framework and its applicability to smallholder farming.

The third chapter focuses on the structure of the Lesotho mohair sector, giving special attention to the developments influencing the structure of the sector. The chapter first presents the historical background and marketing of mohair with attention to the marketing structure, policies and strategies. The following section provides a brief explanation of the economic importance of mohair. Thirdly, the chapter examines the major factors limiting

mohair production in the mountain kingdom. In the fourth section, the national policies related to the mohair sector are discussed. In the fifth section, the profile of the mohair farmers is briefly presented while the last section focuses on the mohair processing sector in the country.

The fourth chapter of the study describes the study area where the research was carried out and this is followed by the methods that are used for gathering and analysing data. The research method follows a predominantly qualitative approach in both data collection and analysis with some quantitative element where necessary. The methods of data analysis used in the study are comprehensively presented and discussed.

The results of the study are presented in chapters five and six. These chapters descriptively present the findings on the small-scale mohair farmers that use formal markets and the small-scale mohair farmers that used the informal mohair markets. The main findings presented in chapters five and six form the basis for data analysis and discussions for the study. The seventh chapter focuses on the analysis and discussions of results based on the framework and analysis techniques developed in the chapter on methodologies.

The final chapter which is chapter eight summarises key arguments and findings presented in the study and provides conclusions of the study. It offers answers to the objectives of the research which were presented in the introductory chapter. The chapter concludes by making policy recommendations and suggesting areas, which require future investigation within the market integration phenomenon.

CHAPTER 2
THEORETICAL FRAMEWORK AND LITERATURE REVIEW

2.1 Introduction

Firstly, the chapter provides a discussion on the New Institutional Economics framework employed in the study and reviews literature on smallholder farming, its importance and challenges faced by this economic sector. It then follows with the discussion of agricultural markets, institutions and their role in economic development particularly agricultural marketing.

2.2 Theoretical framework: New Institutional Economics

That institutions matter for economic performance is an old and inherently plausible intellectual position. However, during the first half of the twentieth century, there was remarkable progress in the mathematical development of neoclassical theory and economic models became increasingly abstract, and institutions received less and less attention (Ritcher, 2005). Thus, in what may be regarded as mainstream theory through the 1980s, institutions played virtually no significant role at all (Hodgson, 2007).

Neoclassical economics is largely based on the assumption of perfect competition. The basic underlying assumption of neoclassical economics is that exchange is a frictionless and a costless process and it contends that where costs exist these are passive and therefore not important. In addition, neoclassical economics provides the theoretical underpinning of structural adjustment and assumes that exchange arises spontaneously from "the atomistic interaction of self-seeking individuals'' (Randela, 2005; Mayhew, 1987; Hodgson, 2007). In essence, neoclassical economics relies on the universal concepts of supply and demand. It makes the market an abstraction device of institutional detail and regards the firm as what Cormier (2001) calls, a "black box".

These extreme views were soon opposed by various strands of a renewed kind of economic institutionalism (Hodgson, 2000). However, there were institutionalists who criticised this

school for the lack of theoretical framework and empirical analysis and, due to the weakness, New Institutional Economics (NIE) emerged which attempted to improve and develop a theoretical framework for institutionalism (Mayhew, 1987; Jari, 2012; Menard and Shirley, 2008).

NIE is an economic paradigm, which attempts to include the social aspects/institutions that influence economic activity into mainstream economics (Bush, 2009). It is a new and multi-disciplinary field which is interested in social, economic, historical, psychological, business and political institutions that govern behaviour (Ritcher, 2005; Furubotn and Ritcher, 2000). Jari (2009) explained that though NIE draws from various fields it is primarily in the field of economics. Under the NIE, the economic theories that were developed by neoclassical economics are merged into institutionalism and it extends and modifies neoclassical theory, such that institutions are analysed with tools of economic theory (Williamson, 2000; Posner, 2010).

NIE accepts the basic assumption of scarcity between individuals, and the issues of choice and competition (North, 2004). According to Chhotray and Stoker (2009), NIE moves beyond neoclassical economics because it acknowledges the importance of institutions. Moreover, NIE discards the neoclassical economics assumption, which states that actors involved in trade simultaneously maximise their gains from trade.

Under NIE, consideration is given to issues related to policy goals, human behaviour, learning and beliefs, and identifies the influence of the social aspects on economic activities (Williamson, 2000). It states that shared values, norms, rules, beliefs and procedures of the formal and informal institutions of the society influence economic action and decision making among people (North, 1990). Further, NIE values among economic agents in business transactions, stating that collective, rather than individual, action has potential to increase economic benefits (Valentinov, 2007; Coase, 2000).

NIE has various branches, but there is as yet no consensus on what is included in the NIE. The commonly agreed upon branches include property rights, transaction cost economics, law and economics, new social economics, collective action theory, public choice and political economy, economics of information and new economic history (Menard and Shirley, 2008).

This study provides a more detailed account of the branches that are closely related to the focus of this research.

Property rights and legal environment approach deals with the application of economics to the design of legal rules and legal system (Gerber, Knoepfel, Nahrath and Varone, 2009; Lai, Peng Li and Lin, 2013). Transaction cost economics deals with microanalysis of economic activities and pays attention to the institutions of governance that sustain and monitor transactions (Williamson, 1998a; Vega and Keenan, 2014). According to Marciano (2012) and Bardhan (2005), the law and economics branch involves application of economic analysis to the field of law. The new social economics deals with the formal and informal institutions that structure social conduct (Meyer, 2009; Palley and LaJeuness, 2007). The theory of collective action explains how economic actors with similar interests work collectively to achieve a common goal (Tajima, 2007; Barsimantov, Racelis, Biedenweg and DiGiano, 2011). The public choice and political economy branch is based on the application of rational-choice approach to politics, which supports the idea that political institutions can be explained in terms of human choice (Munger, 2011; Jari, 2012). Economics of information's main focal point is that searching for information has costs (Kherallah and Kirsten, 2001; Biswas, 2004; Friedan and Hawkins, 2010). According to Jones (2013) and North (1990), new economic history explains why and how economic and political institutions change, develop and function over time.

Kerrallah and Kirsten (2001) and Williamson (1998b) stated that the need for integration and coordination renders the role of transaction costs, trust and relationships, contracts, information asymmetries and strategic alliances important. Randela (2005) and Valentinov (2007) stated that these institutions play an important role in the commercialisation of small-scale farmers. This highlights the importance of the NIE branches and aspects including agency, collective action and contract theories as well as transaction cost economics for integrating small-scale farmers into the commercial economy.

2.2.1 Agency theory

The principal-agent theory explains rational behaviour between individuals engaging in a contractual relationship while pursuing their own interests. These individuals have different amounts of information at their disposal, and where agents have access to a larger amount of information as compared to principals, problems of opportunism may arise (Jones, 2003;

Jari, 2012). However, the opportunistic behaviour can be prevented by appropriate agreements and market control. In addition, trust needs to be created between the principal and the agent, which, in turn, increases mutual benefits, facilitates knowledge transfer, reduces the problem of control and increases the sustainability of the relationship and organisation (Valentinov, 2007; Furubotn and Richter, 2000; Collier, 1998). In this study, the principal/agent construct is analysed by looking at market and farm level relationships, thus between marketing agencies and mohair farmers, and between cooperative management and cooperative members. These relationships have an influence on the economic behaviour and activities hence participation in mohair markets. For example, if Lesotho Wool and Mohair Growers Association management is not motivated, they can pursue their own interests, other than those of the mohair farmers. As a result, participation in mohair markets can be compromised.

2.2.2 Theory of collective action

The theory of collective action is a useful tool for analysing and devising means to overcome the free-rider problem and it can be used to provide solutions for the management of common resources and public goods such as land and water (Kherallah and Kirsten, 2001). Barsimantov *et al.* (2011), Eduardo (2009) and Valentinov (2007) applied the theory of collective action to the investigation of water use, land tenure allocations and agricultural cooperatives respectively. The determinants of success of collective action were identified to include the size, homogeneity and purpose of the group. Ostrom (1990) identified institutional arrangements such as customs and social conventions designed to induce cooperative solutions as possible solutions to collective action difficulties. These social arrangements together with reduced transaction costs also help in the improvement of efficiency in the use of common-pool resources (Nabli and Nugent, 1989; Madigele *et al.*, 2015).

2.2.3 Contract theory

Contract theory focuses on how economic actors construct and develop agreements. It analyses how parties to an agreement make decisions under conditions of uncertainty and information asymmetry. Uncertainty and information asymmetry leads to transaction costs on the actors and contracts emerge to reduce the transaction costs (Ojediran, 2011; Da Silva, 2014). The theory draws upon principles of social and economic behaviour as principals and

agents have different motives to participate in contracts. Oswaldo (2008), Da Silva (2014) and Allen and Lueck (2002) applied contract theory to the study of vertical integration in farming. Cultural values, morals, trust and transaction costs were identified to be some of the institutional determinants of success in contracting.

2.2.4 Transaction cost economics

As indicated earlier, market participation is influenced by both formal and informal institutions as these have positive and negative effects on economic behaviour (Kirsten, Mapila, Okello and De, 2012; Randela, Alemu and Groenewald, 2008) and this behaviour has a bearing on the economic outcomes including the level of market integration (Jagwe, 2011). Greater participation of both large and small economic actors leads to trade expansion which may result in gains to all the participants (Jagwe, 2011). This motivates participants in trade to increase production and hence a positive supply response is achieved (Jari and Fraser, 2009; Randela *et al.*, 2008)

The existence of well-functioning markets is critical to the realisation of agricultural productivity and profitability and such markets call for an active facilitatory role of the public sector in creating a conducive environment (Department for International Development (DFID), 2005; World Bank, 2008). Matungul, Ortmann and Lyne (2002); Cabral and Scoones (2006); and Huo (2015) argued that investment in necessary infrastructure, removal of trade and market access barriers, an efficient legal system, and farmer support services would increase efficiency and profitability of farming.

However, market participation not only depends on the existence of conducive environment but also on the individual economic actor's decision to exchange property rights (Makhura, 2001; Jaleta, Gebremedhin and Hoekstra, 2009). The decision to exchange property rights is influenced by risk and preferences and factors affecting household production (Jagwe, 2011). Randela *et al.* (2008), Williamson (2000) and Jagwe (2011) argued that costs associated with market transactions affect individual household's decision to participate in markets as Williamson (1998) indicated that market exchange is not costless. It is evident that market integration involves costs, and these are commonly referred to as transaction costs (Williamson, 2010; Jaleta *et al.*, 2009).

Different definitions of transaction costs are found in the literature. Benham *et al.* (1998) define transaction costs as the costs of running the economic system. Eggertson (1990) defines transaction costs as the costs that arise when individuals exchange ownership rights to economic assets and enforce their exclusive rights. Eggertson is supported by Barzel (1997, as cited in Benham *et al.*, 1998) who indicated that transaction costs arise due to the transfer, capture and protection of rights.

According to Coase (1960), transaction costs are the full costs of carrying out exchange and include marketing costs. These costs are associated with exchanging, including informational costs of finding out price and quality, service record, availability, durability record, etc, of a product, plus the cost of contracting and enforcing that contract (Nkhori, 2004).

Transaction costs can be divided into different categories including information, negotiation and monitoring and enforcement costs (Huo, 2015). Information costs (*ex-ante*) are costs associated with obtaining information relative to the undertaking of the transation and may include search and bargaining costs (Maltsoglou and Tanyeri-Abur, 2005). Search costs refer to costs associated with identifying and contracting potential buyers and sellers, and quality of resources in which they have property rights (Nkhori, 2004), while bargaining costs are those that are incurred when gathering information on prices in other transactions and on factors that might influence the willingness to bargain by either party (Huo, 2015).

Negotiation costs represent the costs incurred while the transaction is being carried out and may include negotiation of terms of exchange and drawing up the contract, among others (Jari and Fraser, 2009). Monitoring and enforcement costs (*ex-post*) refer to the costs incurred when the transaction is completed (Bwalya *et al.,* 2013). Monitoring costs are incurred while ensuring that the terms and conditions of the contract are adhered to while enforcement costs are the costs of enforcing the contract (Nkhori, 2004).

Several forms of transaction costs are prevalent as transaction costs were classified into observable and unobservable or inhibitive costs (Jagwe, 2011; Igwe and Egbuson, 2013). The observable costs include storage, transport, handling and packaging among others and they represent explicit costs while the unobservable include the costs of information gathering, screening, bargaining, monitoring, enforcement and product differentiation, and they represent implicit costs (Makhura, 2001; Kropf and Suare, 2014; Peng, Chen and Guo, 2012).

Another system was adopted by Kropf and Suare (2014); Peng *et al.* (2012) and Makhura (2001). It distinguishes between fixed and proportional transaction costs. Fixed costs are not affected by the level of transaction effected while the proportional transaction costs vary with the level of transaction as well as the amount involved in the transaction. For example, the quantity of resources used to deliver produce to the market will vary with the amount of output marketed.

As it has been indicated earlier that transaction costs result from economic activity, it is clear that the level of transaction costs has an impact on the economic development of nations. Makhura (2001) explained that several factors influence the level of transaction costs and they are related to characteristics of the transaction and of the transacting actors, and the nature of the institutional environment and institutional arrangements. Characteristics of the transaction include the degree of asset specificity, institutional and biophysical uncertainty surrounding transactions and transaction frequency (Coggan *et al.*, 2014; Williamson, 2000). Economic actors' characteristics involve bounded rationality and broad past experience, opportunism, trust and confidence in information shared between transaction partners as well as social connectedness (Coggan *et al.*, 2014; Morrison, Durante, Greig and Ward, 2008). The nature of the institutional environment that influences the level of transaction costs involve the formal and informal legal, social and political rules that determine the context within which economic activity takes place (North, 1990; Williamson, 2000; Easter and McCann, 2010). The nature of institutional arrangements is related to how the exchange of commodities is coordinated, thus governance structures (Vatn, 2010; Coggan *et al.*, 2014; Easter and McCann, 2010).

The presence and impacts of transaction costs on agricultural production and marketing can be assessed through differences in marketing channels used, costs of inputs (e.g. capital required for entry into marketing), marketing costs and prices received for agricultural products. High transaction costs in either production or marketing of potentially lucrative commodities exclude poorer farmers (mainly smallholders) from participating in growth opportunities (Nkhori, 2004; Fraser, 2016; Snowball, 2015). In most instances, smallholder farmers are subjected to significantly high levels of transaction costs for producing and marketing the same output mix, that is, the real incentive they face is lower than the nominal price in the market (Bwalya *et al.,* 2013; Nkhori, 2014; Maltsoglou and Tanyeri-Abur, 2005).

Williamson (1979) indicated that information asymmetry was one of the factors inherent in transaction costs. Due to high transaction costs, large-scale farmers have more access to full information compared to their counterparts in the small-scale sector and this has led to the exclusion of smallholders from lucrative markets as they were unable to contract and enforce terms of exchange (Huo, 2015).

The presence of transaction costs is often reflected by difference or discrepancy between perceived buying and selling prices (Cuevas, 2014; Lijia and Xuexi, 2014). When there are differences or discrepancies, sellers experience low selling prices and are discouraged to sell their products while buyers experiencing a high price are discouraged to exchange their products and similarly a household tends to purchase less when faced with high transaction costs (Cuevas,2014). Generally, in agricultural markets, a farmer that faces high transaction costs (mostly smallholder) will sell less than a farmer with lower transaction costs (mainly large-scale farmers) (Okoye *et al.,* 2016). That is, the transaction costs limit or discourage small-scale farmers to participate in markets which is the case with smallholders in developing countries, particularly African (Ohen *et al*, 2013).

Transaction costs incurred when gathering information about transporters of agricultural produce to market centres limit the ability of some farmers to access market outlets (Shiimi, Taljaard and Jordaan, 2010). The longer the distance from market and service centres implies high transaction costs and these costs are more prohibitive to small-scale farmers than large-scale farmers (Ohen, Etuk and Onoja, 2013). For example, in coutries such as Lesotho, Uganda and Zimbabwe, the farmers must travel long distances to the few available veterinary centres to seek assistance for their animals and it is difficult to transport sick animals over long distances and as a result a veterinary assistant has to be invited to where the animal is (Matebesi, 2015; Woods, 2000). This imples a double cost on the farmer as he/she must pay in time and money, i.e. time to get to the practitioner to report the case and the cost of the veterinary assistant's travel to the farm. The high mobility costs involved in the visiting veterinary assistant often prohibit the poor farmers from acquiring necessary services, hence poor performance of their livestock enterprises. In contrast, the large-scale farmers would

avoid multiple journeys by transporting his animal to the practitioner because often they have necessary resources (Nkhori, 2014).

Jari and Fraser (2009) indicated that transaction costs influence the choice of marketing channels among crop and livestock farmers. Shiimi *et al.* (2010) stated that some transaction costs proxies including grade uncertainty, risk of not selling, price manipulation and time spent at the market can influence the choice of a marketing channel and often farmers use channels that are less costly. More often, these transaction cost variables characterise informal markets that are often used by small-scale farmers in the developing world (Okoye *et al.,* 2016).

Financial lending institutions prefer large farmers over small-scale farmers because of high transaction costs associated with lending money to smallholders. There are high transaction costs involved in screening and monitoring numerous and heterogenous small borrowers and these costs render servicing this group of borrowers unprofitable (Ohen *et al.,* 2013). Lenders are threatened by their less comprehensive knowledge of the riskiness of the borrowers' activities and by the ability of the latter to modify the level of risk (probability of default) in opportunistic attempts to profit that may hurt the lender (moral hazard) (Ruete, 2015; Muhongayire, 2012). This situation indicates that high transaction costs associated with smallholders limit their ability to access credit hence their (smallholders') lack of resources and poor state of farming.

Transaction costs are also influenced by personal characteristics such as level of education, age and gender (Sigei, 2014). Strydom *et al.* (2012), stated that the level of education affects the transaction costs and less educated farmers who are mostly smallholders face high transaction costs relative to educated farmers because they cannot assimilate information as easily. Education reduces transaction costs by improving access to information that is disseminated through print media and is even more important where the extension services are poor (Oseyebo and Aye, 2014).

The age of the head of the household normally provides a proxy for experience in farming. Age is considered an important factor in farming since it determines the experience one has in a certain type of farming, and older and more experienced household heads tend to have

more personal contacts or stronger social capital and networks, allowing the discovery of trading opportunities at low costs (Sigei, 2014; Cuevas, 2014). Age may also reflect increased trust and reputation gained through repeated exchange with the same party (Goetz, 1992, cited by Matungul, *et al.*, 2002). Household head's experience further influences household members' farming activities since they usually get guidance from the head (Ngqangweni and Delgado, 2003; Adegbola and Gardebroek, 2007).

Transaction costs are influenced by the gender of the head of household. In developing countries, agricultural production is dominated by male farmers to the extent that female farmers face high transaction costs when they want to venture into farming (Okoye *et al.,* 2016; Cuevas, 2014). In many parts of Africa, female farmers face constraints such as weak land rights, limited access to common property resources, lack of equipment, limited contact with agricultural extension officers and lower levels of education (World Bank, 2015). Tologbonse *et al.* (2013) indicated that these gender disparities in asset ownership and economic opportunities are a result of laws and customs that discriminate against women. Daemane (2012) and Nkhori (2014) argue that women face greater legal uncertainty than men in customary courts, and in the national courts when married under customary or common law, especially if separated from their husbands through migration, abandonment, divorce or death. Women, therefore, face higher *ex post* variable transaction costs than do male farmers.

Nevertheless, Tologbonse *et al*. (2013) indicated that in Kaduna State of Nigeria, the levels of customary discrimination induced transaction costs facing women was significantly reduced by the introduction of the Women in Agriculture (WIA) programme aimed at empowering and addressing the challenges that face women in agriculture. The women in the programme also opined that their transaction costs were reduced due to the good understanding, support and encourangement from their spouses in terms of finance and training, among other things. In Madagascar, the women were found to be credible and this helped them overcome transaction cost barriers that faced them, and the situation has led to them participating more in agricultural markets than their counterparts in other parts of Africa (Okoye *et al.,* 2016).

NIE, as highlighted by its theories of collective action and contract, emphasises the importance of transaction costs. According to North (1990) and Kherallah and Kirsten (2001),

transaction costs influence integration of farmers into the mainstream economy and economic prosperity of nations. There is ample evidence proving that transaction costs encourage cooperative relations and contracting which are a way of reducing such costs, hence integration of small-scale farmers into the commercial agricultural economy have a positive impact on rural economic development in developing countries (Randela, 2005; Jagwe, 2011; Makhura, 2001; Kherallah and Kirsten, 2001).

In order to understand clearly the application of transaction costs to small-scale agricultural development in developing countries it is important to consider the following paragraph from North (2000), as quoted in Kherallah and Kirsten (2001: 16):

"The cost of transacting, to put it in its bluntest form, is the key to economic performance. When I go to third world countries and look at why they perform badly and examine how factor and product markets are really working, in every case, be it capital, labour or product markets, one observes that the cost of transacting is high. The cost of transacting results in the economy performing badly because it is so costly for human beings to interact and engage in various kinds of economic activity that the result is poor performance and poverty and so on."

Small-scale producers in the developing world are characterised by a number of institutional constraints that make it difficult for them to access markets and productive assets (Jari, 2009). Transaction and information costs rate among the barriers that may be influenced by policy. In every case, the cost of transacting comes down to the fact that the institutional framework provides the incentives or disincentives for efficient production and incentives for people to engage in activities (Jari and Fraser, 2009; Randela, 2005).

2.3 Smallholder farming and its importance and challenges

Hazell, Poulton, Wiggins and Dorward (2007) defined smallholder farming as farming in which households practice agriculture on relatively small areas of land. This farming is characterised by great dependency on family labour for carrying out farm operations, although better-off smallholders hire labour at times. This labour-intensive nature of small-scale farming leads to production of small yields in comparison to large-scale farming (Burgess, 1997). Produce is intended for family consumption and/or sale that depend upon individual farmer's objectives. Farms are generally the main sources of income and livelihoods in smallholder farming.

However, Kirsten and van Zyl (1998) indicated that smallholders have diverse sources of income that is evidenced by their non-farm income generating activities.

Ojediran (2011) indicated that several terms are used to describe small-scale farming, and these include smallholder farming, subsistence farming, small growers, emergent farming, and resource poor farming, also referred to as peasant farming. These terms will be used interchangeably during this study. Smallholder farming is mainly practiced in many developing countries across the world (Burgess, 1997). Lesotho is no exception as Maseatile (2011) stated that smallholder farming is predominant in Lesotho and this renders it crucial for the economic development of Lesotho.

Smallholder farming is the backbone of the African rural economy as it concerns the way most rural people earn a livelihood. The sector has proved to be a tool for alleviating poverty as it provides food, income, employment and export earnings (Ojediran, 2011). However, Kirsten and van Zyl (1998) and Burgess (1997) indicated that past and present policies and actions of different nations have limited the contribution of this sector towards economic development. This is supported by Hazell *et al.* (2007) who stated that smallholder farming receives a small amount of available developmental resources and this is highlighted by, *inter alia,* few technical packages, scanty extension services, deficient marketing and credit sources and insecure ownership of land resources. This has led to Kirsten and van Zyl (1998: 564) defining a small-scale farmer as 'one whose scale of operation is too small to attract provision of the service one needs to be able to significantly increase one's productivity'.

There are roughly around 33 million small-scale farms, those with less than 2 hectares (ha), in Africa representing around 80% of all farms, with an average size of 1.6 ha. There are varying reports of the share of production that comes from small-scale farms across the continent (Wiggins, 2009) with some countries like Ethiopia going as high 90% (Mahommed, 2013).

2.3.1 Importance of small-scale farming

Despite the fact that smallholder farmers face difficulties in many respects, they continue to produce and survive in the face of unfavourable conditions. It is worth noting that smallholder farmers fulfil numerous functions in the agricultural economy. These functions make the sector important. Such functions include contributions towards food security (Rosset, 1999),

equitable distribution of income and linkage creation for economic growth, among others (Dorosh and Haggblade, 2003). Supporting their views, Dorosh and Haggblade (2003) and Rosset (1999) explained that smallholder farmers have the advantage of flexible, motivated family labour resources, which allows them to allocate labour to activities with higher marginal returns. Further support from Ngqangweni (2000), using Schultz' hypothesis of small but efficient, shows that smallholder farmers can use resources efficiently.

Surveys of farms of different sizes in developing countries frequently show that small- scale farmers produce more per hectare than larger small-scale farmers, with an inverse relationship between farm size and production per output (Wegner and Zwart, 2011). Wiggins (2009) explained that this results from the fact that there are diseconomies of scale once the farm grows larger than can be managed and operated by household labour. The diseconomies of scale are a result of labour use: household labour's ready availability, flexibility in time and effort to suit the demands of the farm that are difficult to predict exactly such as planting times, control of diseases and pests, and harvesting (MacDonald, 2011). The diseconomies of scale in farm production become stronger when labour is major input to production, as applies when labour is relatively cheap and capital relatively costly, which is the case in much of Africa (Wiggins, 2009). However, Delord *et al.* (2015) argued that in transactions off the farm, countervailing economies of scale apply in procuring in inputs, marketing output, obtaining credit and other financial services, in obtaining information on markets and technical issues, in meeting standards and certifying production, and in transacting with large-scale buyers from processors and supermarket chains with their exacting demands for quality, timeliness and bulk deliveries. This situation increases transaction costs to small-scale farmers and renders smallholder farming inefficient and undesirable relative to large-scale farming (MacDonald, 2011).

Reardon and Barrett (2000) explained that smallholder agriculture contributes to poverty alleviation through employment creation because it is labour-intensive unlike large farms where machinery is mainly used in production. Smallholder farming has the potential to contribute towards income and employment generation to the rural poor as smallholder farmers tend to apply much more labour per hectare than large-scale farmers (Arias *et al*, 2013). However, Wiggins (2009) argued that although smallholder farming creates employment, the statistics suggest that often this labour input is poorly rewarded. This was

supported by Anyiro (2016) when stating that small farms usually apply more labour per hectare than large farms and consequently more produce but with lower marginal returns to labour.

Rosset (1999) was of the view that a large number of small farms implied that more people have access to land; which in turn implies own food production. In addition, more agricultural producers result in increased food availability and competition. The price of tradable agricultural goods falls in response to competition and production increases, reducing poverty amongst the consumers. Nevertheless, Wegner and Zwart (2011) argued that smallholder farming can impose significant costs on the environment in the form of water pollution, soil erosion and loss of biodiversity. For example, in Asia, the Green Revolution resulted in negative environmental impact though it transformed rural economies and raised substantial numbers of people out of poverty.

Small farms provide a more equitable distribution of incomes since small farms allow own production for relatively many households, implying that less will be spent on food purchases (Dorosh and Haggblade, 2003). Further explanation showed that poor households that produce their own food are better off, in terms of income, than those who purchase food. In addition, Reardon and Barrett (2000) explained that many smallholder farmers earn some income through selling their agricultural produce, resulting in an improved welfare for such farmers. Haggblade, Hazell and Brown (1990) indicated that in areas where smallholder farmers are efficient and successful, other non-farm economic activities usually emanate as a result. Generally, the growth of the small farms allowed for the growth of business activities through forward and backward linkages. In support, Van Rooyen *et al.* (1995) pointed out that gains in output resulting from investments in any given sector of the economy stimulate demand for production inputs from other sectors (backward linkages). The initial output gains also raise incomes and consequently spur consumer demand for other goods and services (forward linkages). Thus, successful smallholders create a demand for non-farm sector goods. In sectors where excess capacity exists, these increases in demand translate into higher output and consequently higher incomes.

In addition, Wegner and Zwart (2011) stated that small-scale farmers spent higher shares of incremental income locally on construction, services and manufacturing than large farmers,

thereby creating additional demand for the many labour-intensive goods and services that are produced in local villages and towns. These demand-driven growth links provide greater income-earning opportunities for small producers and landless workers.

Smallholder farming's potential to stimulate growth is limited by the traditions and norms whereby subsistence is the primary purpose and most of the production from smallholder activities is intended for household consumption and thus informal institutions are predominant in Africa (Arias *et al.,* 2013). For example, in most African countries more than 90% of agricultural production from small-scale farming is non-marketed as it is for subsistence (Hancock, 2015). The traditions and norms can lead to a poverty trap among small-scale farmers as most of them continue to live below the poverty line and this is more evident in Africa (Food and Agricultural Organisation (FAO), 2013).

2.3.2 Farming systems persued by small-scale farmers in Lesotho

Livestock and crop production are the major source of food products in small-scale farming, especially in rural areas (International Fund for Agricultural Development (IFAD), 2014). Small-scale farming in rural areas is carried out in a way that combines several production components, different from large scale monocultures (producing one type of a product). A typical small-scale farmer produces different crops and livestock and such farming systems are beneficial to the farmer for two main reasons. In combining several components, if one component fails, the others can provide food production and the second reason is that livestock manure is used as a fertiliser and crop by-products are fed to animals (Raleting, 2012).

In general, small-scale farmers are involved in both crop and livestock production. Crop production is practiced as either home garden production or field crop production. Despite their high involvement in agriculture, Maseatile (2011) and Ministry of Trade, Industry, Cooperatives and Marketing (MTICM) (2012) found that small-scale crop farming contributes less than 10% of household income in most rural areas of Lesotho, although farming is considered the most important economic activity.

Crop production by small scale farmers is common in most rural areas of Lesotho. Farmers either produce crops for home consumption, for sale or both. The most common crops include maize, sorghum, wheat, beans, peas and various vegetables. Most of the production

is attributed to smallholders who account for about 95% of the entire population of crop farmers (Matebesi, 2015). In other situations, the smallholder farmers may produce crops with the aim of providing supplementary feeds for their animals. Crop production is practiced by the smallholder farmers as either field crop or home gardening in most cases. It can generally be argued that the decisions on whether the farmers will engage in either home gardening or field crop production is largely influenced by access to land, capacity and other necessary inputs such as financial capital, among other factors (Raleting, 2012).

According to the International Fund for Agricultural Development (IFAD) (2014) and MITCM (2012), the main livestock kept in rural communities of Lesotho are goats and sheep, while cattle, poultry and pigs are kept to a lesser extent. In the 2011/2012 season, there were about 1.96 million sheep and 1.16 million angora goats in the country (IFAD, 2014). Sheep and goats are kept for various purposes such as consumption, fleece sales and cultural uses, while cattle, pigs and poultry are mostly used for household consumption and sale. Livestock kept by small-scale farmers are often the main source of income, which is primarily intended for their children's education and emergencies (Montshwe, 2006). Animals kept by small-scale farmers often provide manure to maintain soil fertility as these farmers could not easily afford inorganic fertilizers.

IFAD (2014) stated that in Lesotho, the mohair industry generally provides direct employment to about 7 000 people and indirect employment to about 45 000 individuals. In Lesotho, mohair production is mainly practiced by smallholders who account for more than 60% of recorded national output. These smallholders make up around 90% of the national population of mohair producers in the country. Mohair and wool are the main agricultural exports and Lesotho is the world's second largest producer of mohair after South Africa as she produces about 20% of the mohair produced globally (IFAD, 2014). On the other hand, it is estimated that the country imports about 90% of beef, 95% of chicken, 80% of pork and 60% of eggs to meet national demand for these products. The small-scale farmers contribute the remainder of food demand as there are some informal markets, where most of them actively participate, though the product quality and its long-term effect on consumers' health is questionable (MAFS, 2011). Perhaps a failure to attain and maintain quality and safety standards could inhibit small-scale farmers' participation in formal agricultural markets (Kirsten and Sartorious, 2002).

2.4 Overview of smallholder marketing

Small-scale farmers in the developing world use both informal and formal markets to sell their produce with the informal channels the more predominant type (Kankanamge, 2012). The informal markets or economy is defined in different ways by different scholars. In the current study informal markets are defined as exchange or economic activities that operate outside a regulatory framework (Anyidoho and Steel, 2016) and this involves the activities of intermediaries such as traders, relatives and friends among others and they are characterised by low formalisation of transactions (Rajiv, 2010). In the agricultural context, Kherallah and Minot (2001) explained that informal markets embrace unofficial transactions between farmers and from farmers directly to consumers. The informal enterprises are a consequence of marginalisation of some economic actors by formal structures of the economy as they face barriers to attain formal and/or legal status (Anyidoho and Steel, 2016). They are regarded as a way to reduce the costs, time and effort associated with the formal economy (Premarathne, 2014) and, in addition, the informal markets emerge due to unclear property rights and weak systems of administration and these perceptions have led to the informal economy being viewed as less important for economic growth (Burke and Myers, 2014). Informal markets result in the loss of income or output in the economy as unfair competition from the informal sector retards the growth of the formal economy and more often the informal sector does not pay taxes which limits revenue potential of government (Abid, 2015). However, Ngalawa and Viegi (2013) and Zhao (2016) argued that informal markets are important as they arise to satisfy the needs and/or wants of people that could not be met by formal markets. They provide an economic alternative since they allow economic activity to take place that would otherwise be lost due to weak institutions (Premarathne, 2014) and, in addition, they increase allocative efficiency due to minimal intervention in the market (Burke and Myers, 2014).

Formal markets in agriculture can be described as the markets governed by high quality and food safety standards and where the activities of participants can easily be monitored and are regulated and characterised by high level of formalisation of transactions (Ferris *et al.*, 2014). Formal markets have clearly defined grades, quality standards and safety regulations and prices are formally set, and smallholder farmers find it difficult to penetrate the formal markets, due to high transaction costs, high risks, missing markets and lack of collective action (Randela, 2005; Mangisoni, 2006). A distinguishing feature of formal markets from informal

ones is the provision of quality assurance and this can take many forms such as compensation for unsatisfactory product performance and free repair and replacement, among others (Anbarci *et al*., 2012). The formal sellers are monitored by government authorities and can enter into binding contracts which can lead to them credibly providing such quality assurance to their customers (Bansal, 2016). Furthermore, because they must incur costs to repair or replace defective merchandise, formal sellers have also financial incentives to detect and eliminate defective products before they reach the market. The formal markets contribute to revenue accumulation on the side of government as it is a common practice that government taxes a fraction of profits of each seller in the formal markets, and the taxation may be in the form of income tax or value added tax (Abid, 2015; Anbarci *et al.,* 2012).

These makerts are regarded as superior to the informal ones, well integrated and functioning and one of the requisite conditions for commercial agriculture (Wiggins and Keats, 2013; Nepal and Thapa, 2009). Commercial agriculture is defined as the farming that is oriented towards market participation whereby participants' main purpose is to sell commodities and the participation can be in output as well as input markets (Poulton *et al.,* 2008). Nevertheless, often, formal markets' high formalisation of transactions and regulatory nature result in exclusion of small-scale farmers (Anyidoho and Steel, 2016), and this was criticised by scholars and development practitioners who argued that any development strategy that ignores the majority, who are small-scale farmers, will leave many trapped in poverty, as most of the smallholders will not be able to compete in the market due to resource constraints (Wiggins, Argwings, Kodhek, Leavy and Poulton, 2011; Jayne, Mather and Mghenyi, 2010).

Contrary to the viewpoint that informal markets are inferior to the formal ones and an ill to the economy, Chen (2012) indicated that these institutions coexist and complement each other in improving market access and economic integration. The "structuralist" school views the informal economy as surbodinated economic units that reduce transaction costs and, thereby, increase the competitiveness of the aggregate economy. In the informal economy, production, distribution, and employment relations tend to fall at some point on a continuum between pure "formal" relations (i.e. regulated and protected) at one pole and pure "informal" relations (i.e. unregulated and unprotected) at the other, with the formal and informal ends of the economic continuum often dynamically linked (Anyidoho and Steel, 2016: Chen, 2007). Few informal enterprises, except perhaps some survival activities, operate

in total isolation from formal markets. They supply raw materials to formal firms either directly or indirectly through intermediaries (some informal) (Chen, 2007). Not only the behaviour of informal actors but their outcomes are conditioned by formal economic, policy, and institutional environments and actors with which they are linked, whether directly or indirectly (Meagher 2013).

For example, in Ghana, there was evidence of input-output relations between informal and formal economies as street vendors acquired their stock from formal businesses who in turn relied on these decentralised informal vendors to market their (formal businesses) products (Anyidoho and Steel, 2016). In other cases, the informal businesses supplied raw materials to the formal businesses through use of middlemen (LNDC, 2015) and this is proof that informal-formal linkages were beneficial to both the informal and formal economies hence effective and efficient complementarity (Chen, 2007). Nevertheless, the informal actors were affected by trends in the macroeconomy as rising rate of currency depreciation and inflation in cost of inputs or supplies resulted in squeeze of profits since customers resisted corresponding increases in sale prices hence undesirable outcomes (Anyidoho and Steel, 2016).

For farmers, growing and harvesting a crop and rearing animals form only half of the battle because they must still market the produce. For smallholder farmers in sub-Saharan Africa, marketing produce remains a challenge. This group of farmers faces difficulties in marketing, even though individual smallholder farmers may be integrated with national or international markets (Shiferaw, Obare and Muricho, 2006). Before choosing a marketing channel, smallholder farmers consider the costs associated with transportation, profits, level of trust among the available brokers and familiarity of the markets, among other factors (Makhura, 2001). In other instances, farmers market their produce through channels offering low prices because they either lack market knowledge or have difficulties in accessing markets that are more rewarding.

Most produce from smallholder farmers in developing countries is sold locally, with only a small amount exported. Generally, smallholder farmers market their produce individually in local markets, but make use of market intermediaries in international markets. Produce from smallholder farmers is sold to consumers and traders at the farm gate, usually through informal transactions where prices and terms of exchange are unofficially negotiated. These

transactions between farmers and traders and between farmers and consumers most often occur in spot markets (Ruijs, 2002; Kherallah and Minot, 2001). When compared to vertical coordination in the supply chain, some weaknesses are associated with spot markets. For instance, prices and conditions of delivery are negotiated for every transaction carried out on spot markets. This may result in increased marketing costs for the farmer. Moreover, farm gate sales tend to result in lower farmer revenue since the prices are relatively low and variable (Montshwe, 2006). Variable prices may result from the unavailability of scales for weighing produce, asymmetric market price knowledge and opportunistic behaviour by the more informed traders. In addition, at the farm gate, farmers may sell to their neighbours, even when the latter cannot pay immediately for the produce. However, smallholder farmers tend to prefer farm gate sales because they receive immediate payments and do not incur marketing costs such as transportation costs and tax payments (Shiferaw *et al.*, 2006).

Smallholder and emerging farmers face difficulties in accessing markets, and, as a result, markets do not serve their interests. In South Africa's less developed rural areas, smallholder and emerging farmers find it difficult to participate in commercial markets due to a range of technical and institutional constraints. Factors such as poor infrastructure, lack of market transport, dearth of market information, insufficient expertise on, and use of grades and standards, inability to conclude contractual agreements and poor organisational support have led to inefficient use of markets, hence, results in commercialisation bottlenecks (Jari and Fraser, 2009). Furthermore, smallholder farmers lack vertical linkages in the marketing channels, which result in their exclusion from the use of formal markets (Makhura, 2001; Delgado, 1999; Wynne and Lyne, 2003). Smallholder farmers have weak financial and social capital and limited access to legal recourse, implying that it is difficult to change these negative market factors individually (Fenwick and Lyne, 1998). Thus, they are trapped and continue to operate within the given market constraints and they do not receive rewarding incomes from their agricultural activities.

The challenges faced by smallholder farmers in production and marketing usually result in a 'low level equilibrium trap' as shown in figure 2.1. In the diagram, constraints, investment disincentives and the stagnant rural economy reinforce each other, leading to a reduction in market participation (Dorward and Kydd, 2005).

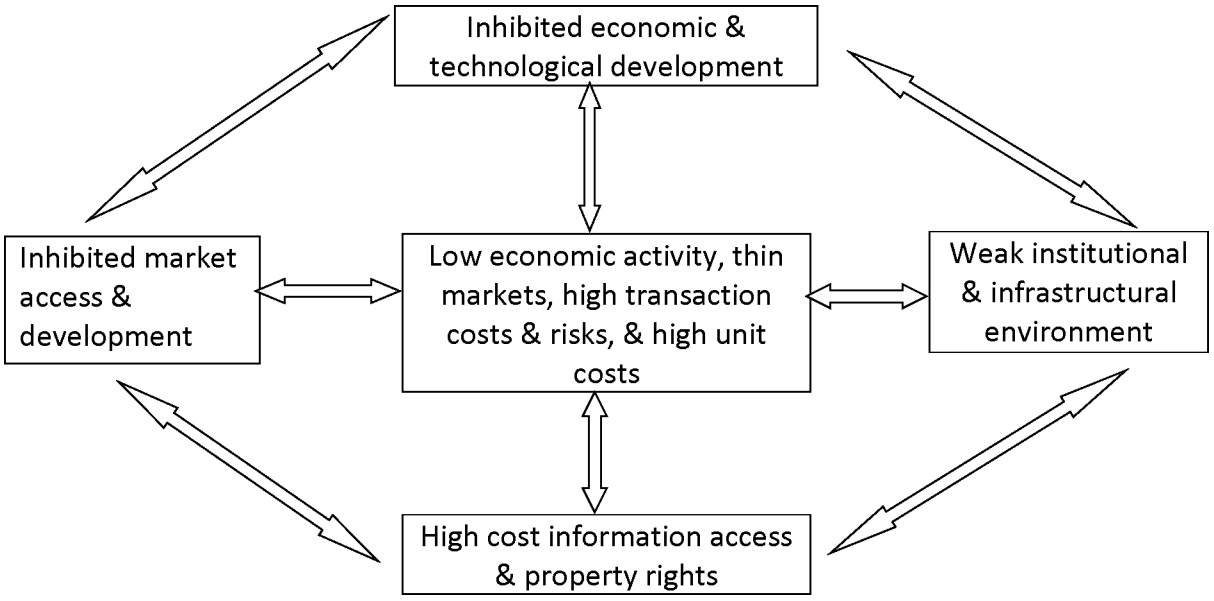

Figure 2.1: Low level equilibrium trap in smallholder farming

Source: Dorward and Kydd (2005)

The factors illustrated in Figure 2.1 summarise the institutional and technical factors influencing marketing decisions amongst smallholder farmers. The institutional factors are discussed in detail in the subsequent sections. This can give an impression that these are the only factors influencing smallholder farmers' decisions. It is important to note that they form part of an array of other factors such as economic, social and political factors.

2.5 Institutional factors and agricultural marketing

2.5.1 Institutions

Institutions comprise of formal and informal rules of conduct that facilitate transactions between, or govern economic decisions within organisations (North, 2000; Kherallah and Kirsten, 2001). Institutions are also devised to structure political and social interactions and they create order and reduce uncertainty in an exchange (North, 1990). Together with the standard constraints of economics they define the choice set and therefore determine transaction and production costs and hence the profitability and feasibility of engaging in the economy (Jari and Fraser, 2009). To understand institutions, a distinction should be made between institutions and organisations, although these are often used interchangeably in everyday language (Williamson, 2000). In the context of institutional analysis, however, institutions are complexes of norms and behaviours that persist over time by serving some

collectively valued purposes, whereas organisations are structures of recognized and accepted roles, formal or informal (Kirsten *et al.*, 2009).

North (1993: 3) helps to clarify the link between institutions and organisation by stating that "*it is the interaction between institutions and organizations that shapes the institutional evolution of an economy. If institutions are the rules of the game, organizations and their entrepreneurs are the players. Organizations are made up of groups of individuals bound together by some common purpose to achieve certain objectives. Organizations include political bodies (political parties, the senate, a city council, regulatory (bodies), economic bodies (firms, trade unions, family farms, cooperatives, etc), social bodies (churches, clubs, athletic associations, etc), education bodies (schools, universities). The organizations that come into existence will reflect the opportunities provided by the institutional matrix. That is if the institutional framework rewards piracy then piratical organizations will come into existence; and if the institutional framework rewards productive activities then organizations—firms—will come in to existence to engage in productive activities*".

North (1990) and Williamson (2000) consider that institutions operate at both micro and macro levels. The macro level deals with the institutional environment that describes property rights, enforcement mechanisms, human behaviours, and power relations in an economy. It also includes beliefs, such as religions; norms, such as trust and lawfulness; constitutionally determined government structures; and legal systems. These elements of the institutional environment provide the structures in which economic decisions, actions (selling, buying, and negotiating), transactions, and flows (resulting from the aggregation of these transactions) are embedded. Economic growth through the growth of specialisation and exchange in an economy depends on the evolution of the institutional environment (Eaton and Meijerink, 2007).

In contrast, the micro level analysis (also known as the level of institutional arrangements) deals with the institutions of governance, which are consindered as a subclass of the institutional environment (Kirsten *et al.*, 2009). These, according to North (2000), describe the sets of rules and structures governing the allocation and exchange of resources through specific transactions. Three broad categories of institutional arrangement can also be distinguished—namely gift exchange, hierarchies, and markets—with many hybrid forms

combining elements from each so that the distinctions among these forms are often blurred (Kirsten *et al.,* 2009).

These forms are found in different elements of the institutional environment described above (Hodgson, 2006). Gift exchange, hierarchies, and markets may be lying on a continuum of institutional arrangements with increasing emphasis on precision in the content of exchange, decreasing emphasis on the relationship between parties in exchange, decreasing interactions between different transactions involving the same parties (over time and across different goods and services), and increasing demands on the wider institutional environment (Dorward *et al.*, 2009). Gift exchange is based on shared values that stress shared responsibilities in social groups with deliberately imprecise terms of mutual obligations that are heavily reliant on investment in social values and social capital. Hierarchies use organisational command and control to allocate resources (Kirsten *et al.*, 2009). They are the basis for operations by governments, parastatal agencies, and most non-governmental organisations.

The basic argument for the role of informal institutions in economic activity is that it reduces transaction costs. In most developing countries, particularly in their rural agricultural sector where the formal institutional architecture is either absent or in a poor state, informal institutions gain prominence by playing a more active role in reducing any kind of transaction costs that engage in all the stages of their agricultural value chain (Premarathne, 2014). The role of institutions in economic activity is that of facilitating exchange and managing natural resources and this role of institutions in facilitation has three components including the coordination of exchange, low cost exchange and provision of incentives (Kherallah and Kirsten, 2001).

Institutions facilitate coordinated exchange and resource management and this coordination is needed at several levels. At the most basic level, coordinated exchange involves the reliable bringing together of buyers and sellers but if an economy includes more complex economic activities and supports specialisation, another level of coordination is needed as entrepreneurs must be able to obtain their various requisite resources and to exchange with buyers (Dorward *et al.*, 2009). Access to these transactions must be reliable in terms of price, quality and timing if the activities are not to be too risky. This second level of coordination

may be termed "complementary coordination", and economic development, with increasingly technical processes and specialisation, generally involves an increasingly complex, dense and extensive web of complementary relationships (Kirsten *et al.*, 2009).

The institutions such as contracts and enforcement mechanisms, commercial norms and rules, and habits and beliefs favouring shared values and accumulation of human capital facilitate the low-cost economic exchange, management of resources and encourage trust amongst the economic participants (Chang, 2010). The institutions also provide incentives and resource management in that they create profitable investment and exchange and through this they encourage entrepreneurs and society more broadly to look for and invest in these opportunities and to invest in infrastructure development and technical and institutional innovation (North, 2000).

The institutions are divided into informal and formal institutions. The informal institutions refer to the non-legal rules of the game that are enforced usually by peers and they include norms of behaviour, conventions, self-imposed codes of conduct, culture, value systems, sociological trends, beliefs and religions (Hodgson, 2006). The informal rules are important as they can constrain and mould human behaviour in many and significant ways. North (1990) suggested that the governing structure is overwhelmingly defined by informal rules, because once they are established, they constrain individual actors. Informal rules are important, particularly amongst smallholder farmers in developing countries, because many exchange relationships are based on ethnical or kinship ties (Jari, 2009). For instance, smallholder farmers offer services to relatives even if it would be more efficient not to offer the services.

Formal rules refer to legal rules such as laws, regulations, constitutions, contracts, political systems and markets, and these are enforced usually by the government (North, 2000). These underlying institutions govern the way societies and states are organised and determine the incentive structure in an economy (Kirsten *et al.,* 2009). Ensminger (1992) and Matabi (2012) pointed out that since bargaining typically takes place 'in the shadow of the law', formal rules are important. However, Hodgson (2006) argued that formal rules in fact occupy a very small proportion of the guides to everyday behaviour and actions. North (1990) explained that the law can only shape the outcome of private bargaining by serving as a backup mechanism for resolving disputes that cannot be resolved privately. This implies that both formal and

informal institutions are equally important as societal relationships are governed by both and these types of institutions can facilitate and/or impede economic growth and development (Hodgson, 2006).

In addition, Lekovic (2012) argued that agricultural development does not only depend on formal institutions and differences in the level of agricultural outputs cannot be explained by formal institutions alone. Although developing countries have introduced similar types of formal institutions (organisations, markets, rules and regulations, constitutions, etc) without investigating the role of informal institutions, their growth rates vary considerably according to the contribution level of both formal and informal institutions (Premarathne, 2014). Therefore, it is assumed that agricultural growth not only depends on economic factors like capital, land and labour, but also on the quality of formal and informal institutions.

2.5.2 Markets and institutions

Smallholder farmers find it difficult to penetrate the formal markets, due to high transaction costs, high risks, missing markets and lack of collective action (Randela, 2005; Mangisoni, 2006). In the agricultural context, Kherallah and Minot (2001) explained that informal markets embrace unofficial transactions between farmers and from farmers directly to consumers. In summary, institutional aspects in marketing include transaction costs, market information flows and the institutional environment.

Transaction costs related factors are the main impediments and determinants of market participation. They have been used as definitional characteristics of smallholder farmers and as the main factor responsible for market failure in developing countries. However, they pose challenges relating to measurements (Alene *et al.*, 2008; Ramoroka, 2012). Sufficiently high transaction costs prevent smallholder farmers from market participation and as a result these costs are not observed. Even if exchange takes place, these costs cannot be easily recorded in a survey (Alene *et al.,* 2008). High transaction costs are one of the major factors constraining growth of smallholder agriculture in African countries and this is largely attributed to poor infrastructure. High transaction costs limit their participation not only in output markets but even in input markets (Bwalya *et al*., 2013) and excessive transaction costs cause smallholders to produce and market very limited amounts of produce or even lead to farmers producing only for subsistence purposes (Tadesse and Bahiigwa, 2015).

To participate in markets, smallholder farmers must determine who to deal with, what the terms of trading are, negotiate bargains, draw up contracts and undertake the inspections needed to make sure that the terms of the contract are being observed (Makhura, 2001; Ramoroka, 2012). This process is often very costly and farmers may not realise or account for these costs (Maltsoglou and Tanyeri-Abur, 2005). Transaction costs tend to reduce the net benefits of exchange resulting in low or no market participation by smallholder farmers (Matungul, 2002).

To overcome these problems, there were various responses to the institutional challenges by farming communities. For instance, to overcome the problems of lack of bargaining power, the smallholders formed cooperatives and collective marketing associations to reduce transaction costs and to develop the bargaining power (Valentinov, 2007). Mellor (2009), Sexton and Iskow (1986) and Kherallah and Kirsten (2001) stated that cooperatives provide institutional advantages to the farmers and the advantages include, among others, farmers cooperatives avoid the effects of their trading partners' market power; thus they improve farmers' negotiating power (Mellor, 2009); farmers' transaction costs of accessing input and output markets are reduced as farmers are assured of the supply of the right inputs and markets for their produce (Nilsson, Svendsen and Svendsen, 2012); cooperatives reduce aspects of the risk and uncertainty that plague farming and they can also provide the option of providing collateral to farmers (Valentinov, 2007); and cooperatives can also reduce the transaction costs resulting from information asymmetries (Crooks, 2004).

Nevertheless, in some cases, the undesirable outcomes were obtained from these institutions as the agricultural cooperatives were confronted with various problems which were a result of the heterogeneity of peoples' preferences, incentives and interests and they could render cooperatives inefficient (Valentinov, 2007). The vaguely defined property rights were identified as one of the major causes of inefficiency in cooperatives (Sykuta and Cook, 2001) and they included common property problems whereby farmers' equity contribution is not proportionate to the distribution of benefits (Nilsson *et al.*, 2012). In addition, the horizon problem, whereby farmers captured benefits from their investment only over the time horizons of their expected membership in the organisation, which causes bias towards short-

term investment and/or under-investment, was a factor that led to the failures of collective efforts (Crooks, 2004). The other factor that led to failure were monitoring problems where decision management is allocated to specialists who are not residual claimants. They influence cost problems whereby some groups of members may have opposing interests and thus engage in costly lobbying activities as well as decision problems where the large number and heterogeneity of members complicate reaching consensual decisions (Valentinov, 2007).

Another response to the institutional challenges facing smallholder farmers was the establishment of contractual agreements with trading partners as contract farming reduces transaction costs and risks (usually caused by uncertainty and imperfect competition) associated with market exchange (Bijman, 2008; Antonaci, Demeke and Soumane, 2013). Contract farming is agricultural production carried out according to a prior agreement in which the farmer commits to producing a given product in a given manner and the buyer commits to purchasing it (Minot, 2011). It specifies the volume to be delivered, the quantity of the commodity supplied, the price and the delivery dates (Sartorius and Kirsten, 2006). The basis for contract farming arrangements is the commitment on the part of the farmer to provide a specific commodity in quantities and at quality standards predetermined by the purchaser and a commitment on the part of the purchaser to buy the commodity (Eaton and Shepherd, 2001; Duma, 2007).

However, Eaton and Shepherd (2001) and Bijman (2008) argued that to realise these positives certain pre-conditions are necessary and it is not ideal to initiate a contract farming venture when the pre-conditions are not met. It is essential that both the farmer and the buyer perceive that there will be gains that cannot be achieved through any other alternative arrangement (Stessens *et al.*, 2004; Ojediran, 2011; Eaton and Shepherd, 2001). In addition, Anseew (2013) argued that it is important that mutual trust and respect exist between the contracting parties as this will make it easy to work within the tenets of the contract.

There should be mutual gains for the contacting parties and this will lead to mutual trust and respect. There must be reciprocal dependency in the contractual arrangement (Ojediran, 2011; Anseew, 2013; Woodend, 2003). There should be a system of input and output markets that cannot be met through open market purchases (Stessens *et al.*, 2004). Government

should provide support through an enabling environment and regulatory role (Minot, 2011). The physical environment must be generally suitable in terms of utilities and communication, land availability and tenure, and input availability (Eaton and Shepherd, 2001). Cultural attitudes and practices should not conflict with farmers' obligations under the contract (Eaton and Shepherd, 2001; Oswaldo, 2008; Da Silva, 2014). There should be transparency among the stakeholders (Ojediran, 2011) and this will improve small-scale farmers' access to finance and credit (Jaeger, 2010).

In cases where such conditions prevailed the concept of contract farming was successful. Nevertheless, Kirsten and Sartorius (2002), Enchanove and Steffen (2005) and Ojediran (2011) indicated that contract farming has not been as effective in other cases due to various challenges including:

- Farmers were indebted due to production problems and advances from the buyers.
- Farmers lost autonomy as they operated under a centralised control system.
- The buyers were unreliable and as such exploited the farmers who in such cases became quasi employees of the buyers/agribusinesses.
- The producers were exposed to the risk of both market failures and production.
- The buyers were biased towards bigger producers due to lower transaction costs and bigger initial asset base.
- Dependence on a single buyer that might fail or lose interest in the business relationship.

2.5.2.1 Market information

Market information is critical to market participation decisions among small-scale farmers as it allows farmers to make well informed business decisions in tems of production, marketing and finance (Tadesse and Bahiigwa, 2015). Access to information allows farmers to identify the right buyer, the right price, the right grades and standards of the product. The necessary information includes information on consumer preferences, quantity demanded, prices, produce quality, market requirements and opportunities (Ruijs, 2002). Of equal importance is the source of market information because it determines accuracy of the information (Makhura, 2001). There must be an institutional framework that facilitates information flow.

However, where such framework does not exist, access to information is dependent on social capital, that is, neighbours, friends and relatives (Gani and Adeoti, 2011). Sahkonen and Leathers (1999) indicated that in many developing countries small-scale farmers have difficulties in accessing market information which puts them in a disadvantageous marketing position. The small-scale farmers are dependent on informal networks due to weak public marketing information systems (Tadesse and Bahiigwa 2015).

However, these informal networks do not always provide up to date and reliable information, making the quality and usefulness of the information doubtful (Jari, 2009). The farmers are at a risk of exploitation due to the opportunistic behaviour of the better-informed middlemen or traders (Kahkonen and Leathers, 1999). For instance, Mangisoni (2006) explained that smallholders usually accept low prices for their crops when the broker informs them that their produce is of poor quality. Smallholder farmers accept these low prices mainly because they are unable to negotiate from a well-informed position.

2.5.2.2 Grades and standards

In both the developed and developing countries, consumers demand quality products in terms of physical attributes and safety and they only buy when the product has desired attributes and its safety for consumption is guaranteed (Ncube, 2014; Kherallah and Kirsten 2001; Jari and Fraser, 2009). That is, the product composition, consistency, safety and presentation influence the customers' purchasing decisions (Jongwanich, 2009).

Developed countries have become a major destination of many agricultural exports from developing countries. However, access to these developed country markets has been a major challenge to smallholder farmers as they are not able to meet grades and standards demanded by these markets (Maertens and Swinnen, 2009). Also, in most cases these small-scale farmers are not able to meet even the grades and standards demanded by the domestic consumers. In addition, institutions for determining market standards and grades tend to be poorly developed in smallholder farmers' environments (Jongwanich, 2009). Due to uncertainty on the reliability and quality of their goods, they usually cannot get contracts to supply formal intermediaries such as shops and processors (Herzfeld *et al.*, 2011). This indicates that only well-organised farmers can benefit from trade liberalisation by adopting strict quality control measures and obtaining the necessary certification for their goods.

2.5.2.3 Organisation in markets

Small-scale farmers face many constraints that impede them from taking advantage of market opportunities. Often, they live in the remote areas with a poorly developed socioeconomic environment and they face high transaction costs that significantly reduce their incentives for market participation (Fischer and Qaim, 2012). They also are not organised as they usually sell their agricultural produce individually and directly to the consumers without linking with other market participants which implies lack of collective action amongst smallholders (Kherallah and Kirsten, 2001). This individual approach to marketing reduces their bargaining power and makes them vulnerable to price exploitation by their exchange partners (Valentinov, 2007). Also, they are characterised by inability to realise economies of scale (Lipton, 2005).

In a globalised world, there has been a response in the form of institutional arrangements such as cooperatives, farmer organisations and contract farming in order to address the problems associated with a lack of collective action and to meet the needs of the modern consumer (Kherallah and Kirsten, 2001). Agribusiness firms and financiers consider smallholders as high-risk entities and this has led to agribusiness firms favouring contracts with large-scale farmers, such that small-scale farmers are excluded from these contracting arrangements (Ojediran, 2011; Key and Runsten, 1999). Lack of facilitation in the formation of producers' associations or other partnership arrangements makes it more difficult for smallholder producers to participate in formal markets. The greater the degree of organisation in the market, the smaller the transaction costs are likely to be and the easier it is to benefit from the exchange opportunity (Fischer and Qaim, 2012; Jari, 2009; Frank and Henderson, 1992). However, lack of collective action among smallholder farmers denies them entry into formal market channels.

2.5.2.4 Legal environment

There are many drivers for market efficiency and legal institutions are one of them as these regulatory institutions have an influence on the market activities and the costs of market exchange (Cordon *et al.*, 2014). The formal institutional development of a society has a considerable influence on transaction costs (Zhang *et al.*, 2014). For instance, Jari (2009) affirmed that if trade laws are transparent then agreements can be legally enforced, leading

to information accessibility and lower costs. In other words, effective legal institutions may improve the organisation of the marketing channels and decrease marketing costs.

Gong *et al*. (2010) indicated that in countries where legal systems enforce private property rights, support private contractual arrangements, and protect the legal rights of investors, markets flourish. However, in many developing economies, laws are not always executed and enforced correctly, bribery and cheating are often not penalised, courts are out of reach for most the population, and market rules are often not transparent to the producers and traders (Beck and Levine, 2003). In addition, formal contract enforcement mechanisms are weak (Fafchamps, 1996). It is even worse for the smallholder farmers because they lack lobbies in the legal environment. As a result, rural trade prospers where trust has been developed based on repeated transactions or informal relationships (Zhang *et al*., 2014; Jari, 2009). Hajjar (2015) and Montefrio *et al*. (2015) argued that an unfavourable legal environment creates a significant barrier to entry into formal agricultural trade and limits participation by smallholders in the modern marketing system. According to Kherallah and Kirsten (2001), in many developing economies, the situation of agricultural markets and smallholders in particular is mainly a result of poor institutional development.

2.6 Synopsis

The chapter discussed a theoretical framework for the current study and reviewed literature on the main institutional factors influencing marketing behaviour of smallholder farmers. The role that is played by smallholder farmers in an economy, including their potential contributions, has been highlighted. Such contributions include poverty alleviation, equitable distribution of income and linkages for economic growth. The institutional factors that pose challenges among smallholder farmers in marketing agricultural produce were discussed.

Based on the institutional discussions, it was being concluded that these factors curtail opportunities for smallholder farmers and usually lead to a premature and rapid exit of smallholder farmers from formal markets. The main institutional factors influencing smallholder farmers' decisions to market include high transaction cost, inadequacy of market information, insufficient expertise on, and use of grades and standards, inability to conclude contractual agreements, poor organisational support and an unfavourable legal environment.

The chapter has described the situation regarding small-scale mohair farming in the world, and the focus was on production as well as participation in markets. The factors that enhance or limit production as well as market participation were highlighted, and this provides direction and a benchmark for documenting the structure of the mohair industry of Lesotho in the next chapter.

CHAPTER 3
THE LESOTHO MOHAIR SECTOR

3.1 Introduction

This chapter focuses on the structure of the Lesotho mohair sector, giving special attention to the developments influencing the structure of the sector. To achieve this, the chapter is organised as follows. The first section presents an overview of the country and is followed by a brief explanation of the economic importance of mohair. Thirdly, the historical background, mohair related national policies and marketing of mohair with attention to the marketing structure, policies and strategies are presented. In the fourth section, the chapter examines the major factors limiting mohair production in the mountain kingdom, while the last section focuses on the mohair processing sector in the country.

3.2 An overview of Lesotho

Lesotho is a constitutional monarchy that is ruled by the King and governed by a 33 – member Senate or upper house comprising of 22 Principal chiefs and 11 technocrats, and a 120 – member National Assembly from which a Prime Minister is elected, and the incumbent shall head the executive (World Bank, 2016). The country's constitution allows for an electoral cycle of five years with the prime ministerial term unlimited.

The country has witnessed a gradual transition from an election system based entirely on the Westminster system to one which combined aspects of the Westminster system such as the First-Past-The-Post (FPTP) and modified approaches of Mixed Member Proportional systems (MMP). With this new system, 80 seats for National Assembly (NA) were retained and an additional 40 seats were added under the proportional representation (PR) system from party lists. The new 40 seats were to be allocated on a compensatory basis to ensure inclusiveness in the National Assembly and to prevent the type of landslide that led to instability in 1998 (UNDP, 2014). Since the reforms, Lesotho has held three additional elections in 2002, 2007 and 2012. In 2005, local government elections were held for the first time and they also applied the FPTP electoral system. The second local government elections were held in 2011 and applied the MMP electoral system (Ministry of Local Government, 2013).

In recent times, Lesotho's political climate has been in flux with the country seeing its first coalition government after the elections held in 2012. A snap election was held three years later, in 2015, and yet another coalition government was formed. The current seven-party coalition government is led by the Democratic Congress Party and it controls a small majority of only 65 of the 120 parliamentary seats (Ministry of Trade and Industry (MTI), 2015).

One distinctive feature of the Lesotho's economy is that the Gross National Product (GNP) is substantially larger than the Gross Domestic Product (GDP). This gap is caused by the large value of factor income from abroad, which mainly comprises migrant workers' remittances from RSA mines (World Bank, 2016). The Gross Domestic Product (GDP) has grown at an average rate of 4% in the past 10 years. In 2015/16, growth was estimated to have declined to 1.7% mostly due to lower growth in South Africa, lower global growth prospects, and the drought. It is expected to remain low at about 2.4% in 2016/17 (CBL, 2015: African Economic Outlook, 2016). The main contributor to this growth has been the industrial sector, which has consistently accounted for an average 40% of sectoral output in the past 10 years (MTI, 2015). The primary sector contribution to GDP has declined significantly in recent years, relinquishing its position as the mainstream of the economic growth in Lesotho. The share of agricultural output has dropped from 30% in the early eighties to around 10% in 2013 (LNDC, 2015). Severe drought has been the main contributor to this unfavourable situation (CBL, 2014). The service sector has however increased its contribution to GDP. This situation is attributable mainly to increased Government spending on social services that include education and healthcare (LNDC, 2012).

Lesotho has one of the highest adult literacy rates in sub-Saharan Africa (94.6%, with 90.6% among males and 98.6% among females). The Net Enrolment Ratio in primary education fell below 80%, to 76.6% in 2014. The female-male enrolment ratio in primary schools in 2014 was 96.1 females per 100 males, while the trend was the opposite at the secondary school level (Africa Economic Outlook, 2016). Universal access to primary education was supported by various measures such as school feeding programmes, child grants, construction of schools to reduce walking distance, the provision of learning materials and integration of children with special educational needs into primary schools (UNDP, 2014).

Despite these developments the country is faced with a number of challenges that require new growth engines, a more streamlined role for the state, and a dynamic private sector to seize opportunities in the Southern African market (World Bank, 2016). Public spending grew from 45% of GDP in 2004/05 to about 59% in 2015/16, mostly due to the increase in the wage bill which was 22% of GDP in 2015/16, one of the highest in the world. The level of public spending is unsustainable, and it can no longer be relied upon to drive growth (International Monetary Fund, 2015).

The country faces an unemployment rate of 40% and low productivity employment is widespread, especially in rural areas (Central Bank of Lesotho, 2014). A 2010/11 household budget survey showed that an estimated 57 percent of the population lives below the poverty line, and that the Gini coefficient based on consumption is estimated to be 0.6. Poverty has decreased in urban areas, while it has increased in rural areas (WB, 2016). Lesotho is also regarded as one of the most unequal societies in the world, as measured by the Gini coefficient, which is around 0.6 (African Economic Outlook, 2016). The situation has been attributed to nepotism, cronyism, hypocrisy, greed and corruption that characterise both the public and private sectors in the country (Directorate on Corruption and Economic Offences, 2015).

Several factors hinder Lesotho's private-sector growth, affecting both Foreign Direct Investment (FDI) and the growth of local businesses. All quantitative measures suggest that business regulations seriously constrain growth (LNDC, 2015: WB, 2016). Despite making progress in streamlining business and property registration and in establishing and operating a credit bureau, Lesotho ranks low on key Doing Business Indicators, such as dealing with construction permits, accessing finance, and the cost of capital. These are constraints on domestic entrepreneurship, suggesting that the domestic private sector remains dependent on the state and non-tradable sectors (World Bank, 2016).

Institutional strengthening to support trade and investment, hence economic growth, could prove to be essential. While Lesotho has made strides in this regard there is room for further improvement. For example, the private sector currently remains fragmented and ineffective as far as advocating for pro-business policies (Commonwealth, 2014). There are also insufficient central sources of comprehensive business information to facilitate trade and

investment decisions (LNDC, 2012). Nevertheless, cognisant of the economic constraints and limitations, the government of Lesotho engages in formulating economic revival strategies in collaboration with various international agencies. The objective of these interventions is to promote sustainable growth and development, as well as alleviating widespread poverty (LNDC, 2015: Commonwealth, 2014).

3.3 Economic importance of mohair in developing countries

Goat Industry Council of Australia (GICA) (2014) defined mohair as the woolly coat covering the goats and usually when people mention mohair reference is made to a silk-like fibre or yarn made from the hair of the goat, usually the Angora breed. The word mohair was adopted into English before 1570 from the Arabic word "Mukhayyar" which means a type of haircloth. Mohair is durable and resilient and notable for its high luster and sheen and it takes dye exceptionally well. It is warm in winter as it has great insulating properties, while remaining cool in summer due to its moisture wicking properties.

Because of these properties, it is a luxury fibre and is usually more expensive than wool that comes from sheep. It is used in the making of knitted products and fine garments including winter scarves, winter hats, sweaters, coats, socks and home furnishing (Dellal *et al.*, 2013). Also, it is used in the making of carpets, wall fabrics, high grade doll wigs, etc. The products made of mohair fetch very high prices at both local and international markets. Mohair may be used as a substitute for fur (Dellal *et al.*, 2013; Guercio, 2015: MTICM, 2012).

The use and price of mohair are usually based on the quality of the mohair fabric. Quality and profitability of mohair are determined by the fleece traits including fibre diameter and fleece weight (McGregor, Butler and Ferguson, 2012). Other quality traits that contribute to both the processing and consumer satisfaction of natural fibres such as standard deviation of fibre diameter and spinning fineness are, of late, given much consideration in the determination of mohair quality (Visser *et al.*, 2009).

Mohair is a vital source of foreign exchange and economic growth for some of the world's poorest countries as most of them export bigger shares with a few exceptions such as Turkey in which more of the crop is bought and distributed to the domestic market (Dellal *et al.,* 2013). It contributes significantly to the value of exports and Gross Domestic Product of many countries (Eastern Cape Provincial Government, 2010). Based on value, mohair exports rank

third in terms of total exports from Lesotho and ranks fourth in terms of contribution to agricultural Gross Domestic Product (Bureau of Statistics (BOS), 2012). Adoko (2014) and Matebesi-Ranthimo (2014) argued that this potential is far more than current contribution and that it can only be fulfilled if the productivity and smallholder market participation can be improved.

It is also an important source of employment as it provides millions of jobs in production, related processing and textile sub-sectors globally (Dellal *et al.*, 2013). The employment potential of the mohair sector is even greater when taking into account forward and backward linkages and externalities (Eastern Cape Provincial Government, 2010).

3.4 Global Mohair Production

South Africa is recognised as the most reliable source of mohair in the world because angora goats grow their fleeces all year-round which allows farmers to auction their produce two seasons a year for summer and winter sales. It produces around 50% of the world's mohair and on average the annual average commercial production is about 2723 tonnes which makes South Africa the largest mohair producing nation in the world (MTI, 2015). Lesotho is the second largest mohair producer followed by Argentina. Mohair is also grown in several countries, mainly the semi-arid areas of the USA, Turkey, and small quantities in Australia and New Zealand (DAFF, 2011).

Table 3.1: Mohair output in the world

	Mohair Production per year (tonnes)									
Country	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**
South Africa	3600	3400	3000	2900	2600	2300	2230	2350	2400	2450
Lesotho	900	920	920	840	800	750	700	600	690	750
Argentina	500	490	520	480	520	550	620	629	635	644
USA	400	420	420	500	510	500	540	558	565	572
Turkey	400	330	360	340	400	410	433	433	461	470
Australia	90	106	119	119	159	170	186	198	210	213
New Zealand	40	49	43	50	63	90	95	100	100	130

Source: Ministry of Trade and Industry of Lesotho, 2015.

During the period 2005 up to 2014, the mohair production volumes from the two leading producers, South Africa and Lesotho, showed a decline due to severe drought that was experienced in the two countries (see Table 3.1). Nevertheless, the mohair production has shown recovery since the year 2012, but not to pre-2009 levels (Mohair South Africa, 2015). In Lesotho, the recovery was attributed to the improved climatic conditions and animal production systems in terms of disease control, veld regeneration and supplementary feeding among others (MTI, 2015).

The mohair produced in South Africa and Lesotho is mainly exported to Europe and Asian countries including Taiwan, Japan, Korea and China. Prior to 2010, the United Kingdom was the major destination of the mohair from the two Southern African countries but there have been changes to the trends. China is now the leading market as it accounts for around 32%, followed by Italy accounting for about 31%, the United Kingdom accounting for 14%, Taiwan accounting for 9% and Japan accounting for 5% (Mohair South Africa, 2015). The lowest importers of mohair from these areas during the period 2012 up to 2014 were Bulgaria at 4%, Egypt 3% and Korea at 1% (MTI, 2015). Production from countries such as USA, Turkey, Australia and New Zealand is mainly absorbed by the domestic markets in those countries (LNDC, 2012: Cull, 2011). However, there has been external/ global interest in the mohair produced from Australia as the quality has improved over the last five years to an extent that

some prominent international buyers have declared Austaralia the best quality mohair producer (Lee, 2015). For example, in 2014, at an auction in Narrandera, New South Wales, bales of the finest Australian fleeces fetched record prices and in one instance selling for $56.50 per kilogram (Savio, 2015).

The ten-year period prior to 2005 was characterised by fluctuating and generally low mohair prices across the world markets (Mohair South Africa, 2011; MTI, 2015). Since 2005, the world started to witness increases in mohair prices as the mohair producer prices started to increase at a slow pace to approximately R58.47/kg and then a consistent increase to between R78.08kg and R78.38/kg until a slight decline occurred in 2008 to approximately R71.33/kg. During the period 2009 up to 2013, mohair producer prices took a positive direction with a consistent increase until a peak was attained in 2014 at approximately R204.01/kg. The reason advanced for the price increase was the decline in production causing less supply in the market and thereby causing the price to climb (LNDC, 2015: DAFF, 2015).

3.4.1 Profile of the Lesotho mohair farmers

In Lesotho, the mohair sector is dominated by many farmers with flocks of less than 100 head and those who own less than 40 goats dominate the group as their stock forms 60% of the goat population. The farmers with flocks of less than 40 heads produced about 33% of the nation's total mohair production for the period 2010 to 2012 as recorded at official mohair outlets. Although their stock forms a smaller part (15%) of the total goat population, farmers with flocks of more than 100 head dominate in terms of the amount of mohair handled and sold through Livestock Products Marketing Services (LPMS). This group of farmers was responsible for about a third of the total mohair sold through LPMS (Department of Livestock Services, 2012) (see Table 3.2).

Table 3.2: Mohair production and flock sizes, Lesotho

Percentage Distribution of Mohair Production in terms of Flock Sizes			
Total Mohair Produced Nationally (2010-2012)	Mohair from flock less than 40 heads	Mohair from flocks between 41-100 heads	Mohair from flocks above 100 heads
2 050 000 kgs	33%	34%	33%
Percentage Distribution of goats in terms of flock sizes in the Country			
Total Number of Goats kept Nationally	Flock less than 40 heads	Flocks between 41 and 100 heads	Flock above 100 heads
820 000 head	60%	25%	15%

Source: Department of Livestock Services (2012)

As has been indicated earlier, there has been a history of illegal mohair sales (smuggling). It is believed that much of the mohair produced by farmers with flocks of less than 40 head is sold to smugglers. According to Department of Livestock Services (2012), the larger portion (60%) of total population of goats is from flocks of less than 40 heads. However, official records in terms of mohair sold present a different picture that has led to the belief that much of their production is sold through illegal channels. This conviction is consolidated by reported cases of Lesotho-type mohair being sold in magisterial districts just outside Lesotho (Mokitimi, 1996) (see Table 3.3).

Table 3.3: Percentage distribution of mohair sold through LPMS from different categories of farmers for the period 201-2012

DISTRICT	Mohair from flock less 40 head	Mohair from flock between 41-100 head	Mohair from flock between 101-200 head	Mohair from flocks of more than 201 head
Butha-Buthe	10%	20%	29%	41%
Berea	10%	15%	25%	50%
Leribe	10%	19%	31%	40%
Maseru	9%	4%	32%	55%
Mafeteng	8%	12%	30%	50%
Mohale's Hoek	22%	15%	23%	40%
Quthing	15%	25.5%	30.5	29%
Qacha's Nek	21%	18%	30%	31%
Mokhotlong	5%	6%	29%	60%
Thaba-Tseka	10%	9%	22%	59%
AVERAGE	**12%**	**11.9%**	**23.4%**	**37.9%**

Source: Department of Livestock Services (2012)

3.5 Historical development of mohair industry

Mohair production in Lesotho began in the 1870s, barely 40 years after the founding of the nation by King Moshoeshoe 1. Basotho acquired goats through labour migration and employment on the South African farms and, sometimes, through stock theft (Mokitimi, 1996). Prices were high at the time and contemporary reports agree that the principal motivation for the acquisition was the cash income to be gained from mohair sales. By the end of the 19th century, most of the goat flocks had been transformed from traditional meat producing breeds to the exotic angora goats (Ministry of Agriculture and Food Security (MAFS), 2003).

Stutley (1960) explained that Basotho agricultural produce including mohair found ready markets in the neighbouring Orange Free State (now Free State Province) and in the diamond and gold mining fields. By the 1890s, Lesotho was becoming well integrated into the South African market economy and was widely described as prosperous. This led to the establishment of trading stations by foreign businesses where the growing agricultural

production was exchanged for consumer goods and farm implements (Hunter, 1987). Mohair and wool were not exceptions in these transactions.

Around 1900, Lesotho's grain exports were significantly reduced due to increased competition from cheap American and Australian grain. In response, Basotho turned to the complementary pursuits of labour migration and wool and mohair production. Between 1910 and 1941, the angora population increased ten-fold from 100 000 to 1 million goats (Mokitimi, 1996). However, a combination of severe drought, range degradation, and world economic depression-induced falls in wool and mohair prices, sheep and goat populations fell by half between 1941 and 1947 (Hunter, 1987).

Surprisingly, the decline in wool and mohair production did not result in reduction in numbers of traders. Instead, the period saw entry of many small traders and hawkers competing for farmers' business (wool and mohair) comprising of Basotho and Indian people (Rantheba, 1985). However, the situation changed following the war between Basotho and the colonial administration that led to many traders fleeing the country. MAFS (2003) stated that the trading structure became markedly more concentrated as more small traders and hawkers entered and acquired the licenses and stations of those who fled. By the 1950s, Frasers (a trading chain in Southern Africa) owned 55% of trading stations in all populous and high producing areas of Lesotho. In the 1980s, Frasers had about half of the private licences for mohair purchases (Rantheba, 1985).

Mokitimi (1996) highlighted that the level of hawking declined in the late 1970s as hawkers were forbidden from trading in mohair and wool as authorities attempted to control more closely the classing of fleeces. Again, the decline in hawking was because capital requirements and transport costs increased, hawkers had to buy and sell in small lots and operated in the areas some distance from established trading stations (MAFS, 2003). Their profits were relatively low hence many of them (hawkers) exited and the traders occupied a relative monopsony position in their trading locale (Ministry of Trade and Industry, Cooperatives and Marketing (MTICM), 2012).

Rantheba (1985) and Mokitimi (1996) indicated that the position of the traders was strengthened further by the Basutoland Traders Association (BTA) which was formed to lobby the government. The Association sought to limit the entry of Indian traders into the business, fearing "unfair" competition of the allegedly narrower Indian trading margins. The BTA also sought to restrict the number of licenses granted for any one trading location and to limit the number of new entrants into the industry. The Association succeeded in its mission as Basotho and Indian traders were denied licenses and where granted they were to the most undesirable locations (Hunter, 1987).

Traders themselves adopted a number of trading practices which effectively limited competition. Traders introduced provision of credit against commodity sales scheme where farmers could purchase consumer goods on credit but had to pledge their output as collateral (MTICM 2012; MAFS, 2003). Although the credit was often useful and even necessary, it limited the ability of farmers to "shop around". They also introduced payment with script or chits where traders would not pay cash but would give farmers chits to be used for the purchase of consumer goods in their stores. This effectively bound the farmers to sales and purchases from the same trader (Mokitimi, 1996; Hunter, 1987).

As a result of these practices, there was widespread belief amongst farmers that traders were taking advantage of them. The marginalised Basotho traders also demanded increased participation in trading (Basutoland National Council (BNC), 1984).

The government, with the urging of the Catholic Church, encouraged and facilitated the formation of the cooperative societies to provide greater competition in the purchase of wool and mohair as well as to eliminate what was thought to be excessively high traders' margins (Basutoland National Council, 1984). By 1968, 14 cooperatives had been formed across the country (Hunter, 1987; Mokitimi, 1996). However, they were never able to handle more than 10% of the total clip. Although traders opposed the cooperatives and sometimes even practiced predatory pricing against them, their ultimate failure was more due to their own financial and managerial problems (MTICM, 2012). By the 1970s, most of the cooperative societies established for the purpose had ceased to function (MAFS, 2003).

It was around this time that the Lesotho government felt compelled to respond to stock farmers' complaints with institutional reforms to the marketing structure (MAFS, 2003).

Although private traders were not forbidden to purchase wool and mohair, the number of licenses issued to this category of traders was greatly restricted (MTICM, 2009). The parastatal Lesotho Marketing Corporation (LMC) was established to buy mohair and wool through government established shearing sheds in direct competition with the private buyers (Mokitimi, 1996). Hunter (1987) indicated that this was followed by the Lesotho Mohair Industries (LMI) which sought to bypass South African markets and to sell directly to overseas buyers.

Both institutions were unsuccessful owing to under-capitalisation, lack of adequate personnel and transport, and poor management and, thus, large quantities of processed mohair remained unpurchased and the prices paid to farmers were sometimes lower than those offered on the South African markets (MAFS, 2003). This turmoil in the marketing system led some farmers to bypass official channels while others reportedly slaughtered their animals (Mokitimi, 1996; Hunter, 1987).

In 1978, the activities of LMC and LMI were terminated and many of the activities were undertaken by a section of the Ministry of Agriculture, the Livestock Products Marketing Services (LPMS), which continues to operate today (MAFS, 2003). LPMS does not take ownership of the clip but acts only as a marketing agent for farmers shearing at government established shearing sheds. In addition, it provides certain regulatory functions including the inspection of the facilities of private traders, the maintenance of classing standards and training of classers, inspection of scales, licensing of private traders, and, in conjunction with traders and the Ministry of Agriculture, the determination of traders' prices and margins (Mokitimi, 1996; Hunter, 1987).

It has been noted by analysts, such as Mokitimi (1996) and Swallow *et al.*, (1987), that the establishment of LPMS led to the sharp decline of trading stations handling mohair and wool. There were more than 170 trading stations prior to 1978 and the number had dropped to about 40 by 1985. This was echoed by MAFS (2003) stating that there were around 10 trading stations in the country in 2003.

3.6 Mohair related national policies

The government of Lesotho has put in place a number of livestock policies and there are various policies that are related to the small stock sector, mohair in particular, and these policies are related to the procurement, keeping and handling, and grazing as well as marketing of the products in the country (Department of Range Resources Management, 2012).

3.6.1 Policy for rearing the goats in Lesotho

In Lesotho, the policy allows primarily the keeping of goats for both milk and mohair production purposes. The Angora goat is the only breed that could be imported and/or kept for mohair production and, secondly, for meat production purposes in the country while other mohair and/or meat breeds are forbidden (MAFS, 2012). There are only three milk producing breeds that are allowed in the country and they include alpine, toggenburg and saanen. These dairy breeds are allowed only in the lowlands and foothill zones of the country while they are forbidden in the highlands and Senqu (Orange River) river valley where the majority of mohair goats are kept and graze (DRRM, 2014). The rationale for this provision is to prevent cross breeding between the dairy and mohair goats which may affect the quality of the mohair which is the premier national product (Ntakatsane, 2013; Mosebi, 2014). Zero grazing is the only practice accepted in the keeping of dairy goats. However, Hlasoa (2012) and MAFS (2012) argued that this was not observed as there were reported cases where dairy goats were grazed in the open and cross breeding occurred in some instances.

3.6.2 Land tenure and grazing management policies

In Lesotho, there has been an evolution in terms of how access to and use of land was guided and, as a result, there is an array of policies that have been put in place since 1903 (Selebalo, 2001) up to as recently as 2011 (DRRM, 2012).

The customary Laws of Lerotholi of 1903 were the first guide for access to and use of various types of land and it stated that access to land was a birthright of every Mosotho. Under this institution, the land was vested in the Basotho nation and the rights to sell and exclude Basotho nationals were prohibited while the foreigners were not allowed to own land (Chapeyama, 2004). The chiefs played an important role of administering land allocation and

they could also withdraw rights of access from nationals who failed to abide by the rules and regulations related to access and use of the land (Daemane, 2012). This was characterised with transhumance that ensured stratified and integrated utilisation of lowland and mountain grazing resources, where lowland farmers would take their stock to summer grazing in the highlands (mountains) while highland communities would take theirs to lowlands for grazing in winter (Chapeyama, 2004).

Subsequent land policy has largely maintained the status quo, although the Land Law of 1979 brought some changes to land tenure through the introduction of provisions for inheritance to land including grazing (Economic Commission for Africa, 2003; Daemane, 2012). There are still two primary forms of land holding in the country, private lands for fields and homesteads and communal land which is held in common by residents and provides access for all to the resources on such land (Cowen, 2007).

The government of Lesotho has long been concerned about degradation of rangelands in the country and has introduced a variety of policy and legal measures to stem the problem over the years (Ministry of Forestry and Land Reclamation, 2011). The Land Husbandry Act of 1969 (Act no. 22 of 1969) made provisions for prescribing the principles to be adopted in the reduction of livestock numbers to be grazed on specific land as well as control grazing and introduce veld/pasture management (Chapeyama, 2004; Lesotho Government, 2014). The Rangeland Management and Grazing Control regulations of 1980 (Legal Notice 39 of 1980) and Rangeland Management and Grazing control (Amendment) Regulations (Legal Notice no. 44 of 1986) gave Principal Chiefs and their representatives special authority over grazing lands and institutionalised the traditional rotational grazing systems through legally recognising the Chiefs' right to set aside closed areas. The same regulation also provided for regulation of livestock numbers and it encouraged livestock farmers to take into account the costs and benefits of open grazing through payment of grazing fees (Bulane, 2014).

Political developments in the country have introduced different sources of authority and in 1992, administration systems such as elected Development Councils were introduced to manage development planning at local level (Sekatle, 2002). In 1999, the urban, rural and community councils were established to manage development planning at local level and these developments saw the role and influence of chiefs gradually getting eroded resulting in

uncoordinated management of resources, such as grazing (Daemane, 2012). These also saw the collapse of the control of the previously stratified system of transhumance where highland communities would no longer take their stock to winter grazing in the lowlands, yet lowland farmers continued to send their stock to summer grazing in the highlands (Chapeyama, 2004). This inequity resulted in increased animal pressure on highland grazing with resultant widespread soil erosion (Nthejane and Ratsele, 2014). This was further deteriorated by the withdrawal of grazing fees in 1993 in the run-up to the first democratic elections and this was due to pressure from political opponents of the government who turned this into an election issue. This withdrawal saw the increase in excessive and uncontrolled grazing resulting in soil erosion and range degradation hence a "tragedy of the commons" situation (DRRM, 2012).

In response to this, the government put in place the National Range Resources Management Policy of 2011 with the main objective to control grazing and reduce the number of livestock on the rangelands and under this policy the Grazing Associations were established (DRRM, 2012). The main purpose of the Associations is to direct and control grazing at the local level. The individual livestock owners are grouped together within village associations for managing their range resources for the common good of participating stockowners and other members of the community (Ntsohi, Tsolo, Nthejane and Ratsele, 2014). Pitso (2014) explained that membership of the grazing associations is voluntary, and this allows non-members to benefit as much as members do since all nationals have inalienable rights of access to grazing resources (Nthejane and Ratsele, 2014).

3.6.3 Agricultural marketing policies

In Lesotho, there is a long history of government participation in the marketing of agricultural products. However, the government decided to reform the sector in 1996. There was policy intent to shift from food self-sufficiency to food security and to realise this goal, inward looking market policies underlying sufficiency strategies had to be replaced by more outward looking policies (MAFS, 2003). It was argued that deregulation of the main agricultural output and input markets were a key area necessary to implement this new strategy successfully (Van Schalkwyk, Van Zyl, Botha and Bayley, 1997).

Until the Agricultural Marketing Act of 1996 was adopted in Lesotho, the marketing of agricultural products was governed by the Agricultural Marketing Act of 1967, the Marketing Amendments Act of 1979 and various legal notices (LPMS, 2014). The Agricultural Marketing Act of 1967 empowered the Minister of Agriculture to gazette regulations and/or intervene in the marketing of agricultural products. For most products, the government intervened in the domestic market in two ways, imports and price control (MAFS, 2003; Van Schalkwyk *et al.*, 1997).

Despite this policy shift the government of Lesotho continues to directly participate in the wool and mohair sector through setting of private traders' marketing margins and prices. The margins are said to make allowances for costs of transportation and handling, shed operation and depreciation, and commission (International Fund for Agricultural Development (IFAD), 2014). In addition, the government participates through establishing shearing sheds and LPMS. These entities (LPMS and shearing sheds) are the channels through which Lesotho fleece reaches BKB in South Africa and other markets. The government finances all the operational costs of the LPMS and about 40% of the operational costs of the more than 110 shearing sheds across the country (LPMS, 2014; IFAD, 2014).

3.7 Lesotho National Wool and Mohair Growers Association

The Lesotho National Wool and Mohair Growers Association (LNWMGA) was established in 1980 through the advice and inspiration of the late Dr. Rakoro Phororo (former Minister of Agriculture). The purpose of the Association is to oversee the overall production and management of the mohair industry, information sharing and joint marketing. The Association started with a few members but now has thousands of members throughout the country (Matebesi, 2014). In all districts of the country, there is a District Wool and Mohair Growers Association (DWMGA) affiliated to and associated with the LNWMGA.

The organisational structure of the Association has the National Executive Committee (NEC) at the apex and this Committee is elected every three years. Below the NEC, there are district committees, which are responsible for governance at district level. The DWMGA committees are elected every three years like the NEC. Each shearing shed has a shearing shed committee (SSC) responsible for governance at shearing shed level and these committees are elected

every two years. The terms for which a member can be in the LNWMGA committees are unlimited (MTICM, 2011).

The NEC holds monthly meetings to discuss issues related to its mandate and holds quarterly meetings together with DWMGA committees to discuss governance issues and other important matters (LPMS, 2014). Even at district and shearing shed levels, the meetings are held regularly. The NEC organises and holds annually a general conference for the entire membership to discuss policy, consultations with members on critical issues as well as reporting to the members concerning the Association's position (Matebesi, 2014).

The National Association is responsible for the operation of 114 shearing sheds across the country and these shearing sheds are government built and owned. The permanent staff at these shearing sheds is paid by the Lesotho government while the seasonal staff is paid by the Association (Moshoeshoe, 2015).

Activities such as goat shearing and mohair classing and grading are carried out at shed level followed by mohair packaging after which the mohair bales are transported to the Livestock Products Marketing Services warehouse in the capital, Maseru. The bales will then be transported to the South African coastal city of Port Elizabeth in the Eastern Cape province where it will handled by the broker, BKB, until it is auctioned and bought (Matebesi, 2014; Moshoeshoe, 2015). The government pays for some of the fixed and variable costs associated with these processes (MTICM, 2011) though it is not clear which they are and what proportions are covered.

3.8 Present marketing system in Lesotho

Presently the market system consists of two official outlets and one unofficial (illegal) outlet, and the one official (government shearing sheds) channel handles an average of 3 400 tons of wool and 787 tons of mohair per annum. There are no clear records of wool and mohair volumes that are handled by the private traders while due to its nature there are no records for the smuggled produce channel (MTICM, 2012). Each tends to serve a different kind of producer and satisfies the different needs of each client (MAFS, 2012).

The government of Lesotho operates 114 shearing sheds scattered throughout the country. Although they fall under the auspices of the government, their day to day administration is in the hands of the Lesotho National Wool and Mohair Growers Association (Tregurtha, 2006;

MTICM, 2012). The number of animals sheared at these sheds varies from year to year depending on market conditions and the timeliness of LMPS payments. Recent MAFS and MTICM estimates indicate that the proportions have been in the range of 50% for goats sheared. These animals are owned by approximately 40% of the stock keepers. The average goat flock, at 101 head, is almost three times as large as the national average (Motsamai, 1990; MAFS, 2013).

LPMS (2012) indicated that after shearing, classing, and weighing a farmer's mohair a receipt is issued against the advance (first) payment by cheque. Although LPMS attempts to get cheques to farmers within a month, delays of up to 6 months have been experienced. After the entire clip has been sold, a second payment may be made if the average realised price is in excess of the advance price. If it is not, the difference is made up by the stabilisation unit. Second payment cheques, which are sometimes substantial, may take a year or more after shearing to reach farmers. The prices paid to farmers selling through this outlet were determined by the markets (Mokitimi, 1996; MTICM, 2012).

MAFS (2003) and Adoro (2012) stated that most farmers (60%) indicated delayed payments and sometimes relatively low prices as the main disadvantages of using LPMS and government shearing sheds. These farmers also indicated that they use government shearing sheds only because of convenience as the sheds are either the only outlet or closest one available.

There are approximately 13 licensed private traders who purchase wool and mohair and there are less than 5 privately owned and relatively small shearing sheds in the country. Despite the relatively few private shearing sheds, they shear about 60% of goats within their locale (Mokitimi, 1996; Adoro, 2012). However, in general, the numbers shorn and handled by these facilities are smaller than those handled at government shearing sheds. The average goat flock, at 21 head, is almost 1.2 times smaller than the national average (LPMS, 2012).

In addition to mohair shorn in the private shearing sheds, private traders also purchase home-shorn fleeces. Although home-shearing is discouraged because of problems of contamination of fleeces with dirt and difficulties of classing, approximately 25% of animals, owned by 30% of stock keepers, are shorn at home. Home-shearing, in general, tends to be done in the more remote areas (MAFS, 2003). For the remote area producer, the cost of driving the flock to a

shed for shearing is high in terms of time lost and distance travelled. Precise data are difficult to come by but estimates are that about one-half of the mohair shorn at home is sold to private traders while the other half is suspected to be sold to smugglers (Mokitimi, 1996).

Traders' prices are gazetted by the government after a committee of traders and government officials agree on the allowable marketing margin. In the event of disagreement, the government has the last word. This margin makes allowances for transportation and handling charges, shed operation and depreciation, and commission. In addition, since traders pay cash upon sale, their marketing margin also includes an allowance for the cost of financing the purchase in advance of sale in South Africa (MAFS, 2003; MTICM, 2012).

There has been a history of wool and mohair smugglers in this country and even today the smugglers still exist in wool and mohair marketing. The smuggling of mohair is illegal because, according to Importation and Exportation of Livestock and Livestock Products (Amendment) Act. 21 of 1984, "no livestock/livestock product shall cross the country borders without issuance of a permit from Livestock division" (Imani Development International, 2007:11). Because their activities are illegal, reliable data on smuggling are necessarily difficult, if not impossible, to obtain (MAFS, 2003). Nonetheless, data on the amount of Lesotho-type mohair sold in magisterial districts just outside Lesotho indicate that as much as 15 to 20% of the mohair (which has a high value per unit weight) may be smuggled. Smugglers purchase fleeces in farmers' villages and from households (Mokitimi, 1996).

Historical data, as well as anecdotal evidence, suggest that smugglers are residual buyers whose business expands or contracts according to the health and efficiency of the two official channels (Rantheba, 1985). Smuggling appears to be undertaken to avoid paying the wool and mohair levy, though today producers have a variety of motivations for selling to smugglers which include to avoid costs of driving flocks to shearing sheds, need for ready cash for emergency needs, and that smugglers purchase mohair from stolen animals since they do not require proof of ownership before the transaction (Mokitimi, 1996; Hunter, 1987).

3.9 Relative performance in the marketing structure

3.9.1 Marketing margins and profits

Before government intervention in the marketing of wool and mohair, there were both theoretical and empirical grounds for believing that private traders did not extract

monopsony profits in wool and mohair purchases. Indeed, between the late 1960s and late 1970s, profits from these transactions were negative (Mokitimi, 1988). While marketing margins were sometimes high, so were storage, transportation and finance costs. In addition, traders faced high risks associated with volatile markets, particularly for mohair; however, marketing margins are inadequate indicators of profit levels (Swallow *et al.*, 1987).

Since government began to interfere in mohair marketing, some factors have operated to enhance the profits of private traders. The first being the reduced number of traders operating in this market, a factor which has enhanced the monopsonistic position. In addition, traders are highly concentrated with only 4 owning all the private facilities handling wool and mohair in 2003 (MAFS, 2003; MTICM, 2012). Although traders face competition from government shearing sheds, Mokitimi (1988) suggests that these two outlets serve different kinds of clientele with different needs.

According to Swallow *et al.* (1987), producers requiring traders' services have to travel longer distances to obtain them, if indeed they are available in their area at all. They are, thereby, placed in a less advantageous position *vis-a-vis* the trader. Although this does not affect the prices paid for a particular class of mohair, it may have an impact on the classes into which fleeces are put. Within limits, traders have discretion in classing fleeces and there have been numerous claims made, both from surveys and by observers, that traders often downgrade fleeces while classing (Mokitimi, 1988; Adoro, 2012).

The second is the guaranteed commission or profit mark-up allowed by government. Until recently, the net prices paid by LPMS and those paid by private traders were almost identical. Between 2008 and 2010, producers received 80% of the gross price for the higher-valued mohair from private traders while those selling through LPMS received 83%. In wool, the producers selling to private traders received 63% of the gross wool price while those selling through LPMS received 65% (Adoro, 2012; Sekonyela, 2012). However, Mokitimi (1996) indicated that this should not be taken to imply that the two outlets operated with equal efficiency since many of the operating costs of the government outlet (shed maintenance, staff salaries, LPMS operating costs, etc) are borne by the government and not charged against mohair payments as they are for traders. If they were net prices paid by LPMS, the producers would be in a much less favourable position.

More recently, this approximate price parity appears to have somewhat changed. Between 2008 and 2011, traders' allowable marketing charges increased a little over 100% for mohair. During the same period the marketing charges deducted by LPMS actually declined by 12% for mohair (MTICM, 2012). Several factors are relevant in this regard: firstly, inflation in Lesotho has been running at the rate of between 8% and 13% per annum during this period, thus, the costs overall have been rising. Secondly, most of the costs incurred by the traders in the informal markets are borne by the government in the form of subsidies to producers marketing through LPMS and they do not appear as deductions from payment cheques (Mokitimi, 1996; MAFS, 2013). Lastly, mohair prices increased by over 50% between 2008 and 2012, and as a percentage of price, margins increased for mohair (MTICM, 2012).

3.9.2 Efficiency considerations

The prices paid to producers using either the LPMS or the private channel were almost the same yet most of LPMS costs were met by government subsidy (Mokitimi, 1996). Since wool and mohair marketing activities are LPMS's major responsibility, it would seem justifiable to allocate at least 60% of its recurrent budget to functions otherwise borne by the private sector. In addition, the cost of permanent shearing shed staff and shearing shed maintenance as well as depreciation are borne by the government and donors (MAFS, 2003). Summing expenditures from both sources and dividing by the amount of wool and mohair marketed through LPMS gives a rough estimate of the government subsidy paid per kilogram of fleece marketed through this outlet. The result is about 15 maloti/rand per kilogram, which was a meaningful share of the mohair prices given that prices ranged between R42.00 and R48.00 in the period between 2007 and 2009 (LPMS, 2009).

With the exception of temporary classers, who are hired for the shearing season, and shearers, who are self-employed, all government shearing shed employees are full-time staff. Many of the government shearing sheds are used only a few months a year, even the busiest are used for only 7 to 8 months. During the remaining months, the shearing sheds as well as 4 or 5 permanent employees at each shearing shed are practically idle (Mokitimi, 1996). Not only do private traders usually have a longer shearing season, but also have greater flexibility to reassign their facilities and employees to other tasks during the idle months (Rantheba, 1985).

3.9.3 Equity considerations

Government shearing sheds serve more than half of wool and mohair producers. The average size of their flocks is much larger than those of producers selling elsewhere (MAFS, 2003). As it has been indicated earlier, producers marketing through LPMS have a number of marketing and overhead costs subsidised by the government and, in addition, have recently (2010-2012) received higher net prices than those selling to private traders. Thus, the substantial government subsidies are going to and benefit mainly the larger producers and this is undesirable from the standpoint of equity (Mokitimi, 1996).

3.10 Major factors limiting mohair production in Lesotho

3.10.1 Poor animal husbandry

Mafisa (1998) and Letsie (2005) highlighted that poor animal management practices have negatively affected mohair production in the country. The most evident detrimental practices include reluctance by farmers to cull undesirable animals despite the adoption of a National Culling and Exchange Programme, the legal basis of which is contained in the Range Management and Grazing Control Regulations of 1980 as amended in 1986. The programme's objective was to coerce the farmers to eliminate unproductive and off-type animals among the flocks across the country (MAFS, 2003). Under the programme, the undesirable animals are described as kempy, coloured and broken mouth goats and sheep. The farmers can either sell these through normal marketing channels or exchange them with improved ewes. The incentive is to exchange two culled sheep or goats for one improved sheep or goat (Mafisa, 1998).

A high rate of overstocking and overgrazing experienced in the country has resulted in a high degree of land degradation (Ratsele, 2014). These together with a lack of supplementary feeding, even during flushing and steaming up, have reduced mohair production levels. Another poor management factor is the reluctance of mohair farmers to engage in strict disease control programmes. For instance, about 30% of farmers do not dip and dose their stock every year (Letsie, 2005).

3.10.2 Institutional factors

Insecure land tenure and access to production credit are major institutional factors on mohair production in Lesotho. The mohair farmers have no private property rights to the land as they use land that is held in common by the King, while its use is controlled through the

chieftainship system (Ministry of Local Government (MLOG), 2013). The situation discourages long term investment in land because property rights affect farmers' development in that secure property rights have an influence through increases in incentives for household and individuals to invest and often also provide farmers with better credit access (MAFS, 2003). Rantlo (2010) argued that where effective demand exists for credit, giving title to land can help producers gain access to credit and improve the functioning of markets. However, Jayne *et al.* (2003) and Van den Berg *et al.* (2007) stated that effectiveness of property rights in facilitating access to credit is also dependent on land resource size and quality as it is believed that land of high quality and large enough to generate meaningful returns will improve repayment capacity of the farmer. Repayment capacity is the main factor that is considered by financial service providers prior to advancing credit (Praghuram and Hymajyoti, 2012).

There are some agricultural traders that provide inputs on credit, although the government does not have a regulatory framework for these agreements (MAFS, 2003). However, Letsie (2005) indicated that these inputs are not timeously delivered by the traders. The late deliveries mean that operations are carried out late with a consequent negative impact on yield. The negative impact of late deliveries of inputs on yield has a negative effect on repayment capacity of the farmers. More often, the repayment schedule is not adapted to the flow of receipts (Paghuram and Hymajyoti, 2012).

Ministry of Trade, Industry, Cooperatives and Marketing (2008) indicated that there has been a rise of informal financial institutions that provide financial assistance to local farmers, but the assistance is often inadequate to cover the full cost of establishments and inputs. Furthermore, the interest rates charged by these institutions are high and the repayment period too short to afford meaningful profits to the farmers.

Most farmers work small areas of land making it difficult for successful farmers to expand and, as a result informal lease agreements have arisen as successful farmers have attempted to increase land established to commercial farming under the constraints of traditional tenure and land size (FAO, 2009). A typical example is the case where farmers rent as small as 2 ha plots in order to expand the area of operation. However, MAFS (2003) indicated that ridiculously high rent charges have rendered successful famers unable to successfully expand.

3.10.3 Poor agricultural support services

The most notable agricultural support that is rapidly declining is the agricultural research service. The Agricultural Research Division is the principal research entity and, according to Molatela (2012), there has been a sharp decline in the budgetary allocation to the division of agricultural research in the last five years. The division of research has experienced an exodus of researchers which threatens the future of public agricultural research in the country. Molebatsi (2011) echoed the sentiments when stating that the division of research is now dominated by staff with low and irrelevant qualifications as well as lack of research background and acumen.

Mahommed (2013) stated that even the National University of Lesotho, the premier institution of higher learning, has experienced a sharp decline in research grants which has led to no research being undertaken in the Faculty of Agriculture and related fields. Olaleye (2013) supported this when indicating that it is a big challenge to receive research articles for the Lesotho Journal of Agricultural Sciences, the only agricultural journal in the country, which proves the lack of agricultural research in the country and few research articles are published in international and recognised journals.

Provision of agricultural extension services is another constraint to mohair production. The Department of Field Services is characterised by a lack of mohair specialist extension services across all levels including sub-resource, resource centre, district and national levels (Adoro, 2012). This is reinforced by Mafisa (1998) and Letsie (2005) when stating that there is major shortage of qualified livestock attendants at livestock improvement centres throughout the country. Compounding the lack of expertise is the reduction of short term training for the staff as well as the suspension of the paid study leave for staff (Molebatsi, 2011).

3.10.4 HIV/AIDS

According to FAO (2006), there is still a lack of reliable data on the extent and nature of the impact of HIV/AIDS, but it is clear that the disease has both a quantitative and qualitative effect on the agricultural sector in Lesotho. The impact is on labour availability, mobility and productivity, investment in the sector, the retention of knowledge about farming practices and the efficiency of extension services. The burden of work falls on inexperienced, younger and weaker, older household members (MAFS, 2012).

It is important to emphasise also, that it is not just the ill that are affected by the pandemic of AIDS. The care responsibilities of the healthy in households with AIDS patients seriously limit their movements and, therefore, a lack of time for agricultural production. In addition, a significant part of the extension staff is infected with the disease which has a negative effect on the efficiency of field services (MAFS, 2003).

3.10.5 Rangeland degradation

The country has experienced rapid rangeland degradation since 1986 and this has resulted in reduced livestock numbers and productivity (Pitso, 2011; Food and Agricultural Organisation, 2005). The population of goats has declined from 1 200 000 in the 1986/7 season to slightly more than 900 000 in 2000 (Chapeyama, 2004; Marake, Mokuku, Majoro and Mokitimi, 1998). The population had declined to about 700 000 in 2005 although there have been signs of recovery as there were more than 800 000 goats in the 2010/11 season (MAFS, 2012). Many studies, including Daemane (2012), Marake *et al.,* (2000) and Chapeyama, (2004), identified overgrazing as the main cause of the reported rangeland degradation as communities increase livestock numbers to maximise individual benefits from communal resources. This is in agreement with what Hardin (1968) termed "tragedy of the commons" whereby rationality influences each herdsman to seek maximum utility (Mbatha, 2007). The utility maximising has resulted in the positive outcome of increasing livestock numbers and a negative one of environmental degradation for all herdsmen due to overgrazing (Hardin, 1968). There has been poor grazing land use and management in most parts of the country that has had detrimental effects on the livestock sector (Central Bank of Lesotho, 2014).

3.11 Mohair processing

Historically, there has been little activity in terms of the processing of mohair in the mountain kingdom and almost all the produce has been export market oriented (Mokitimi, 1996). The local textile producers have been relying on the imported inputs even though the raw materials originate from within the economy (Lee, 2014). In the late 1970s, the government together with development partners established the wool and mohair spinning cooperatives and this was unsuccessful as all such cooperatives generally collapsed in the infancy stage (Lesotho National Development Cooperation (LNDC), 2009).

However, there have been signs of revival of the processing sector as some spinning companies and cooperatives were established in the early 2000s. The cooperatives' main

purpose is the income generation through yarn production and keeping the costs down for the local weavers who currently source almost all their finished yarn from South Africa and other countries (LNDC, 2009). There is only one company involved in mohair processing with the aim of producing blankets, scarves, beanies, floor rugs, ponchos and gloves which are in demand in Lesotho and with visiting tourists. They also have been supplying companies in the USA with their products on a contract basis (Maseru Business Chamber, 2013). Both the company and cooperatives revealed that they struggle to get mohair supply from the local producers since most of them prefer the LPMS and traders and this has a negative impact on their business performance (MTICM, 2012). One probable reason for mohair producers to shun these businesses is the level of raw mohair prices relative to those offered by LPMS and traders.

3.12 Synopsis

This chapter has described the structure and performance of the Lesotho mohair industry. Mohair plays a critical role in the economy of the Kingdom of Lesotho. It is critical for improving the livelihoods of the rural communities. Given the present situation in terms of the demand, free trade and presence of government shearing sheds and private traders, the sector presents opportunities to the small-scale mohair farmers to improve their livelihoods. However, at present, the small-scale farmers seem unable to realise substantial gains from the sector. The sector is constrained by a number of external and internal factors which pose a challenge to all stakeholders in the mohair sector to come up with a comprehensive strategy that will ensure that these farmers are productive and effectively integrated into the commercial economy.

The chapter has provided information that the Lesotho mohair sector, particularly marketing, is indeed challenged and it will be followed by a chapter describing the methods and techniques that will be used to investigate the institutions that limit the integration of small-scale mohair farmers into the commercial agricultural economy in Lesotho. The purpose of the said investigation is to address the institutional problems hindering the development of an effective marketing structure for the commercialisation of small-scale mohair producers in Lesotho.

CHAPTER 4
RESEARCH METHODS

4.1 Introduction

This chapter describes the study area and reviews the research methods used in investigating the integration of small scale mohair farmers into the commercial agricultural economy in Lesotho. The research method follows a predominantly qualitative approach with some quantitative element in the later stages. The method was chosen based on background information from the literature and involved carrying out in-depth research with a sample of small-scale mohair farmers in Lesotho. The chapter further provides a description of data collection tools and procedures, as well as the methods of analysis used in the research. The method of analysis was chosen to suit the nature of data collected from a sample of respondents. Furthermore, the choice of the qualitative analytical method is justified, and the potential weaknesses associated with it are noted. Thereafter, a set of research limitations is presented.

4.2 Study Area

4.2.1 Location of the country

Lesotho is a small country situated between latitudes 28° South and 31′ South of the Equator and Longitudes 27° East and 30° East of the Greenwich (Central Intelligence Agency, 2016). It is a geographic enclave surrounded by the Republic of South Africa (Figure 4.1). "The mountain kingdom" or "The Kingdom in the sky", as it is called by virtue of its plateaus, hills, mountains and rugged terrain, covers about 30 340 square kilometres of the highlands ranging from 1 500 metres at its lowest level to 3 300 metres at its highest level. The country has a temperate climate with cool to cold dry winters and hot wet summers (Baffour, 2003).

Figure 4.1: Country where the research was conducted

Source: Central Intelligence Agency, 2011

4.2.2 Description of the country

Geographically, Lesotho is surrounded by South Africa, to make it one of only three such entities in the world (the others are the Republic of San Marino, an enclave in Italy, and the Vatican City, an enclave in the city of Rome, also in Italy). It is divided into 10 districts, namely: Mokhotlong, Thaba-Tseka, Butha-Buthe, Leribe, Berea, Maseru, Mafeteng, Mohale's Hoek,

Quthng and Qacha's Nek. All these districts are distributed across the different agro-ecological zones of the country (Mphahama, 2011). The distribution is shown in the Map of Lesotho presented in Figure 4.1.

4.2.3 Population and livelihoods

The population of Lesotho was estimated at 2.1 million people in 2012 (United Nations International Children Emergency Fund, 2015), the majority of whom earn their livelihoods from agriculture. An estimated 85% of this population resides in the rural areas. This group of Basotho is mostly engaged in an informal occupation (Van Zyl *et al.,* 1996) and almost half of the nation lives on less than one US dollar a day (CBL, 2015). The informal occupation only accounts for a small part of the rural household income. The major share of rural household income is derived from remittances from males who work on the South African mines (Lesotho Bureau of Statistics, 2012). Key factors behind rural poverty are a lack of access to resources, causing a lack of access to services and markets, a lack of productive assets such as mechanised farm implements which constrain productivity, and a lack of labour. The latter is a true scenario in Lesotho, as some family members are forced to work for other families to supplement the meagre household income thereby causing smaller yields on their own farming operations.

4.2.4 Geographical and soil features in the country

The lowlands and foothills cover about 30% of the country's land area and are characterised by presence of Duplex and Reddish soils that fall under the Alfisols group (Maro, 2011). These areas form the bulk of the productive arable land and are intensively used for cropping (Maro, 2011). The importance of these lands' geographical features to Lesotho is to determine the country's suitability for its agricultural activities. They also influence the adaptability and the distribution of different types of crops (Rooyani and Schmitz, 1987). On the other hand, the mountains in Lesotho and the Orange River Valley are dominated by the dark soils known as Mollisols and these soils form the backbone of livestock production, small stock in particular (Johnston *et al.,* 2012). The Kingdom is a low-income and food deficit country (LIFDC) but has water, agriculture and grazing land, and some diamonds and other minerals as its natural resources.

The country's main products include beans, livestock, maize, sorghum and wheat, though the only agricultural exports are wool and mohair (LNDC, 2014). Only about 10% of the country's

land is suitable for agriculture and more than 80% of its people are engaged in subsistence farming (Baffour, 2003). Crop production is divided among two major cropping sectors, namely cereal crop production and horticulture production (Mosenene, 1994). In addition, most farmers raise livestock to supplement crops and maintain "food security" and animal husbandry is important everywhere and is often the only revenue source in the higher elevations. Sheep and goats that produce meat, milk, and very high-quality wool and mohair are the most important animals in the country (Matebesi, 2014).

4.2.5 Climatic Conditions

Lesotho has a sub-tropical to temperate climate of warm wet summers and cold dry winters. During the months December and January, sometimes including February, there is a hot dry spell. This is harmful to crops since it occurs when flowering occurs or fruit setting is initiated (Makosholo, 2005). Rainfall is erratic and also unseasonal, thus the drought phenomenon has become a constant rather than an occasional incident. Rainfall is of a short duration but of a high intensity (Maseatile, 2011). Frost is common and as indeterminate as hail storms. Because of its climate, therefore, it has been said that crop farming especially is a rather risky business in Lesotho (Mosenene, 1994).

4.3 Economic situation in Lesotho

Lesotho's economy faces a number of challenges, some of which are not new, while some are recent and largely reflect the ongoing impact of the global economic crisis. These problems need to be addressed for the economy to be on a sustainable growth and development path, which is necessary for employment creation and poverty reduction (Central Bank of Lesotho, 2015).

4.3.1 Economic hardships since independence

Lesotho has experienced various challenges to economic growth since independence. By 2010, it was still classified as a least developed country (World Bank, 2014). The country relies on remittances from miners employed in South Africa and customs duties from the Southern Africa Customs Union with the latter accounting for more than 45% of government revenue (Lesotho Government, 2015). As the number of mineworkers has declined steadily over the past two decades, a small manufacturing base has developed based on farm products that support the milling, canning, leather, and jute industries (Lesotho Bureau of Statistics, 2012). Since Lesotho became eligible for trade benefits under the Africa Growth and Opportunities

Act (AGOA) in 2000 and resumed exports to the United States in 2001, Lesotho's textiles and clothing manufacturing sub-sector has grown substantially though not related to mohair. Nonetheless, the road has not always been smooth. The phasing-out of the multi-fibre agreement in 2005 resulted in a decline in the sub-sector's contribution to GDP in 2005 and 2006. More recently, Lesotho's textiles and clothing manufacturing sub-sector has been negatively affected by the global economic crisis and the related slump in consumer demand in the United States (Central Bank of Lesotho, 2015).

4.3.2 Manufacturing sector

For almost 15 years, the manufacturing sector – particularly textiles and clothing – has been an important driver of economic growth and employment creation. According to Lesotho's Bureau of Statistics, from around 10.4% in 1999, its contribution to GDP had grown to 21.3% by 2002. While this had moderated to 18.9% by 2008, the advent of the global economic crisis saw the percentage dropping significantly, and manufacturing presently makes up 11.3% of GDP (African Development Bank, 2014).

Manufacturing concerns in Lesotho comprise food products and beverages, textiles, clothing, footwear and leather, and 'other manufacturing', consisting of electrical and electronic appliances, furniture, ceramics, handicrafts and jewellery. Textile and garments firms, which are predominantly owned by foreign companies, are the dominant industry, followed by food products and beverages (Morgan-Jarvis, 2015).

The textiles and clothing industry has played a vital role in Lesotho's economic development. Investment in the 1990s, primarily by Taiwanese and Chinese companies, allowed the country to take advantage of a number of preferential trade agreements. These included the ACP-EU agreement, which provided duty-free access to the European Union (EU) for clothing originating in Africa, Caribbean and Pacific (ACP) countries, and the AGOA, which gives eligible countries in sub-Saharan Africa duty-free access to US markets. Textiles and clothing firms create a substantial portion of Lesotho's formal sector jobs and employ the vast majority of workers in the manufacturing sector (89.3%), most of whom are women. This sector is the second largest employer after government and has provided employment to around 45 000 Basotho people (Lesotho National Development Corporation, 2012).

4.3.3 Mining sector

Diamond mining in Lesotho has grown in recent years and may contribute 8.5% to GDP by 2016, according to the 2015 forecasts. A significant number of Basotho have been employed in the sector for the last 10 years, though mostly at junior and labourer levels as the country still lacks human capital with competencies in various aspects of mining. All the mines are owned by foreign companies with the Lesotho government owning a maximum of 30% stake in all mining companies (Central Bank of Lesotho, 2011; Lesotho Government, 2015).

4.3.4 Agricultural sector

The economy is still primarily based on subsistence agriculture whose contribution towards the GNP stood at 10% in 2004, a drop from 50% in the seventies (Ministry of Agriculture and Food Security, 2011). This decline was attributed to a decrease in agricultural production and has manifested in the abject poverty amongst Basotho and has resulted in the flood of "development" assistance into the country. Focusing on poverty has helped outsiders to a better appreciation of how they can support Basotho in alleviating some of the hardships that have so constrained (mostly institutional constraints) smallholder farmers (Turner, 2001:3). However, agricultural productivity continues to decline (Ministry of Agriculture and Food Security, 2003) and this has necessitated the introduction of the Agricultural Sector Investment Programme (ASIP), the prime aim of which was to improve productivity, commercialise agriculture, and especially the mohair sector into a competitive sector, responsive to market signals (Likoetla, 2014). Related sub-strategies of the ASIP include the diversification of the agricultural base, embracing a switch to high value products, intensive livestock production and promotion of rural non-farm activities (Ministry of Agriculture and Food Security, 2012). Sales of livestock, wool, mohair, milk and meat make important contributions to the household economy, and a large number of animals are viewed as a desirable means of accruing savings. Livestock production is therefore a more stable source of income (Mphahama, 2011).

4.4 Mafeteng district

4.4.1 Description of the study area

The study was conducted in the Mafeteng district which is in the south-western region of the country. Mafeteng has an area of 2 119 km^2 and a population of approximately 330 000 (Lesotho Bureau of Statistics, 2012). In the north and east it shares a border with Maseru and

in the south, it shares a border with Mohale's Hoek district while in the west it shares a border with Free State province towns of Wepener and Zastron.

4.4.2 Agro-meteorological conditions in the area

The district is characterised by three of the agro-ecological zones of Lesotho. It has a lowland zone, which is found mainly in the southern part, a highland zone, which is found in the north-eastern parts, while the foothills are found mainly in the north-western parts. This is the only district characterised by these three agro-ecological zones (Mphahama, 2011).

The area is renowned for being perennially affected by natural disasters such as storms. It is semi-arid with highly erratic rainfall and the dry weather conditions in the Mafeteng district in general means that crop production, fields and gardens, are likely to be affected by drought unless there is a means of irrigation, which unfortunately does not exist in the district (Sechaba Consultants, 2014). This has rendered the area unsuitable for crop production, particularly crops that demand a high water supply.

Nevertheless, the district has proved to have potential and suitability for livestock production and this has been attributed to soil features, grasses and shrubs especially in the foothills and highland regions and the districts accounts for atleast a quarter of mohair produced in the country (Matebesi, 2014; Sechaba Consultants, 2014; Department of Range Resources Management, 2014).

4.5 Socio-economic situation of the district

The district is characterised by high levels of unemployment and poverty among the citizenry and has the retail sector as its main business with informal trading as one of the main contributors to the local economy. There is significant agricultural production practiced in the district. Livestock farming is the predominant type of farming and the wool and mohair sectors are relatively more productive than the other agricultural sectors in the district. Wool and mohair farming are the main contributors towards the local economy (Rantlo, 2015).

4.6 Research design

In this study, a combination of both the qualitative and quantitative approaches are employed because the study addresses the phenomenon from different perspectives. This approach is useful when studying subjects of research interest within their context and considering the subjective meaning that people bring to their situation and then providing information and

explanations that are 'adequate at the level of meaning' (Lincoln and Guba, 2000). Traditionally, quantitative research follows a positivist paradigm while qualitative research follows a post-positivist approach (Lincoln and Guba, 2000:165; Hyde, 2000). Post-positivism is a paradigm that includes positivism and empiricism (Hyde, 2000). In post-positivism, theory and practice are not separated and it emphasises meaning and creation of new knowledge that can be used to challenge or support theory (Ryan, 2006). Based on this view, this study followed a post-positivist approach although numerical data was used when deemed necessary and conclusions made were based on both qualitative and quantitative evidence.

4.7 Data collection

Data were collected from a randomly selected sample of small-scale mohair farmers using various marketing channels available in Lesotho. Both secondary and primary sources were used to provide necessary data in this study. Secondary data sources used include mohair sector related documents available from the Wool and Mohair Grower Associations, government and other stakeholders. The other secondary data sources included journals, books, policy briefs and the internet, among others. A questionnaire was designed and used as a tool for primary data collection and the survey was conducted in November 2014 (a pilot study) and the again in December 2015 up to March 2016. The questionnaire was administered to the people who were identified as key informants in a farm set-up.

The informal interviews involving other stakeholders were used for supplementary purposes and they were conducted with some officials' major stakeholders in the mohair industry, including ministries of small business development and marketing, agriculture and food security, forestry and land reclamation, trade, Lesotho National Farmers Union, LPMS, Lesotho Mounted Police Services, Private Traders, and the Central Bank of Lesotho. According to Crawford (1997), informal interviews provide additional and/or valid information that may provide in-sight knowledge of the research field. One purposely selected informant from each stakeholder organisation was included in the study.

4.7.1 Sampling procedure

Respondents were chosen to represent small-scale mohair farmers in the Mafeteng District of Lesotho. The district was chosen because of its large numbers of active small-scale mohair farmers that use diverse marketing channels. The district accounts for about 29% of the

country's population of small-scale mohair farmers and around 31% of the recorded national mohair production is from the district (MAFS, 2013).

Purposive sampling was employed in the study based on the criteria of marketing channels within the Lesotho mohair sector. Mohair marketing channels range from public to private channels. Based on this, the study used LNWMGA members as examples of farmers who use public marketing channel while the farmers who were not affiliated to LNWMGA were classified as farmers who used private marketing channels. Of a population comprised of about 220 LNWMGA and 280 non-LNWMGA small-scale farmers, the study randomly interviewed 22 farmers from the LNWMGA and 28 farmers that sold to private traders in the study areas, and all target farmers agreed to and participated in the interviews. The decision to use a sample size of 50 small-scale mohair farmers was reached after consideration of time and cost of extended surveys and the subject of research interest. Given the qualitative nature of the research and homogeneity characterising small-scale mohair farmers within the area and each stratum (Matebesi, 2015; LPMS, 2014), a large sample was not necessary. Fink and Kosecoff (1985) indicated that a sample size is usually influenced by time and cost, available resources, and the level of accuracy required. According to Leedy and Ormrod (2005), when there is great similarity with regard to subject of research interest a large sample is not necessary. An ideal sample size should provide the highest level of accuracy for the resources expended.

Some farmers are known to sell their produce to smugglers (Ministry of Trade, Industry, Cooperatives and Marketing, 2012) and information concerning knowledge of illegal mohair sales was gathered from sampled (LWMGA and non-LWMGA) farmers, and police and customs records were also consulted in this regard. In choosing these groups, the study sought to maximise inter-group variation and allow for comparative institutional analysis (Weaver-Hightower, 2013).

The technique of random sampling was employed within each stratum to choose sampling units and this technique ensured that each unit had an equal chance of being chosen for the survey (Leedy and Ormrod 2005). In this study, farming households were taken as sampling units and the individual household's head being the person interviewed. Nevertheless, during the survey some household heads were not available. In this case, any person above the age

of 18 and well informed about the respective household's farming and other related issues were interviewed instead.

4.7.2 Questionnaire design

A structured questionnaire was designed and used to collect data from small-scale mohair farmers in Mafeteng district. The questionnaire included a mixture of both close-ended and open-ended questions. The open-ended questions were predominantly due to the qualitative nature of the study. The close-ended questions allow respondents to choose from a list of possible answers while open-ended questions allow detailed explanation from respondents (Reja, Manfreda, Hlebec and Vehovar, 2003). When using semi-structured questionnaires, responses are guided to remain focused while detailed responses provide an in-depth knowledge of the research field (Opdenakker, 2006).

The questionnaire was pre-tested in Kolo area of the Mafeteng district to identify any problems before doing the actual survey which ensured that problems were amended before the questionnaire was ready to be taken to the field. The pre-testing of tools helps to improve data capturing and it also helps to identify areas of close focus when conducting interviews (Czaja, 1998). The exercise was done in the rural areas located in the district of Mafeteng and 10 households were interviewed. The refined questionnaires for the actual research were delivered by the researcher and the enumerators to the respondents giving them oral and written instructions. The face-to-face interviews were conducted in the respondents' dwellings and lasted for an hour and half at most. According to Potter (2003) and Leady and Ormrod (2005), the face-to-face approach ensures that all questions are clearly understood by the respondents and allow further probing when particular answers were encountered until a point of clarity is reached. The use of interviewer administered questionnaires also supports minimal loss of data, although the method is relatively expensive, especially if the respondents are highly dispersed (Berg, 2009).

The questions were written in clear and simple English but the interviews were conducted in either Sesotho or English depending on the preferences of the respondents. The questionnaires were administered by enumerators with high levels of proficiency in both English and Sesotho. The own-choice of language approach was employed because respondents often feel free to express themselves when they are using a language they are

comfortable with, but there is a risk of losing data and information during language translations (Babbie, 2008).

The questions revolved around demographics, policy issues, agriculture and mohair production, mohair marketing, mohair farming business, mohair institutions and organisations, and opinions about the entire mohair sector, among others (Appendix 1).

Unstructured interviews were conducted with officials from the Department of Small Business Development and Marketing, Department of Agriculture and Food Security, Department of Forestry and Land Reclamation, Department of Trade, Lesotho National Farmers Union, LPMS, Lesotho Mounted Police Services, Private Traders and the Central Bank of Lesotho. The purposes of these interviews were to determine the officials' perceptions of the mohair sector situation and how it affects smallholder farmers and how policy challenged or supported the situation in Lesotho. One official was interviewed from each department and these officials were selected by their respective departments based on their knowledge in terms of the information that was sought by the study.

A voice recorder was used to record conversations during the interviews and this allowed the interviewer to focus on the conversation, which reduced the time that was spent on taking notes. According to Halcomb and Davidson (2006), voice recording allows later transcription which is important because it records data that cannot be recalled from memory, and allows repeated and thorough analysis of respondents' responses. However, the main disadvantage of voice recording is that some people do not feel comfortable with being recorded and might be inhibited to respond truthfully for fear that the responses may be used against them (Opdenakker, 2006).

4.7.3 LPMS and government documents

LPMS records and government policy documents were used as secondary sources of data. These documents and records were used for gathering data, which was relevant and necessary for the research but had been omitted in the questionnaire or which the respondents were not able to provide during the interviews. These sources were also used for capturing quantitative data. According to Berg (2009), written documents are useful for both complementing primary data and comparing the accuracy of interview responses.

4.7.4 Research Ethics

In any research involving human subjects, it is important to consider the ethical issues (Stevens, 2013) and the researcher should be able to collect data but still be able to protect the interests of the respondents. The researcher should be able to build trust of the respondents, which may motivate the respondents to contribute more openly and truthfully to the research. This can be achieved mainly by considering ethical issues during the interviews (Zeni, 1998). In this study the ethical issues were carefully considered, and an effort was made to promote values that are essential for collaborative work. The researcher first informed the respondents about the nature, aims and expectations of the study and asked for the consent of all respondents before interviewing. The respondents were assured that their responses would remain confidential and this principle was being upheld by the researcher throughout the survey. While interviewing, caution was taken not to question the participants' religious, political or cultural beliefs or any other sensitive issues. At the beginning of interviews, respondents were made aware of the presence of the voice recorder and were asked for permission to record responses. After the interviews, the researcher offered to send respondents, who had requested, the final results of the study to check for accuracy of the recordings.

4.8 New institutional economics analysis of the institutional factors

There has been a growing body of critical scholarship being brought to bear on, among other things, the methodological assumptions of neoclassical economics (Fullbrook, 2004; Lawson, 2003). Going under the broad umbrella of heterodox approaches, a number of distinct theoretical perspectives have placed the spotlight on the failings and inadequacies of mainstream methodology. According to North (1990), institutions are a key part of the structural make up of societies. Thus actual human behaviour is explicable in terms of, or conditioned by, the institutional environment (Mooya, 2009; North, 1990). NIE is associated with a strong empirical epistemology and inductive methodology (Hall and Elliott, 1999). At the core of the NIE is a common methodological concern with comparative analysis of institutions at all levels (Menard and Shirley, 2005).

4.8.1 Challenges of doing institutional analysis

There are several difficulties that need to be overcome in undertaking any form of institutional analysis. According to Ostrom (2005), some of these key difficulties involved in studying institutions include the following:

- While the buildings in which organised entities are located are quite visible, institutions themselves are usually invisible, making identification and measurement difficult.
- The term "institution" is used to refer to many different types of entities including organisations as well as the rules, norms, and strategies used to structure patterns of interaction within and across organisations. Multiple definitions of institutions make it difficult for researchers to make progress.
- Given the multiple languages used across disciplines, a coherent institutional framework is needed to allow for expression and comparison of diverse theories and models of theories applied to particular puzzles and problem settings.
- Decisions made about rules at any one level are usually made within a structure of rules existing at a different level. Thus, institutional studies need to encompass multiple levels of analysis.
- At any one level of analysis, combinations of prescriptions, attributes of the world, and communities of individuals involved work together in a configurational, rather than an additive, manner. Thus, the impact of one type of institution is not independent of the configuration of other institutions. The effect of changing property rights, for example, will vary from society to society due to differences in their institutional structure. While *ceteris paribus* conditions are essential for undertaking any theoretical work involving institutions, the researcher needs to know the values of other variables rather than asserting that they are held constant.

Further challenges were stated by Hall and Elliott (1999: 1278, citing Nugent, 1997) when indicating a list of methodological challenges confronting institutional economists. The key ones included the defining and operationalising the term 'institution', identifying how institutions are determined as well as the effects of institutions given their often invariant nature.

4.9 Data Analysis

4.9.1The institutional analysis and development (IAD) framework

The Institutional Analysis and Development Framework is one of the most significant breakthroughs in the development of tools for doing institutional analysis (Mooya, 2009). It draws on the foundations of many disciplines, and it provides a useful tool that can be used to analyse any type of institutional arrangement (Ostrom, 2005). There are frequently encountered situations and some universal components present in all markets and hierarchies. An institutional analysis framework should identify the major types of structural variables present to some extent in *all* institutional arrangements, but whose *values* differ from one type of institutional arrangement to another.

Central to IAD is a conceptual unit called the *action arena* which can be used to analyse, predict, and explain behaviour within institutional arrangements. Action arenas are defined as the social space where individuals interact, exchange goods and solve problems, dominate one another, feel guilty, or fight (Andersson, 2006). By this definition, the mohair industry can easily be conceived as an action arena.

Action arenas are an amalgamation of action *situation* and the *actors* in that situation. An action situation can be characterised using seven clusters of variables: (1) participants, (2) positions, (3) outcomes, (4) action-outcome linkages, (5) the control that participants exercise, (6) information, and (7) the costs and benefits assigned to outcomes (Ostrom, 2010). These clusters of variables provide a good framework for a descriptive analysis of mohair industries in specific locations. An *actor* is defined as an individual or a corporate actor.

Mohair industries are of course characterised by numerous participants, occupying various positions such as buyer, seller, broker, regulator, among others (Mohair South Africa, 2015). This industry produces a range of outcomes related to specific actions undertaken by participants (Jordaan, 2005). The ability of participants to achieve certain outcomes, in turn, depends on their agency, i.e. the extent to which they as individuals are free to determine courses of action in the face of structural constraints (Mooya, 2009). The information set available to the participants determines the choices that participants must make (Nevid, 2009). Finally, the costs and benefits assigned to specific outcomes sets the incentive structure, influencing what actions will or will not be undertaken (Ostrom, 2010).

An institutional analyst can take two additional steps after an effort is made to understand the initial structure of an action arena. One step digs deeper and inquires into the factors that affect the structure of an action arena. From this vantage point, the action arenas, such as the mohair industry, are viewed as a set of dependent variables influenced by other factors (Figure 4.1). These factors affecting the structure of an action arena include three clusters of variables: (1) the rules and norms used by participants to order their relationships, (2) physical and material conditions obtaining in the relevant community, and (3) the structure of the more general community within which any particular arena is placed (Kiser and Ostrom, 1982).

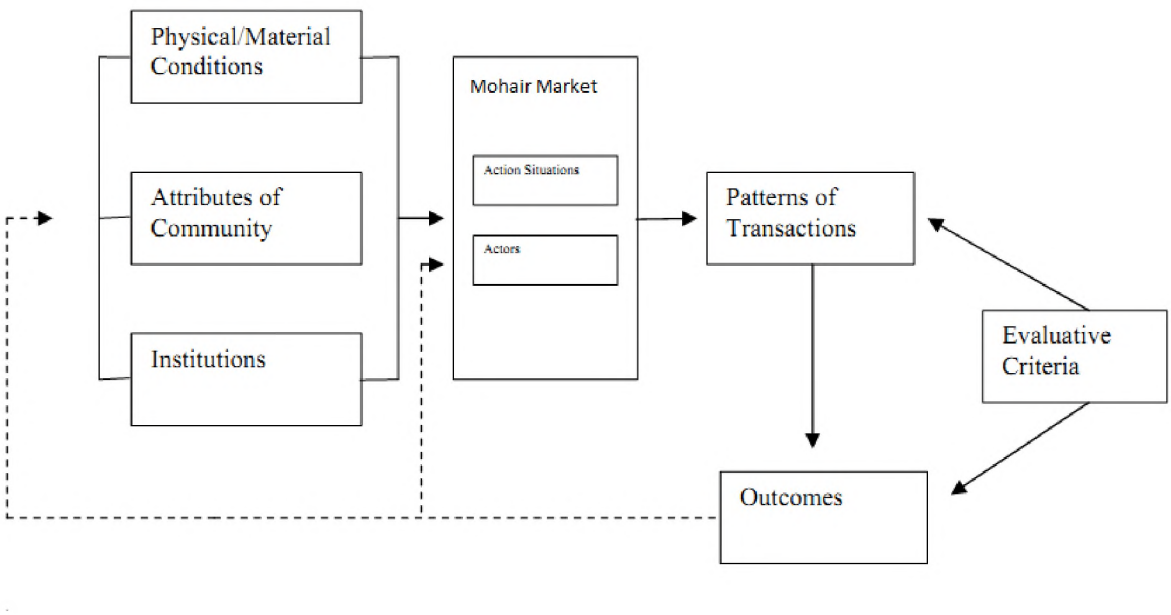

Figure 4.2: A framework for mohair industry analysis

Source: Adapted from Ostrom, 2005: 829

Rules and norms refer to formal and informal institutions respectively. Rules include systems of property rights while norms include traditions, value systems, and sociological trends, among others. These were devised to facilitate coordination or govern relationships between individuals or groups (Kherallah and Kirsten, 2001).

While, as a rule, configuration affects all of the elements of an action situation, some of the variables of an action situation (and thus the overall set of incentives facing individuals in a situation) are also affected by the *physical and material* conditions. What actions are

physically possible, what outcomes can be produced, how actions are linked to outcomes, and what is contained in the actors' information sets are affected by the world being acted upon in a situation. The same set of rules may yield entirely different types of action situations depending upon the types of events in the world being acted upon by participants (Andersson, 2006).

A third set of variables that affects the structure of an action arena relates to the community. The *attributes of a community* that are important in affecting the structure of an action arena include the norms of behaviour generally accepted in the community, the level of common understanding potential the participants' share about the structure of particular types of action arenas, the extent of homogeneity in the preferences of those living in a community, and the distribution of resources among those affected (Andersson, 2006). The term *culture* is frequently applied to this bundle of variables.

Conceiving the mohair industry as an action arena within the IAD framework represents a methodological quantum leap. The concept of the action arena captures the dynamic, transactional nature of this industry. It draws attention to the fact that the mohair industry is dependent on, among others, institutional arrangements for its structure and functioning. The concept elevates the profile of industry participants, making them a focal point of analysis. All in all, the concept of the mohair industry as an action arena is a significant improvement in perspective over the traditional neoclassical approach. As the literature indicates, the neoclassical approach tends to focus on prices and quantities, and ignores or assumes away both institutional structures and the defining characteristics of the action arena (North, 1990; Mooya, 2009).

A conceptualised institutional analysis development framework derived from Ostrom (2005) was used for descriptive analysis. The researcher applied a qualitative analysis to farmers' responses on access to the investigated institutional factors and the way they (farmers) perceive the impact of such factors in promoting mohair production and marketing in the study area. Based on the IAD framework depicted in Figure 4.1, it is assumed that *physical and material conditions, attributes of the community and institutions* will influence the action situation by farmers. The action situation is assumed to yield either positive or negative outcomes. However, on the other hand, it is assumed that if incentives are provided for

any given course of action, the outcome would be positive given the availability, access and suitability of the *physical and material conditions, institutional arrangements* as well as *attributes of the community* (Ostrom, 1990).

The research applied a qualitative analysis to small-scale mohair farmers' responses in relation to the investigated institutional factors and the way they (farmers) perceived the impact of such factors on promoting mohair production and marketing in the study area (Figure 4.1). The t-tests, frequencies and mean values were employed as the main statistical indicators.

4.9.2 Analysis of institutional and transaction cost factors influencing integration of small-scale mohair farmers into the commercial markets

A qualitative approach to the identification of institutional factors influencing smallholder participation in formal, informal and illegal markets was adopted in the study because of the predominantly qualitative data gathered. The qualitative analysis was adopted in order to avoid the complications that come with quantifying of the institutional factors which often necessitates data manipulation in order to make it conform to models and expectations (Oosthuizen *et al*,. 2005).

Institutional factors that were argued to have had an influence on smallholders using formal markets and smallholders using informal markets were highlighted and the recurrent factors were isolated for analysis and discussion. In that regard, New Institutional Economics and the Institutional and Development Framework were employed for guidance. The analysis employed, among others, North's (1990) theoretical propositions in discussions of institutions and transaction costs.

The magnitude of recurrent institutional and transaction factors was evaluated based on the number of respondents citing a particular factor expressed as a percentage of the total number of respondents using the specific market channel under consideration. The results were tested for significant differences between the market channels for each factor using SPSS and Microsoft Excel, the Fisher exact and ANOVA test. The relative weights of each factor were then added and compared for both market channels to identify the significant institutional factors influencing small-scale mohair farmers' participation in formal and informal markets.

The institutional framework of analysis facilitates the identifying and describing all factors that affect development and their actual impact on development. It facilitates full understanding and explanation of the economic system (Ostrom, 2005). This method of analysis is not founded on rigid and prescribed guidelines aimed at certain expected outcomes. The methods designed in such a manner often lead to explanation of the real situation, credible findings and conclusions as data is not manipulated in order make it conform to models and expectations (Oosthuizen *et al.*, 2005).

Mbatha (2007) used a similar approach in the analysis of institutional factors that impacted on rural economic development in the Eastern Cape Province of South Africa. Strydom *et al.* (2012) employed this approach when identifying the transaction cost factors in their study "Reduction of transaction cost within the South African potato processing industry". The method proved to be a good fit to their qualitative data and was also found to be suitable for the relatively small size of the sample for that study.

4.10 Limitations of the analysis tools

In investigating the institutions that limit the integration of small-scale mohair farmers into the commercial agricultural economy, there were different methods that could have been used but the study drew from the arsenal of NIE and IAD analyses. The study investigated the institutions limiting the integration of smallholders that used formal and informal markets but did not measure the transaction costs associated with this integration (it only identified the transaction cost factors). This may hinder the study from providing a comprehensive picture of the factors that limit the integration of small-scale mohair farmers into the commercial economy and perhaps failure to develop an effective marketing strategy for produce from small-scale producers.

The reason for not measuring the transaction costs was that their measurement still remains a big challenge in economic analysis. Quantitative measurement of transaction costs and quantification of institutions still remain as major hurdles when attempting to account for the impact of these costs (Jordaan and Grove, 2010; Maltsoglou and Tanyeri-Abur, 2006). Although there is consensus in the literature on the causes of transaction costs (Jordaan and Grove, 2010), the extensive measurement problems in the empirical analysis of transaction cost economics because of lack of unanimity on the measurement of variables have led to the

studies in transaction economics applying proxy variables to specific attributes (Illukor *et al.,* 2015). A number of recent studies that applied Transaction Cost Economics include, amongst others, Hobbs (1997), Mantungul, Lyne, and Ortmann (2001), de Bruyn *et al*., (2001), and Jordaan and Kirsten (2008). Except for Milagrosa (2007) and Jordaan and Kirsten (2008), all the studies used proxy variables to represent transaction costs in analyses to explain marketing behaviour. Milagrosa (2007), on the other hand, assessed the levels of transaction costs associated with alternative governance structures. She assesses the attributes of the transaction associated with the respective governance structures for vegetable marketing in the Benguet Province in the Philippines. Although she too uses proxy variables to represent transaction cost causing attributes, she compares respective governance structures based on the levels of the transaction cost associated with it.

Therefore, for one to have well informed conclusions on the institutions that limit market integration of smallholders, the analysis of all the limiting factors should be properly and comprehensively performed. The institutions and transaction costs influencing or associated with market integration should be measured and quantified in order to develop an effective marketing structure for the commercialisation of small-scale farmers.

4.11 Reliability and Validity

Patton (2002) and Weaver-Hightower (2013) indicated that it is important to measure the level of reliability and validity in both qualitative and quantitative research. Reliability means the consistency and dependability of the data in quantitative and qualitative research respectively, while validity refers to trustworthiness of the data and research in general (Punch, 2005). Nevertheless, Lincoln and Guba (1985) stated that the two aspects are closely related. Validity and reliability can be tested when the research is still in progress or at the end of the research, using various methods (Lincoln and Guba, 2005). Data triangulation, where data were obtained from different sources, was used to test for reliability and validity in this study. Data were obtained using interviews and from written documents. Triangulation is typically a strategy (test) for improving the validity and reliability of research or evaluation of findings (Golafshani, 2003). To increase the chances of capturing all the important data, a questionnaire was filled in and conversations were recorded during the interviews. The research used activities such as ensuring methodological coherence, sampling sufficiency, developing a dynamic relationship between sampling, data collection and analysis as

verification strategies in order ensure both reliability and validity of data. Results of the research were made available to participants on request, which allowed participants to comment on the reliability of findings.

4.12 Synopsis

In this chapter, the study area was described and the methods that were used to carry out the research were reviewed. The research employed mainly a qualitative approach with some quantitative elements where necessary. Data was collected from 50 emerging and smallholder mohair farmers in the Mafeteng district of Lesotho. The research was focused on the farmers who are involved in mohair marketing. Purposive sampling was applied in order to select a sample from emerging and smallholder farmers involved in mohair marketing. To collect the data, a questionnaire was administered to the respondents through face-to-face interviews. The advantages that are associated with face-to-face interviews have been highlighted within the chapter. The informal interviews with other stakeholders were employed and their advantages were highlighted. For analysing data, the study employed the institutional analysis and development framework and the advantages and suitability of the framework for the study have been highlighted. The limitations of the employed tool of analysis were discussed in the chapter.

The results of the research are presented in the subsequent two chapters and they were attained after the small-scale farmers' data were subjected to the methods and techniques formulated in this chapter, in accordance with the objectives of the research.

CHAPTER 5
INSTITUTIONS AND SMALL-SCALE MOHAIR FARMING IN LESOTHO

5.1 Introduction

This chapter discusses and analyses the results of the field survey that was carried out in the Mafeteng District between December 2015 and March 2016. The data under analysis was collected from 50 smallholder mohair farmers and other stakeholders who are involved in mohair marketing. The chapter provides explanations of the demographic characteristics of the sampled households, which is then followed by an overview of households' assets ownership. It goes on to discuss socio-economic aspects of households, giving special attention to aspects related to mohair farming and institutional factors influencing them. Within the chapter, descriptive statistics such as correlations, mean, maximum and minimum values, frequencies, t-tests and standard deviations were used.

5.2 Demographic characteristics of sampled households

Household head's aspects such as gender, age, highest educational levels and employment status are important because the main household activities are coordinated by the household head and the head's decisions are most likely to be influenced by such demographic aspects (Makhura, 2001). The section further presents and analyses results of the household sizes and labour availability. According to Randela (2005) and Jari and Fraser (2009), demographic characteristics of households are essential when analysing economic data because such factors influence the households' economic behaviour. Some personal characteristics have an influence on the level of transaction costs facing economic actors (Sigei, 2014). As such, it is relevant to include household demographic attributes in analysing market participation among the small-scale mohair farmers in Lesotho.

Table 5.1 shows gender distribution among farming household heads involved in small-scale mohair farming and marketing in the Mafeteng district. The table shows gender distribution among all sampled farmers and within individual marketing channels. Farmers were divided

into their different market channels in order to investigate whether gender influences the choice of marketing channel.

The results show that there was a larger proportion of female household heads (52%) in the mohair markets. When farmers were divided into their different mohair marketing channels, the distribution of females and males was different from the overall distribution. In formal market channels, there was greater proportion of females (64.2%) and this is explained by the fact that a large number of females indicated negative perceptions of informal business dealings especially when involving export products such as mohair and wool. It is assumed that gender-based perceptions and preferences have positively influenced females' participation in formal markets. This scenario substantiates the work by Okoh (2009) who pointed out that Basotho women prefer formal markets when dealing with export oriented products. In addition, statistical analysis revealed a significant relationship between gender and market channel.

Age of the household head is an important aspect in agriculture because it determines experience in a certain type of farming. In addition, to a certain extent, age indicates the position of the household in the life cycle. Household head's experience further influences household members' farming activities since they usually get guidance from the head and it is clear that this variable can influence the level of transaction costs facing the household (Ngqangweni and Delgado, 2003). Age of sampled farmers was classified into different groups where each farmer belonged to one group.

Table 5.1: Demographic characteristics of the Respondents

Formal Market Channel		Informal Market Channel
Number of farmers interviewed		
28		22
Gender (%)		
Female	64.2	36.3
Male	35.8	63.7
Age (%)		
19-29 years	0	13.6
30-39 years	3.5	63.3
40-49 years	3.5	13.6
50-59 years	14.2	5
above 60 years	78.8	4.5
Education level (%)		
No education	50	22.7
Primary	42.8	0
Secondary	3.5	22.7
Tertiary	3.7	54.6
Employment Status (%)		
Employed (formal)	0	4.5
Unemployed	50	31.8
Pensioner	10.7	13.6
Farmer (self-employed)	39.3	50.1

Table 5.1 shows that the majority of farmers (78.8%) using formal market channels are above the age of 60 years. The households that used informal market channels were headed by younger farmers as the majority (63.3%) of them fall in the age range between 30 and 39 years. The statistics show that in the study areas formal market channels are used by older farmers, usually pensioners. As shown in the table, some farmers are below 30 years of age, demonstrating that mohair farming is not only for the old people. However, there are generally fewer young farmers (< 40 years) among the sampled households, as compared to the older farmers.

The high concentration of youths in the informal channels can be explained by the youth holding the opinion that the formal market channel (LNWMGA) is dominated by old people and resistant to change. These results agree with Matebesi (2015) who stated that young wool and mohair farmers dislike the LNWMGA because of these reasons. The perceptions that youth have regarding the LNWMGA have led to the youth preferring to participate in the informal mohair markets. One of the young mohair farmers stated that *"the way things are done and handled in LNWMGA is unsatisfactory and because it is our elders that run the association we cannot challenge them as it is a taboo in our culture and traditions to do that and we then decided to sell our products in the informal markets"*. This indicates that an informal institution (culture) has influenced marketing decisions among the young farming communities in the district of Mafeteng hence their participation in the informal markets.

The highest educational level achieved by the household head was recorded to determine the human capital level of households and the ability to interpret information. People with higher educational levels are more able to interpret information than those who have less education or no education at all (Sebatta *et al.,* 2014). Thus, education levels affect market information interpretation and, hence, transaction costs and market participation level of farmers.

The results revealed that the standard of education attained by small-scale farmers is generally low. When mohair farmers were divided into their different market channels, it was observed that half of farmers that use formal markets have never attended school while 42.8% have attained primary education. However, secondary and tertiary educations were attained by only 3.5% and 3.7% of farmers respectively. Slightly above half of the farmers that use informal market channels have attained tertiary education while 22.7% have attained secondary education and the remaining farmers have not attended school. The statistics revealed that there was a negative relationship between education level and participation in the formal mohair markets with a correlation coefficient of -0.607. Respondents with better education participate less in the formal mohair markets and these statistics can lead to a conclusion that, in Lesotho, ability to interpret information is not that important when using formal markets because government agencies and officials gather and interpret information for small-scale farmers that use such channels. The institutional arrangements within the formal sector have addressed some of the challenges that might have a negative impact on

the illiterate farmers in the form of transaction costs such as supplying the wrong product and using wrong (less rewarding) markets due to lack of correct information.

About 38% of smallholders have not gone to school and these are mainly the older farmers and the statistical tests show that there is a negative relationship between age and education with a correlation coefficient of -0.773. The lower the age of the small-scale farmers the higher the level of educational attainment and this is attributed to the government's prioritisation of education since the 1990s. This led to the adoption of a free basic education policy in the mid-1990s and increased funding for higher education in the late 1990s, and these policy shifts led to younger respondents attaining high educational levels relative to the older people who did not have the kind of opportunities during their school going age and time. This less educated category of smallholders would be expected to participate less in the formal markets because they are unable to interpret information. However, they participate more in these markets because of group participation through the LNWMGA. The participation of these smallholders in a farmers' association has influenced their participation in formal markets.

The employment status of head of household was investigated to determine the level of income and the ability to finance farming related activities. Small-scale farmers with non-farm employment have the potential to acquire additional capital that can be invested in the farm business to grow and expand the operations (Osmani and Hossain, 2015). The results revealed that the small-scale mohair farmers were generally not formally employed and were mostly unemployed and have a poor asset base. Therefore, they are not able to acquire capital because the financial lending institutions (dealing with farmers) in Lesotho require prospective borrowers to put up collateral or proof in the form of financial statements/payslips that the borrower will be able to pay monthly instalments (MTICM, 2012) and most of the Basotho farmers do not meet these requirements (CBL, 2013). This implies limited potential for growth and expanding the mohair operations among the small-scale farmers especially in situations where access to credit is limited or restricted for smallholders. This limits the smallholders' participation in the lucrative formal markets that necessitate investment of substantial capital in order to meet high grades and standards required in these markets. This leads to the participation in the informal markets.

When small-scale farmers are divided into their different marketing channels, it was observed that no farmer using a formal market channel was formally employed (non-farm jobs) in the study areas. This can be explained by low levels of educational attainment among farmers using formal markets, which was revealed by the study. These results support Jimenez *et al.* (2015) when pointing out that low education limits potential for formal employment. The low educational attainment among this older group of farmers can be attributed to the historical legacy of the pre-1993 autocratic and military rule where education was not prioritised, and people were compelled to seek employment in the South African mining industry or worked as domestic servants in the same country (United Nations International Children's Emergency Fund, 2015). Considering the previously highlighted loan requirements in the country, the situation of low education attainment, hence lack of formal employment, has led to limited participation of small-scale farmers in the formal markets.

5.3. Household assets ownership/access

The availability of agricultural related assets influences production and marketing decisions among smallholder farmers (Tatwangire, 2011). That is, farmers who own farming related assets are more likely to produce and formally market their produce than those who lack assets. The main aspects that are discussed include land ownership, implements and value adding items, livestock ownership and market infrastructure among others.

Lesotho is one of the smallest countries in sub-Saharan Africa and land allocated to farmers is so small that it must be usually shared between residential and farming purposes (Daemane, 2012). This situation has greatly limited arable land available for farming purposes. The arable land is sometimes used for growing supplementary feed for the goats. The entire community has access to arable land on which they exercise private property rights but do not have title deeds to these lands. The plots of land are generally small as 49% own one hectare of land and 40% have access to only two hectares of arable land while the remainder farm on three hectares of land. A closer look at the statistics reveals that there is no noticeable difference in sizes of land between smallholders that use formal and informal channels. The minimum and maximum size of land is not different between both groups and mean values are nearly equal with 1.75ha and 1.5ha for farmers that use formal markets and farmers that use informal markets respectively.

The farmers that own small plots may have trouble in obtaining loans for agricultural purposes because they cannot use the land as collateral, since they own lands that are viewed as small and of little value by the financial lenders and the farmers also do not have title deeds for the land. The financial lending institutions are reluctant to lend to small farmers because of difficulties and costs associated with enforcing repayment of loans provided to smallholders (Lovei and Gentry, 2002). The respondents confirmed this as they indicated that the local financial lending institutions are reluctant to grant them agricultural loans. The lack of access to agricultural loans because of small-sized lands limits the acquisition of capital necessary for participation in lucrative formal markets that are characterised by high requirements in terms of standards and grades.

Total herd size has a positive relationship with farmer participation level in the mainstream markets. Thus, as the herd size increases, the probability of participating in formal markets increases (Hunter, 1987). Table 5.2 reflects the number of goats owned by sampled farmers in the region.

The proportion of farmers owning 100 goats or more is 28% and between the ranges of 51 and 99 goats and 26-50 goats was owned by 36% of the farmers each. More than 80% of farmers owning 100 goats or more used formal market channels to sell their mohair clip. The analysis of the relationship between market channel and flock size revealed that there is no statistically significant relationship between the two variables with a significance value of 0.333. This is because the flock sizes owned by mohair farmers in Mafeteng are generally small probably because of the Range Management Policy of 2010 that has resulted in the adoption of programmes aimed at reducing stocking rates in order to control land resource degradation, though it can be argued that degradation is not only caused by high stocking rates. The government has robustly engaged in these programmes. This institutional arrangement has resulted in increased costs to farmers as they are not able to achieve economies of scale due to policy restrictions.

Table 5.2: Distribution of goat ownership levels among farmers

Flock size range (goats)	Number of farmers	Percentage (%)
26-50	18	36
51-99	18	36
100 and above	14	28
TOTAL	**50**	**100**
PAIRED SAMPLES TEST		
Variables	**Correlation**	**p-Value**
Market channel and flock size	0.140	0.333

Experience is critical to farming as it determines the level of contacts and networks that a farmer develops which are crucial for farming success. Through experience a farmer accumulates know-how that will help to improve the performance in terms of production and marketing (Osmani and Hossain, 2015). Fourteen percent of the respondents had been in mohair marketing for a period between 6 and 10 years, 18% of the respondents have been in farming for 11 to 14 years, 22% of the respondents have been farming in mohair for a period between 15 to 20 years while the remainder have been farming for more than 20 years.

The mohair farming experience aspect has not influenced mohair production levels as the relationship between the two factors was found to be insignificant with a p-value of 0.597. Nevertheless, this experience has an influence on the marketing channel choices among the respondents as more experienced respondents chose formal mohair markets relative to their lesser experienced counterparts who chose informal markets. The statistical analysis supported this as the correlation between mohair farming experience and market channel was found to be positive with a coefficient of 0.688. When the respondents were divided into their different marketing channels, the results show that slightly over two-thirds of the farmers using the formal market have been in mohair farming for more than 20 years while only 17% of the farmers that use informal markets have farmed for more than 20 years. This can be explained by the fact that the younger farmers have negative perceptions about formal markets associated with LNWMGA and also perhaps because, for them, costs are greater than benefits, hence their relatively high participation in the informal mohair markets. The mohair farming experience has influenced participation in the formal mohair markets.

Another factor that led to the poor participation of the relatively experienced smallholders in the formal markets is the delayed payments associated with these markets. In practice, the small-scale mohair farmers did not receive any advanced payments and they were negatively affected by delayed payments for their mohair. One smallholder indicated that *"with a little experience that we have we learned that at BKB people go for months before they can be paid and we are just 'new entrants' and cannot cope with the delayed payments experienced with the formal markets of BKB, the delayed payments can be handled by established farmers not us that is why we sell to the informal traders who pay timeously".* The institutional challenges within LNWMGA and BKB have led to the participation of smallholders in the relatively less financially rewarding markets. It is argued that path dependency associated with LNWMGA and BKB has led to some smallholders opting for the formal mohair markets. This has led to costs because of the opportunity cost of not participating in lucrative formal markets. The statistics revealed that there is a highly statistically significant relationship between market channel and farming experience with a p-value of 0.000.

Forty-four percent of the respondents did not belong to any farmer group or organisation while the remainder belonged to the LNWMGA. This association's purpose is to oversee the overall production and management of the mohair industry including information sharing and joint marketing. The statistics revealed a strong positive relationship between group participation and formal market participation as all farmers that held membership of farmer organisations participated in formal marketing of mohair. Collective action has an influence on marketing choices among the smallholders that use formal market channels and it increases the lobbying power and reduces costs associated with the search for information.

The respondents who were members of the association indicated that goat shearing and mohair classing and grading were carried out at shed level followed by mohair packaging after which the mohair bales are transported to the Livestock Products Marketing Services warehouse in the capital, Maseru. The bales are then transported to the South African coastal city of Port Elizabeth in the Eastern Cape Province where it would be handled by the broker BKB until it was auctioned and bought. They also indicated that the Lesotho government pays for some of the fixed and variable costs associated with these processes, though it was not clear which were and what proportions were covered. Almost all (95%) the members cited access to safe storage facilities and the government paid woolshed workers as what made

them to continue with the LNWMGA membership. It is evident that the incentive structure has attracted some smallholders to the association, hence participation in formal mohair markets.

There were various other reasons advanced by the respondents for joining the farmer association, with 76% of the members joining because they had been promised higher profit by the association's leadership during the recruitment campaigns. It can be argued by the researcher that the association probably used strategies based on incorrect information because in formal markets, such as auctions associated with BKB, prices cannot be predetermined as it is market forces that determine sale prices. The dissemination of incorrect information may have lured small-scale farmers to the formal markets and this was attested to by an official from LNWMGA who stated that *"Some of our committee members use incorrect information and unrealistic promises to attract new members to the association".*

The association was portrayed as the epitome of good governance which was the reason why about 83% of the respondents joined this association and small-scale farmers joined the association because it promised them that the association will ensure early and timeous delivery of mohair clip to the sales points. However, this promise has not been fulfilled because the LNWMGA is characterised by late delivery of mohair to the markets. One of the small-scale farmers alluded to this when indicating that *"we were promised that with LNWMGA and BKB our mohair clip will be send to the markets early but it has not happened in the more than eight years I have been in the association".* The smallholders may have incurred losses because their mohair clip missed early auctions that offer better prices and this can be attributed to the highlighted institutional challenges within LNWMGA and/or BKB.

Nevertheless, farmers that owned relatively large flocks of over 100 goats tabled contrasting views that the promise of early delivery of mohair to the markets in Port Elizabeth was fulfilled. One farmer owning more than 100 goats attested to this when stating that *"our goats are shorn early and mohair clip is quickly shipped off to Port Elizabeth and we get good prices for it".* The contrasting opinions and perceptions among membership of the association may result in animosity, hence conflicts among members, and that may lead to detrimental outcomes for the individual members and the association as a whole.

Other smallholder mohair farmers have a perception that LNWMGA management is serving their own interests. One smallholder indicated that *"management ensured that their sheep were the first to be shorn and that their mohair clip was the first to be delivered to BKB in Port Elizabeth after which they relax and never bother what happens to the mohair clip of the small-scale members".* The delayed payments of the farmers were one of the challenges facing the association and the respondents indicated that it can take up to a year after the transaction before they could receive payment and the delays consume a lot of their financial and time resources because they have to use telephones and transport to enquire about payment. A smallholder from Tsákholo shearing shed indicated that *"in 2014 I received my payment 10 months after selling my mohair clip and I spent a lot of money to make telephone calls to the LNWMGA and LPMS offices because representatives of LNWMGA never bothered to enquire on our behalf, they always told us that the headquarters has not said anything about our payment and they were awaiting information from the headquarters".*

However, 80% of the members of this association stated that the promises made to them as strategies to lure them to the association were never fulfilled. They cited a number of challenges that led to the failure to attain the expected benefits as 93% cited power struggles as a challenge in the association. There are always conflicts among members of the association, particularly small-scale farmers, and association's committee members. One of the smallholder farmers indicated that *"the associations committees' members and larger farmers dominate us and use the association to serve their interests and we will not allow that, we will continue to fight that until they are in order".* They indicated that these struggles consume a significant share of association's funds because a lot of financial and time resources are spent on conflict resolution. One member of LNWMGA management indicated that *"there are always conflicts among us and they cost us because we have to organise and attend meetings and money is spent on that and again they cost us time that we could use for other important activities".*

Sixty-nine percent of the members of this association cited a top-down approach to management as one of the challenges characterising the group. They indicated that management never consulted them before making even very crucial decisions and that their opinion was never sought on any issue affecting the association and its functioning. For instance, management never consulted the members when introducing an infrastructure

fund whereby R100.00 of the income from farmers that keep less than 100 goats was to be deducted and allocated to this fund. All the respondents showed dissatisfaction about this deduction which erodes their profits yet no infrastructure development was ever carried out since the introduction of the fund about 5 years ago. In other instances, they (management) embarked on a very expensive trip to Port Elizabeth costing around R90 000.00 without the knowledge and approval of members. During stakeholder interviews, different explanations were made for this trip whereby some management team members stated it as a study tour while others called it a meeting to discuss new business terms with BKB and this lack of consistency in the explanation of the trip raised suspicions and angered the farmer members. When asked about reasons for their dislike of the LNWMGA, all of the respondents cited ever increasing deductions from their monies and dominance of larger farmers and committee members as the main reasons.

However, with regards to continuing with the membership of the association, slightly less than 5% of the respondents indicated that they were going to cancel their membership if the situation did not improve while a tenth were uncertain whether they would or would not continue with the membership and associated formal markets. Around 85% of the members indicated that they would continue despite the challenges and dislikes they highlighted. They explained that they have been in the association for a long time and have invested a lot of their resources and effort in it and that they cannot switch to the less rewarding informal markets, hence path dependency. It is evident that path dependency influenced the participation of this group of farmers in the formal mohair markets. Another factor that has attracted these farmers to the formal markets is the favourable prices that are offered by these markets. This was supported by an official from the Ministry of Trade when indicating that *"The formal markets associated with LNWMGA and BKB usually offer higher prices relative to the informal traders".*

Dependency ratio and the size of household affect the level of household market participation and also affect the ability to accumulate assets and save, and subsequently this affects the stability of the farming venture and the ability to expand (Gabremedhin *et al.*, 2015; Gani and Adeoti, 2011). Dependency ratio was calculated based primarily on the employment status of all the household members. Any individual of school going age as well as the unemployed (excluding welfare grant holders) were classified as dependents. On average there are three

dependents for each income earner per sample household. In addition, sample households have an average of 5 household members. The statistics revealed no correlation between these two variables and market participation and there is no relationship between these two variables and assets ownership and ability to save. This is explained by the generally high unemployment rates prevalent in Mafeteng coupled with the high birth rates in the rural areas that were documented by WHO in 2014.

Table 5.3: Access/Ownership of machinery and communication technology

Item	Number of farmers	Percentage
Telephone	14	28
Computer	7	14
Transport	7	14
Radio	36	72
Value adding machinery	28	56

The access/ownership of agricultural machinery and access to communication technology are some of the core elements of agricultural development as they have a bearing on the levels of productivity, transaction costs as well as information flow (Reid, 2011 and Bull *et al,* 2011). The results in table 5.3 reveal that ownership and/or access to these factors is generally acceptable in the study area. Seventy-two percent owned radios, but telephones were owned by only 28% of the respondents, while 14% of small-scale farmers owned a computer. The statistical analysis revealed no relationship between market participation and ownership of either telephone or radio or a computer. The access/ownership of value adding machinery such as shearing clippers, skirting tables and mohair presses was reported by 56% of the respondents. Further analysis revealed that the farmers that had access to value adding machinery were members of LNWMGA and using formal market channels as no respondent using informal markets indicated access to this type of infrastructure. When the relationship between accesses to these factors was analysed, it was revealed that access to value adding machinery had a significant relationship with a market channel choice amongst respondents with a p-value of 0.000. The access to value adding machinery has influenced farmers' participation in the formal mohair markets. The value adding machinery was provided by government and development partners in order to help reduce some of the costs incurred by mohair farmers across the country. The access to value adding machinery has a correlation

with meeting the grades and standards, hence positive influence on participation in formal markets.

Road networks play an important role in market integration. Debilitated or inadequate road networks raise the cost of transportation, search and transfer costs and thereby limit competition and market participation. Surveyed respondents' judgment of the road networks was more or less the same as 51% viewed them as poor while the remainder viewed them to be very poor. It is apparent that road conditions will equally affect the farmers that use formal markets and those who use informal markets. This was verified by statistical tests and the relationship between market channel and views on the condition of the roads was found to be insignificant with a p-value of 0.305. The provision of public goods such as roads is the responsibility of the government. One village chief who is also a member of Mafeteng District Council indicated that as leadership they have not performed well in the provision and maintenance of rural roads.

Distance to markets is critical as it has a bearing on the level of transportation costs, which affect profit margins (Olwande and Mathenge, 2015). Eighteen percent of the respondents travelled between 1 and 9km to get to the mohair collection points and 47% were located at between 10 and 13 km from the collection points. Twenty-two percent of the smallholders travelled between 14 and 19 km to get to the markets while the remaining respondents travelled between 20km and 25km to get to the mohair collection points. In some instances, informal traders collect mohair from the villages. The situation implies that the costs due to transportation will be incurred either by smallholders or buyers to get mohair to the markets as time and financial resources are expended for this exercise. Further statistical analysis revealed that there is no relationship between distance to mohair collection points and marketing decisions among farmers with a coefficient of 0.307. This is explained by the location of government shearing sheds that are built close to the villages of small stock farmers. In terms of informal trading, this is explained by the mohair collection points that are set up close to or within villages.

The smallholders that sell to the formal markets indicated that sometimes their flocks are shorn late and they fail to deliver their mohair clip at the same time with the rest of the members. This necessitates the transportation of the mohair clip to the collection point in the

capital city where mohair clip is kept before it is sent to BKB in Port Elizabeth, and this category of farmers viewed the distance to be long. One smallholder complained that *"the collection point in Maseru is too far and forces us to incur high transport costs which we do not have because we cannot use our donkeys or horses over a distance of about 90 kilometres to Maseru".* Another smallholder indicated that *"the costs are unbearable when your goats are shorn late and you are unable to share transport costs with fellow farmers which is always the case with us".* The researcher probed further to find the cause of failure to share costs of transporting to Maseru and the lack of financial capacity was the main factor highlighted by the respondents. The respondents in this category are financially poor and could not meet the high transport costs as the transporters' charges are based on the distance covered not tonnage of mohair transported. They could not cope because usually the number of farmers affected by late deliveries is low which necessitates more financial contribution from each affected smallholder. One smallholder confirmed this when indicating *"we are not able to meet the costs associated with late delivery of mohair because our number as affected farmers is usually low which means that each of us has to pay more compared to when the group is bigger and this affects us as during some seasons we end up not selling our mohair clip"*. The resultant lack of collective action during delivery of mohair clip has a negative impact on the performance of mohair enterprises among smallholders who own less than 100 goats that use formal markets.

In contrast, the farmers that had 100 or more goats did not view the distance to the Maseru-based collection point to be a problem during rare delays in shearing and delivery. One of them stated that *"the distance to the collection point is not a problem and the transport costs are not high because we usually hire a big truck to deliver our mohair clip to the city".* These farmers are reported to be more financially capable than those who owned less that 100 goats, it can be therefore be argued in this study that this category of farmers is helped by their relatively better financial capacity to cope with the transport fees. This means that their financial capacity enabled them to act collectively and this collective action during transportation of mohair to the main collection point reduces costs and enhances the participation of this section of farmers in the formal markets.

The area is characterised by lack of market transport as only 14% indicated they owned transport vehicles. When the respondents were divided into their different market channels,

the results revealed that only two of the farmers that used informal channels and five of those who used formal markets owned transport. Further analysis revealed that the relationship between transport ownership and market channel was not significant with a p-value of 0.386. The ownership of transport is not that important in Mafeteng because the shearing sheds and traders collection points are located close to the villages of the smallholder farmers.

5.4 Smallholder Income Diversification Strategies

Income diversification is a typical livelihood strategy for many rural households. Households can commercialise by selling agricultural products or working off-farm to earn an income, which is used to acquire other basic goods such as food, shelter, education, health and energy and communication services. The off-farm sources of income include businesses, remittances and pensions, which, together with agricultural sales and products to which value has been added, form the basis of commercialisation (Grwambi, 2005; Randela, 2005; Makhura *et al*, 1998).

Table 5.4: Distribution of major sources of non-farm income among respondents

Major source of income	Number of farmers	Percentage
Pension	6	12
Social grants	15	30
Permanent job	1	2
Casual jobs	28	56
TOTAL	**50**	**100**

Casual jobs were the most important source of income for the highest proportion of all households irrespective of the household head's level of education (Table 5.4). This can be explained by the high levels of unemployment that have been one of the major characteristics of Lesotho's economy for the last decade (CBL, 2014). The salaries offered for casual jobs are low and cannot allow any recipient to save money so that they can invest in agricultural activities, including mohair farming. The respondents were casually employed in the Ministry of Forestry and Land Reclamation's food for work and/or cash for work programmes. The respondents are employed for a period of two months at most where they receive R1500.00 per month. One smallholder highlighted the importance of these programmes when saying that *"this forestry programme money helps us a lot as we use it to buy food and pay for school fees or even buy supplementary feeds and drugs for our animals".* It is evident that money

received from the cash for work programmes plays an alternative and/or complementary role to money that can be received from credit/loan service providers for investment in agriculture. However, there was no correlation between market channel and cash for work programmes.

Social grants from the government were a source of income with the second highest proportion as they catered for 30% of the respondents. Pensions to the minimum value of R6 960 per annum were a major source of income for 12% of the households (Table 5.4). All smallholders aged 60 years and above indicated that they used pension money to finance their household and farming needs while waiting for the payment from BKB. One of them stated that *"I use my pension money to finance the household obligations while waiting for the payment for the mohair sold and truly this money helps me a lot even to generate more income".* This category of respondents used formal mohair markets and it is argued that the pension money has indirectly influenced the participation in the formal markets that are associated with delayed payments. Pension money enabled them to withstand delayed payments experienced with LNWMGA and BKB.

The fact that none of the households mentioned an agricultural enterprise as a major source of income is a good indication of the farmers' degree of market participation. This means that the involvement of farmers in the agricultural sector is mainly for supplementary purposes.

Table 5.5: Net income from the sale of livestock products other than mohair

Livestock products net income (R)	Market channel					
	Formal market channel		Informal market channel		Total	
	No.	%	No.	%	No.	%
< 800	14	50	20	91	34	68
801 – 1200	13	46	2	9	15	30
2001-2500	1	4	0	0	1	2
Total	**28**	**100**	**22**	**100**	**50**	**100**

The respondents had diversified their farming activities and dealt with various livestock products including meat, milk and poultry. However, net income generated from these additional enterprises was generally low. Sixty-eight percent of the respondents generated less than R800.00 per season and 30% received net income in the range between R801.00 -

R1200.00. Only one of the farmers attained net income in the range between R2001.00-R2500.00 per season (Table 5.5). This may be attributed to the small scale of all enterprises operated by the respondents as one of the smallholders stated that *"we don't make much from our farming operations because our enterprises are too small and inputs are expensive".* The small size of the enterprises leads to smallholders' failure to realise the economies of scale especially when they lack collective action.

Table 5.6: Net income from the sale of crops

Crop net income (R)	Market channel					
	Formal market channel		Informal market channel		Total	
	No	%	No	%	No	%
< 800	18	64	12	55	30	60
801 – 1200	10	36	9	41	19	38
1201-2000	0	0	1	4	1	2
Total	**28**	**100**	**22**	**100**	**50**	**100**

All of the respondents practised crop farming and planted cereals and cash crops under rain-fed agriculture. There were varying levels of net income attained from crop farming among the respondents. Sixty percent of the respondents generated less than R800.00 per season and 38% generated between R801.00 and R1200.00 per season while only one accumulated between R1201.00 and R2000.00 (Table 5.6). The results reveal that the level of income generated from crop farming was generally low which can be explained by the small pieces of lands that are owned and farmed by the respondents in the study area. Low annual rainfall and recent drought incidences have been identified as some of the factors that contributed towards a significant decline in crop production and productivity, hence low income from crop production (Likoetla, 2014).

5.5 Mohair farming and institutions

Socio-economic factors are a function of the environment under which smallholder farmers operate and are useful in understanding their market participation behaviour. This section looks at factors related to institutional arrangements and institutional environment peculiar to the study setting. Factors to be considered include property rights, access to credit and inputs, knowledge of standards and grades, collective action, power imbalances, policy participation and government support.

Land tenure is an arrangement concerned with the terms and conditions under which land resources are held, used and transferred (de Villiers, 1996). It is crucial to the development of rural economies that rely on agriculture for growth and development since the tenure system determines peoples' access to land, credit and water resources and the security over the use of these resources. The tenure system determines the type of property rights people have and how the rights are exercised (Rantlo, 2009). All respondents indicated that they have communal access to the grazing lands in accordance with Lesotho's Land Tenure Policy.

However, contrasting views were expressed by smallholder mohair farmers in regard to security of property rights to the grazing lands. The small-scale mohair farmers that used formal market channels viewed their security of tenure to be good. All the smallholders that used informal market channels viewed their property rights to be insecure and one of them indicated that *"our rights to these grazing lands are not secure because people are being expelled from the grazing lands especially us who are not members of LNWMGA and we are not sure if we are going to continue to use them, we are not secure".* However, one representative of LNWMGA indicated that there are grazing rules, regulations and penalties for misconduct that are communicated to all farmers and have to be observed, and the association works closely with the local authorities (chiefs) to educate their members about the rules, regulations and penalties and to ensure compliance.

The cooperation between the local authorities and LNWMGA has facilitated the implementation of grazing rules and regulations though some challenges have been posed by some sections of the community. This was supported by the village headman from Matelile that *"association members understand and observe grazing laws and most trespasser do not belong to the association and this is because together with us the association educates its members about laws and it is difficult to educate those who do not belong to the association because if you call community gatherings they do not come".*

The local authorities responsible for grazing management expelled numerous farmers from the local grazing lands. The punishment meted out to offenders has led to these farmers developing the perceptions that their property rights to the grazing lands are insecure.

In terms of challenges brought about by the disrespect of grazing rules and regulations, there were a number that were stated by the respondents as shown in Table 5.7.

Table 5.7: Consequences of the disrespect of grazing rules and regulations

Effect of communal tenure	Number of farmers	Percentage
Conflicts among communities	14	28
Land degradation	12	24
High disease incidences	10	20
Poor mohair quality	14	28
TOTAL	**50**	**100**

Slightly above a quarter of the respondents indicated that there were conflicts experienced over rangeland resources and some of the clashes have resulted in deaths in the past. The conflicts resulted because some sections of the community did not contribute towards wellbeing of the grazing lands (required by the grazing rules) and only grazed their livestock to attain maximum benefits from the grazing land and that led to the battles between them and those who contributed towards the wellbeing of the pastures. The grazing association officials and police officers reported that some farmers were arrested in relation to the failure to pay mandatory grazing fees. Nearly a quarter of the respondents indicated that there has been overgrazing, resulting in the high degree of rangeland degradation experienced in the area. The overgrazing and degradation were observed by the researcher on the rangelands in the study area. Nevertheless, the researcher can argue that the observed overgrazing is a result of the lack of will to implement grazing rules by the authorities because the rules clearly state that "a household should keep a maximum of forty small-stock units on the communal grazinglands" but there are farmers that keep more than the permissible size of goat flocks and no action has ever been taken against them. One police officer attested to this when indicating *"we have never received any reports related to transgressions on exceeding the permissible flock size of forty small-stock units, the grazing authorities and local chiefs have never reported to us and we have never arrested anyone in relation to these transgressions".* An official from the Department of Range Management indicated *"overgrazing occurs because the authorities responsible for grazing management in the villages allow the ownership of more that the permissible flock sizes due to conflict of interest as they (grazing associations officials/local chiefs) own far more than the allowed forty goats".* The self-interests of some economic participants render the property rights weak and the outcomes are detrimental to the mohair farming in the country.

High disease incidences were one challenge that was noted by a fifth of the respondents while another 28% of the respondents indicated poor mohair quality as a challenge due to the disregard for grazing rules. For instance, the rules dictate that "sick animals should not be on the communal lands until the diseases have been treated" but the farmers do not observe this regulation as one local authority indicated that *"the farmers graze even sick animals on the communal lands and this has led to spread of diseases and poor quality mohair".* One police officer stated that *"there have been numerous arrests and convictions related to the grazing of sick animals on the communal rangelands".* The disregard for property rights and liability rules has led to the failure to meet standards and grades that are strictly demanded by formal markets.

Another challenge is brought about by the presence of dairy goats on the grazing lands in the area. This was despite the rules and regulations being clear and known to all, that in the highlands and Orange River valley, the grazing of dairy goats in the open is prohibited. A local chief from Mathebe stated that *"people are so disrespectful of the law and enforcement agencies that they graze even the prohibited dairy goats in the open without fear".* Some community members do not observe the rules and regulations and continue to graze their goats in the open which has led to a decline in mohair quality due to cross breeding between dairy and mohair breeds in the field. This situation has negatively affected the farmers that use formal markets as one of them stated that *"the cross breeding between our mohair goats and dairy goats has reduced the quality of our mohair and we fail to meet the standards and grades that are required by BKB*". The disregard for grazing rules has limited the participation of small-scale farmers in the formal markets because of poor mohair quality that is not demanded by these markets. Nevertheless, the incidences of transgressions and arrests related to the grazing of dairy goats in the open have been declining in the past two years (2013 and 2014) (Ministry of Police, 2016; Ministry of Local Government, 2015).

Access to agricultural inputs has an influence on the levels of farm productivity and the inputs also improve productivity of other factors of production and this improvement can lead to better market participation as well (Melesse, 2014). All respondents indicated that they regularly buy agricultural inputs to improve the productivity of their mohair farming. More than 80% of the respondents bought agricultural inputs from local traders while 16% imported inputs from the Republic of South Africa.

Nevertheless, this impressive acquisition of agricultural inputs has come with challenges as the respondents that owned less than 100 goats stated that the drugs they bought from local traders were found to be irrelevant and ineffective. This was supported by one of the Department of Livestock Services officials during informal interviews when saying *"when farmers get to the shops to explain problems affecting their goats, the retailers give them any product just to get it off the shelves and later when you visit the farmers you discover that the drugs were not relevant hence ineffective".* The prices charged by the local traders are reported to be high as indicated by 48% of the respondents. For example, it is claimed that a litre of a chemical that costs R500.00 in the local market costs R228.00 in the neighbouring rural South African town of Wepener in the Free State Province. The local traders are better informed and out of opportunism take advantage of the lack of knowledge on the side of small-scale farmers by selling them any drug available and at high prices.

The small-scale farmers that used formal markets and owned 100 or more goats do not buy drugs and feedstuffs from the local traders as they are expensive, instead they import them from the neighbouring South African towns and they are cheaper. One of the farmers indicated that *"we pool our financial resources together and buy in bulk and this makes it less expensive for us".* In this case, collective action during procurement of inputs has benefited this group of mohair farmers as it reduced their production and operational costs. In addition, the respondents indicated that the drugs bought from South Africa are correct and effective and this was echoed by the officials from the livestock division during informal interviews. The collective action has improved access to inputs that will help to improve the quality of mohair produced, thus meeting the standards and grades demanded by formal markets. It is argued that collective action has enhanced the participation of this category of farmers in the formal mohair markets.

Agricultural credit is a critical input in agricultural growth and development as it plays a catalytic role in strengthening the farm business and augmenting the productivity of scarce resources (Keregero, 2015). The statistics show that access to agricultural loans was generally poor among the small-scale mohair farmers with 74% of the respondents having no access to agricultural loans.

There were various reasons for the lack of access to agricultural loans among the farming communities as half of the respondents cited the lack of collateral as the reason for not having access while 28% had no information about loans. This group did not know that agricultural loans existed, and they had no idea of loan service providers. The statistical analysis revealed no correlation between access to agricultural loans and market channel choice. The explanation is that these farmers have a limited asset and financial resource base and one banker, Mr Moeketsi, indicated that smallholders fail to be granted credit due to the lack of collateral because most of them have literally nothing to put up as collateral. The small-scale mohair farmers do not have title deeds to the lands which means they cannot use such lands for. In addition, based on the socio-economic situation together with researcher's observation that the respondents lack assets, the two categories were not capable of putting up collateral even if they had information about loan services.

The farmers that owned 100 or more goats indicated that they were aware of financial services and procedures but did not find it necessary to acquire credit for now. One of them confirmed this when stating that *"up to now we do not find it necessary to acquire loans because we still afford to meet the mohair farming financial requirements".* The explanation for that is the collective action based approach that this group of farmers use when buying inputs and marketing and transporting their mohair produce, reduces costs for these respondents. The participation of this category of farmers in the formal markets is helped by their collective approach to farming business.

When farmers were divided into their different market channels, it was revealed that 40.9% of farmers that used informal marketing channels had taken agricultural loans while only a tenth of the farmers that used formal markets had taken agricultural loans. The loans were used to meet input costs and were obtained from informal money lenders and the magnitude of the agricultural loans ranged between R1000 and R2500 in both groups of respondents. The paired samples t-test revealed that there was a significant relationship between market channel used and access to loans (p-value of 0.05). This can be explained by the study's results that farmers that used informal markets, unlike the LNWMGA members in formal markets, lack external support from both the government and private sector and they must individually finance their mohair operations and activities. It would seem irrational that the farmers that use informal markets do not switch to formal markets so that they could get assistance but

these farmers indicated that they continue to use informal markets because they cannot cope with delayed payments associated with LNWMGA and BKB because they are poor and need immediate cash.

For the respondents that indicated they have access to agricultural loans, there was uniformity in terms of the sources of loans and some variation regarding the terms and conditions of the loans. All the respondents supplying the formal markets and all those who supply informal markets obtained agricultural loans from informal money lenders. The said money lenders did not carry out economic feasibility tests before advancing these loans. The interest rates were generally high as they ranged between 20% and 40% within a repayment period of one month. These interest rates together with a very short repayment period do not afford any time to start realising meaningful returns from any investment for which the loan should have been used. In some cases, the farmers used part of their household consumption budget to repay the loans, that is, these loans ended up being a financial burden on the concerned households. The informal money lenders' institutional weakness of not conducting the economic feasibility tests before granting loans results in failure to determine a loan amount and repayment plan and period suitable for each farmer/borrower.

Agricultural commercialisation is not a smooth and frictionless process and it requires input from both the private and public sectors. As such stakeholders have a crucial role to play in managing the process of commercialisation and making it a success (Gabreselassie, 2010; Gabreselassie and Sharp, 2008). This implies that stakeholders should develop policies that will smooth agricultural commercialisation and create an enabling political environment to get the policies well implemented (Leavy and Poulton, 2007; Nepal and Thapa, 2009). The main focus should be on policies, investment and regulations that facilitate and stimulate growth in a market oriented rural economy (Pingali and Rosegrant, 1995; Poole *et al.*, 2013).

For effective policies to be adopted and successfully implemented, all stakeholders should participate in the policy processes. However, there is a generally poor participation in policy discussions among smallholders as the majority (76%) of the respondents indicated a lack of participation in policy discussions. There are various reasons that are cited for poor participation and the smallholders indicated dissatisfaction about the situation as shown in Table 5.8.

Table 5.8: Responses on the lack of participation in policy discussions and design

Reasons for not participating	Number of farmers	Percentage (%)
Events for bigger/connected farmers	22	44
Never invited when discussions are held	2	4
For Government and LNWMGA members	14	28
Participated in policy discussions and design	12	24
TOTAL	**50**	**100**

Slightly above three-quarters of the respondents thought that the policy discussions served LNWMGA members, influential farmers and officials as they are the ones invited to such events and they are dominant and influential at those discussions. One of the smallholders indicated that *"only bigger farmers, LNWMGA committees' members and government officials attend the policy conferences because from the shearing shed level only those who have large flocks and more money are chosen to attend policy conferences".* In addition, one LNWMGA committee member argued that the conferences take about three to five days and farmers have to pay for transport and accommodation, which most of the smallholders cannot afford, hence the participation of the financially capable farmers at shearing shed level. The LNWMGA's constitution dictates that the committee members should attend policy conferences. One official from the Department of Livestock clarified that *"in regards to the attendance of government officials, they attend because they are stakeholders. We offer advisory services to and many other services and the livestock department governs the sector".* The LNWMGA, government and NGOs' officials are responsible for coordinating most of the policy conferences and discussions in the country. The lack of financial resources among the small-scale farmers has led to their failure to attend policy conferences, hence inability to influence the adoption of policies that would enhance their participation in formal markets.

Further analysis revealed that 90% of the smallholders that participated in policy discussions owned flocks of 100 goats or more and they used formal market channels to sell their mohair clip. These farmers are assumed to attain meaningful income from their mohair enterprises, thus have the financial capacity to pay for transport and accommodation costs associated with policy conferences. Their financial position has enabled them to influence the adoption of policies that enhance their participation in lucrative formal markets.

In terms of contribution in policy discussions and design, most respondents indicated dissatisfaction and they cited various reasons for their discontent. Fourteen percent stated

that they do not contribute in policy issues because LNWMGA farmers and officials control and dominate every aspect of the policy discussions and that small farmers are not listened to at all. The remainder of the respondents indicated that only farmers with bigger flocks are listened to and all their suggestions and ideas were adopted while the ideas and suggestions of smallholders are not even considered. One small-scale farmer from Mathebe shearing shed stated that *"if a small-scale farmer raises a very important point during discussions it will never be considered never mind being incorporated into the strategies, only the contributions and suggestions from government officials and bigger farmers are incorporated into strategies".* This was confirmed during informal interviews with other stakeholders as LPMS and MAFS officials cited dominance of LNWMGA and bigger farmers as one of the features of mohair policy discussion. The socio-economic status of this category of farmers has given them influence, resulting in the adoption of their preferred strategies and policies that enhance their participation in formal markets.

One of these government officials supported the argument when saying that *"I have attended many policy discussions and I have seen conference chairpersons more often choose bigger and/or popular farmers to make points or contributions, the smallholders will raise their hands from day one up to last day of the conference without being chosen to give their opinions".* However, one member of LNWMGA NEC argued by saying that *"the choosing of people who talk or make contributions during policy discussions is the prerogative of the conference chairperson not LNWMGA or government or big farmers".* This power imbalance whereby farmers with bigger flocks dominate the policy sector was verified by the analysis of the minutes of the National Wool and Mohair Conference in 2014 and its amended strategy of 2015 which revealed that only the suggestions of the LNWMGA officials, prominent/popular and big mohair farmers (names withheld) were adopted and incorporated into the strategies.

In response to the appropriateness of the policies for small scale mohair industry growth, the respondents viewed the policies as inappropriate for the growth of the sector in Lesotho. They cited various reasons for this particular stance. Slightly below half of the respondents indicated that the current policies help the case of LNWMGA affiliated farmers and 34% perceived the policies as helping the LNWMGA committee members and bigger farmers while around a fifth of the respondents were of the view that all farmers benefit from the policies.

Further analysis revealed that the farmers that perceived the policies to be helping the case of LNWMGA farmers were all using the informal market channels and not members of that association. One of these smallholders highlighted this when stating that *"look the government built shearing sheds and provided infrastructure and even pays permanent workers at these shearing sheds and these sheds are only used by LNWMGA members and such support is not provided to us at all".* The cited policy discrimination was found to be true as one of the top officials from the Department of Livestock agreed that the shearing sheds are only used by farmers that use formal market channels. This institutional arrangement denied these small-scale mohair farmers access to the factors that could have improved their mohair quality, resulting in higher prices and net income.

Those who regarded mohair policies as benefitting LNWMGA committee members and bigger farmers were the smallholder members of LNWMGA and they used formal markets. A project called the Wool and Mohair Production Promotion Project (WAMPP) that was established in 2015 aims to enable mohair producers to generate higher incomes and more sustainable livelihoods. Under one of the project components, Improved Livestock Production and Management (ILPM), the big farmers are afforded mohair production and management training and association committees' members are trained on different aspects of cooperative administration and management. One of the LPMS officials questioned the design of the project when stating that *"the mohair sector is dominated by small-scale farmers that need to improve the production and productivity levels but this WAMPP focuses on empowering bigger farmers and not saying anything about resource poor smallholders".* It is evident that the institutional support afforded is likely to help the target farmers acquire skills that will help them to produce quality mohair, therefore satisfying the standards and grade requirements associated with formal markets.

The views that the policies help all farmers were tabled by all the farmers that owned bigger flocks of goats and this agrees with economic theory that individuals are self-seeking economic agents and are content with the status quo as it benefits them even if it does not benefit other mohair farmers. The status quo in Mafeteng benefits bigger mohair farmers because they have access to government shearing sheds and infrastructure, paid permanent staff, transport subsidy and lately training from WAMPP, which are not afforded other

categories of mohair farmers. Thus, the advantages of larger-scale farmers are entrenched, while current institutions further exclude and disadvantage poor small-scale farmers.

5.6 Synopsis

The chapter explained the demographic characteristics of the sampled households and provided an overview of households' assets ownership together with the socio-economic aspects of households, giving special attention to aspects related to mohair production farming and institutional factors influencing them.

In Mafeteng, mohair farming is dominated by small-scale farmers who participate in different mohair markets and there is equal participation between females and males with generally low education attainment. There is limited access in terms of arable land and grazing lands and these lands are used in private and in common respectively. In terms of cultural influence, market information, market infrastructure, group participation and government support, there is variation among smallholder mohair farmers. The distance to mohair collection points is more or less equal among small-scale farmers. There are some mohair farmers who participate in policy discussions and design while others are marginalised.

Thus, the chapter has presented the factors that may have an influence on the mohair marketing situation in the area and, as such, the attributes will provide a basis for describing small-scale mohair marketing among the small-scale Mafeteng ccommunities in the next chapter.

CHAPTER 6
MARKET PARTICIPATION AMONG SMALL-SCALE MOHAIR FARMERS IN LESOTHO

6.1 Introduction

This chapter provides an overview of mohair marketing by smallholder mohair farmers. Farmers are divided into different marketing channels and analysis on how they market their produce is presented, giving more attention to the marketing channels used, institutional arrangements and environment as well the associated transaction cost factors.

6.2 Market channels used by the respondents

As indicated earlier, there are two market channels that are predominantly utilised by small-scale mohair farmers in the area. The formal marketing channel is the predominant type as it is used by slightly more than half of the respondents while the informal market channel is used by the remainder of the households. The respondents together with government officials and police indicated that there are farmers that used illegal market channels. However, the proportion of the smugglers could not be established due to the sensitive nature of the operation.

As indicated in section 5.2, when the respondents were divided into their different marketing channels, it was revealed that all respondents that used formal market channels were members of the LNWMGA and all the respondents that used informal market channels were not members of any farmer group or organisation.

6.2.1 Market channel choice

There were various reasons that were advanced as to the market channel choice in the area. It was revealed that 72% of the farmers that used formal market channels chose that market channel because it was the only channel they knew of when they joined the mohair industry and it was used by their parents (Table 6.1). One of the smallholders indicated that *"We sell to BKB because that market was used by our fathers and forefathers and we know this market better*". It is apparent that in terms of marketing, the farmers do things according to how they

have always been done, that is, the information and knowledge are passed from one generation to the next and this has influence on marketing choices. This was verified during stakeholder interviews when officials from the Ministry of Agriculture and Food Security and Ministry of Small Business Development, Cooperatives and Marketing who work closely with these smallholders indicated that more often the smallholder mohair farmers employ production and marketing strategies that were used by their parents and their communities and do not see a need to change the strategies. This explains that path dependency has an influence on the marketing strategies of mohair farming.

Other smallholders that used formal markets indicated that they chose them because of the access to the shearing sheds and their infrastructure. The farmers that used formal markets have access to the adequately equipped government shearing sheds. It is evident that the institutional support from government and development partners has provided incentives for smallholders to use the formal markets.

The farmers that used informal market channels had various reasons for choosing it, including prompt payments, no deductions from the income and buying of home shorn fleece. Around 64% of those choosing this market channel did so because of prompt payments as the informal traders pay them at the time of exchange. This arrangement positively affects the smallholders because it reduces the costs associated with making follow up on payments as is the case with delayed payments. Seventy-two percent chose informal markets because of no deductions made to the price agreed upon during negotiations. One prominent farmer attested to this by stating that *"With informal markets the traders give you exactly the price you agreed upon nothing more or less and they pay right on the spot though prices are always lower"*. No mohair levies and taxes are paid by these farmers and this institutional arrangement has attracted smallholders to these informal markets as they view it as an advantage and benefit to their mohair business. However, it is assumed that the informal traders offer relatively low prices to cover costs associated with levies and tax because the policies and laws dictate payment of such. In the seasons 2009/2010, 2010/2011, 2012/2013, 2013/2014 and 2014/2015, the formal markets offered after commissions R42.00/kg, R53.00/kg, R53.75/kg, R78.00/kg and R79.50/per kg respectively, while in the same seasons the informal traders offered R31.45, R37.00, R37.90, R59.00/kg and R60.00/kg respectively (MTICM, 2015).

Based on the differences between the market prices and the informal market prices, it is evident that the small-scale mohair farmers that use the informal markets are prepared to forego substantial amounts of money to derive the benefits of choosing the market. In the seasons 2009/2010, 2010/2011, 2012/2013, 2013/2014 and 2014/2015 they had to forego R10.55, R16.00, R15.85, R19.00 and R19.50 per kg respectively, and this is substantial in terms of what these farmers received in the informal markets. Thus, they were strongly willing to pay for the benefits of the informal market, hence participation in such markets.

Table 6.1: Reasons for choosing the type of market channel among smallholders

	Reasons for Market Choice	Number of farmers	Farmers (%)
Formal Market Channel	It was used by parents and forefathers	20	72
	Access to the shearing sheds and infrastructure	17	62
Informal Market Channel	Prompt payments	14	64
	Purchasing of home shorn fleeces	17	72
	No deductions to payments	19	86

A major reason for the choice of informal market channels was because even the home shorn fleeces were accepted and bought by the traders as opposed to formal markets that required shearing to be done at shearing sheds. One small-scale farmer proudly voiced support for the informal markets when stating that *"Yah that is peoples' market you are not forced to shear at the shearing sheds you just ask your children to shear the goats and take mohair to the buyers who pay instantly".* Poor quality of the shearing has a negative impact on the prices received by Basotho mohair farmers (Matebesi, 2015). However, in Mafeteng there are great shearing skills and competencies, resulting in high quality of the shearing among smallholder mohair farmers, thus the factor (poor shearing) is not prevalent among smallholders in Mafeteng (MTICM, 2015; MOAFS, 2013). This is attributable to the regular training (on shearing) offered by Rural Self-help Development Agency (RSDA) based in the area. One District Animal Production Manager stated that *"I have worked in almost all districts of Lesotho, but I have never seen a district that can rival Mafeteng in terms of shearing skills*

among farmers, they are very competent, they are the best whether formal or informal". The arrangement of not using shearing sheds reduces costs because the farmers are spared of paying for shearing and classing services at the shearing sheds, hence an incentive to use these markets.

6.2.2 Buyers of mohair produced by the respondents

About 56% of the respondents have sold their mohair clip to the South African broker BKB while the remaining farmers sold their clip to the private traders that are found across the country. The statistics further revealed that friends, relatives and neighbours were a source of information only for smallholders that used informal mohair markets. Social capital plays a role in providing information to this group of farmers hence their market participation decisions. However, this is a double-edged sword as it can help to reduce information search costs but, on the other hand, it can be costly because sometimes it provides incorrect and/or inaccurate information which can negatively affect farmers' decisions. The LNWMGA committees were a source of information about BKB markets for the smallholder farmers that sold mohair in the formal markets. It can be assumed that the type of information provided by the association has led smallholders to participate in formal mohair markets. This information was also disseminated during the orientation for the newly recruited LNWMGA members.

Generally, there was knowledge about how the informal traders and markets operate amongst the respondents that use informal marketing channels. All of these farmers indicated that the informal traders establish mohair collection points in different villages or sometimes the traders visit every village to buy mohair. The smallholders take any quality of mohair to the collection points and they use any container to package their mohair, that is, no specific requirements such as packaging bales. One of the smallholders alluded to this when saying that *"With informal traders we package our mohair in any container such as plastic bags and boxes it is not like at LNWMGA and BKB where you are required to use those expensive bales".* This arrangement is cost effective in that it reduces costs incurred by smallholders because boxes and plastic bags are cheaper than bales specifically for wool and mohair packaging and can be an incentive for using informal markets.

The smallholders and buyers negotiate the transactions and once the mohair quality and prices have been agreed upon the cash payment is made instantly at the collection points as the traders promised. This prompt payment indicates that buyers are trustworthy as they comply and fulfil the promises they had made and this reduces the costs associated with monitoring and enforcement as well as risk and uncertainty on the side of smallholders. It is apparent that prompt payment has lured mohair farmers to the informal markets.

In terms of difficulties facing smallholder mohair farmers in the informal markets, there are various challenges confronting this group of farmers. The challenges cited include lack of information in relation to where and when the buyers come to buy mohair, traders dictate prices, long negotiations and mohair rejections (Table 6.2).

Table 6.2: Challenges faced by small-scale mohair farmers in the informal markets

Challenges faced	Number of farmers	Percentage of farmers (%)
Difficulty in knowing when and where the traders set up collection points	9	41
Buyers dictate prices	20	90
Mohair quality rejections	14	64
Long negotiations before selling	5	22

The smallholders in the informal markets indicated that sometimes it is difficult to get information as to when buyers are coming and where they will be setting up mohair collection points. This was alluded to by one smallholder when indicating that *"Sometimes we fail to sell our mohair because by the time we get information the buyers have already left".* Another farmer supported this by stating that *"In other cases we are not able to sell all mohair because we arrive late when the buyers have already exhausted their cash reserves and we have to return with our mohair only to sell it in future".* Other smallholders indicated that sometimes they go to places which they were told that buyers are going to set up collection points on certain days only to find that the buyers are not available. The reliance on social networks has detrimental effects on these farmers as these types of networks provide incorrect or inaccurate information to the smallholders. In addition, lack of communication between the

involved exchange partners affects the mohair sellers in these informal market channels. The buyers are also affected because the low smallholders' turn out implies a cost to them.

The smallholders stated that in most cases they know prices offered for their mohair some days before time of exchange. This arrangement is cost-effective on the side of smallholders because it prevents the situation in which they can spend time with a buyer that offers low prices. They have time and opportunity to compare the prices and approach the buyer who offers the best price. Despite the advance price knowledge, smallholders still negotiate prices, particularly when they deem price to be too low, but 90% of the smallholders cited dominance of buyers in terms of determining mohair sale prices. The buyers are in a powerful position and always have a decisive voice on the mohair sale prices. Their position is strengthened by, among others, the fact that smallholders are financially poor and always desperate for cash when they sell their produce. This means that these poor smallholders cannot cope with costs associated with extensive search for buyers that offer better prices or long negotiations. One of the small-scale farmers highlighted this when stating that *"The traders offer very low prices and we try to show them that the prices are too low given the quality that we supply but in most cases they never raise the price and we sometimes go back and come back the next day thinking that they will change their heart but they never raise the prices until we give up and accept those low prices because we are desperate for money".* This case shows that these individually operating smallholders lack bargaining power and become price takers and they are involved in long negotiations that involve costs which negatively affect their mohair businesses. About a quarter of respondents indicated that they take a long time before they sell their mohair because of the long and difficult negotiations, causing high transaction costs.

About two-thirds of small-scale farmers that use informal market channels indicated that at times the mohair clip they supply is rejected by the informal traders. They indicated that they supplied the quality of mohair they were informed was required and accepted by the traders but to their surprise the traders rejected it as they demanded and bought different quality. This can be explained by this group's reliance on social networks for market information and has detrimental effects on the poor small-scale farmers. The respondents also indicated that the prices offered are different from what they expected and in all cases, prices are lower than expected. There is inconsistency in the prices offered for same quality of mohair as one of the smallholders indicated that *"On one day in 2014 grade A was bought at R 60.00 per kg*

in the morning and bought at R 50.00 in the afternoon sometimes different days have different prices". These prices did not compare favourably to those received from BKB auctions as during the said year R78.00 for the same quality of mohair was received at the BKB auctions after commissions were deducted. This supports the complaint of many (68%) smallholders that the prices are being manipulated in the informal markets. This is costly to the farmers because they incur costs for transporting mohair to the collection points only to find lower than expected prices and moving to another buyer adds to the costs. This is clear that informal traders behave opportunistically to satisfy their self-interest of profit maximisation at the expense of the smallholder mohair farmers. The smallholders indicated that their trust in the informal traders is declining because of these actions which they regard as manipulation and this is a threat to the exchange relationship.

However, it is noted that despite prices received from BKB auctions being higher, the net prices received by smallholders are significantly reduced, though they never reach the level or below those offered by informal traders. For instance, in the years 2009/2010, 2010/2011, 2012/2013, 2013/2014 and 2014/2015 the differences between the prices received from the BKB auctions and the net prices received by smallholders were 14.28%, 9.43%, 13.02%, 7.69% and 10.69% respectively (see Table 6.3). The smallholders and LNWMGA failed to explain these reductions (dishonesty was suspected by the researcher), therefore the researcher's guess is that the difference is due to the costs and commission.

In terms of how the formal mohair markets operate, the involved farmers have knowledge about value chains for their mohair clip and they indicated that as members of LNWMGA they use government shearing sheds for shearing, grading, packaging and storing their mohair. After this stage, the shearing shed committees provide them with receipts showing the grade and quantity of mohair supplied by each farmer. The bales are then dispatched to the national collection point at the LMPS headquarters in Maseru after which they are sent to the market in Port Elizabeth. They indicated that the shearing, grading and packaging services are offered on credit only to smallholders that own less than 100 goats. The transportation costs are paid upfront by all farmers that are members of the association. The arrangement of offering services on credit is an incentive for small-scale mohair farmers to participate in formal mohair markets.

Table 6.3: Prices received between the seasons 2009/2010 and 2014/2015

Market channel	Year	Price	Commission	Net price
Formal market	2009/2010	R48.90	R6.90	R42.00
	2010/2011	R58.60	R5.60	R53.00
	2012/2013	R61.79	R8.04	R53.75
	2013/2014	R84.49	R6.49	R78.00
	2014/2015	R89.01	R9.51	R79.50
Informal market	2009/2010	R31.45	_	R31.45
	2010/2011	R37.00	_	R37.00
	2012/2013	R37.90	_	R37.90
	2013/2014	R59.00	_	R59.00
	2014/2015	R60.00	_	R60.00

This group of mohair farmers is clear in terms of who the buyers of their mohair are (BKB) but there was a striking lack of knowledge when it came to how the BKB auctions work. Eighty-five percent of the respondents indicated that the mohair is sold to BKB which then pays the farmers after some time. This is not how the mohair auction markets at BKB work and this gives a hint that this critical form of information was not effectively disseminated to the farmers or the farmers due to their reported lack of education failed to grasp and understand how these formal markets operate. It can be argued by the researcher that this lack of correct information might have influenced smallholders to participate in formal markets.

In terms of the reasons that motivated this group to use the formal markets, it was earlier reported that the farmers were attracted by the privilege of using the adequately equipped government shearing sheds, subsidised transport to the markets and access to government paid shearing shed workers as well as promised high prices and profits.

In terms of difficulties facing smallholder mohair farmers in the formal markets, there are various challenges confronting this group of farmers. The challenges cited include failure to negotiate for improved prices and deductions made to payments (Table 6.4). The challenges including failure to negotiate better prices and deductions from payments were a result of a lack of understanding because in the formal markets prices are not negotiated but

determined by the market forces. The deductions are commissions charged by the broker BKB for offering services to the small-scale farmers.

Table 6.4: Challenges faced by small-scale mohair farmers in the formal markets

Challenges faced	Number of farmers	Percentage of farmers (%)
Failure to negotiate better prices	22	78
Deductions from payments	17	61
Delayed payments	17	61

The smallholders viewed the prices offered by the market as being low and there was a failure to negotiate better prices. This was one of the major challenges facing smallholder farmers that use formal mohair marketing channels in Mafeteng as cited by more than three-quarters of the respondents in that category. The farmers indicated that the prices offered by the BKB markets are below their expectations and failure of the LNWMGA NEC to negotiate for better prices is a big challenge and what they dislike most about this formal market channel. One of the smallholders was furious when stating that "*This market channel is useless because prices are low but our representatives do not want to negotiate for improved prices".* In formal markets, the prices are determined by market forces of supply and demand and they cannot be predetermined or negotiated. The perceptions of smallholders are a result of the lack of knowledge on how auction markets work and may have detrimental effects on the LNWMGA and its entire membership as one of the DWMGA committee members indicated that they often hold meetings to address conflicts related to farmers' dissatisfaction about prices. This lack of information leads to costs associated with the opportunity cost of time and resources used for arranging and attending meetings.

Sixty-one percent of the smallholders that use formal markets cited the deductions made from their final payments as a major challenge they are facing in this type of market. The smallholders indicated that there are monies deducted from their payment and they were dissatisfied because this reduces the net income attained from their mohair business. However, these small-scale farmers failed to provide the precise/estimates of the amounts deducted from their payments per season. Most (60%) farmers also failed to mention the types of deductions that they were liable to pay. The researcher suspected that the

respondents were not honest in their responses and this was later confirmed by one of the MAFS officials when clarifying that *"The small-scale farmers are offered services including shearing, grading, packaging bales on credit and the mohair tax is also paid and all these amounts are deducted from final payment but these farmers always complain about it and the association is always involved in meetings to address these conflicts".* This misunderstanding has led to perceptions and conflicts that have a negative impact on the functioning and performance of the association as well as farmers because of financial and time resources spent addressing the conflicts instead of investment in other important areas.

Delayed payment is one of the major challenges as the respondents indicated that at times they receive their payment a year after the transactions were effected and they attributed this to BKB. Nevertheless, LPMS and MAFS officials argued that the mohair clip is held for a long time at the national collection point in Maseru because LNWMGA NEC takes time to process payment of transportation fees to the transport operators. The officials came to know about this delay because the government subsidises transport to Port Elizabeth and the government pays its share on time only for the LNWMGA to delay. The institutional arrangement and weaknesses within the LNWMGA create delays, which is a cost to the smallholder farmers. It has deterred some smallholders from participating in formal markets and they opted for the informal markets instead.

There was generally poor knowledge about grades and standards amongst the respondents except for those who owned 100 or more goats (who used formal markets) as most indicated a lack of knowledge about the determinants of mohair quality. Almost two-thirds of the respondents lacked knowledge about how quality of mohair is determined, and they also lacked knowledge about the quality demanded by the customers. The remaining respondents indicated knowledge about the determinants of mohair quality and the quality demanded by their buyers. Further analysis revealed that the respondents who have knowledge about grades and standards also included the association committee members. The LNWMGA disseminates information to its members which makes them relatively more aware of the grades and standards and it is assumed that knowledge of grades and standards has influenced the participation of this category of farmers in the formal mohair markets because the prices they receive depend on the grades produced.

In terms of formal markets, the lack of information is explained by the cited poor communication between the association committees and small-scale farmers, which leads to poor market information flow, causing a lack of information among these farmers. With regards to farmers that use informal markets, the lack of information is explained by reliance of smallholders on social networks for market information. These sources of information are not reliable as they do not always provide correct and accurate information and these weaknesses will have detrimental effects on the small-scale farmers' performances. The information asymmetry between the small-scale mohair farmers and informal traders makes the smallholder mohair farmers vulnerable to exploitation whereby due to opportunism some buyers can offer low prices for mohair sold by the uninformed farmers. This results in smallholders incurring information related transaction costs in the form of opportunity cost of spending time and other resources with the wrong buyers, those who offer low prices.

Concerning the farmers that use formal markets, the uneven information levels between the smallholders and LNWMGA management may lead to principal-agent problems to the detriment of the small-scale farmers. The constitution of LNWMGA dictates that for a member to be elected to the committees he/she must meet the criteria used in the association which is the attainment of high mohair quality consistently for at least five years and a flock size of at least 100 goats. The LNWMGA management is not paid but do receive some incentives from BKB in the form of cash bonuses and improved breeding goats every year that are shared among committee members throughout the country. This was confirmed by one of the LNWMGA management team when stating that "*We are not paid any salaries, the only incentives that we receive are from BKB in the form of improved goats and bonuses in the form of money and this is shared evenly among the committee members".* Due to this scenario, the LNWMGA management seems not to have the same incentives as the smallholders and may take a different action than the smallholders would like them to. For instance, the smallholders desire more rewarding mohair markets and improved contractual agreement (inclusion of technical and other support services) but the LNWMGA management continues to maintain the status quo by indicating that they are still negotiating for inclusion of support services in the contractual agreement, and that they had conducted market research and found that BKB offers by far the best prices. The smallholders cannot observe the actions of LNWMGA management precisely, therefore, they are not sure if the LNWMGA

management is still negotiating for the support services or did conduct the market research that revealed that BKB prices are indeed the best. The management continues to sell high quality mohair, hence high prices, and continue to receive incentives from BKB, while the smallholders in informal markets continue to receive low prices due to the poor quality mohair that they supply. This power imbalance entrenches the dominant position of the relatively larger-scale mohair farmers and this may cause the dissatisfaction of the smallholders that may lead to detrimental costs in the form of conflicts.

The mohair grading or classing skills were poor among the respondents as only a quarter of the respondents knew how to grade and class mohair. About 40% of those who lacked knowledge and skills in mohair grading indicated that grading of mohair was done only by mohair classers and/or committee members at the shearing sheds. The remaining respondents indicated that grading is done only by private traders during exchange at the trading posts/mohair collection points. These institutional arrangements are open to opportunism for downgrading of mohair quality by the buyers and would severely reduce the prices the smallholders receive for their produce. This was alluded to by one of the MAFS officials when indicating that *"Sometimes one could see that a farmer has produced good quality mohair but the private traders will opportunistically downgrade it and offer a low price just because farmers lack information and are desperate".* The information asymmetry has led to the exploitation of the small-scale farmers which negatively affects the transaction costs for small-scale farmers. The small-scale farmers incur the opportunity cost of expending their limited time, efforts and financial resources with the wrong buyer.

6.2.3 Contractual arrangements

Contractual arrangement is an institutional arrangement in agriculture that integrates independent smallholder farmers, traders, buyers, financial intermediaries and agricultural investors, which previously have been in fragmented chains (Ojediran, 2011). For any financing arrangement to be successful, these once fragmented chains must be seen as a single structure, which is the value chain. This structure can be described in terms of the relationship between the sellers (farmers) and the buyers. The design and efficiency of these institutional arrangements are based on several institutional factors including property rights, preferences, incentives, and trust, loyalty and transaction costs among others (Sykuta and Cook, 2001).

There were some formal contractual arrangements among the respondents in the mohair markets. More than half of the respondents had contractual arrangements while the remaining respondents had no form of contracts with any business partner. When the respondents were split into their different marketing channels, it was revealed that all of the smallholders without contracts were using informal market channels. The contracts influenced participation in formal markets and the LNWMGA signed a contract on behalf of the members. The market specification contracts were made and the buyer committed to buy mohair from the farmer while the farmers committed to sell his/her mohair clip to the buyer. In terms of payment, the LNWMGA contract with BKB states that payment will be made three months from the day of sale. Nevertheless, the respondents indicated that more often they received payment a year after the day of exchange/auction. This is indicative of non-compliance by BKB and/or LNWMGA which might lead to monitoring and enforcement related transaction costs being incurred by small-scale farmers due to follow-up on payments.

Various reasons were advanced for the delay in payment as one of the BKB representatives in Lesotho stated *"LNWMGA takes too long to dispatch the mohair clip to the market in Port Elizabeth and farmers think that it is BKB that delays paying them".* One LNWMGA committee member argued *"It is true that sometimes we take too long to send mohair clip to BKB but even after eventually dispatching mohair, BKB still takes more than the stipulated three months to make payments"*. One official from the Ministry of Trade and Industry shared the sentiments of the LNWMGA official by stating, *"Yes LNWMGA delays to dispatch mohair but even after dispatching it, BKB usually fails to pay farmers within the three months period that is stipulated in the contractual agreement"*. It is evident that one exchange partner did not comply with terms and conditions of the contract and this implies that smallholders incur costs to monitor and enforce the contract. This also reduces smallholders' confidence in the buyer as some of the farmers indicated that they no longer trust the exchange partner as well as the LNWMGA leadership.

In response to why the contractual arrangements were entered into, almost all (96%) of the smallholders indicated that they entered into their contract because the contracts were already in place when they entered the mohair sector and their fathers and forefathers operated under the same contract. This indicates that path dependency influenced decision making within this group of small-scale farmers. This paints a bleak future for the LNWMGA

should the older farmers stop being active or should they pass on, the sustainability of the Association is threatened.

In response to the question on their satisfaction about the contract, not all respondents were satisfied with the contract. More than half of the respondents (57%) were dissatisfied because they viewed the contract without any support services to be unhelpful. Sometimes they are confronted with challenges that necessitated external support services, which are difficult to get from government, development partners and local businesses. The remaining respondents were dissatisfied because the prices they received were different to what they were told and promised before sending their mohair clip to BKB. These promises seem to be part of LNWMGA strategy to attract members to the association. A member of the DWMGA committee confirmed that there are promises they make to potential recruits when stating *"We promise them better prices which are indeed better than those offered by informal markets but the problem is that some association officials promise unreasonable prices which angers smallholders later when they realise that the promises are not being fulfilled".* This was supported by one official from LPMS when indicating *"In some cases the LNWMGA officials promise prices that are not realistic just to lure smallholders to the association"*. This is baseless because at BKB auctions market forces set the prices and there is no guarantee that they will be high or low. The association did not provide members with the right information, which can lead to wrong business decisions among farmers. In addition, it is apparent that the contract design did not consider the institutional factors including desires and preferences of the smallholders and this may affect the efficiency of the contract because trust and loyalty of the smallholders will be affected. The respondents stated that they tried in vain to convince the LNWMGA management to review the contract but their opinions and suggestions were never considered during association's meetings, which supports the smallholders' claims that they have no influence on policy.

Despite their unhappiness, the smallholders continue to use the BKB channel. However, the amount of mohair handled by LNWMGA has been gradually declining as one of the DWMGA officials stated, *"The amount of wool handled by our shearing shed has been slowly decreasing because our small-scale members sell some of their mohair on the side".* One official from LPMS verified this when stating *"Probably due to unhappiness, the smallholder members of the association now sell some of their clip to other buyers".* It is evident that the loyalty of the

small-scale members of LNWMGA is being affected. The reason advanced for continuing to sell through BKB despite the unhappiness is the better prices and the access to market infrastructure, shearing sheds and government paid staff, shearing, grading and packaging services offered on credit. The side selling helps the farmers to counteract costly delayed payments associated with BKB as it enables farmers to meet their immediate household needs and obligations. It is assumed that another reason for continuing to sell through BKB is the low education attainment and lack of market information that characterise the small-scale farmers that render them unable to search for alternatives. Infrastructural support from government, provision of services on credit by LNWMGA as well as relatively high prices have influenced the participation of small-scale farmers in the formal markets.

6.2.4 Marketing arrangements in the informal mohair markets

Around 27% of the smallholders that used the informal market channels had simple agreements with their exchange partners. They were relatively clear about the terms and conditions of their agreements and they indicated that they were involved in the design of the agreements although this does not happen in all circumstances. Under these agreements, the smallholders would commit all their produce in advance to the private trader who in turn will provide groceries up to a certain limit decided by the private trader and at times the private trader would help to pay school fees of the farmers' children. In other instances, the respondents only committed their produce in exchange for school fees of their children whereby they would in advance sell their produce to the private trader who would then only pay school fees for their children. This group of smallholders made the arrangement because they wanted urgently to address their families' immediate needs at any time they arose such as feeding their families and paying school fees for their children. In this case, the material conditions led to the design of institutional arrangements that led to actions that resulted in positive outcomes for the small-scale farmers. These marketing arrangements have lured smallholders to the informal mohair markets.

They all indicated that the prices were below their expectations and that they do not trust the private traders. For instance, a farmer would receive groceries worth R1800 and produce mohair worth R3000, which the trader would take all because of the agreement signed in

advance. One smallholder complained "*We attained the same mohair grade as my brother last year. Though I had more goats he was paid way more than me by the same trader to whom I had sold in advance because he did not enter into contract with that trader, I was cheated".* This scenario clearly demonstrates the economic conditions of the small-sale farmers and led to them signing the agreements that disadvantaged them and made them victims of opportunism from the side of private traders. However, it may be that the informal trader may have paid in advance an interest on the loan as well as risk. Whatever may be the case, the researcher argues that the small-scale farmers incurred an opportunity cost by selling to the informal traders in advance.

Despite the dissatisfaction, these smallholders indicated that the arrangements helped them because they approached the private traders during time of great desperation in their households. It is evident that these institutional arrangements have influenced the participation of small-scale farmers in the informal mohair markets.

6.3 Mohair smuggling

The stakeholders revealed that the area was characterised by illegal sales of mohair as there were smallholders that sold their mohair clip to smugglers and this was supported by scholars such as Mokitimi (1996), Hunter (1987) and Ministry of Police (2016) when stating that Lesotho has a long history of mohair smuggling. The respondents agreed with the statements as all of them stated that there were farmers that sold their produce through the illegal channels. The smuggling of mohair is illegal because, according to the Importation and Exportation of Livestock and Livestock Products (Amendment) Act. 21 of 1984, ''no livestock/livestock product shall cross the country borders without issuance of a permit from the Livestock division" (Imani Development International, 2007:11).

Table 6.5: Stakeholder response on incentives for mohair smuggling

Incentive for smuggling	Number of stakeholders	Percentage of respondents (%)
Acceptance of any mohair quality	37	75
Non-requirement of ownership proof	45	92
Acceptance of home shorn fleece	38	76

Various factors were cited as incentives for the illegal dealings in mohair marketing (Table 6.5). Three-quarters of the respondents cited the acceptance and buying of any mohair quality by smugglers as a factor attracting more farmers to illegal channels. This institutional arrangement has positively impacted on the smallholders because farmers have a chance of getting some returns for any effort they had applied in production as they are not rewarded only for the best quality.

The fact that smugglers do not require smallholders to produce animal ownership proof or certificates before buying their mohair clip was one of the incentives as cited by 92% of the respondents. One of the officials from the Department of Livestock stated that *"The livestock ownership certificates are expensive and also associated with massive bureaucracy"*. This arrangement has positively affected the small-scale farmers as it spared them from incurring the costs associated with the acquisition of ownership proof or certificates that have financial and time costs. Other (76%) stakeholders cited acceptance of home shorn fleece as an incentive for selling mohair through illegal channels, This was supported by one smallholder farmer who uses legal market channels when indicating *"Smugglers do not expect sellers to shear at shearing sheds where every service is charged unbearable prices that is why some farmers resort to the illegal dealings".* It is apparent that the institutional arrangement has reduced costs associated with shearing, grading and packaging associated with some legal market channels.

Despite the positives of selling mohair through illegal channels, the respondents highlighted various negatives of mohair smuggling in their areas. Fifty-four percent of the stakeholders stated that mohair smuggling has resulted in stock theft and mohair theft in some instances, which is probably due to the non-requiring of the animal ownership certificates on the side of smugglers. This theft has led to costs to the mohair sector as stakeholders have been spending financial and time resources on addressing this challenge. This expenditure has opportunity costs of not spending on areas that are critical to the mohair sector's growth and development.

Poor range management was one of the disadvantages of mohair smuggling as cited by nearly two-thirds of the stakeholders. This is due to the acceptance of any mohair quality and the farmers no longer see a need to invest in range management, hence quality improvement.

The mohair smuggling has led to a 'tragedy of the commons' situation as herders only focussed on maximising utility from the rangelands and the outcome has negatively impacted on the community at large in the form of rangelands degradation. About 68% of the small-scale farmers indicated that the disease incidences have increased because farmers no longer invest adequately in animal health probably because they are sure that even if the mohair quality is poor the smugglers will buy it. The arrangement of accepting any mohair quality has negatively altered the behaviour and attitudes of the farmers and the outcomes have been detrimental to the livestock sector in Mafeteng.

There a number of disadvantages associated with smuggling and they include unreliability of trade because sometimes police presence around points of these illegal exchanges prevents these illegal operations and sellers lose, as the quality of most of their mohair cannot be sold through the legal channels. Low prices were mentioned as another disadvantage of using smugglers to sell mohair and this is not surprising given the nature of the trade. However, the researcher was unable to get data regarding the prices offered by the smugglers except that they were lower than those offered by legal markets. The other mentioned cost of mohair smuggling is the bribery paid to the authorities and, in most cases, the authorities solicit huge amounts that significantly reduce the gains attained by small-scale farmers. One of the respondents who was once involved in smuggling stated that *"Sometimes, especially when you are caught, the authorities (cannot be specified) demand huge amounts of bribery that one ends up with low gains"*. It is evident that smuggling is not a panacea for costs incurred by smallholders in formal and informal markets as it has its own associated costs.

6.4 Mohair Business Costs and Income

The level of input costs can affect the competitiveness of a business due to a decrease in the profit margins attained by the farm enterprise (Thompson, Jr., 1984), that is, the production costs have an influence on the performance and financial position and hence sustainability of a farm enterprise. The major areas where farmers spend more financial resources include feeding, disease control, transport, taxes/levies/deductions, packaging, shearing and classing/grading of mohair (Table 6.6).

Table 6.6: Expenditure on main activities among all respondents per goat

Market channel	Variable	Minimum	Maximum	Mean
Formal n = 28	Feeding cost	R17.00	R40.00	R21.75
	Disease control cost	R4.00	R10.00	R6.64
	Transport cost	R4.20	R9.00	R5.90
	Tax/Levy/deductions	R2.75	R4.00	R3.81
	Packaging cost	R1.20	R1.50	R1.35
	Shearing cost	R5.00	R5.00	R5.00
	Classing/Grading cost	R2.00	R2.00	R2.00
Informal n = 22	Feeding cost	R0.00	R20.00	R9.00
	Disease control cost	R2.00	R6.00	R2.90
	Transport cost	R3.00	R7.00	R4.70
	Tax/Levy/deductions	R0.00	R0.00	R0.00
	Packaging cost	R0.00	R0.00	R0.00
	Shearing cost	R0.00	R0.00	R0.00
	Classing/Grading cost	R0.00	R0.00	R0.00

The results show that there is a difference in terms of expenditure on the aforementioned cost aspects between the two groups of farmers. The farmers that use informal markets spent less on feeding and disease control than those farmers who used formal markets (Table 6.6). This is explained by the institutional arrangement of accepting lower mohair quality by informal traders, which has led to the farmers spending less on quality improvement which is partly a product of good feeding and disease control programs. Other areas where farmers that use informal market channels spend less up front include shearing, grading/classing, packaging and taxes/levies/deductions. The informal traders explain this by the acceptance of home shorn fleeces packed in any container and by the fact that grading/classing is only done by the traders. There are no taxes/levies paid by this group of farmers, but it is assumed that they are factored in the relatively low prices offered by the informal traders. These institutional arrangements and indirectly the factors connected to the formal markets (demand for high quality, use of mohair packaging material, mohair levy, etc) have attracted the smallholders to the informal markets.

Table 6.7: per goat expenditure among farmers that have 100 goats or more

Market channel	Variable	Minimum	Maximum	Mean
Formal n = 14	Feeding cost	R29.00	R40.00	R34.00
	Disease control cost	R8.00	R10.00	R9.20
	Transport cost	R4.20	R6.10	R4.70
	Tax/Levy/deductions	R2.95	R4.00	R3.85
	Packaging cost	R1.20	R1.40	R1.25
	Shearing cost	R5.00	R5.00	R5.00
	Classing/Grading cost	R2.00	R2.00	R2.00

Further analysis revealed that among the smallholders, those that owned 100 goats or more spend more on feeding and disease control per goat (Table 6.7). This is explained by their knowledge of quality and standards that has compelled them to invest in quality improvement relative to their less informed and smaller-scale colleagues. This category of farmers is better informed because of the reported good relations and information sharing with the LNWMGA management. The statistical analysis revealed a positive correlation of 0.601 and 0.606 between mohair quality supplied and feeding costs and disease control costs respectively. The access to information has positively changed the behaviour and attitude of this category of farmers and subsequently the reduction of costs associated with supplying low quality mohair produce. It is apparent that access to market information regarding the standards and grades has led to these farmers' participation in formal markets that normally demand high standards and grades. One area where they spend less is transportation of mohair (Table 6.7) and this is due to the collective action whereby they pool their financial resources together, therefore a gain in the form of reduced costs.

Table 6.8: Net income levels among respondents per season

Market channel	Variable	Minimum	Maximum	Mean
Formal	Total costs	R368.75	R2900.00	R1563.59
	Gross Income	R1680.00	R11900.00	R5994.18
	Net Income	R1311.00	R9600.00	R4430.59
Informal	Total costs	R170.00	R1745.00	R521.82
	Gross Income	R1475.00	R6000.00	R3438.55
	Net Income	R1160.00	R5251.00	R2216.73

In terms of the total costs incurred by farmers, the farmers that used formal market channels incurred more total costs relative to their counterparts in the informal markets (Table 6.8). The total costs for small-scale farmers that use informal market channels were even lower than those of farmers who owned less than 100 goats and used formal market channels (Table 6.9). The explanation is that smallholders in this category incur less cost in few areas and do not spend anything at all on other areas. For instance, smallholders that use informal markets do not incur costs in terms of feeding, shearing, grading and packaging, and none of them has any deductions made to their payments. This is attributable to the institutional arrangement of accepting even low quality mohair by the informal traders. It can be argued that this has led to transaction costs in the form of the opportunity cost of not using more rewarding formal markets.

Table 6.9: Net income levels among respondents owning less than 100 goats per season

Market channel	Variable	Minimum	Maximum	Mean
Formal	Total costs	R368.75	R1459.00	R911.33
	Gross Income	R1680.00	R6336.00	R3358.94
	Net Income	R1311.00	R5505.00	R2447.61
Informal	Total costs	R170.00	R1745.00	R521.82
	Gross Income	R1475.00	R6000.00	R3438.55
	Net Income	R1160.00	R5251.00	R2216.73

Further analysis revealed that the total costs incurred by farmers that owned 100 goats or more incurred more total costs than other categories of farmers (Table 6.10). This is attributable to the quantities of mohair handled and supplied as most charges are proportional to the mohair quantity. As mentioned earlier that there is a positive relationship between expenditure and the quality of the mohair supplied, it is assumed this better mohair quality will deliver higher prices and better returns to the farmers. The knowledge and attainment of required standards and grades and corresponding expenditure have led to the participation of this category of smallholder farmers in the formal markets.

Table 6.10: Net income levels among respondents owning 100 goats or more per season

Market channel	Variable	Minimum	Maximum	Mean
Formal	Total costs	R2175.00	R2900.00	R2571.64
	Gross Income	R7700.00	R11900.00	R10066.82
	Net Income	R5325.00	R9600.00	R7495.18

The study area was characterised by inability of the small-scale mohair farmers to sell all the mohair produced per season. A tenth of the respondents indicated that they fail to sell all the mohair produced during some seasons. Further analysis revealed that the farmers that failed to sell all their mohair during some seasons used informal market channels. The statement can also explain that most farmers struggled to get information on where and when buyers were coming to buy mohair, which resulted in the smallholders missing the opportunity to sell their clip. The lack of information leads to opportunity costs associated with not selling the mohair produce.

The levels of net income attained from mohair sales were generally low among small-scale farmers that used informal market channels and those who used formal market channels but owning less than 100 goats. The average net income for the small-scale farmers that use informal markets and those who used formal markets but owning less than 100 goats are R2216.73 and R2447.61 respectively. The farmers that use formal markets and owning 100 goats or more attained the average net income of R7495.18. The statistics support this as they showed that the relationship between flock size and quality of mohair sold was significant with a p-value of 0.001. Another explanation for higher net income among these farmers is the collective approach that they use when buying inputs, marketing and transporting their mohair; it helps to reduce the costs for this category of farmers. The collective action has influenced the participation of this category of farmers in the formal mohair markets.

6.5 Stock theft and associated costs

Stock theft is a major threat to the livestock industry, poverty alleviation initiatives and human security in developing countries of Africa and the farmers incur costs because of, among others, preventing, controlling and managing this phenomenon (Malekano, 2000; Amankwah *et al*., 2012; Matebesi, 2015). The study area is characterised by high rates of stock theft as 71% of the small-scale farmers had experienced theft in their mohair enterprises while the remainder indicated that this has affected some of their fellow farmers. The informal interviews supported these statements as stakeholders cited stock theft as a major problem affecting farmers in the area. According to the stakeholders, this problem, though not in isolation, has led to increased deployment of police and military officers in the district of

Mafeteng over the last 12 months. This also has led to the establishment of temporary police stations in the rural areas where livestock farming is mainly practised. The phenomenon of stock theft, which is a product of behaviour of the people in Mafeteng, has led to costs incurred by the public sector because of new police recruitments and construction of new buildings. These investments have led to a significant decrease in stock theft in Mafeteng though results have been different in some districts.

There were various measures taken by the smallholders to address the challenge of stock theft and two-thirds of the respondents indicated that village policing was introduced where at night they would patrol the villages and kraals. There were financial contributions made by the villagers to acquire resources such as public address systems, telephones, torches, protective clothing and blankets for the village policing group members. A quarter of the smallholders constructed more secure kraals for their goats as a response to the challenge of stock theft, while the remaining respondents increased security at their homestead through acquiring licensed fire arms, hiring night watchmen and fencing off their yards. The smallholder farmers and communities at large have incurred costs due to countering the problem. This has led to opportunity costs because resources could have been expended on productive activities.

6.6 Views of other stakeholders in the mohair industry of Lesotho

To create balance and fairness in the research, the opinions of other stakeholders were incorporated into the study. The opinions of officials from the LNWMGA, LPMS, MAFS, MTICM, Private traders, Department of Range Management, Local Government as well as the local chiefs were sought, and the data also helped in the verification and/or substantiating or opposing of some of the statements made by the small-scale mohair farmers.

6.6.1 Views concerning the Lesotho National Wool and Mohair Growers Association (LNWMGA)

The constitution of LNWMGA dictates that for a member to be elected to any committee a member should have attained high mohair quality consistently over a period of five years and should also have attained a minimum of 100 goats. The association adheres to this dictate as one of the NEC members indicated "*In the executive there are members that were not eligible six years ago, but they improved and eventually they were elected to the executive*". Nevertheless, this institutional arrangement explains the lack of small-scale farmers'

representation in the LNWMGA structures, hence claims by small-scale farmers that committee members and bigger farmers dominate the association. The constitution of LNWMGA does not take cognisance of the fact that the Rangeland Management Policy of 2010 strives towards reduced stocking rate. For instance, the Ministry of Forestry and Land Reclamation has robustly engaged in stocking rate reduction programmes and this will make it difficult for small-scale mohair farmers to meet the criteria for promotion within the LNWMGA. One of the smallholders complained *"The range regulations do not allow us to keep up to 100 goats and this affects us because we cannot be promoted in LNWMGA if we do not reach that flock size, we will always be at this level and poor because of such regulations".* One official from the Department of Range Management supported the smallholder claims by stating *"the range management policy does not allow farmers to exceed a flock size of forty but the LNWMGA requires farmers to keep at least hundred goats to be elected to the committees and this disadvantages small-scale and emergent farmers"*.

The lack of policy cohesion has led to the feeling of marginalisation of some economic participants particularly the vulnerable like small-scale mohair farmers and this has resulted in animosity and conflicts, which have been costly for the LNWMGA and its membership.

It was indicated earlier that the LNWMGA's NEC organises and holds annually a general conference for the entire membership to discuss policy, consult with members on critical issues as well as to report to the members concerning the association's position. However, the small-scale farmer members were unable to attend these three-to-five day conferences because they could not afford transport and accommodation costs, as they need to finance themselves. The conferences are held in Maseru or major district towns and this means that some farmers must travel from distant rural areas. One official from the Food and Agricultural Organisation attested to this by stating *"the policy conference are always held in the capital town and this prevents the small-scale mohair farmers from participating and contributing towards the direction taken by their association".* This situation provides an explanation to the smallholders' complaints that they do not attend conferences, hence are unable to contribute towards the running of affairs and that the association is dominated by and only serves the interest of the farmers with larger flocks. This tradition of holding conferences only in the city or major towns has created power imbalances between small-scale farmer

members and their larger colleagues. This has led to the reported animosity, hence costly conflicts between these two categories of farmer members of LNWMGA.

On recruitment, members are oriented on the governance, policies, marketing and other operations of the association to ensure that they understand what they venture into by joining the LNWMGA. One of the DWMGA committee members indicated *"We even teach them that we have a market-based contract with BKB which acts as a middleman for our (LNWMGA) mohair clip and that BKB receives commission for the services rendered depending on the amount of mohair sold. However, when this amount is deducted from their payments they complain and claim that the committees cheat them".* The sentiments were shared by another committee member from one of the Mafeteng shearing sheds who stated that *"We clearly explain to them that with auction markets you cannot know prices in advance as it is the market forces that determine sale prices yet the farmers keep claiming that we hide the truth and information so that we can secretly deduct money from their payment and that we don't want to negotiate better prices with BKB. We go to an extent of inviting government expert officials to ensure that things are explained clearly to them''.* Based on these orientations that are verified by multiple stakeholders, it can be argued that smallholders were well informed before making a decision to participate in the formal markets and that access to information has led to them participating in the formal mohair markets.

However, the negative perceptions have led to animosity between committee members/bigger farmers and small-scale farmers particularly at shearing shed level where they interact closely. The shearing shed meetings are always characterised by heated and circular arguments that do not result in progressive outcomes. One member stated that *''More often shearing shed meetings have to be called off due to heated arguments between smallholders and committee members and this has led to holding of many more meetings than planned".* One Agricultural extension Officer confirmed this when stating, *"We are always asked to mediate in the associations meeting to solve the frequent conflicts within that group".* It is evident that the perceptions have led to farmers incurring costs in the form of financial resources that are involved in the organising and attendance of meetings as well as the time cost.

During the shearing season, the members' flocks are brought to the shearing sheds where they are shorn by permanent and temporary/casual shearers. The permanent shearers are

paid by government while the casual are paid by the LWMGA. The members are charged R5.00 per goat and the mohair classing/grading is charged at R2.00 per goat to enable the LNWMGA to meet casual labour costs. The members are also required to contribute towards purchase of packaging bales whereby each member owning less than 100 goats contributes R 50.00 per season while those that own more contribute R150.00. One committee member indicated that this institutional arrangement has helped to instil the sense of ownership among members when stating that *"In the past casual labour and packaging bales were provided and paid for by government and members used to steal packaging bales to sell them to private traders and farmers that used informal markets but since they were required to pay, these items no longer disappear".* It is evident that the new institutional arrangement has helped to break down the culture of dependency and norms in the LNWMGA as farmers continue to pay for the bales despite complaining and it helped to reduce costs incurred due to the replacement of items that were stolen. This arrangement has influenced and enhanced participation in the formal mohair markets.

One official from the Department of Field Services stated that *"The farmers that owned larger flocks are required to pay for these services upfront while the small-scale farmers could get services on credit, which will be deducted from their payment from BKB".* The chairperson for one of the shearing shed committees stated that the new arrangement was made in order to help the small farmers, as they were poor and unable to afford such expenses. The rules of the game changed in order to address the prevailing conditions within the LNWMGA context and this resulted in positive outcome as it allowed smallholders' mohair clip to be shorn, packaged and sent to markets. It is argued that this arrangement has influenced and enhanced the participation of small-scale farmers in the formal markets. Nevertheless, the farmers complain when the deductions are made from their payments. The treasurer at one of the shearing sheds stated, *"When the deductions are made the smallholder farmers complain and claim that they don't know what they are for because the farmers that sell to traders are not charged anything and we have to hold meetings to address this misunderstanding and meetings are costly to organise and attend".* It is evident that the conflicts lead to farmers incurring costs due to resources used and time lost because of holding and organising meetings. The expectation of small-scale mohair farmers to not be charged may be due to a lack of trust due to not having committee representatives.

The expectation of smallholders to not be charged anything, like farmers in the informal markets, may also be that the smallholders did not understand how the auction markets associated with BKB work. This can be attributed to the developmental history of Lesotho whereby in the past the country did not prioritise education and people also did not bother themselves with going to school as men were easily absorbed by the booming South African mining industry while women served as domestic servants in the same country. According to United Nations International Children's Emergency Fund (2015), the period before 1993 was characterised by low education rates with the primary school participation at 20%, secondary school participation at 15% and tertiary participation at 6%. There has been significant improvement due to policy change that resulted in improvement of primary school participation to 98%, secondary school participation to 78% and tertiary participation to 61% in 2012. Most of the smallholders in LNWMGA are old and ex-miners and ex-domestic workers with no education and understanding of how markets work - it is difficult for them despite it being simple for better-educated people.

The misunderstanding has led to poor relations between LNWMGA management and small-scale mohair farmers. This is supported by one member of the DWMGA when stating that "*Because of the misunderstandings and conflicts that we always have with some members the relations have soured to an extent that some members have terminated membership and others threatened to leave* as *well*". One of the smallholder farmers confirmed the threats when she stated *"Once we find a better offer elsewhere we are going out of this association of committee members and bigger farmers".* The threats could provide an explanation to the previously reported anomaly whereby farmers that use formal market channels search for more information hence high transaction costs. Their search for information is intense because they are unhappy and want to leave the association. Thus, the perceptions and attitudes have resulted in the farmers incurring information related transaction costs.

After the mohair has been graded and packaged, the bales are transported to the main collection point at LPMS in Maseru. One official from the Department of Livestock indicated that *"the DWMGA and shearing shed committees organise transport and members contribute proportionally to their quantities of mohair produce to be transported. For instance, in Mafeteng, the smallholders pay between R30.00 and R70.00 while the bigger farmers pay in the range of R120.00 and R200.00 each. From the collection point at LPMS, the mohair clips*

are transported to BKB in Port Elizabeth". The sentiments were shared by one member of LNWMGA's NEC who also added that the association uses funds from its rented property to pay for, among others, the transportation of mohair to Port Elizabeth. It was realised that government provides subsidy for transportation as one government official stated that *"The government lately through its section LPMS provides some money to LNWMGA for wool and mohair transportation to foreign markets to help reduce the costs for farmers".* One of the small-scale farmers commended the government by stating, *"Since time immemorial we have been telling our government that the costs particularly transport related ones were affecting us but luckily they listened and decided to help us with transport subsidy that has helped to reduce our costs".* The positive political response has resulted in the reduction of transportation costs for mohair farmers in the country and it is assumed that this policy shift has positively affected the mohair farmers and enhanced their participation in formal mohair markets.

The association together with its partners, including LPMS and Ministry of Agriculture and Food Security, has been holding workshops for members on various aspects of mohair farming business to capacitate them. It must be noted that there has been lack of workshops for non-LNWMGA members. One government official from the Matelile Agricultural Resource Centre supported this by indicating, *"The LNWMGA organises workshops for their farmers and they invite us to be facilitators. For several years I have been facilitating workshops on grades and standards to enable farmers to produce good quality mohair and be able to receive better prices for their mohair produce"*. The workshops were open to both new and old members of the association irrespective of the scale of production of a farmer. However, some officials from the LPMS argued that the workshops on grades and standards might be ineffective because there is a well-documented lack of mohair production expertise across the government departments. The officials from the Ministry of Agriculture and Food Security in Mafeteng argued that many small-scale farmers are unable to attend these crucial workshops because they are held in Maseru or major district towns and the small-scale farmers could not attend due to lack of financial resources. This explains the lack of knowledge about quality and standards among small-scale farmers that use formal market channels. The institutional problem of lack of mohair related expertise in Lesotho and the LNWMGA tradition of holding even crucial events in Maseru or major district towns far from

poor farmers' settings have negatively affected the small-scale farmers. These farmers lack information and knowledge and their participation, particularly in formal markets, is limited, hence transaction costs in the form of foregone gains associated with these markets because of the mentioned institutional challenges.

6.6.2 Views concerning the Livestock Products Marketing Services (LPMS)

The responsibilities and duties of LPMS were highlighted in a section on the historical development of the mohair industry in chapter three. The LPMS has been working closely with the LNWMGA that represents farmers that use formal mohair markets and it has been providing the association with market information and marketing related advice. The marketing official at LPMS stated *"We always provide market related information and advice to the LNWMGA and help to facilitate training for their members and their dealings with BKB".* Nevertheless, there have been challenges and the stand out one is that of delayed payment, which small-scale farmers have cited. According to one LPMS official, *"the farmers wait too long before they could receive their payment because LNWMGA takes a very long time before they could pay for transportation of mohair clip to BKB in Port Elizabeth".* Another official from the MAFS indicated *"At times mohair clip stays at LPMS for around four months and the farmers think that once their mohair clip leaves shearing sheds it spends a few days at LPMS warehouse and then gets transported to PE".* The problem lies with the association because the payment for transportation is its responsibility while the LMPS role is to provide the storage facility. It is evident that the institutional challenges within LNWMGA have been costly for small-scale farmers as they always incur financial and time costs associated with making follow-ups on their payment. The institutional challenges have triggered negative perceptions of BKB and LNWMGA among small-scale farmers, which have resulted in animosity and costly conflicts within the association.

According to the LPMS officials, another grievance that is always tabled by small-scale farmers is that their mohair clip is always the last to be shipped off from the shearing sheds and that it reaches Port Elizabeth late when the prices are no longer that attractive. In this study, it is reported that the farmers complain that their clip is the last to be sold and that the mohair clip from big farmers is sold first. Other small-scale farmers indicated that sometimes they are not able to sell their mohair because it is always left lying in the store room at the shearing shed. The LPMS officials indicated *"It is true that the flock from bigger farmers are shorn first*

and their mohair leaves the country first. In the past any farmer's goats would be shorn at any time but this arrangement created a lot of problems for us and LNWMGA because the farmers are expected to pay for transport immediately after their mohair has been graded and packed in bales to send it to LPMS warehouse in Maseru. The small-scale farmers struggled to pay this money timeously and the shearing shed store rooms would be full of bales to an extent that shearing would be suspended for some weeks or even months and this proved costly as most mohair clip would leave the country late and be sold in late auctions which usually do not offer attractive prices". One livestock assistant from Ribaneng Agricultural Resource Centre indicated that *"During some seasons, the small-scale farmers'mohair clip is not sold because they were unable to pay for transport to deliver it to the LPMS mohair collection centre".* The same sentiments were shared by one LNWMGA NEC member when stating *"We cannot sustain a practice if it proves to be costly to the entire mohair sector".* It is evident that cost-inefficiency has led to institutional responses that were aimed at creating positive economic outcomes. The negative feedback led to institutional changes that minimised transaction cost within LNWMGA. This has increased the participation of mohair farmers with bigger flocks in the formal markets while it has restricted that of farmers with small flocks. This is supported by the reported fact that small-scale farmers wait for the next season to sell their mohair clip. The statistical analysis revealed a positive relationship between flock size and 100% sales every season with a coefficient of 0.613.

It was indicated earlier that the establishment of this agency has led to a sharp decline of private traders in Lesotho. This is because LPMS has been doing well in improving the price that traders offered as they increased prices in the informal market. The officials in the Ministry of Agriculture and Food Security together with some LNWMGA officials and local chiefs indicated that *"In the past private traders used to offer prices that were low relative to what farmers that used formal markets received. For instance, private traders used to offer R23.50 for a mohair grade that fetched R55.00 at BKB auctions and Basotho farmers had to accept such prices because more often they were desperate for instant cash needed to meet immediate household obligations".* The agency has successfully reduced opportunistic behaviour among private traders who sought to maximise utility at the expense of cash desperate Basotho farmers. The exploitation of Basotho farmers through low prices was reduced and many traders exited from business because of reduced profit margins (LNDC,

2012; Mokitimi, 1996). LPMS takes cognisance of the costs of the private traders when determining their prices and profit margins. An accountant and Lesotho Revenue Authority official indicated that *"Private mohair trading is a good business and many of the private mohair traders do well and attain good profits and meet their tax obligations as well".* The regulation of the informal mohair sector through the intervention of LPMS has improved the conditions for smallholders, hence participation in the informal markets. The regulation helps to address the power imbalance and information asymmentry in these markets.

Officials from the Department of Trade and Department of Livestock indicated that the prices offered by private traders are now more attractive than in the past though they are always below those offered by formal markets. The researcher realised that the average net income attained by small-scale farmers that participate in the informal markets is found to be nearly equal to that of their counterparts (owning less than 100 goats) that use formal markets. It can be argued that this is because small-scale farmers that use informal markets rarely incur transport costs because more often the traders collect mohair clips from the farmers villages and/or set up collection points not far from the villages, and these farmers use any packaging material even plastic bags. These smallholders shear their goats in their backyards since private traders accept home shorn fleece and mohair grading is done by traders, that is, no production costs are incurred by smallholders in this regard. According to officials from the Ministry of Trade, another factor that led to reduction in costs for smallholders that use informal markets is the non-payment of taxes and that there are no deductions made from their payments. The rules and norms that are used to order economic relationships among economic actors and material conditions in the informal mohair trading have resulted in actions and outcomes that positively influence the economic participants. These institutional factors have attracted the smallholder mohair farmers to the informal mohair markets.

6.6.3 Stakeholders' opinions concerning Private Traders

The mandate of the LPMS was stated in the third chapter of the thesis and the general opinion among the stakeholders is that the institution has been doing well in terms of executing the mandate. One top and experienced trader indicated that *"The LPMS did a great job because the prices that were offered by traders in the past were unreasonably low, Basotho farmers were being exploited, and traders were attaining very high margins at their expense".* One official from the Department of Extension alluded to this when indicating *"the LPMS has*

helped to reduce the exploitation of the mohair farmers by private traders, the prices have significantly improved under this institution". In the ten year period before 1978 (establishment of LPMS) the average price for all grades of mohair never increased but post-1978 saw a steady rise in the prices offered by private traders (CBL, 2015). Before 1978, the difference between the prices offered by private traders and those offered by the formal markets was in the range of 38.5% to 50% while after 1978 it has never been more than 20% (MTICM, 2015; MOAFS, 2013). In the past nine to ten years the difference has been below fourteen and half percent (MTICM, 2015). The regulation of the prices offered by the private traders has led to price increases in the informal markets, hence participation in such markets.

The stakeholders indicated that private traders deal with the mohair farmers in the informal markets in various ways. Some traders go to the villages to buy and collect mohair from the farmers and once quality and price have been agreed, spot payment is made on the exchange. This institutional arrangement is beneficial to the small-scale farmers as it reduces the transaction costs that they incur due to transportation to the mohair collection points. It is argued that this has influenced the small-scale farmers to participate in the informal mohair markets. However, this method has been costly to the private traders because they incur high costs due to travelling to villages as they have specific areas where they operate. One trader indicated, *"Moving from one village to the next is costly and when we mention this to the farmers and offer lower prices they complain that we dictate matters and turn them into price takers but our costs should be recovered and reflected in the prices".* This explains why the small-scale farmers showed dissatisfaction that they are not able to convince the buyers to offer better prices and that they are being dictated to because they lack bargaining power. To address the conflicts, many private traders switched to the method in which they set up a mohair collection point in a central village and mohair farmers will converge to that point to sell their mohair clip. One trader indicated, *"This method has significantly reduced our transport costs and does not burden the farmers with transport costs as we always make sure that collection points are not more than 15km from the villagers and many use donkeys and horses to come to the collection points".* The same sentiments were echoed by one Agricultural Technical Officer in the MAFS. The institutional change in the mode of interaction between the farmers and the material conditions in the form of cheap modes of transport has reduced costs for the economic actors. It can be argued that had this change not been

made some informal traders would have ceased operations to the detriment of small-scale farmers. This has maintained and enhanced the participation of smallholder farmers in the informal markets.

There are other conditions set by private traders that are viewed to be reducing costs for the poor small-scale mohair farmers as one MAFS official in unison with his colleagues indicated that *"the private traders accept even the home shorn fleece packaged in any container and farmers like this condition".* It is argued by the researcher that the private traders play an important role as this condition reduces costs associated with specific packaging materials for smallholder mohair farmers and enhance their (smallholders) participation in the informal mohair markets.

The traders indicated that at times they do not get satisfactory amounts of mohair produce from the farmers due to the low farmer turnout at the collection points. The Agricultural Assistant for the Ts'akholo Agricultural Resource Centre attested to this when stating, *"Sometimes traders do not get business because very few farmers come to the collection points and the farmers claim that they do not know when and where the traders will be located for mohair purchasing"*. This explains why some small-scale mohair farmers that use informal markets cited failure to sell their produce as one of their challenges and this also supports small-scale farmers claims that they do not know when the traders will be coming to buy mohair. The small-scale farmers indicated that sometimes they miss the opportunity to sell their mohair to the private traders due to this lack of information. A LPMS official attested to this by stating *"Sometimes the farmers fail to sell their mohair or fail to sell all their mohair because sometimes when they get information the traders may have already exhausted the money to buy all the consignment the farmers that arrive late have brought to the collection point and farmers have to wait for next rounds and they are far apart".* Lack of communication and information flow between trading partners has led to transaction costs for both exchange partners and this threatens their businesses and relationship.

Generally, the amount of mohair sold through the informal market channels has increased despite occasional incidences of low farmer turnout at the mohair collection points. One local chief indicated that the number of his subjects who sell through the informal market channel has increased because of some incentives when saying, *"Many small-scale farmers in my village no longer use formal markets associated with LNWMGA because the traders do not*

demand many things like strictly mohair shorn at the shearing shed and also pay promptly". An Agricultural Extension Officer supported this by stating, *"People resort to private traders because they accept a home shorn fleece which reduces costs associated with shearing at LNWMGA shearing sheds and these traders pay them instantly".* The small-scale farmers made a trade-off between formal markets that offer higher returns but delay payment and the informal markets that offer lower returns and immediate cash that they need. The benefits and incentive structure influenced the small-scale farmers to use the informal market channels. Small-scale farmers that had adequate information chose to sell their mohair clips through the informal market channels.

The officials from the LPMS and Ministries of Agriculture and Food Security indicated that the transactions between private traders and small-scale farmers sometimes are rocked by conflicts regarding quality of mohair supplied and prices expected by farmers. A trader stated that *"We sometimes clash over quality of mohair supplied and prices the farmers expect us to pay for that".* The small-scale farmers that use informal markets receive market information from friends, relatives and neighbours and this was supported by government officials and traders. Another trader stated that *"Sometimes a farmer comes with very poor mohair and when I tell them that if I compromise and buy it I will give a low price, the farmer will quarrel that she/he has been told by friends or neighbours that this is accepted and bought by us and it fetches a very good amount. Imagine they argue based on the information from people who are not involved in this business and do not want to listen to us buyers and sometimes we reject that quality totally".* It is clear that social networks influence the market participation of the smallholders in the informal markets but the reliance on social networks negatively affects small-scale farmers and increases their transaction costs because such sources do not always provide correct and accurate information. This proves that the information set available to the economic actors determines the choices that they make and in this case, the outcomes were costly to the small-scale farmers.

6.7 Synopsis

The evidence presented in the chapter suggests that the small-scale farmers that participate in either formal or informal mohair markets encounter the institutional factors that facilitate their participation in their respective markets. Nevertheless, there are other institutional

factors that constrain their participation in mohair markets and these constraints can lead to the smallholders incurring costs.

In Mafeteng, the interaction between smallholders and mohair buyers has been dynamic and there are various institutional arrangements that have potential to influence market participation among small-scale farmers. In the formal markets, small-scale mohair farmers have access to government support, market information and infrastructure, contractual agreements, knowledge of grades and standards, and they are characterised by collective action and their decisions are path dependent. These factors lead to a reduction of transaction costs incurred in these markets and they receive relatively higher prices and net income from mohair farming. Nevertheless, power imbalances, conflicts and mistrust increase the costs associated with participation in these markets. In terms of the informal markets, the small-scale mohair farmers do not have access to the advantages that their counterparts in the formal markets receive. They have access to marketing arrangements and rely on social networks for market information and their production and marketing costs are relatively lower as they spent less on many aspects due to the acceptance of the relatively lower grades and standards. They receive net incomes that are not that different from their counterparts that own less than 100 goats in the formal market despite receiving relatively lower prices from the traders. These small-scale mohair farmers are marginalised due to policy exclusion and are targets of unscrupulous behaviour of some exchange partners.

This chapter has descriptively presented the findings on the small-scale mohair farmers that use formal markets and the smallholder mohair farmers that use the informal mohair markets. The main findings presented in this chapter will form the basis for data analysis of the relationship between marketing choices and institutional factors and discussions for the study which will be presented in the next chapter, whereby focus is on the analysis and discussions based on the framework and analysis techniques developed in the methods chapter.

CHAPTER 7
EFFECTIVENESS OF INSTITUTIONS IN SMALLHOLDER MOHAIR MARKETING IN LESOTHO

7.1 Introduction

The previous chapter presented the descriptive results of the data analysis. It laid the foundation for the analysis chapter by giving an overview of conditions under which smallholder mohair farmers in Lesotho operate. The main objective of this chapter is to present the results of the analytical methods and techniques that were formulated in Chapter four, in accordance with the research objectives. This chapter focuses on the institutional factors that influence small-scale mohair farmers' market participation in formal and informal markets. The chapter also focuses on the factors influencing transaction costs associated with the integration of small-scale mohair farmers into the commercial agricultural economy. The analysis is made within the Institutional Analysis and Development framework that was proposed in Chapter four of the thesis.

7.2 Physical and material conditions influencing market participation among smallholder mohair farmers

Physical and material conditions prevailing in a specific context have an influence on the action situations and constrain institutional arrangements (Ostrom, 2005). In the Mafeteng context, the conditions include property rights and land sizes which are related to the production and marketing of mohair. These conditions have implications for interactions and outcomes which are critical for mohair marketing choices.

The communal use of grazing lands has negatively affected small-scale mohair farming in the Mafeteng district, not because it is a bad form of resource use, but due to the characteristic low subtractability whereby too many farmers use the grazing lands at the same time and low excludability whereby some farmers, particularly those who use the informal markets, have been able to use the grazing lands without contributing to the cost of provision. There is lack of will (due to conflict of interest stated and explained in chapter five) from the authorities to implement the previously stated grazing rule that is intended to physically control access and consumption so that mohair farmers can all contribute towards the cost of use. This has led

to a "tragedy of commons" situation that has affected the entire mohair farming community in the form of conflicts, resource use inefficiency and the failure to attain grades and standards of mohair quality demanded by lucrative formal markets. Despite the generally undesirable consequences of communal grazing, the small-scale farmers who use formal markets perceive their property rights to grazing lands to be secure. They believe that their land rights are secure because their forefathers and now them have been living in the area and using the grazing lands for a long time and they have never been expelled or prohibited from using the lands. The perception has led to the relatively high investment in the mohair farming aspects such as supplementary feeding and disease control because these farmers were assured of their property rights to the grazing lands and thus returns to investment being made. This situation has encouraged them to invest in the growth and development of their mohair farming that has led to the attainment of relatively better mohair quality that has been acceptable in formal mohair markets.

The mohair farmers have access to small pieces of grazing lands and small pieces of arable land because of the tiny size of the country as Lesotho is only 32 000 square kilometres in size and the land is divided between multiple uses. The small size of the grazing lands has led to the lack of economies of scale as one farmer's use reduces the supply available to others and this poses a challenge to the private use of grazing lands and integration of the mohair farmers into the commercial markets. In terms of the arable land, the small-scale mohair farmers privately use these lands but without title deeds or lease agreements and this has not helped them because they could not use the lands as collateral (required by credit providers) for the loans or credit that they need to improve their mohair farming to meet standards and grades that are demanded particularly by the formal markets.

The setting up of mohair collection points in the villages where smallholders reside affords the exchange partners a platform for negotiating and affecting the mohair exchange for the small-scale farmers that use informal mohair traders. The condition enables small-scale mohair farmers to meet informal traders and engage in negotiations that lead to the sale of their mohair clip. The condition has prevented the smallholders from incurring financial, effort and time costs of organising and coordinating that is associated with the travelling to the central points for negotiations and transportation of the mohair clip to the collection

points. This means that even though this group of smallholders know they will get a lower price for their mohair clip from informal traders, it is worth the trade-off because they avoid some transaction costs. For small-scale farmers that use formal markets, the location of shearing sheds in the close vicinity of farmers' settlements presents to the smallholders an opportunity to get their goats shorn without having to be transported or walked over long distances which is a physically and financially costly activity. This close location of shearing sheds also helps to avoid cost of time, money and effort associated with organising and coordinating the transportation of the mohair clip to the distant collection points.

The prevailing conditions in the form of property rights, size of lands and mohair collection points have an influence on the mohair production and marketing activities in the area. Nevertheless, the production and marketing activities are not only dependent on these physical and material conditions but they are also dependent upon other circumstances that are specific to a particular place and people. Based on this and the IAD framework, the study needs to consider the community attributes that have an influence on the action arena, interactions and outcomes.

7.3 Influence of individual or group attributes on marketing behaviour

The attributes of the community influencing action situations, interactions and outcomes in the Mafeteng district include demographic characteristics of the participants such as mohair farming experience and age, culture, social networks, power imbalances, collective action, path dependency as well as policy participation.

The smallholders with more experience in mohair farming have more knowledge regarding both formal and informal mohair marketing systems because of long participation in mohair farming and interactions with other stakeholders in the industry, and these farmers also have extensive contacts. This widens the information set available to the older small-scale mohair farmers which puts them in a better position to choose the more rewarding markets as more of these older and experienced smallholder farmers sell their mohair clip in the more lucrative formal markets than their younger and inexperienced counterparts. The experience has enabled them to be informed and understand the workings, demands and expectations of formal mohair markets which enables them to meet these requirements better relative to

their younger counterparts. The variable reduces transaction costs for this group of smallholder farmers as experience makes them relatively more aware of the importance or benefits of interaction with their exchange partners. Therefore, they frequently contact their buyers who keep them up to date in regards to quality and price information, which helps to avert the transaction costs in the form of mohair rejections, conflicts and long negotiations. In terms of inexperienced smallholders that use informal markets, they are yet to recognise the importance of frequent contacts with their exchange partners and as a result there are fewer interactions with informal traders which increases transaction costs incurred by these smallholders in the form of mohair rejections and search for better prices as this group of smallholders is not up to date in terms of quality and price information. The older and experienced smallholders who participate in the formal markets have more household income which is attributable to their sales in the more rewarding formal markets. The slightly higher income probably enables this group of small-scale farmers to meet more of the mohair farming costs compared to their counterparts in the informal mohair markets.

The rural communities of Mafeteng are deeply rooted in the Basotho culture and this influences the way mohair industry participants govern their relationships hence action situation which in this setting leads to participation in the informal mohair markets. Although the younger farmers agree that LNWMGA members who use the formal markets receive favourable prices and access to government support, they could not become LNWMGA members in order to participate in the formal markets because they dislike and disapprove of the way the elders run the association. It would be expected that due to the perceived benefits associated with LNWMGA and formal markets, these young smallholders would stay in the association and strive towards improvement in the running of the association. But the local culture is prohibitive of confrontation and negotiations between elders and the young and this leads to the young smallholders giving up the opportunity and benefits of participating in formal markets and opting for the informal markets instead because of respecting and upholding the cultural principles and values.

The small-scale mohair farmers that use informal markets are relatively young and more educated and these characteristics have facilitated the establishment of social capital within this group of smallholders since their characteristics are positively and significantly correlated

with reliance on social networks. The social capital enables this group of smallholders to exchange mohair farming ideas and sharing of market information related to the informal markets. In particular, they avoid the LNWMGA and its associated formal markets due to perceived maladministration in the association. The social capital in this action arena leads to the interactions that influence participation of smallholders in the informal mohair markets.

On the other hand, relatively smaller-scale farmers that use formal markets participate in the group LNWMGA which enhances collective action among this group of mohair farmers. The group has rules and regulations that govern relationships among participants in terms of joining the group, production, marketing and overall doing of business that are highlighted in the previous chapter. These have an influence on the action situation and interactions as they allow the members to act collectively in various areas including procurement of inputs, shearing, grading, sharing of market information and transportation of the mohair clip to the markets. The resultant economies of scale for larger-scale producers reduce costs including information search, negotiations and monitoring and enable the smallholders to meet the requirements of the formal markets compared with the non-members of the association. In addition, the collective action helps the farmers to get recognition, which strengthens their lobbying power as they successfully pressure government and non-governmental organisations to support them through infrastructure, training and transport subsidies, which reduce business costs and also enable them to meet the requirements and demands of the formal markets.

Nevertheless, some rules and regulations of the association, such as those that dictate that goat flocks of the bigger farmers will be shorn before those of their small-scale counterparts, result in inequalities and marginalisation of the latter. They lead to the late shearing and dispatch of the mohair clip of the smallholders in many instances that result in the incurring of transaction costs in the form of opportunity cost of not selling in the early auctions that fetch high prices. The other transaction costs incurred are related to organising and coordinating transportation of the mohair clip to the national collection point in the capital town because when shearing is done late mohair is no longer collected at the collection points in the villages or districts. The resources expended on these activities could have been used in other productive areas to improve the position of the small-scale farmers, hence

opportunity cost. The action situation leads to the dissatisfaction of the small-scale farmers who now want to leave the LNWMGA. This results in the extensive search for alternative markets, hence increased transaction costs. This explains the contradiction with the conventional view that farmers in the farmer groups/associations have low search for information/markets as one of the benefits of collective action.

The policies and mode of operation in the LNWMGA, with their influences on the way members act and interact, create power imbalances in the mohair sector with smallholders the compromised segment. For instance, the holding of policy discussions in the distant city of Maseru denies the smallholder mohair farmers an opportunity to express their opinions and concerns regarding how the industry should be run. The smallholders' poor financial conditions lead to their failure to finance their transportation and accommodation to the conference; hence they are not able to get their interests incorporated into the policies, strategies and programmes. This results in the adoption of pro-large scale mohair farmer policies that limits the participation of the small-scale mohair farmers in formal mohair markets. The power imbalances also lead to animosity between the dominant and the dominated participants which result in the incurring of transaction costs as they frequently organise and attend conflict resolution meetings. The magnitude of these transaction costs is unsustainable for the financially poor smallholder mohair farmers, which leads to some opting for the informal markets that are believed to be relatively less affected by conflict.

The smallholders that use formal markets are characterised by path dependency which determines the action situation in the mohair industry in the country as it reflects that information and knowledge are shared among participants and between generations. This attribute influences marketing choices as these smallholders chose formal markets because they have been used and trusted by their forefathers. These smallholders continue to participate in the formal markets because, according to them, these formal mohair markets offer more benefits and changing to the alternative markets will impose immediate and high costs on their mohair farming business. From an economic point of view, the cost-benefit analysis by these smallholder mohair farmers favours participation in formal mohair markets.

The community attributes prevalent in the study area have an influence on the actions and interactions between economic participants in the mohair industry that lead to various outcomes. Economic behaviour is not a product of only material conditions and participant attributes, but also that of the rules of the game because institutions have an influence on the incentive structure that each actor faces and thus they ultimately help determine economic behaviour. In the light of this, the study considers the institutional arrangements that have an influence on the behaviour, hence action arena, interactions and outcomes.

7.4 Institutional factors influencing market participation among small-scale mohair farmers

The action situation in the mohair industry is influenced by the institutions operating in that particular arena as they guide and govern the marketing behaviour of the smallholder mohair farmers in repetitive activities that characterise mohair markets. These working rules have a bearing on the incentives and constraints facing the small-scale farmers which in turn influence marketing decisions, actions and outcomes in the mohair industry.

Government support that is given to the mohair farmers has an influence on the action situations and behaviour among the farming communities due to its effect on the incentives facing the participants in the mohair industry. The support is accessible only to the mohair farmers that sell their mohair through BKB channels. The support is in the form of well-equipped government built shearing sheds, government paid staff, training and subsidised inputs and transport. This enables the smallholders to participate in the formal markets as it reduces the smallholders' operational and production costs and increases their productivity and mohair quality to the levels accepted by the formal markets. The market information and advisory services provided by the LPMS and MAFS to this group of farmers increases the information available for the smallholders to make informed choices and this reduces the transaction costs related to search for information and supplying incorrect mohair grades. The government support renders formal markets more beneficial to some participating smallholders relative to other market channels hence an incentive for participating in the formal mohair markets. However, this discriminative government policy leads to inequality among small-scale mohair farmers whereby small-scale farmers that use informal markets

are not improving in terms of efficiency, productivity and mohair quality which binds them to sell in the informal markets as they accept relatively low quality.

The smallholders that use formal markets have access to market infrastructure provided at the shearing sheds mainly by the non-governmental organisations that operate in the country. The storage facilities help to avoid mohair wastage and quality deterioration while the packaging technology and packaging materials help to preserve the mohair produce and prevent contamination of the product so that it is maintained until it can be sent to the market. Access to these infrastructures enhances participation in the relatively lucrative formal markets as it helps smallholder mohair farmers to avoid costs of quality decline due to contamination and wastage of mohair, which means that their mohair will be in an acceptable condition by the bidders when it gets to the BKB auctions. The smallholder mohair farmers are enabled to meet standards and grade requirements of the formal markets hence the realisation of the potential benefits of the formal markets such as higher prices and net incomes. The grading and weighing facilities enable these smallholders to properly grade and weigh the produce which are some of the determinants of receiving due prices. The communication and cooperation between the buyers and smallholder mohair farmers is improved as the access to these infrastructures reduces incidences of mohair quality rejections by mohair buyers and conflicts over prices, hence reduction in transaction costs incurred by small-scale farmers.

Contractual agreements facilitate and enhance communication, hence information flow between LNWMGA (on behalf of the small-scale farmers) and BKB which results in incentives that influence economic behaviour and decision making among small-scale farmers. The contractual agreement between BKB and LNWMGA provides guaranteed access to formal markets as it enables the exchange partners to know the preferences and expectations of each other in terms of quality, in particular. The smallholder mohair farmers meet the quality requirements of the BKB associated buyers as a result, which in turn reduces costs associated with BKB auctions as the exchange costs (information search and negotiations) are reduced for small-scale farmers and for BKB. The contractual agreements render participation in the formal markets less costly and more beneficial to this group of smallholders, hence use of such markets.

The mohair industry is characterised by the interaction between BKB, LNWMGA and farmers which facilitates the sharing of information pertaining to grades and standards that are required by buyers at the auctions. This interaction helps to impart to smallholder mohair farmers the knowledge of grades and standards demanded/preferred by buyers at BKB auctions which enables these farmers to approach their production accordingly. The ability to meet the expectations and preferences of exchange partners is enhanced, causing participation of the smallholders in the formal markets as it (knowledge of grades/standards) reduces transaction costs associated with quality rejections for the wrong quality supplied as well as conflicts between exchange partners. This renders more beneficial the participation of smallholders in the formal markets because when costs are reduced profit margins are likely to increase.

However, the operation and organisation within LNWMGA and BKB lead to actions that have detrimental effects on the poor small-scale mohair farmers in the area. There is a perennial delay of payments due to mohair farmers which has a pronounced effect on smallholders. These delays in getting paid negatively influence the transaction costs for the smallholders as the farmers have to approach the buyers several times in order to get paid and this follow-up implies that finances, time and effort are spent on the activity, increasing transaction costs. The smallholders use, among others, telephones and transport for the follow-up on mohair payment and these resources could have been used on productive aspects of the mohair farming business such as feeding and disease control that improve quality, leading to high prices and net income.

The marketing arrangements between the smallholders who are not LNWMGA members and informal traders have a significant influence on participation in the informal markets. The marketing arrangements were designed such that payments are made on the spot of exchange and that smallholders can sell their mohair in advance. The design of these marketing arrangements recognised the preferences and desires of the small-scale farmers who desperately need cash and are not able to cope with delayed payments associated with LNWMGA and BKB. The marketing arrangements satisfy the smallholders which influence their economic decision to participate in the informal markets as these arrangements benefit

and enable them to meet their immediate financial and economic obligations. The informal traders comply with the terms and conditions and promptly pay the smallholder which reduces the transaction costs associated with follow-up on payments as they do not have to enquire about the payments for their mohair clip. These interactions between smallholder mohair farmers and informal mohair traders lure the smallholders to the informal mohair markets.

Nevertheless, the advance sale of mohair negatively influences the transaction costs incurred by smallholders in the informal markets because it exposes them to price fluctuations, resulting in uncertainty (more than faced by Association members from the auctions) as more often parallel markets offer higher prices than those agreed in advance and the smallholders incur the opportunity cost in the form of missing out on the favourable prices and higher net income. In addition, when the prices offered by parallel markets are higher than those agreed in advance the smallholders negotiate for the top-up payment even though there was no variation clause in the advance sale agreement and the negotiations require time, effort and financial resources.

Informal institutions, such as social networks, facilitate action situations in the study area and these institutions facilitate the sharing of information between the small-scale mohair farmers that use informal mohair markets. One of the results of these interactions is the knowledge of mohair prices offered by informal traders prior to the day of mohair sales. The prior knowledge of mohair price positively influences the transaction costs incurred by small-scale mohair farmers in the informal markets because it affords the smallholders a chance to select the informal traders that offer better prices thus avoiding the cost of missing out on a relatively higher net income. In the formal markets, where the prices are only known during the auctions, the smallholders do not get an opportunity to look for buyers who offer better prices (when offered prices are unfavourable).

The mohair industry is characterised by limited interaction between small-scale mohair farmers and informal traders which results in the lack of communication of critical information that negatively influences the transaction costs incurred by both parties to mohair exchange. Small-scale mohair farmers fail to sell their mohair clip due to the lack of

knowledge of dates and places of mohair sale and this means that all the resources used in relation to the production of the mohair clip were wasted because these smallholders do not even have storage facilities that can preserve the product until it goes to market again. As a result, the smallholders incur the cost of missing out on the high prices due to failure to sell, and mohair quality declines. In addition, the informal mohair traders incur transaction costs due to low smallholder mohair farmer turnout at the mohair collection points because they expend time, effort and financial resources to set up and get to the mohair collection points. This situation can render the initiative of collecting mohair in the villages a costly activity for the informal mohair traders hence a potential threat to the continuation of the arrangement.

The rules of the game, whether formal or informal, influence the actions of the smallholder mohair farmers when it comes to choosing and participating in mohair markets in the country. The action situation in the area further proves that actions result in either an increase or decrease of transaction costs incurred by various participants in the action arena. The combination of physical/material conditions, community attributes and institutions have created incentives and constraints for Basotho small-scale mohair farmers and their decisions regarding marketing choices. Considering this, the study next analyses the interactions among these three sets of factors and participants in the mohair industry of Lesotho.

7.5 Patterns of interactions that impact on the marketing choices among small-scale mohair farmers

In the IAD framework, mapping the strategic interactions among participants and rules in a given action situation is essential to identifying and understanding the outcomes of the action arena (Stone-Jovicich *et al*, 2009; Ostrom, 2005). These interactions occur within and are shaped by the specific set of physical or material conditions, community attributes and rules prevailing in the Mountain Kingdom.

7.5.1 Interactions among participants within the informal markets

Informal institutions in the form of social contacts facilitate interactions between smallholder mohair farmers and, through these networks, the farmers are able to share information pertaining to informal markets and prices, which enables the smallholders to choose such markets for selling their mohair clip. In addition, the level of education and age of the

smallholders, which led to common understanding and challenges among this group of mohair farmers, fostered the networks. Nevertheless, there are limited interactions when it comes to the buying of inputs, marketing and transportation of the mohair clip to the market as each smallholder acts individually in this regard. As a result, the farmers fail to achieve economies of scale and this results in them obtaining relatively lower net income.

There is good interaction between smallholder mohair farmers and informal traders due to the trustworthiness of the informal traders as they respect the terms and conditions of the agreements including the paying for the smallholders' mohair clip on the spot. This has led to smallholder mohair farmers having confidence in the informal traders, which results in the continued dealing with the informal traders and participating in the informal markets. In addition, the lenient requirements of the informal traders about, *inter alia*, packaging, grades and standards take into consideration the bad financial position of small-scale farmers. However, there is limited interaction with the local mohair processing industry due to the limited number of mohair spinning companies organised to negotiate with the smallholders for the supply of raw material (mohair). This has limited the expansion of the market for the mohair clip from smallholders.

There are limited interactions between the small-scale mohair farmers who use the informal markets and input suppliers as the smallholders that use informal mohair markets operate individually when acquiring farm inputs. This reduces their lobbying powers as they are unable to negotiate discount prices with the input suppliers because the suppliers only discuss with and give discount prices to bulk buyers. This means that the smallholder famers' input costs are relatively high and unsustainable for a large number of them and makes it difficult to meet the high demands of the formal mohair markets, hence opting for the informal mohair markets. They also incur transaction costs related to information searches for suppliers that sell inputs at relatively competitive prices.

The LPMS does engage the small-scale mohair farmers who use the informal markets and informal traders during the discussions on regulating and setting the mohair prices to be paid by informal mohair traders. This has led to improvement of the mohair prices offered by the informal traders, leading to relatively better relations between stakeholders. The conducive

operating relations have maintained the participation of smallholder mohair farmers in the informal mohair business. Nevertheless, some informal traders were dissatisfied about the regulating of the informal sector which led to their closing of business which has limited the market options for smallholder mohair farmers in the informal markets.

There is limited interaction between the small-scale mohair farmers who use the informal markets and MAFS because of limited capacity as there are no extension agents offering any agricultural advisory services in terms of production and marketing. This has affected this group of mohair farmers in terms of mohair quality attained, hence their continued participation in the less rewarding informal markets. The Local Government (Chiefs and Councillors) has achieved limited success in engaging the small-scale mohair farmers who use the informal markets on the range management rules and regulations, despite policies providing for platforms where rules and regulations are presented to the communities with the aim of facilitating implementation. The situation has led to failure to understand and observe the grazing rules and regulations by this group of small-scale mohair farmers, which subsequently led to their eviction (stated in the previous chapter) from such lands. As a result, they struggle to find alternative grazing lands because the country is small with few and little grazing lands and this has led to poor feeding and relatively lower mohair quality. These small-scale mohair farmers cannot afford zero grazing because of their limited financial capacity to buy animal feeds.

There is poor interaction between smallholders that use the informal mohair markets and policy participants and policy makers due to the inappropriate and disconnected approach to policy planning and implementation in the country. Policies in place have not been informed by the farming communities despite the policy framework calling for the participation of all stakeholders. The Agricultural Sector Strategy of 2003 provides a platform where stakeholders' opinions and concerns can be raised and incorporated in the draft policy, but the government officials and LNWMGA have been ignoring this leading to the exclusion of smallholders that use informal mohair markets. In the previous chapter, the small-scale mohair farmers that use the informal markets stated that they are never invited to policy discussions and their opinions are never sought in any way. Despite the existence of the institutional arrangement, the only perennial participants in policy discussions are

government officials and LNWMGA, hence the adoption of policies unfavourable to smallholders that use informal markets, e.g. use of shearing sheds and associated infrastructure by only LNWMGA affiliated mohair farmers.

7.5.2 Interactions among participants within the formal markets

The rules and regulations of the LNWMGA lead to interactions that positively affect members farming mohair by pooling their resources during mohair production, marketing and transportation which results in economies of scale for some members. The resultant decrease in production and operational costs enhances their capacity to meet and invest more in quality improvement aspects such as feeding and disease control which helps them to achieve relatively higher quality that is acceptable to buyers at BKB auctions. In addition, the design of some rules and regulations considers the poor financial position of the smallholder members; for instance, the providing of services on credit only to small-scale mohair farmer members of the association as well as the low and fixed contributions only from this category of members. These help the small-scale mohair farmers to cope with costs, thus participation in the financially demanding formal mohair markets.

The homogeneity in terms of age composition of the LNWMGA small members has facilitated the establishment of common understanding, interests and working relations among this category of small-scale mohair farmers in the study area. The common understanding, interests and working relations enable these smallholders to come up with one voice, view and strategy when confronting any issue related to their participation in mohair markets and the running of the association. This reduces conflicts within this specific group, hence reduction of transaction costs related to effort, time and financial resources expended on conflict resolution.

Nevertheless, the LNWMGA's constitution has created interactions that are characterised by power imbalances between large and small-scale mohair farmer members as it enhances the dominance of relatively large mohair farmers over small-scale ones. For instance, the provision that to be eligible for election to the committees a member must attain high quality and a minimum of 100 goats consistently for period of at least five year clearly favours the large mohair farmers because most of them already had met the criteria even before the establishment of the association. The power imbalances are exacerbated by the regulation

that flocks from large mohair farmers be shorn and shipped off first. This means that policies and strategies adopted by the association are pro-large mohair farmers and that large scale farmers attain better benefits (high prices associated with early auctions) of the formal markets. These arrangements have led to animosity between the two categories of members which in turn results in high transaction costs (searching for alternatives) being incurred by small-scale farmers in particular.

There is cooperation between the smallholder mohair farmers that use formal markets and Local Government authorities (Chiefs), which increases the success of this institution in engaging the small-scale mohair farmers on range management and regulations, hence implementation of these rules of the game. This effective communication of rules and regulations has led to the small-scale farmers understanding and respecting these institutions that have guaranteed their use of the grazing lands. The guaranteed use improves access to feed sources, which results in the attainment of relatively good mohair quality that is acceptable at BKB auctions. In addition, the guaranteed use creates a positive perception of the property rights security among the small-scale mohair farmers, which, in turn, results in more investment in mohair farming within this category of mohair farmers.

The Agricultural Sector Strategy of 2003, with its emphasis on the betterment of the formal mohair sector, increases information flow between the public extension agents and small-scale mohair farmers that use formal mohair markets. Despite the MAFS limited mohair expertise among its personnel, there has been crucial interaction and imparting of critical mohair farming related knowledge to the small-scale mohair farmers that has led to the relative superiority of this category of mohair farmers in terms of mohair quality. In addition, the interactions have resulted in the smallholder mohair farmers avoiding the transaction costs associated with quality rejections and conflicts with their exchange partners. The flow of information is strengthened further by the interaction between the LPMS and the small-scale mohair farmers that use formal mohair markets. The regular and official meetings between the LNWMGA national committee and LPMS officials provide a platform for information exchange that ultimately trickles down to the small-scale mohair member farmers of the association.

The cooperation between the Government of Lesotho and its development partners has facilitated the non-governmental organisations' interactions with the small-scale mohair farmers with the intention of capacitating them in terms of their mohair farming. These non-governmental organisations interact with the Basotho small-scale mohair farmers through the provision of workshops and trainings on aspects including mainly mohair production, marketing, entrepreneurship and record keeping. The results of these workshops and training have been manifested in the relatively better mohair quality and performance of the mohair enterprises operated by this group of small-scale mohair farmers. In addition, the non-governmental organisations interact with the smallholder mohair farmers through the provision of modern storage facilities for the mohair clip that have enabled these farmers' mohair clip to be in an acceptable condition until it is shipped off to the BKB auction in Port Elizabeth.

There are various stakeholders that participate in the mohair industry of Lesotho and they are faced with different incentives and constraints that influence their behaviour, actions and interactions because of the physical and material conditions, attributes and the rules of the game that characterise the environment in which they operate. The interactions of the three set of factors and economic participants are likely to have various socio-economic outcomes with implications for the integration of small-scale mohair farmers into the commercial agricultural economy. Considering this, the study next determines the outcomes that result from the interactions between the three sets of factors and participants in the mohair industry of Lesotho.

7.6. Outcomes in the mohair industry of Lesotho

Based on Polski and Ostrom (2009), the mohair industry of Lesotho is a space in which various participants inform themselves, consider alternative causes of action, make decisions and take action. These are affected by the factors in the physical and material world, the community and rules-in-use and have consequences that have a bearing on the market participation of small-scale mohair farmers and the transaction costs associated with this market participation.

7.6.1 Market participation outcomes

The formal mohair markets are used and dominated by older farmers as they prefer using the agricultural production and marketing practices that were tried, tested and used by their forefathers before. Concerning the marketing of mohair, they use formal marketing channels of BKB that were used by the mohair generation before them. Since 1900, there has been government involvement in mohair markets that has been biased towards use of formal markets, influencing the history of use of such markets by the ancestors of these small-scale mohair farmers (Tsoako, 2016; Matebesi, 2015; Mokitimi, 1996).

This category of small-scale mohair farmers is comprised of only members of the LNWMGA that was formed with the purpose of addressing the challenges that face farmers and fulfilling the untapped potential of participating in formal mohair markets. The small-scale mohair farmers in this association are informed in terms of standards, grades and expectations of their mohair exchange partners at BKB auctions. They act collectively when approaching mohair related activities, hence economies of scale that reduce their production and operational costs as they are able to negotiate and attain purchasing discounts. In addition, they have the power to lobby government and non-governmental organisations to provide them with well-equipped shearing sheds, marketing infrastructure, transport subsidies, advisory services, trainings and workshops which is not the case with small-scale farmers who use informal mohair markets.

These small-scale mohair farmers receive relatively stronger institutional support from the public and private sector as well as the international community. The government policy is biased towards this group of farmers as it bears the costs that were supposed to be borne by the farmers in the form of costs associated with labour, capital, entrepreneurship and land. MTICM (2011) indicated that the government pays shearing shed workers, bought land and built shearing sheds for the association and fitted them with modern equipment and provides them with technical assistance as well.

This category of small-scale mohair farmers achieves relatively higher sales as a result of knowing and understanding the expectations of the buyers at the auctions due to the contractual agreement that they (LNWMGA) have with the BKB group. They are able to adjust their production accordingly which is aided by the technical and institutional assistance that

they receive from the government, development partners and private sector. As a result of the institutional arrangements, they never supply mohair clip quality that is not acceptable to the buyers at the BKB auctions. The situation leads to the small-scale mohair farmers recording higher incomes relative to their counterparts who use the informal mohair markets.

The administration of the LNWMGA is fully dominated by the large-scale mohair farmers and their small-scale colleagues do not participate in the planning and formulation of operations, strategies and policies. The policies and strategies adopted by the LNWMGA favour the administrators (who are relatively larger farmers) and the entire category of large-scale mohair farmers. The small-scale members of the association are aware, dissatisfied and frustrated by the dominance and some have terminated their membership while others are searching for alternatives as they want out of this association as well. The number of small-scale members of the LNWMGA has been declining over the years.

The small-scale mohair farmers who use formal markets have secure property rights to grazing lands as they perceive the time over which they may enjoy benefits from the grazing lands to be long-term and their ability to exercise their property rights to be strong. As a result, they invest relatively higher amounts of resources in their mohair farming which results in them experiencing low goat mortality rates, higher productivity levels and mohair quality that are some of the determinants of participation in formal markets and they attain relatively higher income as a result.

In terms of the informal markets, the dominant participants are young and educated small-scale mohair farmers with some having once held membership of the LNWMGA while others never used that formal market channel. They avoid formal mohair markets because they do not like the status quo at LNWMGA in terms of how the elders administrate and manage the association. The young farmers are informed and have ideas and views as to how the association should be run to improve the small-scale mohair farmers but cannot participate and raise them due to cultural restrictions. The young farmers are of the view that bottom-up approach to management, transparency, inclusion of small-scale members in decision making as well as accountability will improve the conditions for the LNWMGA members, including the small-scale mohair farmers. Out of respect for culture, they participate in the

informal markets because they could not confront and challenge their elders as it is taboo to do so in their culture.

These smallholder mohair farmers receive higher prices (in the context of informal markets) as they know in advance the mohair prices paid by each informal trader and they choose the buyer that offers relatively favourable mohair prices. In addition, these smallholder mohair farmers are guaranteed payment for their mohair clip as the informal traders comply with the terms and conditions of the marketing arrangements between the two parties to exchange. As a result of the trustworthiness of the buyers the smallholder mohair farmers meet their short term household and financial obligations, and sustainability of their livelihoods.

The national policies have led to the small-scale mohair farmers who use the informal mohair markets lacking access to shearing sheds, market infrastructure, extension advisory services and subsidies from neither the public nor private sectors, resulting in relatively lower mohair quality that is not acceptable to formal markets. Nevertheless, on recognising the plight of these small-scale mohair farmers, the informal mohair traders amended the rules and regulations regarding packaging, standards and grades so as to accommodate these smallholders such that they receive some reward for their efforts applied in mohair production.

7.6.2 Transaction costs outcomes

The small-scale mohair farmers that use the informal mohair markets have low transaction costs related to information searches due to their prior knowledge of mohair prices as they do not move from one buyer to the next in search of relatively higher prices. Moreover, they have low transaction monitoring and enforcement costs as they are promptly paid by their mohair exchange partners. They do not engage in costly follow-up on the payments from the informal mohair traders.

However, these smallholder mohair farmers incur high transaction costs related to the negotiations that they engage in with their exchange partners when they deem the price offered to be too low. They incur other high transaction costs due to their failure to sell their mohair clip in some seasons due to their lack of information regarding when and where informal traders will be buying and collecting mohair.

Moreover, the small-scale mohair farmers that use the informal mohair markets engage in advance sales of mohair and more often the parallel markets offer higher prices than those agreed in advance. In such situations, they incur more transaction costs for engaging in usually long negotiations for the topping-up on the payment that was previously agreed upon.

The smallholder mohair farmers that use formal markets have low transaction costs related to information search due to the contractual agreement that they have with the BKB group which makes them informed in terms of prices, quality and expectations of the exchange partners. From their experience in mohair farming, they frequently contact the BKB to be abreast of the developments regarding mohair quality and do not experience transaction costs due to information searches. In addition, their transaction costs related to the negotiating of transactions are reduced because of this contractual agreement that they have with BKB.

However, these small-scale mohair farmers that use formal markets have high monitoring related transaction costs due to the delayed payments they experience with LNWMGA and BKB, which necessitate costly follow-up on payments. Furthermore, these small-scale mohair farmers who use the formal markets incur high transaction costs related to the organising and coordinating transportation of the mohair clip to the national collection point as a result of the late shearing and dispatch of their mohair. In addition, they incur the cost of missing out on the relatively higher prices associated with early BKB auctions. The small-scale members are not satisfied about the situation and are searching for alternatives and incur more information search related transaction costs.

The interactions between material/physical conditions, community attributes and rules of the game and economic participants lead to actions that result in varying outcomes in terms of the participation in the formal and informal mohair markets in the Mountain Kingdom of Lesotho. These sets of factors positively or negatively influence the transaction costs associated with the participation in either formal or informal mohair markets.

7.7 Synopsis

The results of the study demonstrated that participation in mohair markets is a major source of livelihoods in Lesotho with some Basotho participating in formal markets while others chose informal mohair markets. There are formal and informal institutional factors that

influence or limit participation of small-scale mohair farmers in either formal or informal mohair markets. Moreover, the participation of smallholder mohair farmers in mohair markets is associated with multiple factors that positively or negatively influence the transaction costs incurred by the small-scale mohair farmers in Lesotho.

By using the institutional development and analysis framework, the Lesotho mohair industry is shown to be characterised by various participants who occupy different positions and play different roles. The material or physical conditions, community attributes and institutions that are available in the country influence the marketing behaviour of small-scale mohair farmers as they incentivise or constrain the actions and interactions within the mohair industry. These actions and interactions led to outcomes that have a bearing on the integration of small-scale mohair farmers into the commercial markets. These provide the basis for evaluating the institutional structure of the mohair industry in Lesotho and for suggesting the industry's challenges and policy recommendations following in the next chapter of the thesis.

CHAPTER 8
CONCLUSIONS AND RECOMMENDATIONS

Integration of small-scale mohair farmers into the mainstream economy is influenced by both formal and informal institutions as these institutional factors have a bearing on household marketing choices. The integration of small-scale mohair farmers requires the efforts from both the public and private sectors to ensure that the institutional environment and arrangements are conducive as these factors can have positive and negative effects, which impact on the economic actions and choices, influencing the welfare of economic actors. One of the necessities for the integration of small-scale farmers into the commercial agricultural economy is the existence of well-functioning markets, which are possible through the policy environment that ensures supply of and improvement in infrastructure, communications and removal of trade and market access barriers. However, the decision to participate is based on the institutional situation as well as the individual household consideration of the transaction costs associated with participation in the markets. In this context, the study was designed to investigate the institutions that limit the integration of small-scale mohair farmers into the commercial agricultural economy in Lesotho.

The research utilised primary data and information, which was collected from sampled small-scale mohair farmers in various communities of the Mafeteng district in Lesotho. As such, the results of the study reflect the influence of the institutions on the small-scale mohair farmers that participate in the formal markets and their counterparts in the informal mohair market. The influence of the institutions on the integration of small-scale mohair farmers into different markets was assessed in a NIE context, and analysis was guided by an institutional analysis and development framework (IAD). The results of the study showed the institutional strengths and weaknesses as well transaction costs associated with the integration of small-scale mohair farmers into the commercial agricultural economy in Lesotho. In addition, a number of lessons were drawn as well as the areas that need to be addressed in order to improve the integration of small-scale mohair farmers into the commercial agricultural economy. Moreover, the areas that could be of interest for further research have been highlighted towards the end of the chapter.

8.1 Summary of research findings

Based on the results of the study, it is evident that the integration of small-scale mohair farmers into the commercial agricultural economy is influenced by both formal and informal institutional factors and this integration is associated with factors that positively and negatively influence the small-scale mohair farmers. The small-scale farmers that use formal mohair markets are integrated in the agricultural economy as they operate on a more commercial basis which is influenced by their access to well-equipped shearing sheds, subsidised transport, market information, cooperative buying of inputs and selling of produce, and marketing infrastructure. In addition, they have contractual agreements with the buyers and secure property rights to lands. These farmers have relatively larger flocks and have more power and net income. On the other hand, small-scale mohair farmers that use the informal markets do not receive any of the advantages and incentives received by their counterparts in the formal markets. Their market options are relatively limited and the only outlet for their mohair is informal traders, and the small-scale farmers become targets for unscrupulous behaviour of these informal traders. However, in some instances some traders provide necessary services to the small-scale mohair farmers such as credit. Despite this, the overall situation limits the chances of these small-scale mohair farmers improving their situation and being integrated into the commercial agricultural economy. The integration of a small-scale mohair farmer into the commercial agricultural economy is faced with challenges that vary from one market channel to the other.

8.2 Integration of small-scale mohair farmers into the commercial agricultural economy

For households to participate in markets there should be in place an institutional structure that incentivises people to participate and the constraints to and costs associated with market exchange should be minimised. The study used the institutional analysis framework to determine the influence of the institutions on the integration of small-scale mohair farmers into the commercial agricultural economy, and a summary of main findings is shown in Table 8.1.

The institutional factors have influenced the integration of small-scale mohair farmers that use the formal mohair markets, while the small-scale mohair farmers that use the informal markets are not integrated into the commercial agricultural markets as a result of the unfavourable institutional arrangements and environment. In terms of transaction costs,

there are various factors that influence the costs associated with market participation in both formal and informal markets, leafing to variation in the levels of integration into the commercial agricultural economy among small-scale mohair farmers in the study area.

8.2.1 Institutional factors influencing participation of small-scale mohair farmers in mohair markets in Lesotho.

One of the overriding factors influencing participation in mohair markets is the support that government provides to the mohair farmers that use formal markets. The public resources were used to assist the LNWMGA with the factors of production including labour, capital and skills. The resources provided include shearing sheds, equipment, and government paid staff, technical assistance and transport subsidies. Through this support, the government provided the factors that would otherwise not be available to the small-scale mohair farmers and these resources are necessary for integration into the commercial markets. Thus, government support has significantly contributed towards the integration of only the LNWMGA's small-scale mohair farmers into the commercial agricultural economy in Lesotho.

Another institutional factor that influences the integration of small-scale mohair farmers is the market information that is accessible to farmers in the formal markets. The information is mainly about the grades and standards demanded by buyers at BKB and this information is available in home language Sesotho, which means the small-scale mohair farmers are able to interpret and understand it given their low educational attainment. This information is one of the necessities for participation in commercial markets as it enables the production and supply of the appropriate mohair quality, and the access to this information has contributed towards the integration of the small-scale mohair farmers into the commercial agricultural economy.

Table 8.1: Summary of the institutional analysis results

Institutional factor	Research Findings	Conclusion
Government support	• The small-scale mohair farmers that use formal markets have access to government built and well-equipped shearing sheds with government paid staff, transport subsidies and advisory services • Access to this institutional support enhanced productivity and improvement of production and mohair quality levels among small-scale mohair farmers	• The conducive environment is created for the integration of these small-scale farmers into the commercial agricultural economy
Market information	• There is information flow between members of LNWMGA pertaining to the grades and standards that are required by buyers at the BKB auctions • This has enhanced knowledge and production of mohair quality required by buyers • There is relatively poor knowledge in terms of the functioning of auctions and this leads to conflicts within LNWMGA and reduction in farmers that sell through the formal channel	• The ability of small-scale farmers to meet the grades and standards required by the buyers at BKB is improved, hence integration into the commercial agricultural economy • Lack of knowledge of market dynamics is a threat to the integration of these small-scale farmers into the commercial sector
Market infrastructure	• The small-scale mohair farmers that use formal markets have access to storage facilities that help to avoid mohair wastage and quality deterioration until sale • The grading and weighing facilities enabled the classers to properly grade and weigh the mohair clips which determines the receiving of due prices	• The potential for small-scale mohair farmers to attain high prices for their mohair is increased • Price manipulation is reduced in the formal markets • These enhance integration of small-scale mohair farmers into the commercial agricultural economy
Collective action	• The rules and regulations of the LNWMGA fosters collective action in procurement of inputs, production, marketing and transportation of mohair clip	• Collective action reduces barriers that prevent the small-scale mohair farmers from being integrated into the mainstream economy

	• This resulted in economies of scale and the group successfully lobbied government to provide support • There is dominance of relatively bigger mohair farmers in terms of decision making and policy design	• The power imbalances that dis-advantage small-scale mohair farmers limit their integration into the mainstream economy
Property rights	• The small-scale mohair farmers that use formal markets have secure rights to lands as they deemed them to be secure and they invested relatively more in mohair farming aspects such as feeding and disease control • The investment led to the attainment of relatively better mohair quality • The small size of the country and grazing does not permit private use of grazing lands	• The ability of the small-scale mohair farmers to meet the expectations of buyers in the formal markets is enhanced, which positively influences their integration into the commercial agricultural economy • The small size of grazing lands continues to be a challenge to the commercialisation
Contractual agreements	• The contractual agreements between BKB and LNWMGA enhance communication between small-scale mohair farmers and buyers • This communication enables small-scale mohair farmers to know the grades and standards and expectation of mohair buyers • The buyers at BKB buy all the acceptable mohair quality supplied by small-scale mohair farmers	• The contractual agreements render the formal BKB market a guaranteed market for the small-scale mohair famers which enhances integration of these small-scale mohair farmers into the commercial agricultural economy
Path dependency	• There is good sharing of information between members of LNWMGA and between generations in the formal markets • This resulted in small-scale mohair farmers using the markets that were tried, tested and used by their forefathers	• Integration of small-scale mohair farmers is significantly enhanced by path dependent decision making of farmers
Experience	• The small-scale farmers that use formal markets are experienced and have extensive contacts and knowledge of the sector • They frequently contact their exchange partners to discuss transaction related matters and this reduces the transaction costs associated with information search and negotiations • They act collectively in numerous aspects of mohair farming and marketing	• The costs of market exchange are reduced and this enhances integration of small-scale mohair farmers into the commercial agricultural economy

Social capital	• Small-scale mohair farmers that use informal markets have strong social networks and this facilitates the exchange of mohair farming ideas and sharing of information about informal markets	• Social networks consolidate participation in the informal markets to the detriment of the integration into the commercial agricultural economy
Culture	• The young small-scale mohair farmers respect and uphold Basotho culture and out of this they highly respect their elders • This leads to these mohair farmers considering cultural values instead of benefits when making market participation choices	• Cultural beliefs and values limit this group of small-scale mohair farmers' integration into the commercial agricultural economy
Marketing arrangements	• The marketing arrangements between small-scale mohair farmers and informal traders are designed such that payments are made on the spot of exchange and/or that small-scale mohair farmers sell their mohair in advance • The design of the arrangements is preferred by the small-scale farmers as they get immediate cash that they direly need • The prices offered by the traders are less than the prices obtained on the formal market • The small-scale mohair farmers do not incur costs associated with delayed payments	• The perceived benefits of informal markets are relatively increased and this renders them markets of choice for these small-scale farmers. • The integration of this group of small-scale mohair farmers into the commercial agricultural economy is being limited
Delayed payments	• There are perennial delays in the payments from BKB and small-scale mohair farmers have to approach buyers several times in order to get paid • The monitoring related transaction costs are increased for the small-scale mohair farmers • This dissatisfies the farmers and some threaten to leave while others have already left the market	• The integration into commercial agricultural economy markets is limited and threatened by high monitoring transaction costs
Late dispatch of mohair clip	• The rules and regulations of LNWMGA foster the late dispatch of mohair clip from the small-sale mohair farmers that use formal markets and they incur the opportunity cost of missing out on the early auctions that usually offer higher prices	• The optimal benefits of participating in the formal markets are not realised by the small-scale mohair farmers and this limits and threatens integration of

	• The small-scale mohair farmers receive relatively lower prices and net income and they are dissatisfied about the situation such that they seek alternative markets	these farmers into the commercial agricultural economy
Prior knowledge of prices	• The mode of interactions between small-scale mohair farmers that use informal markets enhance information exchange that results in the knowledge of prices before the day of sale • This prior knowledge of mohair prices enables the farmers to choose the buyer that offers most favourable prices • The transaction costs related to the search for information are reduced	• The potential for the attainment of higher prices and net income from the informal markets is enhanced • This limits the potential for the integration of these small-scale mohair farmers into the commercial agricultural economy
Price negotiations	• When the small-scale mohair farmers view the prices offered by informal traders to be too low, they push for an increase and engage in long negotiations for better prices • In almost all cases the informal traders do not increase prices and farmers search for alternative buyers which they often fail to find, hence failure to sell mohair • The small-scale mohair farmers are dissatisfied and constantly look for an alternative market that could offer higher prices	• The participation of these small-scale farmers in the informal markets is hindered • This increases the chances of these farmers resorting to the formal markets

Apart from access to market information and government support, the other factor that influences commercial market participation among small-scale mohair farmers is the market infrastructure including storage and grading facilities. Due to this infrastructure, the mohair clip reaches the markets in a condition acceptable to the buyers and the small-scale mohair farmers receive relatively higher prices as a result. The grading facilities ensure proper grading of mohair and the small-sale mohair farmer receive precisely what is due to them. Through these infrastructures, the small-scale mohair farmers satisfy the requirements of the formal markets and their need for higher income is satisfied which are necessary for integration into the commercial markets. Therefore, access to market infrastructure has significantly contributed towards the commercialisation of the small-scale mohair farmers in the country.

An institutional factor that influences integration into the commercial markets is the collective action approach that is employed by the farmers that use formal mohair markets. The collective action is employed in the areas including procurement of inputs, production, marketing, negotiating and transportation of the mohair clip and through this approach the purchasing economies of scale was achieved. In addition, the lobbying power of farmers was strengthened which is evidenced by successfully forcing government to provide various forms support, including adoption of pro-formal market policies and projects. Collective action has provided strengths that would otherwise not be available to the individually operating small-scale mohair farmers. That is, collective action has significantly contributed towards the integration of small-scale mohair farmers into the mainstream economy in Lesotho. Nevertheless, the positive effects of collective action are reduced by the adoption of policies that favour relatively larger mohair farmers as they limit the integration of small-scale mohair farmers into the commercial mohair markets.

The secure property rights to lands that are held by small-scale mohair farmers are one of the overriding factors that influence integration into the commercial markets. The security of the property rights was underpinned by the certainty on the length of time for exercising the rights and assurance of reaping the benefits from investment. This led to relatively more investment in mohair farming that resulted in improved mohair quality acceptable to the buyers. It is through this that the ability of the small-scale mohair

farmers to meet the demands of the buyers in the formal markets was improved which is one necessity for integration into the commercial markets. Thus, the secure property rights significantly contributed towards the integration of the LNWMGA small-scale farmers into the commercial agricultural economy. Nevertheless, the positive effect of secure property rights on the integration of small-scale mohair farmers is negated by the small size of the lands which makes it possible to grant private property rights without compromising on the supply available to other smallholders.

The contractual agreement between the LNWMGA and BKB is an institutional factor that influences the participation of small-scale mohair farmers into the commercial markets in the mountain Kingdom. The contract has clear terms and conditions regarding the expectations and obligations of each exchange partner. The small-scale mohair farmers know the standards and grades to be supplied while the buyers commit to buy the mohair supplied by the farmers. The exchange partners have so far been observing these terms and conditions, which implies that small-scale mohair farmers using the formal markets have a guaranteed market channel. Through this guaranteed market, the contractual agreement has provided an arrangement that would otherwise not be available to the small-scale mohair farmers. That is, this institution has significantly contributed to the integration of small-scale mohair farmers using the formal markets into the commercial markets. However, the delayed mohair payments increase the monitoring related transaction costs associated with participation in the formal markets which deter small-scale mohair farmers from participating in the formal mohair markets as they are unable to cope with the consequences of such situations. The delayed payments present a barrier to the integration of small-scale mohair farmers into the commercial agricultural economy. Thus, the delayed payments for mohair sold by the farmers limit the integration of these farmers into the mainstream agricultural economy in the study area. In addition, the integration of small-scale mohair farmers into the mainstream economy is limited by the late dispatch of the mohair clip to the markets as this prevents small-scale mohair farmers from receiving relatively higher prices associated with early auctions. Some small-scale mohair farmers are frustrated by this and have left the formal markets for the informal mohair markets.

The continued use of formal mohair markets based on the historical preferences and use is one of the institutional factors influencing commercial market participation in the area. The small-scale mohair farmers in the formal markets use these markets as they deem it more cost-effective and beneficial to continue using them than resorting to the alternative (informal) markets. It is due to this that formal markets are rendered the markets of choice for these small-scale mohair farmers despite the costly and frustrating delayed payments and dominance by relatively larger mohair farmers in these markets. Thus, path dependency has positively influenced the integration of Basotho small-scale mohair farmers using the formal markets into the commercial agricultural markets.

The mohair farming experience possessed by small-scale mohair farmers using the formal markets is one of the factors that have an influence on the integration into the commercial economy in the country. These farmers are relatively more experienced and this improved small-scale mohair farmers' ability to analyse the markets, hence informed marketing decision making. Nevertheless, this does not imply that the farmers in the informal markets are not making informed decisions but they use other points of reference. In addition, the farmers in the formal markets developed the ability to reduce the costs associated with market participation, for example, by frequently contacting their buyers. The BKB frequently contacts the buyers in terms of quality expectations and then relays the information to the LNWMGA that then disseminates it to the members. It is through these issues that small-scale mohair farmers identified the benefits such as relatively higher prices and net income offered by formal markets and means to reduce barriers to entry in such markets. Thus, mohair farming experience significantly contributed towards the integration of small-scale mohair farmers using the formal markets into the mainstream economy.

The exchange of market information through informal institutions that characterises the younger and inexperienced small-scale mohair farmers is one of the institutional factors that limits the integration of small-scale mohair farmers into the commercial markets. The type of information flowing through the social networks is mainly about the informal markets. Through this institution the informal market orientation, hence informal market participation, is entrenched among these small-scale mohair farmers to the detriment of

participation in the commercial agricultural economy. That is, social capital significantly limited the integration of small-scale mohair farmers into the commercial markets.

The strong rooting in culture which characterises the relatively younger farmers in the informal markets influences the decision making as cultural values seem to supersede economic principles when marketing choices are made. It was previously indicated that the younger and more educated farmers were unhappy with the way they are treated by the LNWMGA but could not confront their elders as this was a taboo in Basotho culture, causing them to leave the Association. Thus, these small-scale mohair farmers choose informal markets over formal ones only because they help them to avoid confrontations with their elders who are found in the formal markets. These small-scale farmers do not consider the relatively greater benefits associated with formal markets when choosing the market channels to use, making informal markets their markets of choice. The upholding of cultural values entrenches participation in the informal markets which prevents these small-scale mohair farmers from participating in the relatively lucrative commercial agricultural economy. Thus, culture limits the integration of the younger small-scale mohair farmers into the commercial agricultural markets. It has to be stated that this situation is a threat to the sustainability of the LNWMGA when the old members of the association are no longer active or have passed on.

The existing marketing arrangements between small-scale mohair farmers and informal traders increases the benefits of participating in the informal mohair markets as they enable small-scale mohair farmers to meet their immediate needs such as cash, school fees and food which is not the case with formal markets characterised by delayed payments. From the farmers' point of view, the informal markets offer relatively more benefits, hence their markets of choice. Through these institutional arrangements participation in the informal markets is consolidated to the detriment of participation in the commercial economy. Thus, marketing arrangements between these small-scale mohair farmers and the informal traders have limited the integration of these small-scale mohair farmers into the mainstream agricultural economy in Lesotho.

Prior knowledge of mohair prices that characterises small-scale mohair farmers that use the informal mohair markets is one institutional factor that limits the integration of small-scale mohair farmers into the mainstream economy in the country. This enables the small-scale mohair farmers to attain better prices (though lower than prices in the formal markets) as they are able to choose the buyers that offer the most favourable prices, resulting in the attainment of improved net income from the informal markets. This results in the small-scale mohair farmers continuing to use these markets to the detriment of the participation in the commercial agricultural economy. Thus, prior knowledge of mohair prices by small-scale farmers in the informal markets limits their integration into the commercial agricultural economy.

The small-scale mohair farmers that use the informal markets often fail to receive improved prices even after long negotiations with informal traders which implies that they lack bargaining power. As a result, they receive lower prices, lower net income, and out of frustration, which is also aggravated by high negotiations related transaction costs, they leave mohair farming. Thus, this lack of bargaining power and high negotiation costs limited participation in the informal markets integration of these small-scale mohair farmers into the mainstream economy. In addition, the frequent failure to sell mohair due to lack of information about the dates and places of mohair collection is one factor that affects market participation decisions among small-scale mohair farmers in the area. Due to this institutional weakness, small-scale mohair farmers fail to receive the desperately needed income and out of frustration they often opt out of mohair farming. Thus, the lack of information about the dates and places of mohair sales in the informal mohair markets limited the integration of small-scale mohair farmers into the commercial agricultural economy.

8.3 Concluding remarks

The institutional factors have influenced the structure of the mohair industry such that it is characterised by dual markets including formal and informal markets. The small-scale mohair farmers that use formal markets are integrated into the commercial agricultural economy and this integration is enhanced by favourable policy relating to provision of infrastructure including shearing sheds, subsidised transport, government paid staff,

market infrastructure, market information and secure property rights as access to well-functioning markets. They have increased productivity and reduced the barriers to integration into the commercial agricultural markets. On the other hand, small-scale farmers that use the informal markets do not receive the advantages received by their counterparts in the formal markets due to policy exclusion. As a result, their production levels and productivity are relatively low and they also incur relatively higher transaction costs, hence barriers to integration into the mainstream economy.

If analysed in the IAD context, small-scale mohair farmers' integration into the commercial agricultural economy has been enhanced by the individual or group characteristics including mohair farming experience possessed by the farmers together with group participation as well as path dependent marketing decisions. The institutional arrangements like contractual agreements with mohair buyers also entrenched the integration into the commercial agricultural economy. These institutional factors reduced transaction costs and also led to economies of scale which helped the process of integration. In the same context, the small-scale mohair farmers that use the informal markets' integration into the mainstream economy is limited by the individual attributes such as operating individually, reliance on social capital for market information and culture influenced marketing choices. The institutional arrangements such as marketing arrangements with the informal traders limited the integration of these small-scale mohair farmers into the commercial agricultural economy. In the NIE context, the integration of small-scale mohair farmers into the commercial agricultural economy is influenced by both formal and informal institutions.

The overall conclusion is that there certainly is an opportunity to improve small-scale mohair farmers' integration into the commercial agricultural economy, hence an improvement in these farmers' livelihoods, if each one of the institutional weaknesses can be addressed. This requires consideration of certain policy options and such policy options are discussed in the following section. It is also important for the farmers to identify the areas where they can have a direct impact and make efforts to address them.

8.4 Recommendations for policy

Based on the results and findings of this research, some policy reforms are proposed. The options that can be considered for addressing the institutional problems that hinder the development of an effective marketing structure for the commercialisation of small-scale mohair producers in Lesotho are outlined in this section of the study.

8.4.1 Representation of small-scale mohair farmers that currently use the informal market on the LNWMGA committee

It is realised that the mohair industry of Lesotho lacks redistributional equity. The provision of various forms of support is focused only on the relatively better-off mohair farmers that use formal mohair markets associated with LNWMGA instead of the needy groups that use the informal mohair markets. This substantial support from both the government and its development partners has facilitated the integration of LNWMGA members into the commercial agricultural economy. It is against this background, that the research recommends that small-scale mohair farmers in the informal markets be represented on the LNWMGA by having some positions on the Committees reserved for small-scale mohair farmers so that they can enjoy the advantages as well, hence increased potential for integration into the commercial agricultural economy. This representation will ensure that the association benefits all smaller producers as representative of all mohair producers in Lesotho.

8.4.2 Resuscitation of the advance payment

It has been discovered that the advance payment, which is a proportion of the expected price of the mohair on the auctions, is no longer paid to the small-scale mohair farmers, despite it being one of the terms and conditions of the LNWMGA. It is in the light of this, that the study recommends that the advanced payment be resuscitated in order to help these vulnerable mohair farmers to better cope with the delayed payments, which according to these mohair farmers had detrimental effects on their livelihoods.

8.4.3 Ensure the participation of small-scale mohair farmers in decision making

In Lesotho, the policy environment is characterised by exclusion of some stakeholders, particularly small-scale mohair farmers from policy design and discussions. This is not ideal because agricultural commercialisation is a process which requires input from all stakeholders. It is in this light that the study suggests that proper and appropriate

measures be put in place in order to ensure that all stakeholders, including small-scale farmers, participate in policy discussions and that they contribute towards all inclusive policies so that economic growth can affect all actors in the economy.

This necessitates the review of the rules and constitution of the LWMGA such that criteria for election to positions of leadership do not favour only the relatively larger mohair farmers. Smaller scale mohair farmers need to have representation on the committees. The holding of policy conferences must be in a location that is accessible to the small-scale mohair farmers who lack the means to attend and that reside in remote rural areas. In addition, the distribution of incentives such as improved breeding stock and veterinary medicines should be inclusive of small-scale mohair farmers so that they can attain better quality mohair, hence increase in income and integration into the commercial agricultural economy. These changes will make LNWMGA to be truly representative of the industry and benefit all mohair farmers and the country.

8.4.4 Maintenance of the communal property rights system to grazing lands

The study has discovered that communal use of grazing lands is one of the factors limiting mohair production and marketing in Lesotho. Despite this, the private user rights to these lands should not be introduced when commercialising the industry because, due to small country size, few people will get meaningful private grazing lands while many people will be deprived of a valuable source of livelihoods as many poor people rely on livestock farming, particularly small stock. One would assume that those who own grazing lands can rent them out to those who can use them more effectively and productively but these rental markets are near impossible because such lands belong to the state and only used communally by the farmers through the authority of the local chiefs. If the state introduces private ownership many people would be denied access to the resources and this will result in an economic growth that excludes other economic participants.

8.5 Recommendations for further research

The research has identified several areas that require further exploration and these potential future research areas include the following:

1. Analyse the performance of the mohair industry as well as the profitability of mohair businesses in Lesotho.

2. Analysis of the technical and institutional challenges and constraints to the farmer associations and commodity groups in the mohair industry of Lesotho. The NIE approach should be used in carrying out this investigation.

3. Assess the potential role of contract farming; farming in which agricultural production is carried out according to a prior agreement in which the farmer commits to producing a given product in a given manner and the buyer commits to purchasing it. It specifies the volume to be delivered, the quantity of the commodity supplied, the price and the delivery date, as a model or strategy for integrating small-scale mohair farmers into the commercial markets.

4. Study how successful commercialisation models linking small-scale mohair farmers with markets/processors elsewhere have been structured so that their success features can be replicated and incorporated into the mohair industry commercialisation strategies in Lesotho but with modifications to fit the context.

The research has contributed to the mohair industry, particularly focussing on how institutional economics can be applied to solving problems found in the marketing structures of goods produced by small-scale farmers in developing countries. The overall conclusion drawn from this research is that interactions between the physical/material conditions, community attributes, institutions and participants limit the integration of small-scale mohair farmers into the commercial agricultural economy. The mohair industry, including small-scale mohair farmers, continues to face challenges related to several institutional factors and transaction costs. However, the mohair industry remains a potential tool for economic growth and livelihood improvement in the country.

REFERENCES

ABERA, G., 2009. Commercialisation of Smallholder Farming: Determination of Welfare Outcomes. A cross-sectional study in Enderta District, Tigrai, Ethiopia. Unpublished MSc Thesis, University of Agder, Norway.

ABID, M., 2015. The close relationship between informal economic growth and carbon emissions in Tunisia since 1980: The (ir) relevance of structural breaks. *Sustainable cities and society,* 15:11-21.

ABRAHAM, M. GRIMM, V. NEEB, C. and SEEBAUER, M., 2016. Reputation formation in economic transactions. *Journal of Economic Behaviour and Organisation*, 121:1-4.

ADEGBOLA, P. and GARDEBROEK, C., 2007. The Effect of Information Sources on Technology Adoption and Modification Decisions. *Journal of Agricultural Economics*, 37(1):55-65.

ADORO.B., 2012. Mohair Industry in Lesotho. Brief. Department of Marketing. Mafeteng, Lesotho.

ADOKO, G., 2010. Contribution of small stock production to livelihoods. Report. Faculty of Agriculture. National University of Lesotho. Maseru, Lesotho.

ADRIAS, P. HALLAM, D. KRIVONOS, E. and MORRISON, J., 2013. Smallholder Integration in Changing Food Markets. Food and Agricultural Organisation. Rome.

AFRICAN DEVELOPMENT BANK. 2014. African Economic Outlook. Kigali, Rwanda.

AFRICAN ECONOMIC OUTLOOK. 2016. Overview of Lesotho. [Online]. Available from: www.africaneconomicoutlook.org. Accessed on: 29/12/2016.

ALENE, A.D., MANYONG, V. M. OMANYA, G. MIGNOUNA, H. D. BOKANGA, M. and ODHIAMBO. G., 2008. Smallholder Market Participation under Transaction costs: Maize supply and fertilizer demand in Kenya. *Food Policy,* 33(4):318-328.

ALLEN, D.W. AND LUECK, D., 2002. The nature of the farm: Contracts, risks, and organization in agriculture. Cambridge and London: The MIT Press, UK.

AMANKWAH, K. KLERKX, L. OOSTING, S. J. SAKYI-DAWSON, O. VAN DER ZIJPP, A. S. and MILLAR, D., 2012. Diagnosing constraints to market participation of small ruminant producers in northern Ghana: An innovation systems analysis. *Wageningen Journal of Life Sciences,* 60-63: 37-47.

ANBARCI, N. GOMIS-PORQUERAS, P. and MARCUS, P., 2012. Formal and Informal Markets: A strategic and evolutionary perspective. MPRA paper no. 42513. Ontario, Canada.

ANDERSSON, K., 2006. Understanding decentralised forest governance: an application of the institutional analysis and development framework. Sustainability: Science Practice and Policy, 2(1):25-35. [Online] Available from: http://www.google.co.ls/archives/ vol2iss1/0507-010.andersson.html Accessed on 05/04/2016.

ANSEEW, W., 2013. Making the most of Contract Farming: Recommendations for sustainable contracts in agriculture. *Contacting Arrangements,* 1(5): 1-5. [Online]. Available from: www.nepadbusinessfoundation.org. Accessed on 10/03/2014

ANTONACI, L. DEMEKE, D. AND SOUMAN, S.W., 2013. Integrating Risk Management Tool and Policies into CAADP: Options and Challenges. Working report. FAO, Rome, Italy.

ANYIDOHO, N. A. and STEEL, W. F., 2016. Perceptions of cost and benefits of informal-formal linkages: market and street vendors in Accra, Ghana. Working paper No. 35. WIEGO. Ghana

ANYIRO, C.O., 2016. Labour-use Efficiency by Smallholder Yam Farmers in Abia State Nigeria: A labour-use requirement approach. *International journal of food and agricultural economics,* 1(1):151-163

BABBIE, E., 2008. The Practice of Social Research (11e). Belmont: Thomson Wadsworth.

BAFFOUR, A., 2003. Lesotho- Africa's Best Kept Secret: Pure Majesty. [Online]. Available from: http://findarticles.com/p/articles/mi_qa5391/is_200305/ai_n21330240. Accessed on: 24/06/2015.

BAKER, G., 2002. "Distortion and Risk in Optimal Incentive Contracts". *Journal of Human Resources,* 37:728-751

BANSAL, M., 2016. The difference between informal and formal sectors as against organised and unorganised sectors. Mumbai. India.

BARDHAN, P., 2005. Law and Economics in the Tropics: Some Reflections. *International Review of Law and Economics,* 25(1): 65-74.

BARSIMANTOV, J. RACELIS, A. BIEDENWEG, K. AND DiGIANO, M., 2011. When Collective Action and Tenure Allocations Collide: Outcomes from community forests in Quintana Roo, Mexico and Peten, Guatemala. *Land Use Policy*, 28(1): 343-352

BARZEL, Y., 1997. Economic analysis of property rights. Cambridge University Press, Cambridge.

BASUTOLAND NATIONAL COUNCIL. 1984. Importation and Exportation of Livestock Produce in Basutoland. GoL Printing. Maseru. Lesotho

BECK, T. and LEVINE, R., 2003. Legal Institutions and Financial Development.Working Paper no. 3136.World Bank Policy Research. Minnesota, USA.

BENARD, T. AND SPIELMAN, D., 2008. Making Rural Institutions for Sustainable Livelihoods and Equitable Development: A case study of agricultural marketing and smallholder cooperatives in Ethiopia. International Food Policy Research Institute. Washington, DC, USA.

BENHAM A and BENHAM L., 1998. Measuring the cost of exchange. Paper prepared for the 2nd Annual Meeting of the International Society for New Institutional Economics, 17-19 September 1998.

BERG, B. L, 2009. Qualitative research methods for Social Sciences (7e). Boston: Pearson International Ed.

BIJMAN, J., 2008. Contract Farming in Developing Countries: An Overview. Working Paper, University of Wageningen, The Netherlands.

BISWAS, D., 2004. Economics of Information in the web economy: Towards a new theory? *Journal of Business Research*, 57(7): 724-733

BULANE, I., 2014. Perspectives of Herders, Councillors and Chiefs from Thaba-Tseka, Mafeteng and Quthing Districts-Sustainable Rangeland Management through Capacity Building of Range Resources Governors and Users: case study of Lesotho. Working paper.Department of Range Resources Management, Ministry of Forestry and Land Reclamation.

BULL, J.K, DAVIS, A.W. and SKROCH, P.W., 2011. How Smart IT Systems are Revolutionizing Agriculture. National Academy of Engineering. Washington DC, USA.

BUREAU OF STATISTICS. 2012. Lesotho Livestock Products for 2011-2013. Statistical report no. 13. GoL Printing. Maseru, Lesotho.

BURGESS, S., 1997. Smallholder Voice and Rural Transformation: Zimbabwe and Kenya compared. *Comparative Politics,* 29 (2): 127-149 [Jstor] Available from: http://jstor.wam.seals/ac/za/stable/422076?

BURKE, W. J. and MYERS, R. J., 2014. Spatial equilibrium and price transmission between Southern African maize markets connected informal trade. Food policy, 49(1): 59-70.

BUSH, P.D., 2009. The Neoinstitutionalist Theory of Value. *Journal of Economic Issues*, 21(3):971-998.

BWALYA, R. MUGISHA, T. and HYUHA, T., 2013. Transaction costs and Smallholders household access to maize markets in Zambia. *Journal of Development and Agricultural Economics,* 8(9):328-336.

CABRAL, G. and SCOONES, I., 2006. Narratives for Agricultural Policy in Africa: What Roles for Ministries of Agriculture? Research Paper 001, Future Agricultures.

CENTRAL BANK OF LESOTHO. 2010. Annual report. Maseru, Lesotho.

CENTRAL BANK OF LESOTHO. 2011. Lesotho's Economy in Perspective: A review of major macroeconomic challenges. Economic Review. Maseru.

CENTRAL BANK OF LESOTHO, 2012. Annual Report. Maseru. Lesotho

CENTRAL BANK OF LESOTHO. 2013. Annual report. Maseru. Lesotho

CENTRAL BANK OF LESOTHO. 2014. Economic review. Maseru. Lesotho.

CENTRAL BANK OF LESOTHO. 2015. Economic review. Maseru. Lesotho.

CENTRAL INTELLIGENCE AGENCY. 2011. CIA's World Fact Book. [Online]. Available from: www.ezilon.com/maps/africa/lesotho-maps.html. Accessed on: 01/08/2016

CHANG, H.J., 2010. Institutional and Economic Development Theory, Policy and History. *Journal of Institutional Economics*, 7(4):473-498.

CHAPEYAMA, O., 2004. "Rangeland Management in Lesotho". Report on Assessment of Needs to Reintroduction of Grazing Fee. United States Aid for International Development. Maseru, Lesotho.

CHAPOTO, A., MABISO, A. and BONSU, A., 2013. Agricultural Commercialisation, Land Expansion and Home-grown Large-scale Farmers. International Food and Policy Research Institute Discussion Paper No. 01268. IFPRI. Ghana.

CHEN, M., 2012. "The Informal Economy: Definitions, Theories and Policies." WIEGO Working Paper No. 1. Cambridge, Massachussets, USA. [Online]. Available from: http://wiego.org/publications/informal-economy-definitions-theories-and-policies. Accessed on: 29/12/2016.

CHEN, M. A., 2007. Rethinking the informal economy: Linkages with the formal economy and the regulatory environment. DESA working paper no. 46. New York. USA

CHHOTRAY, V. AND STOKER, G., 2009. Governance Theory and Practice. A Cross-disciplinary Approach. London: Palgrave MacMillian.

CHIBANDA, M., ORTMANN, G. F. and LYNE. M. C., 2009. Institutional and governance factors influencing the performance of selected smallholder agricultural cooperatives in Kwazulu-Natal. Agrekon, 48 (3): 293-306.

COASE, R. H., 2000. The New Institutional Economics. Cheltenham: Edward Elgar Publishing.

COASE, R., 1960. "The problem of social costs". *Journal of Law and Economics*, 3, 1-44.

COGGAN, A., BUITLAAR, E., WHITTEN, S. and BENNETT, J., 2014. Factors that Influence Transaction Costs in Development Offsets: Who bears what and why? *Ecological Economics,* 88:222-231.

COLLIER, P. and DERCON, S., 2009. African Agriculture in 50 Years: Smallholders in a rapidly changing world. Paper presented at the Food and Agricultural Organisation of the United Nations Expert Meeting on How to Feed the World in 2050. Rome.

COLLIER, P., 1998. Social Capital and Poverty. Social Capital Initiative working paper no. 4. World Bank, Washington, DC, USA.

COMMONWEALTH. 2014. Small States in Transition from Vulnerability to Competitiveness: Lesotho: Managing the Trade Support Network. Port of Spain, Trinidad and Tobacco.

CORDON, M.J. ADANACIOGLU, H. AUBERT,M. BOUHSINA. Z. EL MEKKI, A.A. ROUSSERT, S. TOZANLI, S. and YERCAN, M., 2014.The Role of Market Forces and Food Safety Institutions in the Adoption of Sustainable Farming Practices: The Case of the Fresh Tomato Export Sector in Morocco and Turkey. *Food Policy*, 49: 268-280.

CORMIER, K., 2001. Farm Restructuring in Kazakhstan: An Institutional Economics Approach. Agricultural Economics Report NO. 612. Department of Agricultural Economics, East Lensing, MI, Michigan State University.

COWEN, D.V., 2007. Land Tenure and Economic Development in Lesotho. *South African Journal of Ecnomics*, 35(1):57-74.

CRAWFORD, M., 1997. Marketing Research and Information Systems. Food and Agricultural Marketing and Agribusiness Text No. 4. [Online]. Available from: http://www.fao.org/docrep/w3241e/w3241e00.HTM. Accessed on: 20/10/2014.

CROOKS, A., 2004. The Horizon Problem and New Generation Cooperatives: Another Look at Minnesota Corn Processors. United States Department of Agriculture. Kansas City, USA.

CUEVAS, C. A., 2014. Transaction costs of exchange in Agriculture: Survey. University of Philippines. Los Banos. Philippines.

CULL, C., 2011. A business plan for Australian mohair industry. Report No. 01/093. Rural Industries Research and Development Corporation. New South Wales, Australia.

CZAJA, R., 1998. Questionnaire Pretesting Comes of Age. Marketing Bulletin, 5(9): 52-66.[Online]. Available from: http://marketing-bulletin.massey.ac.nz. Accessed on 27/02/2016.

DAEMANE, M.M., 2012. Problems of land tenure system in Lesotho since post-independence: challenging perspectives for sustainable development in land administration and management. *Journal of Sustainable Development in Africa*, 14(8):164-175.

DA SILVA, C. A. B., 2014. The Growing Role of Contract Farming in Agri-Food Systems Development: Drivers, Theory and Practice. Un-numbered Report. Food and Agricultural Organisation, Rome.

DE BRUYNE, C. and FISCHHENDLER, I., 2013. Negotiating Conflict Resolution Mechanisms for Trans boundary Water Treaties: A Transaction Cost Approach. *Global Environmental Change,* 23(6):1841-1851.

DE BRUYN, P. DE BRUYN, J.N. VINK, N. and KIRSTEN, J.F., 2001. How transaction costs influence cattle marketing decisions in the Northern Communal areas of Namibia. Agrekon 40(3):405-425.

DELGADO, C. 1999. Sources of Growth in Smallholder Agriculture in sub-Saharan Africa: The Role of Vertical Integration of Smallholders with Processors and Marketers of High-value Added Items. *Agrekon,* 38(Special Issue): 165-189.

DELLAL, G. YANAR, A. PEHLIVAN, E. KOKSAL, O. SOYLEMEZOGLU, F. ERDOGAN, Z. and TUNCER, S.S., 2013. The economic and cultural importance of animal fibers

production in Turkey. Paper presented at the third International Scientific Symposium "Agrosym Jahorina 2012".

DELORD, B. MONTAIGNE, E and COELHO, A., 2015. Vine planting rights, farm size and economic performance: Do economies of scale matter in the French viticulture sector? *Wine economics and policy,* 4(1):22-34.

DEPARTMENT OF AGRICULTURE, FORESTRY AND FISHERIES. 2015. A Profile of the South African Mohair Market Value. Pretoria. South Africa.

DEPARTMENT OF AGRICULTURE, FORESTRY AND FISHERIES. 2011. A Profile of the South African Mohair Market Value. Pretoria. South Africa.

DEPARTMENT FOR INTERNATIONAL DEVELOPMENT. 2005. Growth and Poverty Reduction: The Role of Agriculture. Policy Paper, DFID, UK.

DEPARTMENT OF LIVESTOCK. 2012. Livestock Production and Products. Report. Ministry of Agriculture and Food Security. Maseru, Lesotho.

DEPARTMENT OF RANGE RESOURCES MANAGEMENT. 2014. Animal Keeping and Grazing in Lesotho. Working Document. Ministry of Forestry and Land Reclamation. Maseru, Lesotho.

DEPARTMENT OF RANGE RESOURCES MANAGEMENT. 2012. Approaches to grazing management. Working document.Ministry of Forestry and Land Reclamation. Maseru, Lesotho.

DE VILLIERS, A., 1996. Agricultural Land Reform Policies for the Northern Province: Policy Report Number 1, University of the North. Sovenga.

DIRECTORATE ON CORRUPTION AND ECONOMIC OFFENCES. 2015. Crime report. Government printing. Maseru, Lesotho

DJURFELDT, A. A., 2013. African Re-organisation? Accumulation or Pro-poor Agricultural Growth? *World Development,* 41:217-231.

DOROSH, P. and HAGGBLADE, S. 2003. Growth Linkages, Price Effects and Income Distribution in Sub-Saharan Africa.IFPRI, Washington DC.*Journal of African Economies*, 12(2): 207-235.

DORWARD, A.R. KIRSTEN, J.F. OMANO, S.W. POULTON, C. and VINK.N., 2009. Institutions and the Agricultural Development and Challenges in Africa. In: J.F. Kirsten, A.R. Dorward, C. Poulton and N. Vink (Eds.).International Economic Perspectives on African agricultural Development. Washington, DC. USA.

DORWARD, A. and KYDD, J. 2005.Making Agricultural market systems work for the poor: Promoting effective, efficient and accessible coordination and exchange. Imperial College, London.

DUMA, M., 2007. Contract farming as a tool for the development of smallholder farmers in Zimbabwe. Unpublished MBA dissertation. University of Stellenbosch. South Africa.

EASTER, K.W. AND McCANN, L., 2010. Nested Institutions and the Need to Improve International Institutions. *Water Policy,* 12: 500-516.

EASTERN CAPE PROVINCIAL GOVERNMENT. 2010. Provincial Industrial Development Strategy. Department of Economic Development, Environmental Affairs and Tourism. Bisho. South Africa.

EATON, D. and MEIJERINK, G., 2007. Markets, Institutional Change and the New Agenda for Agriculture.Agricultural Economics Research Institute (LEI), Washington University and Research Center, United Kingdom.

EATON, C. AND SHEPHERD, A.W., 2001. Contract Farming: Partnerships for growth. Agricultural Service Bulletin No. 145, FAO, Rome.

ECONOMIC COMMISSION FOR AFRICA. 2003. Economic Report on Lesotho. GoL Printing. Maseru, Lesotho.

EDUADRO, A. J., 2009. What explains collective Action in the Commons? Theory and Evidence for Philippines.*World Development*, 37(3): 687-697.

EGGERTSSON, T., 1990. Economic Behavior and Institutions. Cambridge Press, Cambridge.

ENCHANOVE, F. AND STEFFEN, C., 2005. Agribusiness and Farmers in Mexico: the importance of contractual relations. *The Geographical Journal,* 171(2):166-176.

ENSMINGER, J. 1992. Making a market: The Institutional transformation of an African society. Cambridge University Press, New York.

FAFCHAMPS, M. 1996. The Enforcement of Commercial Contracts in Ghana. *World Development*, 24(3): 427-448.

FELKINS, L., 2007. Introduction to Public Choice Theory. [Online]. Available from: http://perspicuity.net/sd/pub-choice.html. Accessed on 15/04/2017

FENWICK, L.J. and LYNE, M.C., 1998. Factors Influencing Internal and External Credit Rationing Among Small-Scale Farm Households in Kwazulu-Natal. Agrekon, 37(4): 495-505.

FERRIS, S. ROBBINS, P. BEST, R. SEVILLE, D. BUXTON, A. SHRIVER, J and WEI, E., 2014. Linking Smallholder Farmers to Markets and the Implications for Extension and Advisory Services. MEAS discussion paper No. 4. United States Agency for International Development, Michigan.

FINK, A. and KOSECOFF, J., 1985. How to conduct surveys: a step-by-step guide. SAGE, London.

FISCHER, E. and QAIM, M., 2012. Linking Smallholders to Markets: Determinants and Impacts of Farmer Collective Action in Kenya. *World Development,* 40(6):1255-1268.

FOOD AND AGRICULTURAL ORGANISATION. 2013. Smallholder Integration in changing food markets. Rome. Italy

FOOD AND AGRICULTURAL ORGANISATION. 2009. Conservation Agriculture and Sustainable Crop Intensification in Lesotho. Report. FAO-Lesotho. Maseru.

FOOD AND AGRICULTURAL ORGANISATION. 2006. State of the agricultural sector in Lesotho. Report. FAO-Lesotho. Maseru

FOOD AND AGRICULTURAL ORGANISATION. Lesotho Economic Development. Report. FAO-Lesotho. Maseru, Lesotho.

FRANK, S. D. & HENDERSON, D. R. 1992. Transaction costs as determinants of vertical coordination in the US food industries. *American Journal of Agricultural Economics*, 74(4): 941-950.

FRASER, G. C. G., 2016. Personal communication. Rhodes University. Grahamstown. South Africa.

FRIEDAN, B.R. AND HAWKINS, R. J., 2010. Asymmetric Information and Economics. *Physica A: Statistical Information and Its Applications*, 389(2): 287-295.

FULLBROOK, E. 2004. A guide to what's wrong with economics. London: Anthem Press

FURUBOTN, E.G. and RITCHER, R., 2000. Institutions and Economic Theory: The Contribution of New Institutional Economics. Michigan University Press, Michigan, USA.

GABRESELASSIE, S., 2010.Creating New Markets via Smallholder Irrigation: The Case of Irrigation-led Smallholder Commercialisation in Lume District, Ethiopia.Working Paper No. 018. Future Agricultures. [Online]. Available from: http://www.future-agricultures.org. Accessed on 14/03/2014.

GABRESELASSIE, S. AND SHARP, K., 2008. Commercialisation of Smallholder Agriculture in Selected Tef-growing Areas of Ethiopia. Discussion Paper No. 006. Future Agricultures. [Online]. Available from: http://www.future-agricultures.org. Accessed on 20/03/2014.

GANI, B.S. and ADEOTI, A.I., 2011. Analysis of Market Participation and Rural Poverty among Farmers in Northern Part of Taraba State, Nigeria. *Journal of Economics*, 2(1):23-36.

GEBREMEDHIN, B. HOEKSTRA, D. TEGEGNE, A. SHIFERAW, K and BOGALE, A., 2015. Factors determining household market participation in small ruminant production in the highlands of Ethiopia. Lives working report no. 2. International Livestock Research institute. Addis Ababa, Ethiopia.

GERBER, J. KNOEPFEL, P. NAHRATH, S. AND VARONE, F., 2009. Institutional Resource Regimes: Towards sustainability through the combination of property-rights theory and policy analysis. *Ecological Economics,* 68(3): 798-809.

GIBBONS, R., 1998. "Incentives in Organizations" .*Journal of Economic Perspectives,* 12:115-132.

GLOVER, D., 1994. Commercialisation of Agriculture in Developing Countries.In Von Braun, J. and Kennedy, E (eds). Agricultural commercialisation, economic development, and nutrition. John Hopkins University Press, Baltimore, Maryland, USA. Pp. 166-175.

GOAT INDUSTRY OF AUSTRALIA. 2015. Fibre Goats. [Online]. Available from: http://www.gica.com.au/history-of-goats/fibre-goats. Accessed on: 17/03/2015.

GOLAFSHANI, N., 2003. Understanding Reliability and Validity in Qualitative Research.*The Qualitative Report, 8(4):597-60.* [Online]. Available from: http://www.nova.edu/ssss/QR/QR8-4/golafshani.pdf. Accessed on 20/03/2016.

GONG, Y. BULL, G. and BAYLIS, K., 2010. Participation in the World's First Clean Development Mechanism Forest Project: The role of property rights, social capital and contractual rules.

GOPALAKRISHNAN, S., 2005. Collective Action in the Management of Common Pool Resources: Is there an alternative to the rational choice model? Unpublished MSc Thesis, Michigan State University. USA

GRWAMBI, B., 2005. Commercialisation of small-scale wool production in the rural Peddie District of the Eastern Cape. Unpublished MSc. Dissertation. University of Fort Hare. Alice. South Africa.

GUERCIO, A., 2015. The elegant history of mohair.Inspired.news, 7(2). [Online] Available from: http://kravetnews.com/articles/articles_view/the_elegant_history_of mohair. Accessed on: 20/05/2015

HAGEDORN, K., 2008. Particular requirements for institutional analysis in nature-related sectors.*European Review of Agricultural Economics,* 35(3):357-384.

HAGGBLADE, S., HAZELL, P. and BROWN, J. 1990. Farm-non-farm linkages in rural sub-Saharan Africa. *World Development,* 17(8): 1173-1201.

HAJJAR, R., 2015. Advancing Small-Scale Forestry under FLEGT and REDD in Ghana. *Forest Policy and Economics*, 58:12-20

HALCOMB, E and DAVIDSON, P, 2006. Is verbatim transcription of interview data always necessary? *Applied Nursing Research*, 19(1): 38-42.

HALL, T. W and ELLIOTT, J. E., 1999. Methodological controversies in economics and political economy. *International Journal of Social Economics*, 26(10/11):1249-1284.

HANCOCK, T., 2015. Subsistence farmers not the answer to Africa's food insecurity. SSG consulting report. South Africa. [Online]. Available from: www.engineeringnews.co.za. Accessed on: 20/12/2016.

HARDIN, G., 1968. The Tragedy of the Commons. *Science new series*, 162(3859):1243-1248.

HAZELL, P. POULTON, C. WIGGINS, S. and DOWARD, A., 2007. The future of small farms for poverty reduction and growth. 2020 Discussion paper 42. International Food Policy Research Institute. Washington DC, USA.

HERZFELD, T. DRESCHER, L.S. and GREBITUS, C., 2011. Cross-national Adoption of Private Food Quality Standards. *Food Policy*, 36:401-411.

HIJDRA, A., WOLTJER, J. and ARTS, J., 2014. Value Creation in Capital Waterway Projects: Application of a Transaction Costs and Transaction Benefit Framework for the Miami River and the New Orleans Inner Harbour Navigation Capital. *Land Use Policy,* 38: 91-103.

HLASOA, M., 2012. The Present Grazing System and its Effects on Small Stock Production. Department of Livestock Services. Leribe. Lesotho.

HOBBS, J.E.,1997. Measuring the importance of transaction costs in cattle marketing. *American Journal of Agricultural Economics,* 79(4):1083-1095.

HODGSON, G. M., 2000. What is the essence of institutional economics? *Journal of economic issues*, 34(2): 317-329.

HODGSON, G.M., 2007. The Revival of Veblenian Institutional Economics. *Journal of Economic Issues,* XLI (2): 325-339.

HODGSON, G.M., 2006. What are institutions? *Journal of Economic Issues*, XL(1):1-25.

HUNTER, J.P., 1987. Economics of Wool and Mohair Production and Marketing in Lesotho. Institute of Southern African Research Report no. 16. National University of Lesotho. Maseru, Lesotho.

HUO, J. H. X., 2015. Transaction costs and Farmer-to-Market Linkages: Empirical Evidence from China Apple Producers. IOAE. Milan, Italy.

HYDE, K.F., 2000. Recognising deductive processes in qualitative research: Qualitative Market Research. *International Journal for Qualitative Market Research*, 3 (2): 82 – 90.

IGWE, K. C. and EGBUSON, O. M., 2013. Determinants of Transaction Cpsts for Borrowers among Farmers in Ikwuano Local Government Area, Abia State, Nigeria. *American Journal of Rural Development,* 1(5):116-120.

IMANI DEVELOPMENT INTERNATIONAL. 2007. Survey on non-tariff barriers to trade: Lesotho. Regional Trade Facilitation Programme. Report. Maseru, Lesotho.

INTERNATIONAL FUND FOR AGRICULTURAL DEVELOPMENT. 2014. RURAL POVERTY IN LESOTHO. Working Report, Maseru, Lesotho.

INTERNATIONAL MONETORY FUND. 2015. State of Public Expenditure in Lesotho. Report. Maseru, Lesotho.

JAEGER, P., 2010. Smallholders: How to Involve Small-Scale Farmers in Commercial Horticulture. A paper presented for the 6th seminar "Highvalue Agriculture in Southern and Eastern Africa. World Bank.

JAGWE, J.N., 2011. The Impact of Transaction Costs on the Participation of Smallholder Farmers and Intermediaries in the Banana Markets of Burundi, Democratic Republic of Congo and Rwanda. Unpublished PhD Thesis. University of Pretoria, RSA.

JALETA, M., GEBREHEDHIN, B. and HOEKSTRA, D., 2009. Smallholder Commercialisation: Processes, Determinants and Impact. Discussion Paper No. 18. International Livestock Research Institute.

JARI, B., 2012. An Investigation into the Impact of Fairtrade in South Africa. PhD Thesis, Rhodes University, Grahamstown.

JARI, B., 2009. Institutional and Technical Factors Influencing Agricultural Marketing Channel Choices Amongst Smallholders and Emerging Farmers in the Kat River Valley. MSc Thesis, University of Fort Hare, Alice. South Africa

JARI, B., 2009. AND FRASER, G.C.G., 2009. An Analysis of Institutional and Technical Factors Influencing Agricultural Marketing Amongst Smallholder Farmers in the Kat River Valley, Eastern Cape, South Africa. *African Journal of Agricultural Research,* 4(11): 1129-1137.

JAYNE, T.S., MATHER, D. and MGHENYI, E., 2010. Principal Challenges Confronting Smallholder Agriculture in Sub-Saharan Africa. *World Development,* 38(10):1384-1398.

JAYNE, T.S. WEBER, M.T. TSCIRLEY, D. BENFICA, R. CHAPOTO. A. and ZULU, B. 2003. Smallholder income and land distribution in Africa: implications for poverty reduction strategies. *Food Policy,* 28:253-275.

JIMENEZ, A, PALMERO-CAMARA, C, GONZALES-SANTOS, M. J, GONZALES-BERNAL, J, JIMENEZ-EGUIZABAL, J. A., 2015. The impact of educational levels on formal and informal entrepreneurship. *Business Research Quarterly* 18: 204-212.

JONES, P.,2013. History Matters: New Evidence on the Long Run Impact of Colonial Rule on Institutions. *Journal of Comparative Economics,* 4 (1): 181-200.

JONGWANICH, J., 2009. The Impact of Food Safety Standards on Processed Food Exports from Developing Countries. *Food Policy Research*, 34:447-457.

JORDAAN, H. and GROVE, B., 2010. Analysis of the Governance structure used by Eksteenskuil Raisin Producers: Is there a need for more vertical integration? Paper presented at the Joint 3rd African Association of Agricultural Economists (AAAE) and 48th Agricultural Economists Association of South Africa (AEASA) Conference, Cape Town, South Africa, September 19-23, 2010.

JORDAAN, D. and KIRSTEN, J., 2008. Investigating alternative governance systems for the South African mohair supply chain. Agrekon 47(2) :258-284.

JORDAAN, D. P. S., 2005. A critical analysis of the South African mohair marketing systems in the evolving global agribusiness environment. Unpublished MSc. Dissertation. University of Pretoria. Pretoria, South Africa.

KAHKONEN, S. and LEATHERS, H., 1999. Transaction costs analysis of maize and cotton marketing in Zambia and Tanzania. Technical paper no. 105. USAID, Maryland, USA.

KANKANAMGE, R. V., 2012. Formal and Informal Trading in Agriculture. Lecture notes. National University of Lesotho. Roma, Lesotho.

KEREGERO, K. J. B., 2015. State of extension and rural development in Lesotho. Report. National University of Lesotho. Roma, Lesotho.

KEY, N. and RUNSTEN, D. 1999. Contract farming, Smallholders, and Rural Development in Latin America: The organization of Agro-processing firms and the scale of outgrower production. *World Development,* 27(2): 381-401.

KHERALLAH, M. and KIRSTEN, J., 2001. The New Institutional Economics: Applications for Agricultural Policy Research in Developing Countries. MSSD Discussion Paper No. 41. International Food Policy Research Institute. Washington. DC, USA.

KHERALLAH, M. and MINOT, N. 2001. Impact of Agricultural Market Reforms on Smallholder Farmers in Benin and Malawi. IFPRI Collaborative Research Project. International Food Policy Research Institute, Washington DC.

KIRSTEN, J., MAPILA, M., OKELLO, J. and DE, S., 2012. Managing Agricultural Commercialisation for Inclusive Growth in Sub-Saharan Africa. Briefing Paper No. 1, Global Development Network.

KIRSTEN, J.F. and KARAAN, A. S. M. ., 2009. Introduction to the Economics of Institutions. In Kirsten, JF, Dorward, AR, Poulton, C. and Vink, N (eds), Washington, D.C: IFPRI. Pp 35-74.

KIRSTEN, J.F. DOWARD, A.R. POULTON, C. and VINK, N., 2009. Institutional Economics Perspectives on African Agricultural Development. International Food Policy Research Institute (IFPRI). Washington, DC. USA.

KIRSTEN, J. and SARTORIUS, K., 2002. Linking Agribusiness and Small-Scale Farmers in Developing Countries: Is There A New Role for Contract Farming? Working Paper No. 13, University of Pretoria, RSA.

KIRSTEN, J.F. and VAN ZYL, J., 1998. Defining small-scale farmers in South African context. *Agrekon,* 37 (4): 560-571.

KISER, L. L. and OSTROM., 1982. The Three Worlds of Action: A metatheoretical synthesis of institutional approaches. Polycentic Games and Institutions. University of Michigan Press, Ann Arbor.

KROFT, A. and SUARE, P., 2014. Fixed Cost Per Shipment. *Journal of International Economics,* 92(1):166-184.

LAI, Y. PENG, Y. LI, B. and LIN, Y., 2013. Investment in Physical Capital, Relationship-Specificity, and the property rights approach. *Economic Letters*, 119(3): 336-339.

LAWSON, T. 2003. Reorienting economics. New York: Routledge.

LEAVY, J. and POULTON, C., 2007. Commercialisations in Agriculture. Working Paper 003. Future-Agricultures. [Online].http://www.future-agricultures.org. Accessed on 25/02/2014.

LEE, X.E., 2014. The challenges facing textiles producers in Lesotho.Working report.Textile Producers Association. Maseru, Lesotho.

LEE, T., 2015. Australian mohair, produced by Angora goats regains its mojo after decades in the doldrums. [Online]. Available from: www.abc.net.au/news/2015-03-28/australia-mohair-regains -its mojo/6354136. Accessed on: 05/01/2017

LEEDY, P. D. and ORMROD, J, E., 2005. Practical research. Planning and design. Pearson Merrill Prentice-Hall. Ohio, USA.

LEKOVIC, V., 2012. Interaction of formal and informal institutions – Impact on economic success. *Economics and Organisation*, 8(1):357-370

LERMAN, Z., 2004. Policies and institutions foe commercialisation of subsistence farms in transition countries. *Journal of Asian Economics*, 15:461-479.

LESOTHO BUREAU OF STATISTICS. 2012. Situation of Agricultural Sector. Government printers. Maseru, Lesotho.

LESOTHO GOVERNMENT. 2015. Lesotho Economy Profile. Government printers. Maseru, Lesotho.

LESOTHO GOVERNEMNT. 2014. Lesotho Economy profile. Government printers. Maseru, Lesotho.

LESOTHO NATIONAL DEVELOPMENT CORPORATION. 2015. Private and Public Sector Development in Lesotho. GoL Printing. Maseru

LESOTHO NATIONAL DEVELOPMENT CORPORATION. 2012. Economic Performance Annual. Government printers. Maseru, Lesotho

LESOTHO NATIONAL DEVELOPMENT COOPERATION. 2009. History of Mohair Processing in Lesotho. Report. Maseru. Lesotho

LETSIE, L., 2005. Explanatory factors of poor performance in wool and mohair production. Report. Division of small stock. Maseru. Lesotho

LIJIA, W. and XUEXI, H., 2014. Growers' selling behaviour: Transaction Cost Comparison Analysis. *Agricultural Economics Review*, 15(2):5-28.

LIKOETLA, P.L., 2014. Agricultural Productivity in Lesotho. Departmental Brief. National University of Lesotho, Roma.

LINCOLN, Y and GUBA, E., 2000. Paradigmatic controversies, contradictions and emerging confluences. In: Denzin, N and Lincoln, Y (eds.), The Handbook of Qualitative Research (3e). Thousand Oaks: Sage. Pp.191-221.

LINCOLN, Y. S., and GUBA, E. G., 1985. Naturalistic Inquiry. SAGE. Beverly Hills, CA

LIPTON, M., 2005. The Family Farm in a Globalising World.Policy Brief No. 74. International Food Policy Research Institute, Washington, DC. [Online]. Available from: www.ifpri.org. Accessed on 18/04/2014.

LIVESTOCK PRODUCTS MARKETING SERVICES, 2014. The marketing and performance of wool and mohair sectors. Department of Marketing. Maseru. Lesotho.

LIVESTOCK PRODUCTS MARKETING SERVICES. 2012. Wool and Mohair Production and Performance. Report. Department of Marketing. Maseru. Lesotho.

LIVESTOCK PRODUCTS MARKETING SERVICES, 2010. The present marketing system. Maseru. Lesotho. [Online] Available from: http://www.fao.org/Wairdocs/ ILRI/x5514E/ x5514e06.htm#TopOfPage. Accessed on 20/08/2014.

LIVESTOCK PRODUCTS MARKETING SERVICES. 2009. Impact of subsidies to the small stock sector. Report. Department of Marketing. Maseru. Lesotho.

LOVEI, M. and GENTRY, B.S., 2002. The Environmental Implications of Privatization: Lessons for developing countries. Discussion Paper 426, World Bank, Washington, DC.

MACDONALD. J.M., 2011. Why are farms getting larger? The case of U.S. United States Department of Agriculture, Washington DC.

MADIGELE, P. SNOWBALL, J. and FRASER, G., 2015. Water, water everywhere: Is integrated water resource management the right institutional prescription for South Africa's water management challenges? Department of Economics, Rhodes University, South Africa.

MAERTENS, M. and SWINNEN, J.F., 2009. Trade, Standards, and Poverty: Evidence from Senegal. *World Development, 37(1):161-178.*

MCGREGOR, B.A. BUTLER, K.L. and FERGUSON, M.B., 2012. The allometric relationship between mean fibre diameter of mohair and the fleece-free weight of Angora goats over their lifetime. *Animal Production Research*, 52:35-43

MAFISA, T., 2011.Project Proposal for Lesotho Wool and Mohair Development. GoL Printing. Maseru, Lesotho.

MAFISA, T., 1998. Wool and Mohair Production in Lesotho.Working Paper.Department of Livestock Services. Maseru, Lesotho.

MAHOMMED, J., 2013. Effects of the Budgetary Constraints on the agricultural activities and growth at the National University of Agriculture. National University of Lesotho, Maseru.

MAKHURA, M.T., 2001. Overcoming Transaction Costs Barriers to Market Participation of Smallholder Farmers in the Northern Province of South Africa. Unpublished PhD Thesis, University of Pretoria, Pretoria.

MAKHURA, M.T., GOODE, F.M. AND COETZEE, G.K., 1998. A cluster analysis of commercialisation of farmers in developing rural areas of South Africa. *Development Southern Africa* 15 (3): 429-448.

MAKOSHOLO, M. L., 2005. The comparative advantage of long-term crops in Lesotho. Unpublished MSc Thesis. University of the Free State, RSA.

MALEKANO, L., 2000. The socio-economic impact of stock-theft and disease in the lower Shire district of Malawi. A paper presented at the "International Conference on Historical and Socio-science Research in Malawi". Zomba, Malawi.

MALTSOGLOU, I and TANYERI-ABUR., 2005. Transaction costs, Institutions and Smallholder Market Integration: Potato Producers in Peru. ESA Working paper no. 05-04, Food and Agricultural Organisation. Rome.

MANGISONI, J. 2006. Markets, Institutions and Agricultural Performance in Africa. ATPS special paper series No. 27, the African Technology Policy Studies Network, Nairobi. Online: http://www.atpsnet.org/content/files/documents/Special%20Paper%20Series%2027.pdf. Accessed: 20-08-15.

MARAKE, M. MOKUKU, C. MAJORO, M. and MOKITIMI, N., 2000. Global Change and Subsistence Rangelands in Southern Africa: Resource Viability, Access and Use in

relation to Rural Livelihoods and Welfare: A preliminary report and literature review for Lesotho. ISAS research report. National University of Lesotho, Maseru.

MARCIANO, A., 2012. Guido Calabresi's Economic Analysis of Law, Coarse and Coarse Theorem. *International Review of Law and Economics*, 32(1): 110-118

MARGOLIS, S. and LIEBOWITZ, S.J., 2000. Path Dependence. University of North Carolina, Raleigh. USA.

MARO, P., 2011. Environmental Change in Lesotho: An analysis of the causes and consequences of Land-Use change in the lowland region. Springer. Brussels, Belgium.

MASEATILE, M.S.M., 2011. Productivity of Small-Scale Maize Farmers in Lesotho. Unpublished MSc Thesis. University of the Free State. RSA

MASERU BUSINESS CHAMBER. 2013. Basotho Businesses Competitiveness. Report. Maseru. Lesotho

MATABI, J. M.O., 2012. Analysis of institutional and governance factors and their impact on smallholder agricultural cooperatives' performance in malawi"a case of the rice-oriented cooperatives in Zomba, Salima and Nkhatabay Districts of Malawi". Unpublished MBA. Dissertation. Exploits University. Malawi

MATEBESI.P., 2015. Youth participation in wool and mohair farming in Lesotho. Working paper. Lesotho National Wool and Mohair Growers Association. Maseru, Lesotho.

MATEBESI-RANTHIMO, P., 2014. Wool and Mohair Breeding in Lesotho. Paper presented at the LNWMGA conference. Maseru, Lesotho.

MATEBESI, P., 2014. Personal communication. Faculty of Agriculture. National University of Lesotho. Roma, Lesotho

MATEBESI, P.A., 2013. Importance of small stock farming in Lesotho. National University of Lesotho press. Roma, Lesotho.

MATUNGUL, P.M., ORTMANN, G.F. and LYNE, M.C., 2002. Marketing Methods and Income Generation among Small-Scale Farmers in Two Communal Areas of Kwazulu Natal, South Africa. Presented Paper at the 13th Congress of International Farm Management Association, Wageningen, Netherlands.[Online]. Available from: http://ageconsearch.umn.edu/bitstream/6958/2/cp02or01.pdf. Accessed on 17/04/2014.

MATUNGUL, M. P. M., 2002. Marketing constraints faced by communal farmers in KwaZulu-Natal, South Africa: a case study of transaction costs.Unpublished PhD thesis, Discipline of Agricultural Economics, School of Agricultural Sciences and Agribusiness. Pietermaritzburg: University of Natal, RSA.

MATUNGUL, P.M. LYNE, M.C. and ORTMANN, G.F., 2001. Transaction costs and crop marketing in the communal areas of Impendle and Swayimana, KwaZulu-Natal. Development Southern Africa, 8(3)347-363.

MAYHEW, A., 1987. The Begginings of Institutionalism. *Journal of Economic Issues*, 21(3): 971-998.

MBATHA, C., 2007. A case of institutional investigations in economic research methods with reference to South Africa's agricultural sector. Unpublished PhD thesis, University of Rhodes. Grahamstown.

MEAGHER, K., 2013. Unlocking the Informal Economy: A Literature Review on Linkages between Formal and Informal Economies in Developing Countries. WIEGO Working Paper No. 27. Manchester, UK. [Online]. Available from:http://wiego.org/ publications/literature-review-linkages-between-formal-and-informal-economies-developing-countries. Accessed on: 10/01/2017.

MELESSE, T.M., 2014. Agricultural Technology Adoption and Market Participation underLearning Externality: Impact Evaluation on Small-scale Agriculture fromRural Ethiopia. Working paper no. 2015/06. Maastricht School of Management. Maastricht.

MELLOR, J.W., 2009. Measuring Cooperative Success: New Challenges and Opportunities in Low-and Middle-Income Countries. United States Agency for International Develoment Report, New York, USA.

MENARD, C., 2001. Methodological issues in institutional economics. *Journal of Economic Methodology,* 8(1): 85-92.

MENARD, C. AND SHIRLEY, M., 2008. Handbook of New Institutional Economics. Springer, USA.

MEYER, A., 2009. Online Social Network in Economics. *Decision Support Systems*, 42(3): 169-184.

MILAGROSA, A., 2007. Institutional economic analysis of vegetable production and marketing in Northern Philippines: social capital, institutions and governance. PhD thesis. Wageningen University, The Netherlands.

MINISTRY OF AGRICULTURE AND FOOD SECURITY. 2013. Lesotho Agricultural Situation Report. GoL Printing. Maseru. Lesotho.

MINSTRY OF AGRICULTURE AND FOOD SECURITY, 2012. Annual Performance Report. GoL Printing. Maseru. Lesotho.

MINSTRY OF AGRICULTURE AND FOOD SECURITY, 2011. Annual Performance Report. GoL Printing. Maseru. Lesotho.

MINISTRY OF AGRICULTURE AND FOOD SECURITY, 2003. Sectoral Strategy Document, GoL Printing, Maseru. Lesotho.

MINISTRY OF FORESTRY AND LAND RECLAMATIION. 2011. Rangelands management in Lesotho. GoL Printing, Maseru, GoL Printing. Lesotho.

MINISTRY OF LABOUR AND EMPLOYMENT. 2013. Lesotho Enterprises and Employment Situation. GoL Printing, Maseru, GoL Printing. Lesotho.

MINISTRY OF LOCAL GOVERNMENT. 2015. Governance of communal areas in Mafeteng Districct. Mafeteng Urban Council. Mafeteng. Lesotho.

MINISTRY OF LOCAL GOVERNMENT. 2013. Governance of communal areas in Mafeteng Districct. Mafeteng Urban Council. Mafeteng. Lesotho.

MINISTRY OF POLICE. 2016. Working report. Mafeteng, Lesotho.

MINISTRY OF TRADE AND INDUSTRY. 2015. Mohair Global Trade. GoL Printing. Maseru, Lesotho.

MINISTRY OF TRADE AND INDUSTRY. 2015. Agricultural Global Trade. GoL Printing. Maseru, Lesotho.

MINISTRY OF TRADE, INDUSTRY, COOPERATIVES and MARKETING, 2012. Enterprises Situation. GoL Printing. Maseru, Lesotho.

MINISTRY OF TRADE, INDUSTRY, COOPERATIVES AND MARKETING. 2011. Mohair and wool production in the Mountain Kingdom. Report. Department of Marketing. Maseru, Lesotho.

MINISTRY OF TRADE, INDUSTRY, COOPERATIVES AND MARKETING. 2009. State of Enterprises. Annual Report, GoL Printing. Lesotho.

MINISTRY OF TRADE, INDUSTRY, COOPERATIVES AND MARKETING. 2008. State of Enterprises. Annual Report, Lesotho.

MINOT, N., 2011. Contract Farming in Africa: Opportunities and Challenges. Seminar Paper, AAMP Policy Seminar, Kigali, Rwanda.

MOHAIR SOUTH AFRICA. 2015. A Profile of the South African Market Value. Pretoria, South Africa.

MOHAIR SOUTH AFRICA. 2011. A Profile of the South African Market Value. Pretoria, South Africa.

MOKITIMI, N., 1988. An Economic Analysis of the Lesotho Mohair Marketing System. Unpublished MSc Thesis. University of Saskatchewa, Canada.

MOKITIMI, N., 1996. Private Traders' Conduct in the Marketing of Wool and Mohair in Lesotho. *Review of Southern African Studies,* 1(2):38-53.

MOLATELA, M., 2012. Situation of Agricultural Research in Lesotho. Report. Department of Agricultural Research. Maseru, Lesotho.

MOLEBATSI, N., 2011. Capacity challenges at District Agricultural Office in Mafeteng District. District Agricultural Office. Mafeteng, Lesotho.

MONTEFRIO, M.J. SONNENFELD, D.A. and LUZADIS, V.A., 2015. Social Construction of the Environment and Smallholder Farmers' Participation in 'low-carbon', agro-industries crop production contracts in the Philippines. *Ecological Economics,* 116:70-77.

MONTSHWE, B. D. 2006. Factors affecting participation in mainstream cattle markets by small-scale cattle farmers in South Africa. Unpublished MSc Agric thesis, University of Free State, Bloemfontein, RSA.

MOOYA, M. M., 2009. Real Estate Markets and Poverty Alleviation in Namibia's Urban Informal Settlements: An Institutional Approach. Unpublished PhD Thesis, University of Pretoria, South Africa.

MORGAN-JARVIS, L., 2015. The Lesotho Outlook. Wade Publishers. Maseru, Lesotho.

MORRISON, M. DURANTE, J. GREIG, J. and WARD, J., 2008. Encouraging Participation in Market Based Instruments and Incentive Programs. Final Report Prepared for Land and Water Australia.

MOSEBI, P., 2014. Rangelands Use and Quality of Produce. Report. Faculty of Agriculture. National University of Lesotho. Maseru, Lesotho.

MOSENENE, L.1994. Soil-Water and Conservation Tillage Practices in Lesotho: Experiences of SWACAP. Ministry of Agriculture and Bureau of statistics, Lesotho Situation Report. [Online]. Available from: http://www.fao.org/ag/ags/agse/agse-s/3ero/namibia1/c19.htm. Accessed on: 13/03/2015.

MOSHOESHOE, T. O., 2015. Mohair and Wool Marketing in the Mountain Kingdom. Report. Ministry of Small Business Development, Cooperatives and Marketing. Maseru, Lesotho.

MOTSAMAI, B. 1990. Management of communal range resources in Lesotho. Unpublished report. National University of Lesotho. Roma, Lesotho.

MPHAHAMA, L. E., 2011. Institutional constraints to marketing of horticultural production and marketing in Lesotho. Unpublished MSc. Dissertation. University of Fort Hare. Alice, South Africa.

MUHONGAYIRE, W., 2012. An economic assessment of the factors influencing smallholder farmers' access to formal credit: A case study of Rwamagana District, Rwanda. Unpublished MSc. Dissertation. University of Nairobi, Kenya.

MUNGER, M., 2011. Persuation, Psychology and Public Choice. *.Journal of Economic Behaviour and Organisation,* 80(2): 290-300.

NABLI, M.K. AND NUGENT, J. B., 1989. The New Institutional Economics: Its Applicability to Development. *World Development*, 17(9): 1333-1347.

NCUBE, J. S., 2014. Determinants of Smallholder Market Participation in the Broiler Industry of Gauteng Province in South Africa. Unpublished MInst Agrar Dissertation. University of Pretoria. South Africa.

NEPAL, R. AND THAPA, G. B., 2009. Determinants of agricultural commercialisation and mechanization in the hinterland of a city in Nepal. *Applied Geography,* 29(3):377-389.

NGALAWA, H and VIEGI., 2013. Interaction of formal and informal financial markets in quasi-emerging market economies. *Economic Modelling*, 31:614-624.

NGQANGWENI, S. S. 2000. Promoting Income and Employment Growth in the Rural economy of the Eastern Cape through Smallholder Agriculture. Unpublished PhD thesis. University of Pretoria, Pretoria.

NGQANGWENI, S. and DELGADO, C., 2003. Decisions on livestock keeping in the semi-arid areas of Limpopo Province. Working paper: 2003-02. University of Pretoria, RSA.

NILSSON, J. SVENDSEN, G.H.L AND SVENDSEN, G.T., 2012. Are Large and Complex Agricultural Cooperatives Losing Their Social Capital? *Agribusiness,* 28(2):187-204.

NKHORI, P., 2004. The impact of transaction costs on the the choice of cattle markets in Mahalapye district, Botswana. Unpublished MSc. Dissertation. University of Pretoria, South Africa.

NORTH, D.C., 2004., Understanding the Process of Economic Change. Princeton: Princeton University Press.

NORTH, D.C., 2000. A Revolution in Economics. In Menand, C (eds). Institutions, Contracts and Organisations: Perspectives from NIE, Edward Elgar, Chaltenham, United Kingdom.

NORTH. D. C., 1993. New Institutional Economics and Economic Development. Working paper. Washington University. St Louis. [Online]. Available from: http://129.3.20.41/eps/eh/papers/9309/9309002.pdf. Accessed July 17, 2005.

NORTH, D. 1990. Institutions, institutional change and economic performance, Cambridge University Press, Cambridge.

NTAKATSANE, M., 2013. Effects of good breeding program on the quality of fleece. Report. Faculty of Agriculture. National University of Lesotho, Roma.

NTHEJANE, M. and RATS'ELE., C 2014. Investigating the Effectiveness of Exclusion of Grazing in Controlling Shrub Invasion. Paper presented at a Sustainable Land Management Conference held at Maseru Sun Hotel, Maseru.

NTS'OHI, R. T'SOLO, C. NTHEJANE, M. and RATS'ELE, C., 2014. An Investigation into the Effectiveness of Grazing Associations in Management of Communal Rangeland Resources. Paper presented at a Sustainable Land Management Conference held at Maseru Sun Hotel, Maseru.

NUGENT, R. A., 1997. Teaching Tools: A pollution rights trading game. *Economic inquiry,* 35(3): 671-685.

OHEN, S.B, ETUK, E.A, and ONOJA, J.A., 2013. Analysis of market participation by rice farmers in Southern Nigeria. *Journal of Economics and Sustainable Development* 4(7): 6-11.

OJEDIRAN, A.O., 2011. Contract Farming in Developing Emerging Farmers in South Africa: Exploring the GledhowMansomini Sugarcane Scheme. Unpublished MBA Thesis, University of Stellenbosch, South Africa.

OKOH, F., 2009. Basotho women participation in export markets. Seminar paper. National University of Lesotho. Roma, Lesotho.

OKOYE, B. C. ABASS, A. BACHWENKIZI, G. ALENKHE, B. ASUMUGHA, G. RANAIVOSON, R. RANDRIANARIVELO, R. RABAMANANTSOA, N. and RALIMANANA, I., 2016. Effect of Transaction costs on market participation among smallholder cassava farmers in central Madagascar. Cogent economics and finance. Madagascar. [Online]. Available from: http://dx.doLorg/10.1080/23322039.2016.1143597. Accessed on 24/12/2016.

OLALEYE, A., 2013. Constraints to research output at the National University of Lesotho. Report no. 12. Faculty of Agriculture. National University of Lesotho, Maseru.

OLWANDE, J and MATHENGE, M., 2012. Market Participation among PoorRural Households in Kenya. Paper presented at the International Association of Agricultural Economists (IAAE) Triennial Conference, Foz do Iguaçu, Brazil, 18-24 August, 2012.

OOSTHUIZEN, L.K., MEIRING, J.A., BOTHA, P.W., GROVE, B., MONKHEI, M.M., and PRETORIUS, I., 2005. Cost Estimating Procedures for Micro, Drip and Furrow Irrigation Systems for Large and Small Scale Farmers in the Onderberg/Nkomazi Region. Paper to the Water Research Commission by the Department of Agricultural Economics of the University of the Orange Free State. WRC paper no 974/1/05. Pretoria, RSA.

OPDENAKKER, R., 2006. Advantages and Disadvantages of Four Interview Techniques in Qualitative Research. *Forum for Qualitative Research*, 7 (4): 114-128.

OSEBEYO, S. and AYE, C. G., 2014. Transaction costs and marketing decision: a case study of smallholder tomato farmers in Markudi, Nigeria. Urban, Planning and Transport Research Journal, 2(1):333-340. [Online]. Available from: http://dx.doi.org/10.1080/21650020.2014.939296. Accessed on 06/01/2017

OSMANI, A.G and HOSSAI, E., 2015. Market participation decision of smallholder Farmers and its determinants in Bangladesh. *Economics of Agriculture,* 1(3): 339-349.

OSTROM, E., 2010. The Institutional Analysis and Development Framework and the Commons. *Cornell Law Review,* 95 (4): 807-816.

OSTROM, E., 2005. Doing institutional analysis: digging deeper than markets and hierarchies. In Handbook of New Institutional Economics. (Eds) C Menard and M. M Shirley. Dordrecht: Springer, Pp. 819-848.

OSTROM, E., 1990. Governing the commons: The evolution of institutions for collective action. Indiana University, USA.

OSWALDO, M. T., 2008. Business Model and Indigenous Cultural Identity: The Facilitator's Role in Contract Farming Projects: The Case of Chincha Valley in Peru. *Journal of Graduate School of Asia-Pacific Studies,* 15: 117-132.

PAGAN, P., 2009. Laws, customs and rules: Identifying the characteristics of successful water institutions. In Crase, Land Gandhi, V.P. (Ed) (2010), *Reforming Institution in water resource management: Policy and performance for sustainable development* (pp. 20-44). London: Earthscan.

PALLEY, T.I. and LaJEUNESS, R.M., 2007. Social Attitudes, Labour Law, and Union Organizing: Toward a new economics of union density. *Journal of Economic Behavior and Organization,* 62(2): 237-254.

PATTON, M.Q., 2002. *"Qualitative Research and Evaluation Methods (3e)"*. Thousand Oaks. California: SAGE Publications.

PENG, X. CHEN, M. AND GUO, J., 2012. Optimal Dividend and Equity Issuance Problem with Proportional and Fixed Transaction Costs. *Insurance: Mathematics and Economics,* 51(3): 576-585.

PINGALI, P.L., 2007. Agricultural growth and economic development: a view through globalization lens. *Agricultural Economics*, 37(1):1-12.

PINGALI, P.L. AND ROSEGRANT, M.W., 1995. Commercialisation and Diversification: Processes and Policies. *Food Policy,* 20(3): 171-185.

PITSO, L., 2011. Forests and Rangelands condition in Mafeteng. Report. Ministry of Forestry and Land Reclamation, Mafeteng. Lesotho.

POLSKI, M. and OSTROM, E., 2009. An institutional framework for policy analysis and design. Department of Political Science. Indiana University, USA.

POOLE, N.D. CHITUNDU, M. AND MSONI, R., 2013. Commercialisation: A meta-approach for agricultural development among smallholder farmers in Africa? *Food Policy*, 41: 155-165.

POSNER, R. A., 2010. From the NIE to Organisational Economics: With Applications to Corporate Governance, Government Agencies and Legal Institutions. *Journal of Institutional Economics,* 6(1): 1-37.

POTTER, J., 2003. Studying the standardized survey as interaction, *Qualitative Research, 3: 269–278.*

POULTON, C. TYLER, G. HAZELL, P. DOWARD, A. KIDD, J. AND STOCKBRIDGE, M., 2008. Commercial Agriculture in Africa: Lessons from success and failure. Background paper for the CCAA Study.

PRAGHURAM, P. and HYMAJYOTI, S., 2012. Agricultural Finance and Co-operation. Lecture Notes. Department of Agricultural Economics. S.V. Agricultural College. Tirupati, India.

PREMARATHNE, H. A., 2014. The impact of informal institutions on agricultural production and marketing: The experiences of Sri Lanka. New Dheli, India.

PUNCH, K.F., 2005. Introduction to Social Research: Quantitative and Qualitative Approaches. SAGE publications, London.

RAJIV, R., 2010. Formal versus informal markets: Investing in agricultural markets based solution (Decision and Policy Analysis). International Centre for Tropical Agriculture. [Online]. Available from: data.ciat.cgiar.org/formal-versus Informal Markets. Accessed on: 20/09/2018.

RALETING, P.M., 2012. An Investigation of Institutional Factors Influencing Vegetable Production Amongst Small-Scale Farmers in Central Eastern Cape: a case of six vegetable projects in the Nkonkobe Local Municipality. Unpublished MSc Thesis, University of Fort Hare, Alice, South Africa.

RAMOROKA, K. H., 2012. Participation and Utilisation of Formal Vegetable Markets by Smallholder Farmers in Limpopo: A Tobit II approach. Unpublished MSc. Dissertation. University of Limpopo. South Africa.

RANDELA, R., ALEMU, Z.G. and GROENEWALD, J.A., 2008. Factors Enhancing Market Participation by Small-Scale Farmers. *Agrekon*, 47(4):451-469.

RANDELA, R., 2005. Integration of Emerging Cotton Farmers into the Commercial Agricultural Economy. PhD Thesis, University of Free State, RSA.

RANTHEBA, L., 1985."The History of Indian Traders in Lesotho". Unpublished BA Dissertation. National University of Lesotho. Maseru, Lesotho.

RANTLO, A.M., 2009. The Role of Property Rights to Land and Water Resources in Smallholder Development in the Kat River Valley. Published Master's Thesis. University of Fort Hare. Alice, South Africa.

RANTLO, M.A., 2015. The business of informal trading in the food sector in Mafeteng urban. *International journal of development research* 5(3): 3621-3625.

RAPSOMANIKIS, G. HALLAM, D and CONFORTI, P., 2007. Market Integration and Price Transmission in Selected Food and Cash Crop Markets of Developing Countries. Food and Agricultural Organisation, Rome.

RATS'ELE, C., 2014. Natural Resources Situation: Forests and Rangelands. Working report. Department of Range Resources Management. Maseru. Lesotho.

REARDON, T. and BARRETT, C. 2000. Agro-industrialization, globalization, and international development: An overview of issues, patterns, and determinants. *Journal of Agricultural Economics,* 23(3): 195 -205.

REID, J.F., 2011. The Impact of Mechanization on Agriculture. National Academy of Engineering. Washington DC, USA.

REJA, U. MANFREDA, L. K. HLEBEC, V. and VEHOVAR, V., 2003. Development in Applied Statistics. Ansuka Ferligoj and Andrej Mrvar Editors. Ljubljana, Slovenia.

RITCHER, R., 2005. The NIE: Its Start, Its Meaning, Its Prospects. *The European Business Organisational Law Review,* 6(2): 161-200.

ROOYANI, F and SCHMITZ, G, .1987. Lesotho: Geology, Geomorphology and Soils. National University of Lesotho. Roma, Lesotho.

ROSSET, P. M., 1999. The Multiple Functions and Benefits of small farm Agriculture. In the Context of Global Trade Negotiations. The Institute for Food and Development Policy, Oakland.

RUETE, M., 2015. Financing for Agriculture: How to boost opportunities in developing countries. Policy brief no. 3. International Institute for Sustainable Development (IISD). Manitoba, Canada.

RUIJS, A., 2002. Cereal Trade in Developing Countries: A Stochastic Equilibrium Analysis of Market Liberalisation and Institutional changes in Burkina Faso. Labyrint Publication, the Netherlands. Online: http://dissertations.ub.rug.nl/FILES/faculties/eco/2002/a.j.w.ruijs/titlecon.pdf. Accessed: 21-06-07.

RYAN, A. B, 2006. Post-Positivist Approaches to Research. In: Antonesa, M, Fallon, H, Ryan, A. B, Ryan, Walsh, T and Borys, L (eds.), Researching and Writing your thesis: a guide for postgraduate students. MACE: Maynooth Adult and Community Education. Pp. 12-26.

SARTORIOUS, K. and KIRSTEN, J., 2006. Contracts and Contract Farming as Potential Mechanisms to Improve Market Access for Black Farmers in South Africa. Department of Agricultural Economics, Extension and Rural Development, University of Pretoria, South Africa.

SAVIO, C., 2015. Australian Mohair Industry could fill breach left by South Africa. Safil, Bulgaria.

SCHNEIBERG, M., 2007. What's on the path? Path dependence, organisational diversity and the problem of institutional change in the US economy, 1900-1950. *Socio-Economic Review,* 5:47-80.

SCHOLL, K. MARKEMANN. A. MEGERSA, B. BIRNER, R. and ZARATE, A. V., 2016. Impact of projects on initiating group marketing of smallholder farmers – A case study of pig producer marketing groups in Vietnam. *Journal of Co-operative Organisation and Management,* 4(1):31-41.

SEBATTA, C. MUGISHA, J. KATUNGI, E. KASHAARU, A. and KYOMUGISHA, H., 2014. Smallholder Farmers' Decision and Level of Participation in Potato Market in Uganda. *Modern Economy*, 5:895-906.

SECHABA CONSULTANTS. 2014. Agriculture and development in Lesotho. Working report No. 12. Ministry of Agriculture and Food Security, Maseru, Lesotho.

SEKATLE, P., 2002. Basotho Have Come a Long Way. Report. Lesotho News Agency, Maseru.

SEKONYELA, M., 2012. Annual Profits for Leribe Wool and Mohair Farmers. Report. Ministry of Trade, Industry, Cooperatives and Marketing. Leribe, Lesotho.

SELEBALO, Q.C., 2001. Land Reform and Poverty Alleviation: Lesotho's experiences during the last two decades. Paper presented at the conference on Land Reform and Poverty Alleviation in Southern Africa. Southern Africa Regional Poverty Network. Pretoria.

SEXTON, R. J. and ISKOW, J., 1986. Factors Critical to the Success or Failure of Emerging Agricultural Cooperatives. United States Department of Agriculture, ECIFS-S-2. USA

SHIFERAW, B., OBARE, G. and MURICHO, G. 2006. Rural Institutions and Producer Organizations in Imperfect markets: Experiences from Producer Marketing groups in semi-arid Eastern Kenya.IFPRI Working paper 60, International Food Policy Research Institute, Washington DC.

SHIIMI, T. TALJAARD, P. R. and JORDAAN, H., 2010. Transaction costs and cattle farmers' choice of marketing channels in North-Central Namibia. Paper presented at the joint 3rd AAAE and 48th AEASA conference. Cape Town. South Africa.

SIGEI, G., 2014. Determinants of Market Participation among Small-scale Pineapple Farmers in Kericho County. Kenya. Unpublished MSc. Thesis. Egerton University, Kenya.

SNOWBALL, J., 2015. Personal communication. Rhodes University, Grahamstown, South Africa.

SPIELMAN, D.J., BYERLEE, D. ALEMU, D. and KELEMEWORK, D., 2010. Policies to promote cereal intensification in Ethiopia: The search for appropriate public and private roles. Food Policy, 35:185-194. [Online]. Available from: www.elsevier.com/locate/foodpol. Accessed on: 20/10/2014.

STEINER, S., 2008. Determinants of the use of financial services in rural Ghana: Implications for social protection, Brooks World Poverty Institute, University of Manchester.

STESSENS, J. GOUET, C. and EeCKLOO,P., 2004. Efficient Contract Farming Through Strong Farmers' Organisations in a Partnership with Agribusiness. Report, IVA and AgriCard, Katholieke Universiteit Leuven. Netherlands

STEVENS, M., 2013. Ethical Issues in Qualitative Research. Social Care Workforce Research Unit. Kings College London. London. [Online] Available from: http://www.kcl.ac.uk/sspp/policyinstitute/scwru/pubs/2013/conf/stevens14feb13.pdf. [Accessed on 20/02/2016].

STONE-JOVICICH, S. LYNAM, T. MARSHALL, N. HERR, A. SMAJGL, A. STRATON, A. VELLA, K. and NURSEY-BRAY., 2009. Incentives for community participation and land use decisions in Etheridge Shire, Queensland. Desert Knowledge Cooperative Research Centre. Report No. 31. Alice Springs, Australia.

STRYDOM, D.B. TERBLANCHE, B. VAN ZYL, H. and WILLEMSE, B. J., 2012. Reduction of transaction cost within the South African potato processing industry. *African Journal of Agricultural Research,* 7(47):6265-6273.

STUTLEY, P.W., 1960. Marketing the Agricultural and Livestock Produce of Basutoland. Unpublished MSc Thesis. University of Reading, United Kingdom.

SWALLOW, B. MOKITIMI, N. and BROKKEN, R.F., 1987. Cattle Marketing Policy in Lesotho. Alpan African Livestock Policy Analysis Network.Network Paper no. 14.International Livestock Center for Africa (ILCA). Addis Ababa, Ethiopia.

SYKUTA, M. E. AND COOK, M. L., 2001. A New Institutional Approach to Contracts and Cooperatives. *American Journal of Agricultural Economics*, 83(5):1-17.

TADESSE, G. and BAHIIGWA, G., 2015. Mobile Phones and Farmers' Marketing Decisions in Ethiopia. *World Development*, 68:296-307.

TAJIMA, K., 2007. The Theory of Institutions and Collective Action in Adam Smith's Theory of Moral Sentiments. *Journal of Socio-Economics,* 36 (4): 578-594.

TATWANGIRE, A., 2011. Assets to productive assets and impact on household welfare in rural Uganda. Unpublished PhD Thesis, Norwegian University of Life Sciences, Norway.

THOMPSON Jr. A. A., 1984. Strategies for Staying Cost Competitive. Harvard business review report. Harvard University, USA.

TOLOGBONSE, E. B. JIBRIN, M M. AUTA, S. J. and DAMISA, M. A., 2013. Factors influencing women participation in Women in Agriculture (WIA) programme of Kaduna State Agricultural Development Project, Nigeria. *International Journal of Agricultural Economics and Extension,* 1(7):047-054.

TREGURTHA, N., 2006. Enhancing the Structure and Performance of Value Chains: A case study of the Lesotho Wool and Mohair Sector. Paper presented at a ComMark workshop held at the Lesotho Sun Hotel in Maseru, Lesotho.

TSOAKO, M., 2016. Institutional factors influencing market participation among small-scale farmers in Maseru urban. Unpublished Bsc. Project. National University of Lesotho. Roma, Lesotho.

TURNER, S. 2001. Livelihoods in Lesotho. Report, CARE-Lesotho. Maseru, Lesotho.

UNITED NATIONS DEVELOPMENT PROGRAMME. 2014. Lesotho Overview. Country statistical information. Maseru, Lesotho.

UNITED NATIONS INTERNATIONAL CHILDREN AND EMERGENCY FUND. 2015. State of the World's Children 2015. Country statistical information. Maseru, Lesotho.

VALENTINOV, V., 2007. Why are Cooperatives Important in Agriculture? An Organisational Economics Perspective. *Journal of Institutional Economics,* 3(1):55-69.

VAN DEN BERG, L. J., MANDJES, M.R.H. and NUNEZ, R. Q., 2007. Pricing and distributed QoS control for elastic network traffic. *Operations Research Letters 35* (2007), 297-307.

VAN ROOYEN, C. J., KIRSTEN, J.F., VAN ZYL, J. and VINK, N. 1995. Structural Adjustment, Policy reform and Agricultural performance in South Africa. Working paper 15: USAID Southern African Trade and Structural Adjustment Project, Pretoria, RSA.

VAN SCHALKWYK, H.D., VAN ZYL, J., BOTHA, P.W. and BAYLEY, B., 1997. Deregulation of Lesotho's Maize Market. *Agrekon,* 36(4):626-637.

VAN ZYL, J., VAN SCHALKWYK, H.D and DOYER, T.O., 1996. Lesotho: Impact Analysis of Deregulation of the Grain Sector. Ministry of Finance: Government of Lesotho. Maseru, Lesotho.

VATN, A., 2010. Institutional Analysis of Payments for Environmental Services. *Ecological Economics,* 69(6): 1245-1252.

VEGA, D.C. and KEENAN.J.,2014. Transaction Cost Theory of the Firm and Community Forestry Enterprises. *Forest Policy and Economics*, 42: 1-7 [Online]. Available from: http://ac.els-cdn.com/S1389934114000203/1-s2.0-S. [Accessed on 20/03/2014].

VON BRAUN, J., BOUIS, H. and KENNEDY, E., 1994. Conceptual Framework. In Von Braun, J. and Kennedy, E (eds). Agricultural commercialisation, economic development, and nutrition. Johns Hopkins University Press, Baltimore, Maryland, USA. pp.9-37.

VISSER, C. SNYMAN, G. VAN MARIE-KOSTER, E. and BOVENHUIS, H. 2009.Generic Parameters for Physical and Quality Traits of Mohair in South African Goats. *Small Ruminants Research*, 87:27-32.

WEAVER-HIGHTOWER, M.B., 2013. A mixed methods approach for identifying influence on public policy. *Journal of Mixed Methods Research,* 1-24.

WEGNER, L. and ZWART, G., 2011. Who will feed the world? The production challenge. Oxfam Research Report. [Online]. Available from: www.oxfam.org. Accessed on: 09/01/2017.

WIDMARK, C., BOSTEDT, G., ANDERSSON, M., and SANDSTROM, C., 2013. Measuring Transaction Costs in Multiple Land Use Situations: The Case of Forestry and Reindeer Husbandry in Sweden. *Land Use Policy,* 30:677-684.

WIGGINS, S. AND KEATS, S. 2013. Linking Smallholders to Markets. Imperial College, London. Available from: www3.imperial.ac.uk/africanagriculturaldevelopment. Accessed on: 12/10/2014.

WIGGINS, S., ARGWINGS-KODHEK, G., LEAVY, J. and POULTON, C., 2011. Small Farm Commercialisation in Africa: Reviewing the Issues. Research Paper No. 23. Future-agricultures, Ethiopia.[Online]. Available from: www.future-agricultures.org. Accessed on: 20/10/2014.

WIGGINS, S., 2009. Can the smallholder model deliver poverty reduction and food security for a rapidly growing population in Africa? Food and Agricultural Organisation, Rome, Italy.

WILLIAMSON, O.E., 2010. Transaction Cost Economics: The Natural Progression. *Journal of Retailing,* 86(3):215-226.

WILLIAMSON, O.E., 2000. The New Institutional Economics: Taking stock, Looking ahead. *Journal of Economic Literature,* 38(3):595-613.

WILLIAMSON, O.E., 1998a. Transaction Cost Economics: How it works; Where it is headed. *De Economist,* 146(1):23-58.

WILLIAMSON, O.E., 1998b. The Institutions of Governance.*American Economic Review*, 88(2): 75-79.

WILLIAMSON, O. E., 1979. The transaction cost economics. The governance of contractual relations, *Journal of Law and Economics*, 22: 233-261.

WILLIAMSON, O., 1996. The Mechanisms of Governance. Oxford University Press. New York, USA.

WOODEND, J.J., 2003. Potential of Contract Farming as a Mechanism for the Commercialisation of Smallholder Agriculture: The Case of Zimbabwe. Report, Food and Agricultural Organisation, Rome.

WOODS, P. S. A., 2000. The importance of proximity, transport and gender as transaction costs in the use of veterinary services in Zimbabwe. In: DK Leonard (Eds). Africa's changing markets for health and veterinary services. The New Institutional Issues. Macmillan Press Ltd.

WORLD BANK, 2016. Lesotho Economy Overview. World Bank, Washington, D.C. USA

WORLD BANK, 2015. Key Issues on Gender and Development. Report. Rome, Italy.

WORLD BANK, 2014. Lesotho's Overview. Washington DC, USA.

WORLD BANK, 2009. Awakening Africa's Sleeping Giant: Prospects for Commercial Agriculture in the Guinea Savannah Zone and Beyond. World Bank, Washington, DC. [Online]. Available from:http://sitesources.worldbank.org/INTARD/Resources/sleeping_giant.pdf>

WORLD BANK., 2008. Agriculture for Development.World Bank Development Report, Washington DC, USA.

WORLD BANK, 2007. Tools for Institutional, Political and Social Analysis of Policy Reform. A source book for Development Practitioners, World Bank. Washington DC, USA.

WORLD HEALTH ORGANISATION, 2013.Trade, foreign policy, diplomacy and health. World Bank, Washington DC, USA.

WYNNE, A. T, and M. C. LYNE. 2004. Rural Economic Growth Linkages and Small-Scale Poultry Production: A Survey of Producers in KwaZulu-Natal. *Agrekon* 43 (1) : 1-21.

ZENI, J., 1998. A guide to ethical issues and action research. Educational Action Research, 6(1): 9-19. [Online] Available from: http://dx.doi.org/10.1080/09650799800200053. Accessed on 15/02/2016.

ZHANG, L. ZHU, X. HEERINK, N. and SHI, X., 2014. Does Output Market Development Affect Irrigation Water Institutions? Insights from a case study in Northern China. *Agricultural Water Management,* 131:70-78.

ZHAO, P., 2016. An "unceasing war"on land development on the urban fringe of Beijing: A case of gated informal housing co.mmunities. *Cities,*60(B):139-146.

APPPENDIX 1: Questionnaire for small-scale mohair farmers of Lesotho

INTEGRATION OF SMALL SCALE MOHAIR FARMERS INTO THE COMMERCIAL AGRICULTURAL ECONOMY IN LESOTHO: A NEW INSTITUTIONAL ECONOMICS APPROACH

The objective of this study is to investigate the institutions that limit the integration of small scale mohair farmers into the commercial agricultural economy in Lesotho in order to address the institutional problems hindering the development of an effective marketing structure for the commercialisation of small-scale mohair producers in Lesotho.

You are therefore requested to spare some of your time to respond to the questions that follow. The researcher undertakes to keep the information private and confidential. Rhodes University has a policy which requires researchers dealing with human subjects to adhere to ethical conduct and to protect the respondents by respecting their freedom. The analysis will use personal identification numbers that the researcher will assign each respondent. This will protect respondents by making the responses anonymous.

Please, you are kindly requested to respond to thisquestionnaire.

Your cooperation on the above is highly appreciated.

Thank you in advance for your participation and cooperation in this project!!!

BACKGROUND

Date……

Interviewer……

Name of village……..

Research Identification number of respondent ……

Relation to household head ……

BACKGROUND AND DEMOGRAPHIC DETAILS

A.DEMOGRAPHIC DETAILS

Fill in the relevant information and where possible mark with an X.

A.1. GENDER		**A.2.** AGE (Years)						**A.3.** MARITAL STATUS				**A.4.** HOUSEHOLD SIZE			
M	F	<19	19-29	30-39	40-49	50-59	≥60	Single	Married	Widowed	Divorced	<16	16-60	>60	Total

A. 5. What is the highest educational level the head of household has completed? (Mark with an X)

No formal education	Primary school only	Secondary/High schoo	Tertiary educatio	Other (specify)

A. 6. Indicate the number of employees who assist with farm work

Type of employee	Full-time employees	Part-time employees	Unpaid family members	**TOTAL**
Number				

A. 7. What is your employment status and under which income class do you fall in? (Mark as appropriate)

EMPLOYMENT STATUS		**INCOME CLASS** (Rand per month)					
	Tick	<700	700 - 1500	1500 - 3000	3001 - 5000	5000 – 10000	>10000
Full time farmer							
Part time farmer							
Formally employed							
Pensioner							
Unemployed							
Other (Specify)							

A. POLICY ISSUES

A1. Are you aware of any policy related to mohair production and marketing?

Yes	
No	

A2. Which of the following policies are you aware of?

Agricultural Marketing/production	
Agricultural credit and research	
Agricultural Extension	
Range Management	
Other (specify)	

A3. Do you participate in the policy discussions or design?

Yes	No

A4. If not, what is the reason (s) for not participating?

A5. If yes to A3, how do you participate?

Directly	Indirectly/Represented

A6. How do you feel about your contribution?

A7. Are you aware of any provisions that address mohair production /marketing in these policies?

A8. Do you think the policies talk to each other? State the reasons for your response.

A9. Do you think the policies are conducive or appropriate for commercialisation of small scale farming? Support your answer with reasons.

A10. Generally, whose interests do you think are served by the policies and why do you think so?

A11. In which of the following aspects are interests of specific groups identified in A10 served?

Policy Discussions	Policy Design	Policy Implementation

B. MOHAIR PRODUCTION

B1. How long have you been in mohair farming?

Years	

B2. How many goats do you keep?

Number of goats	

B3. How much mohair do you produce per year?

Mohair kilograms	

B4. What type of property rights to grazing land do you have?

Private rights	
Communal rights	
State rights	
Open access	

B5. Do these property rights enhance productivity of your farm? Support your answer with reasons.

B6. Do you have access to agricultural loans?

Yes	
No	

B7. If no, what are the reasons for the lack of access?

B8. If yes to question B6, where do you get the loan?

Input supplier	
Bank	
Informal lender	
Other (specify)	

B9. If loan received, what were the loan conditions? (E.g. repayment arrangement, interest rate, etc.)

B10. What are the main constraints you encounter in mohair production?

B11. In your opinion what do you think should be done to solve these problems?

B12. Do you buy some agricultural inputs?

Yes	
No	

B13. Where do you buy them, and are you happy with it? State the reasons.

B14. If no to B12, what are the reasons for not buying inputs?

B15. What were the costs incurred in mohair farming?

Activity/Inputs	**Quantity per year**	**Costs per year**

B16. What are the main challenges that you face in running your farming business?

	Minor challenge	Major challenge
a) The search for information b) Lack of support by the government c) Lack of trust in the institutions d) Bureaucracy e) Financial f) Problems associated with crime g) Uncertainty of property rights h) Corruption problems		

B17. Will you still continue mohair farming in future?

Yes	
No	
Uncertain	

B18. What are the reasons for your answer in B17?

C. MARKETING INFORMATION

C1. How much mohair do you sell per year?

Mohair kilograms	

C2. Who are your customers?

Private traders	
BKB	
Weavers/Spinners	
Other (specify)	

C3. How did you know about these buyers?

Extension Agents	
Friends/relatives/neighbours	
Media (Specify)	
Community Leadership	
Farmers Associations/Groups	

Other (specify)	

C4. What do the buyers use to determine the quality of mohair?

Determinants	
Style and character	
Fineness	
Length	
Kemp	
Vegetation or defect	
Other (specify)	

C5. How do you improve the quality of your mohair clip?

C6. How much are they willing to pay for a kilogram/bale of each grade of mohair?

Mohair Grade	**Unit (Kilogram/bale)**	**Price per unit**
Mature Mohair A		
Mature Mohair B		
Basotho Kids Mohair A		
Basotho Kids Mohair B		

C7. Do you have skills and knowledge in mohair grading?

C8. Do you trust them (buyers) and how much? Support your answer with reasons.

C9. What channels do you use tomarket your mohair produce?

C10. Why did you choose these channels?

C11. What influence does culture/tradition have on your mohair marketing?

C12. Indicate the type of infrastructure you have access to.

Infrastructure	**Condition**		
	Bad	Fine	Good
Value adding machinery (e.g. storage)			
Telephone			
Electricity			
Computer			
Water			
Other (specify)			

C14. Do have any contractual agreement or guaranteed/ready market?

C15. If yes, why did you enter into the contract?

C16. What does the contract stipulate? (Please explain if possible).

C17. Who designed the contract?

Buyer	
Yourself	
Both (buyer and farmer)	
Other (specify)	

C17. Are there any support services (e.g. credit, extension service etc) that the contractor provides you with?

C18. If yes, list all the support services that the contractor provide you with

C19. Are you satisfied with the support services provided? Explain please.

C20. Are you satisfied with the type of agreement that you have entered into? Explain please.

C21. If not, what's the problem and what do you think needs to be done to solve the problem?

C22. If yes, what do you like most about the contract?

C25. What are the costs incurred in mohair marketing?

Activity/Inputs	**Quantity per year**	**Costs per year**

C26. Do you perform price surveys, before selling?

Yes	No

C27. How is price set during the sales?

I set the price	We negotiate	It is market driven	It is dictated by buyers	Other (Specify)

C28. How do you decide the sale price of your produce? Mark with an X as appropriate

	Very important	**Important**	**Not important**
a) It depends on the price of other local farmers b) It depends on the price of international farmers			

c) It depends on the market we sell to d) It depends on the production costs e) It depends on the concentration of the market f) It depends on the transaction costs			

C29. How do the prices that the buyers are willing to pay differ from your expectations?

Lower than expected	Equal	Higher than expected

D. OTHER ISSUES RELATED TO MOIHAIR BUSINESS

D1. How far you are from the market, distance?

Very far	
Far	
Moderate	
Close	
Very close	

D3. How does this distance affect you?

D4. How are road conditions, and how do they affect you?

D5.Which business taxes are you liable to pay? Mention them

D6. How does this affect your mohair farming?

D7. Are you happy with this tax arrangement and what do you think should be done to improve it?

D8. How does stock theft affect your mohair farming?

D9. How do you prevented and control this stock theft?

D10. Besides official marketing channels, do people also use non-official marketing channels?

Yes	No	Not sure

D11. If yes to D10, which non-official channels do they use?

Legal non-official channels	
Illegal non-official channels	
Other (specify)	

D12. What do you think makes people to sell mohair throughillegal channels?

D13. What do you regard as disadvantages of selling mohair through illegal channels?

D14. How does the presence of dairy goats affect you? E.g. quality or shift in business?

D15. Mention the main constraints you encounter in mohair marketing.

D16. In your own opinion, how can they be solved?

E. ENTREPRENEUSHIP

E1. Do you prepare any mohair enterprise budgeting?

Yes	No

E2. How important is budgeting to you?

Very important	
Important	
Not that important	

Not important	
Least important	
Not sure	

E3. Do you keep records of all your mohair activities?

Yes	No

E4. How important is record keeping to you?

Very important	
Important	
Not that important	
Not important	
Least important	
Not sure	

	Strongly disagree	**Disagree**	**Agree**	**Strongly agree**
E5. Leadership				
You are not afraid to try new techniques before your fellow farmers.				
Before making any major farming decision, you consult or seek advice from any relevant source of information.				
E6. Need for Achievement of Goals.				
If you have a challenge or problem on your farm, you will keep on trying to solve the problem and you will not quit				
E7. Creative Skills				
You are always looking for opportunities to increase profit of your farm (The creation and identification of new markets for products).				
E8. Motivation				
You like helping or supporting your fellow farmers when they are struggling or when they come to you with problems.				

F. GROUP MEMBERSHIP

F1. Are you a member of the LNWMGA?

Yes	No

F2. If not a member, why are you not a member?

F3. When and why did you join the association?

F4. Have you benefitted the way you had expected? Explain please.

F5. Are there any conflicts or challenges in the association? Mention them please.

F6. If yes, how do they affect you?

F7. How is the relationship between LNWMGA management and you (the farmer)?

F8. How does it impact on business performance?

F9. What do you dislike most about the LNWMGA?

F10. Will continue to be a member of LNWMGA? State the reasons for your answer.

THANK YOU