



Kingdom of Lesotho



**2019/2020 LESOTHO AGRICULTURAL CENSUS**  
**VOLUME I: HOUSEHOLD CHARACTERISTICS AND**  
**CROPS STATISTICS REPORT**  
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Food and Agriculture  
Organization of the  
United Nations

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## **MISSION STATEMENT**

*To coordinate the National Statistical System (NSS) and produce accurate, timely and reliable, culturally relevant and internationally comparable statistical data for evidence-based planning, decision making, research, policy, program formulation and monitoring and evaluation to satisfy the needs of users and producers*

## **PREFACE**

The Ministry of Finance and Development Planning through the Department of the Bureau of Statistics (BOS), in collaboration with the Ministry of Agriculture and Food Security (MAFS) conducted the 2019/2020 Agricultural Census. The Census was conducted with technical assistance of the Food and Agriculture Organization of the United Nations (FAO). This was the eighth Census undertaken by the Government of Lesotho since 1949/1950.

The main objective of the 2019/2020 Agricultural Census was to provide baseline data on agricultural statistics, which will be used for agricultural planning, policy formulation and implementation of agricultural programmes and projects for improvement of the agricultural sector. The information will also be used to monitor and evaluate implementation of the national, regional and international frameworks such as National Strategic Development Plan II (NSDP II), Agenda 2063 and Sustainable Development Goals (SDGs).

The census collected data at household level, non-household sector as well as community level in order to meet the demand for data. Information covered included production of crops and livestock, land use, agriculture practices and services and work on the farming holding. Community level data was collected mainly to better understand farmers' constraints in the adoption of improved agriculture practices in relation to availability of infrastructure and services.

The census used Computer Assisted Personal Interview (CAPI) for data collection for the first time. CAPI provides high quality and accuracy in results as well as shortened data processing time.

The BOS would like to express its gratitude to the Government of Lesotho for providing financial support for the census. Similar gratitude is extended to FAO for the providing technical assistance. All participants of the Census, comprising Coordinators, Supervisors and Enumerators are given special acknowledgement. Finally, appreciation goes to numerous farmers who provided information as well as District and Local leaders who provided guidance to the Enumerators in ten districts of the country where the Census was successfully undertaken.

M.C. Molato



**Director, Bureau of Statistics**

**MINISTRY OF FINANCE AND DEVELOPMENT PLANNING**

<b>Table of Contents</b>	<b>Page</b>
PREFACE.....	iii
Table of Contents.....	iv
List of Tables.....	vii
List of Figures.....	x
EXECUTIVE SUMMARY.....	1
CHAPTER 1 INTRODUCTION.....	2
1.1 Background.....	2
1.2 Objectives.....	2
1.3 Scope and Coverage of the Census.....	3
1.4 Methodology.....	3
1.4.1 Sample Design.....	3
1.4.2 Sample Size.....	4
1.4.3 Sample Allocation.....	5
1.4.4 Sample Weights.....	6
1.5 Field Organization and Data Collection.....	8
1.5.1 Census Period.....	8
1.5.2 Confidentiality.....	8
1.5.3 Census Implementation.....	8
1.5.4 Sampling.....	8
1.5.5 Questionnaires.....	8
1.5.6 Pilot.....	8
1.5.7 Listing.....	8
1.5.8 Recruitment and Training.....	9
1.5.9 Data Collection and Processing.....	9
CHAPTER 2: DEMOGRAPHIC CHARACTERISTICS.....	10
2.1 Introduction.....	10
2.2 Agricultural Households.....	10
2.3 Household Population Size.....	10
2.4 Household Population.....	11
2.5 Relationship of Households Members to Head.....	11
2.6 Age Distribution.....	12
2.7 Marital Status.....	13
2.8 Educational Characteristics.....	14
2.9 Employment Status.....	14
2.10 Agricultural Holders.....	15
2.11 Main Agricultural Activity.....	15
2.12 Main Purpose of Production.....	16
2.13 Agricultural Training.....	17
2.14 Other Economic Activities.....	17
2.15 Main Source of Income.....	18
2.16 Contribution of Agriculture to Household Income.....	19
CHAPTER 3: LAND USE AND CROPS.....	20
3.1 Introduction.....	20

3.2 Field Location .....	20
3.3 Land Tenure .....	20
3.4 Soil Conservation Measures Used .....	21
3.5 Land Use .....	22
3.5.1 Area of Holding and Sex of Holder .....	23
3.5.2 Total Area of Holding .....	23
3.6 Area Planted, Production and Disposition of Crops .....	24
3.6.1 Temporary Crops .....	24
3.6.2 Permanent Crops.....	29
CHAPTER 4: AGRICULTURAL PRACTICES .....	34
4.1 Introduction .....	34
4.2 Seeds.....	34
4.3 Main Source of Seeds .....	34
4.4 Fertilizers .....	35
4.5 Main Source of Fertilizers .....	36
4.6 Pesticides .....	36
4.7 Main Source of Pesticides .....	37
4.7 Agricultural Training and Use of Inputs.....	37
Chapter 5: IRRIGATION SYSTEM.....	39
5.1 Introduction .....	39
5.2 Irrigation .....	39
5.2 Main Sources of Irrigation Water .....	39
5.4 Reasons for not Practicing Irrigation System.....	40
CHAPTER 6: AGRICULTURAL SERVICES .....	41
6.1 Introduction .....	41
6.2 Type of Extension Services.....	41
6.3 Extension Service Providers and Services .....	41
6.4 Extension Service Provider and Satisfaction of Holders.....	42
6.5 Agricultural Information .....	43
6.6 Agricultural Information Received.....	44
6.7 Main Source of Information .....	44
6.8 Access to Agricultural Credit/Loan.....	45
6.9 Main Source of Credit/Loan .....	46
6.10 Purpose of Credit/Loans.....	46
6.11 Reasons Credit/Loan Not Granted.....	47
6.12 Reasons for Not Seeking Credit/Loan .....	48
CHAPTER 7: FARM IMPLEMENTS AND ASSETS.....	49
7.1 Introduction .....	49
7.2 Machinery .....	49
7.3 Manual Equipment.....	50
7.4 Type of Non-Residential Buildings Used.....	50
CHAPTER 8: LABOUR INPUT .....	51
8.1 Introduction .....	51
8.2 Labour Input of Household Members.....	51

8.3 Labour Inputs of Employees .....	52
8.4 Form of Payment for Employees.....	52
8.5 Type of Services Rendered .....	53
APPENDIX.....	54
I. Estimates of Sampling Errors .....	54
II. Sampling Errors for Selected Indicators.....	54
Questionnaire.....	64



**List of Tables****Page**

Table 1: District distribution of PSUs covered, 2019/2020 Agricultural Census .....	5
Table 2: Distribution of Sample PSUs and Agricultural Households by District and Zone, 2019/2020 Agricultural Census .....	5
Table 2.1: Number and Percentage Distribution of Agricultural Holdings and Household Heads by District and Sex 2019/2020 Agricultural Census.....	10
Table 2.2: Number of Agricultural Holdings by Household Size and District, 2019/2020 Agricultural Census.....	11
Table 2.3: Agricultural Population by District and Sex, 2019/2020 Agricultural Census.....	11
Table 2.4: Agricultural Population by Relationship to the Households Head, 2019/2020 Agricultural Census .....	12
Table 2.5: Number of Persons 15 years and above by Marital Status and Sex, 2019/2020 Agricultural Census.....	13
Table 2.6: Population Aged 3 Years and Above by Educational Attainment and Sex, 2019/2020 Agricultural Census .....	14
Table 2.7: Agricultural Population aged by District and Main Employment Status, 2019/2020 Agricultural Census .....	14
Table 2.8: Number of Agricultural Holders by District, Sex and Age Group, 2019/2020 Agricultural Census.....	15
Table 2.9: Number of Agricultural Holders by Agricultural Activity and District, 2019/2020 Agricultural Census.....	16
Table 2.10: Percentage Distribution of Holdings by District and Main Purpose of Production, 2019/2020 Agricultural Census.....	16
Table 2.11: Number of Agricultural Holders by Type of Agricultural Training and Sex, 2019/2020 Agricultural Census.....	17
Table 2.12: Number of Holdings by District and Type of Other Economic Activities by District, 2019/2020 Agricultural Census.....	18
Table 2.13: Number of Holdings by District and Main Source of Income, 2019/2020 Agricultural Census.....	19
Table 2.14: Number of Holdings by District and Contribution of Agriculture to Household's Total Income by District, 2019/2020 Agricultural Census.....	19
Table 3.1: Number of Fields by District and Location, 2019/2020 Agricultural Census	20
Table 3.2: Number of Agricultural Holders by District, Land Tenure and Sex, 2019/2020 Agricultural Census.....	21
Table 3.3: Area of Holding by District and Type of Land Tenure, 2019/2020 Agricultural Census .....	21
Table 3.4: Number of Fields by District and Soil Conservation Measures, 2019/2020 Agricultural Census.....	22
Table 3.5: Area of Holding (ha) and Percentage Distribution by of Land Use, 2019/2020 Agricultural Census.....	22
Table 3.6: Area (ha) and Percentage Distribution by District and Sex, 2019/2020 Agricultural Census.....	23

Table 3.7: Area (ha) and Number of Holdings by District 2019/2020 Agricultural Census .....	23
Table 3.8: Number of Agricultural Holdings by Area Planted (ha) and Size of Household, 2019/2020 Agricultural Year.....	24
Table 3.9: Area Planted (ha) to Temporary Crops by District and Type, 2019/2020 Agricultural Census.....	24
Table 3.10: Percentage Distribution of Area Planted and Fertilized by Type of Crop, 2019/2020 Agricultural Census .....	25
Table 3.11: Quantity Harvested of Temporary Crops (kg) by District and Type, 2019/2020 Agricultural Census .....	26
Table 3.12: Area Planted (ha) and Harvested (ha) for Temporary Crops by Type, 2019/2020 Agricultural Census .....	26
Table 3.13: Area Planted (ha), Production (mt) and Yield (mt/ha) of Major Crops by Year and Type, 1989/1990 to 2019/2020 Agricultural Censuses .....	27
Table 3.14: Disposition of Temporary Crops by Method/Type of Disposal and Type of Crop, 2019/2020 Agricultural Census.....	27
Table 3.15: Area (ha) of Temporary Crop Harvested by Type of Crop and End Use, 2019/2020 Agricultural Census .....	28
Table 3.16: Quantity ('000kg) of Crop Sold by Type of Crop and Type of Farm Market, 2019/2020 Agricultural Census .....	28
Table 3.17: Number of Permanent Crops in Scattered Plantation by District and Type of Crop, 2019/2020 Agricultural Census.....	29
Table 3.18: Number of Permanent Crops in Compact Plantation by District, 2019/2020 Agricultural Census.....	30
Table 3.19: Area Planted (ha) to Permanent Crops by District and Type of Crop, 2019/2020 Agricultural Census .....	30
Table 3.20: Number of Permanent Crops of Productive Age in Compact Plantation by District and Type, 2019/2020 Agricultural Census .....	31
Table 3.21: Quantity of Crops Disposed by Method of Disposal and Type of Crop, 2019/2020 Agricultural Census .....	32
Table 3.22: Area (ha) of Temporary Crop Harvested by Type of Crop and End Use, 2019/2020 Agricultural Census .....	32
Table 3.23: Quantity ('000kg) of Crop Sold by Type of Crop and Type of Farm Market, 2019/2020 Agricultural Census .....	33
Table 4.1: Number of Holders Who Seeds by District and Source, 2019/2020 Agricultural Census.....	35
Table 4.2: Number of Holders by District and Source of Fertilizers, 2019/2020 Agricultural Census.....	36
Table 4.3: Number of Holders Who Used Pesticides by District and Main Source, 2019/2020 Agricultural Census.....	37
Table 4.4: Number of Holders Who Attended Agricultural Training by Type of Input Used, 2019/2020 Agricultural Census.....	38
Table 5.1: Number and Percentage Distributions of Holders by District and Irrigation Practices, 2019/2020 Agricultural Census.....	39



Table 5.2: Number of Holders Who Practiced Irrigation by Sources of Irrigation Water and Area Irrigated (ha), 2019/2020 Agricultural Census.....	40
Table 5.3: Number of Holders Who Did Not Practice Irrigation by District and Reasons, 2019/2020 Agricultural Census .....	40
Table 6.1: Number of Agricultural Holders Who Received and Who did not Received Extension Services by District, 2019/2020 Agricultural Census.....	41
Table 6.2: Number of Agricultural Holders Who Received Extension Services by Type of Service Provider and Type of Service, 2019/2020 Agricultural Census .....	42
Table 6.3: Number and Percentage of Agricultural Holders Who were Satisfied with Service Providers by Type and District, 2019/2020 Agricultural Census ...	43
Table 6.4: Percentage Distribution of Agricultural Holders Who Received and did not Receive Agricultural Information by District, 2019/2020 Agricultural Census .....	43
Table 6.5: Number and Percentage Distribution of Agricultural Holders Who Received Information by District and Type, 2019/2020 Agricultural Census .....	44
Table 6.6: Number and Percentage Distribution of Agricultural Holders Who Received Information by Main Source of Information and District, 2019/2020 Agricultural Census.....	45
Table 6.7: Number and Percentage Distributions of Holders who Applied for Credit/Loans and Loan Granted by District, 2019/2020 Agricultural Census .....	45
Table 6.8: Percentage Distribution of Holders Received Loan by Main Source of Credit, Sex and Period, 2019/2020 Agricultural Year.....	46
Table 6.9: Number and Percentage Distribution of Holders Who Applied for Credit/Loans by District and.....	47
Table 6.10: Number and Percentage Distribution of Holders Who were not Granted Credit/Loans by Reasons and Sex, 2019/2020 Agricultural Census ....	47
Table 6.11: Number and Percentage Distribution of Holders Who did not Seek Credit/Loans by Reasons and Sex, 2019/2020 Agricultural Census .....	48
Table 7.1: Number of Holdings who used Machinery by Type and Source of Ownership, 2019/2020 Agricultural Census.....	49
Table 7.2: Number of Holdings who used Manual Equipment by Type and Source of Ownership, 2019/2020 Agricultural Census .....	50
Table 7.3: Number of Holders, Area (ha) of Buildings by Purpose and Land Tenure Type 2019/2020 Agricultural Census .....	50
Table 8.1: Number of Household Members Aged 10 Years and Over who Participated in Agricultural Work by District and Working Time, 2019/2020 Agricultural Census.....	51
Table 8.2: Number of Employees by District and Working Time, 2019/2020 Agricultural Census .....	52
Table 8.3: Form of Payment for Employees by District, 2019/2020 Agricultural Census .....	52

Table 8.4: Number of Employees by District and Services Rendered, 2019/2020	
Agricultural Census.....	53

**List of Figures**

Figure 2.1: The Distribution of Agricultural Population by Age and Sex, 2019/2020	
Agriculture Census.....	13
Figure 3.1: Quantity Harvested for Permanent Crops (kg) by Type of Crop, 2019/2020	
Agricultural Census.....	31
Figure 4.1: Number of Holders by the Type of Seeds Used by Type, 2019/2020	
Agricultural Census.....	34
Figure 4.2: Number of Holders Who Used Fertilizers by the Type, 2019/2020	
Agricultural Census.....	35
Figure 4.3: Number of Holders Who Used Fertilizers by the Type, 2019/2020	
Agricultural Census.....	36

## **LIST OF ACRONYMS**

<b>AC</b>	Agricultural Census
<b>AFSSD</b>	Agriculture and Food Security Statistics Division
<b>AIDS</b>	Acquired Immune Deficiency Syndrome
<b>APS</b>	Agricultural Production Survey
<b>BOS</b>	Bureau of Statistics
<b>CAADP</b>	Comprehensive Africa Agriculture Development Programme
<b>CAPI</b>	Computer Assisted Personal Interview
<b>CsPRO</b>	Census and Survey Processing System
<b>CV</b>	Coefficient of variation
<b>EA</b>	Enumeration Area
<b>EPA</b>	Environmental Protection Agency
<b>FAO</b>	Food and Agriculture Organization of the United Nations
<b>GDP</b>	Gross Domestic Product
<b>GMs</b>	Genetically Modified Seeds
<b>HIV</b>	Human Immunodeficiency Virus
<b>MAFS</b>	Ministry of Agriculture and Food Security
<b>NGO</b>	Non-Governmental Organization
<b>NSDP</b>	National Strategic Development Plan II
<b>NSS</b>	National Statistical System
<b>PSU</b>	Primary Sampling Unit
<b>SDGs</b>	Sustainable Development Goals
<b>SPSS</b>	Statistical Package for Social Sciences
<b>SRV</b>	Senqu River Valley
<b>UN</b>	United Nations
<b>WCA</b>	World Programme for the Census of Agriculture

## CONCEPTS AND DEFINITIONS

<b>Agronomic Practices</b>	Agronomic practices are schedule activities aimed at providing a favourable environment for good crop growth and development and an unfavourable environment to control plant pest and diseases. They are pre-planting and post-planting operations.
<b>Agricultural Census</b>	It is a statistical operation for collecting, processing and disseminating data on structure of agriculture, covering the whole or a significant part of a country.
<b>Agricultural Holder</b>	It is a person who makes the major decisions regarding resource use and exercises management control over the agricultural holding operation.
<b>Agricultural Holding</b>	The agricultural holding or household is an economic unit of agricultural production under single management comprising all livestock kept and all land used wholly or partly for agricultural production purposes, without regard to title, legal form or size.
<b>Agricultural Year</b>	In Lesotho, the time reference for the Agricultural Census is a full Agricultural Year that commences on the 1 <sup>st</sup> of August and ends on the 31 <sup>st</sup> of July of the following year.
<b>Biofertilizer</b>	These are the products containing living or dormant micro-organisms, such as bacteria and fungi, which provide nutrients to enhance plant growth
<b>Cash Crop</b>	Cash Crop is an agricultural crop which is grown to sell for profit.
<b>Census Period</b>	It is the period when the census was conducted.
<b>Commercial Farming</b>	Commercial farming is all about the growing of crops and/or the rearing of animals for raw materials, food, or export, particularly for profitable reasons.
<b>Compact Plantation</b>	This is when plants, trees and shrubs are planted in a regular and systematic manner, such as in an orchard, etc.
<b>Conservation Agriculture</b>	A method of crop production in which mechanical disturbance to the soil is kept to a minimum and other

practices, such as crop rotation and restoring organic matter to the soil, may be used:

**Cover Cropping**

Are plants that are grown in order to provide soil cover to improve the physical, chemical and biological characteristics of the soil.

**Crop Farming**

Crop farming is the process of growing crops for domestic or commercial purposes. is a practice that paves the way for protecting the environment and natural resources on the individual, organizational as well as governmental levels

**Crop Rotation**

Crop rotation is growing of alternating species or families of crops in a specific field in a planned pattern or sequence to break weed and diseases and to maintain or improve soil fertility and organic matter content.

**End Use**

End use refers to the purpose of the crop. Crops may be grown for use as food for human consumption or as feed for animals, for producing biofuels or for non-food products, such as tobacco and flowers

**Environmental Conservation**

It is a practice that paves the way for protecting the environment and natural resources on the individual, organisa tional as well as governmental levels

**Genetically Modified Seeds**

Seeds are crops that are enhanced by genetic engineering, a more exact technique for plant reproduction.

**Gross Domestic Product**

The total value of goods produced and services provided in a country during one year.

**Household Head**

A person is considered by the household to take full responsibility in the household, such a person does not necessarily need to be elderly person in the household.

**Household Size**

The number of household members.

**Hybrid Seeds**

Crossing two genetically different plants produces a hybrid seed (plant) by means of controlled pollination.

<b>Improved Seeds</b>	The introduction of quality seeds of new varieties wisely combined with other inputs significantly to increase yield levels.
<b>Informal Learning</b>	Refers to practical agricultural training/education. It is the experience acquired through practical work.
<b>Inorganic Fertilizer</b>	Are fertilizers prepared from inorganic materials manufactured through an industrial process. Inorganic fertilizers are also known as “chemical fertilizers”, “artificial fertilizers”, and “mineral fertilizers”.
<b>Irrigation</b>	Refers to the artificial application of water to the soil for the purpose of supplying the moisture essential for a plant growth.
<b>Land Use</b>	Land Use is the term used to describe the human use of land. It represents the economic and cultural activities (e.g., agricultural, residential, industrial, mining, and recreational uses) that are practiced at a given place.
<b>Land Tenure</b>	Land tenure is the legal regime which land is owned by an individual, who is said to "hold" the land. It determines who can use land, for how long and under what conditions.
<b>Livestock Husbandry</b>	Animal or livestock husbandry is the phrase that covers all of your activities that directly involve the animals. This would include, milking the cows, feeding the sheep, moving the pigs, etc.
<b>Local Seeds</b>	They are seeds produced from farmer's own produce.
<b>Mixed Farming</b>	Mixed farming combined production of crops and animals without a specialized production of crops or animals.



<b>Non-Perennial Crops</b>	Refers to any plant species, either grown naturally or through cultivation that lives for a particular harvest season and perishes with harvesting of its yields
<b>Organic Fertilizers</b>	Fertilizers prepared from processed plant or animal material and/or unprocessed mineral materials
<b>Organo-Mineral Fertilizer</b>	Materials obtained through blending or processing organic materials with mineral fertilizers to enhance their nutrient content and fertilizing value
<b>Perennial Crops</b>	Perennial crops are crops that – unlike annual crops – don't need to be replanted each year. After harvest, they automatically grow back. E.g. Fruits
<b>Share Cropping</b>	A type of farming in which farmers rent land/fields from other farmers or landowners in return for a portion of their crop, to be given to the landowner at the end of the agricultural year.
<b>Permanent Crops</b>	Long term crops which do not have to be replanted for several years.
<b>Primary Sampling Unit</b>	Sampling units that are selected in the first (primary) stage of a multi-stage sample ultimately aimed at selecting individual elements.
<b>Subsistence Farming</b>	Farming of crops and livestock for living, with little surplus for sale.
<b>Systematic Sampling</b>	Systematic sampling is a type of probability sampling method in which sample members from a larger population are selected according to a random starting point and a fixed periodic interval.
<b>Temporary Crops</b>	Crops with less than one-year growing cycle.
<b>Terraces</b>	Terrace is a low, flat ridge of earth built across the slope, with a channel for runoff water just above the ridge. Usually, terraces are built on a slight grade so that the water caught in the channel moves slowly toward the terrace outlet.

## **LIST OF CONVERSIONS**

1,000 Millilitres	= 1 Liter
1,000 Grams	= 1 Kilogram (Kg)
1,000 Kilograms	= 1 Metric tonne (Mt)
2.47105 Acres	= 1 Hectare (Ha)
100 Hectares	= 1 Square Kilometer

## **EXECUTIVE SUMMARY**

The Government of Lesotho conducted 2019/2020 Agriculture Census in March 2021. This was the eighth Census undertaken by the Government of Lesotho since 1949/1950. The Census covered both subsistence and commercial farmers. Commercial farming was covered for the first time. In addition, the latest technology, Computer Assisted Personal Interview, was used for the first-time using tablets, which provided more accurate results because data processing time was shortened. The processes include data collection, editing, and capturing.

There were 227,899 holders engaged in subsistence agriculture while out of the total agricultural holders 37,571 were engaged in crops only, 61,040 were engaged in livestock only, 129,288 were engaged in both crops and livestock.

The major crops that were covered during 2019/2021 included maize, sorghum, wheat, beans and peas. The main type of livestock covered included cattle, sheep, goats, pigs, chicken.

Total land area available to subsistence farmers was estimated at 290,521ha, of which more than 50.0 percent was used for temporary crops. Land was mostly acquired through inheritance (66.2%). Most of the land was planted temporary crops (45.6 percent) and permanent crops covered (1.0 percent). Temporary meadows and pastures occupied 5,155ha. Maize was the most planted crop (147,133ha) followed by followed by beans and sorghum with 38,865ha and 26,847ha respectively.

Improved seed was commonly used by holdings; however, most holders still use seeds obtained from their produce. Use of fertilizer shows that on the total area planted about 45.1 percent was fertilized mainly with Mineral and manure. Pesticides use shows that majority of households applied insecticides (30,8651) on the crops. About 4,486 holders had irrigated their crops. Irrigation was not commonly practiced in the country due to no irrigation systems.

About 81.3% of agricultural holders (38,214) reported to have received extension services from Ministry of Agriculture and Food Security extension officers. Most of them received extension services on crop selection (20, 857) followed by livestock husbandry (13,615).

Majority of holdings reported to have used their own tractor driven ploughs (2,314) for their agricultural activities. Some holdings reported to have received credits from different sources which were mainly for purchasing seeds and livestock.

Total number of households who were engaged in Livestock rearing was 168,656. There were 125,718 holders who kept cattle, 94,399 kept sheep and 64,944 keep goats.

# CHAPTER 1 INTRODUCTION

## 1.1 Background

Lesotho is a high-altitude country fully landlocked by the Republic of South Africa. The country is divided into ten administrative districts that cover four ecological zones; Lowlands, Foothills, Mountains and Senqu River Valley (SRV). The lowland zone is most densely populated and intensively cultivated zone with relatively high chances of rainfall. The Foothill zone, as compared to Lowland is less populated with less rainfall. The Mountain zone is the largest zone of the country that is characterized by very cold winter. Senqu River Valley is the smallest zone which runs from the east to the west across some districts.

Agriculture is the backbone of the rural economy. The population of Lesotho is predominantly rural where 65.8 percent of the population lives. Agriculture remains a critical sector for food security, employment creation, poverty alleviation and rural development. Contribution of agriculture to Gross Domestic Product (GDP) is 4.7%. Despite its low contribution to GDP, it is an important source of livelihoods for rural population. It is mostly dominated by subsistence farming with small commercial agriculture which is composed of crops and livestock production.

In Lesotho, the Census of Agriculture is undertaken every ten years. The first census was conducted in 1949/1950 and the 2019/2020 Agricultural Census was the eighth census. The 2019/2020 Lesotho Agricultural Census was conducted to provide information for planning and policy formulation. It is also meant to provide data for monitoring and evaluation of agricultural programmes as articulated in National Strategic Development Plan (NSDP II). The report therefore presents summary of the key findings for 2019/2020 Agricultural Census.

## 1.2 Objectives

The 2019/2020 Agricultural Census was designed to meet the data needs in the agricultural sector, and this includes; planners, policy makers, rural development agencies, researchers, NGO's and farmers' unions and other agricultural development agencies. The data requirements of regional and international frameworks were also considered.

Specifically, the Census was designed to:

- Provide data on the structure of agriculture, focusing on small administrative units

- Provide data to use as benchmarks for reconciliation of current agricultural statistics in relation to policies and interventions promoted and led by Ministry of Agriculture and Food Security (MAFS), as well as monitoring trends in food and nutrition security
- Provide baseline data for measuring the impact of the objectives of the agricultural sector development programmes as articulated in the National Strategic Development Plan (NSDP II)
- Provide frames for subsequent agricultural sample surveys

### **1.3 Scope and Coverage of the Census**

The census scope and content were based on national, regional and international data requirements, in particular, the UN World Programme for the Census of Agriculture. However, emerging country issues emanating from a series of User-Producer workshops organised by BOS informed the coverage and content of the final census questionnaire. Hence, the Census covered households and commercial farmers engaged mainly in the:

- Growing of non-perennial crops (temporary crops);
- Growing of perennial crops (permanent crops);
- Animal production; and
- Mixed farming.

The Agricultural Census covered agricultural activities (Crops – temporary and permanent and Livestock in line with the NSDP II) on both households and commercial farms under different systems of land tenure in the administrative districts as well as the four (4) ecological zones in the country. All fields regardless of area were covered. In other words, there was no cut-off threshold for field size. However, households with no fields, no cattle and less than: - three sheep or three mixed herd of sheep/goats; two pigs; or five (5) poultry were excluded in the farming households sampling frame. Also excluded are dogs and cats.

## **1.4 Methodology**

### **1.4.1 Sample Design**

The target population or the universe for the census of Agriculture 2019/20 is defined as all the rural agricultural households engaged in crop cultivation and/or livestock farming in the districts. The Census Population consisted of all rural areas and agro-ecological areas of the selected PSUs in Lesotho. The PSUs were first stratified according to the ten administrative districts namely: Botha-Bothe, Leribe, Berea, Maseru, Mafeteng, Mohale's Hoek, Quthing, Qacha's Nek, Mokhotlong, and Thaba-Tseka. Then within each district, the PSUs were grouped into the four agro-ecological zones:

- 1). Lowlands;
- 2). Foothills;
- 3). Mountains; and
- 4). Senqu River Valley (SRV)

### 1.4.2 Sample Size

A total of 8,000 agricultural households in 500 sample PSUs from rural areas and all the four ecological zones were covered in the 2019/20 Census unlike the 2009/10 Census, where 2,292 households from 120 PSUs were selected from rural areas and 600 households from 40 PSUs were selected from urban areas.

In arriving at the 8,000 agricultural households, a number of factors including resources, time and logistical considerations influenced the choice of the sample size. These include:

1. The lowest domain of estimation is the district;
2. Production levels of maize, wheat and sorghum;
3. Livestock numbers of cattle, sheep and goats;
4. The expected level of precision for the important variables like maize, wheat, sorghum (crops), cattle, sheep and goats (livestock) at the district level is fixed around **7.5% CV** (Coefficient of Variation);
5. The minimum sample size at the district level is fixed as **400** agricultural households;
6. Available human and financial resources.

Hence, the estimation formula for the minimum sample size,  $n_h$ , is:

$$n_h = \left( z^2 \right) (r) (1-r) (f) (k) / \left[ (p) \left( \tilde{n} \right) (e^2) \right], \text{ where}$$

$n_h$  is the parameter to be calculated and is the sample size in terms of number of agricultural households to be selected;

$z$  is the statistic that defines the level of confidence desired (95%) i.e. 1.96;

$r$  is an estimate of a key indicator to be measured by the survey (e.g. Maize production, number of livestock);

$f$  is the sample design effect, *deff*, assumed to be 2.0 (default value);

$k$  is a multiplier to account for the anticipated rate of non-response;

$p$  is the proportion of the total population accounted for by the target population (**agricultural households**) and upon which the parameter,  $r$ , is based;



$\bar{n}$  is the average household size (number of persons per household);

$e$  is the margin of error (CV) to be attained<sup>1</sup>

### 1.4.3 Sample Allocation

The final distribution of the 500 PSUs and 8,000 agricultural households by district and Zone is shown as follows;

**Table 1: District distribution of PSUs covered, 2019/2020 Agricultural Census**

District	PSUs	Households	Percentage of PSUs
Botha-Bothe	41	656	8.2
Leribe	71	1,136	14.2
Berea	61	976	12.2
Maseru	75	1,200	15.0
Mafeteng	52	832	10.4
Mohale's Hoek	47	752	9.4
Quthing	36	576	7.2
Qacha's Nek	30	480	6.0
Mokhotlong	39	624	7.8
Thaba-Tseka	48	768	9.6
<b>Lesotho</b>	<b>500</b>	<b>8,000</b>	<b>100.0</b>

**Table 2: Distribution of Sample PSUs and Agricultural Households by District and Zone, 2019/2020 Agricultural Census**

S/N	District	Zone				PSUs	Agric. Household
		Lowlands	Foothills	Mountains	SRV		
1	Botha-Bothe	19	18	4	-	41	656
2	Leribe	53	9	9	-	71	1,136
3	Berea	49	11	1	-	61	976
4	Maseru	40	24	11	-	75	1,200
5	Mafeteng	39	13	-	-	52	832
6	Mohale's Hoek	12	7	8	20	47	752
7	Quthing	-	-	16	20	36	576
8	Qacha's Nek	-	-	14	16	30	480

<sup>1</sup> United Nations (2008): Designing Household Survey Samples: Practical Guidelines, New York (P.41).

**Table 2: Distribution of Sample PSUs and Agricultural Households by District and Zone, 2019/2020 Agricultural Census**

S/N	District	Zone				PSUs	Agric. Household
		Lowlands	Foothills	Mountains	SRV		
9	Mokhotlong	-	-	39	-	39	624
10	Thaba-Tseka	-	-	41	7	48	768
<b>11</b>	<b>Lesotho</b>	<b>212</b>	<b>82</b>	<b>143</b>	<b>63</b>	<b>500</b>	<b>8,000</b>

#### 1.4.4 Sample Weights

##### I. Computation of Weights

The 2019/2020 Agriculture Census is not a self-weighting sample design because disproportionately larger samples from regions with smaller populations were drawn. Therefore, each sample household did not have the same chance of selection into the sample. Hence, weights were computed to account for the different probabilities of selection in order to obtain the true contribution of each selected PSU in the sample based on the first and second stage probabilities of selection. For instance, an observation with a sampling weight of 25 represents twenty-five individuals from the target population while another observation with a sampling weight of say 17 represents only seventeen individuals.

- Let  $M_{hi}$  = Number of 2016 Lesotho Population households in the  $i^{\text{th}}$  selected PSU in the  $h^{\text{th}}$  stratum or District  
 $\Sigma M_{hi}$  = Population in the  $i^{\text{th}}$  stratum (i.e. population size in either in rural areas or ecological zones in a District)  
 $M_{hi}^*$  = Number of agricultural households listed in the  $i^{\text{th}}$  selected PSU in the  $h^{\text{th}}$  stratum  
 $a_h$  = Number of clusters selected in the  $h^{\text{th}}$  stratum  
 $b$  = 16 (number of selected agriculture households per PSU in each stratum)

Then the first and second stage probabilities of selection are:

$$P_{1hi} = \frac{a_h M_{hi}}{\sum M_{hi}} \quad \text{and} \quad P_{2hi} = \frac{b}{M_{hi}^*}$$

Where,

$P_{1hi}$  is the probability of selecting the  $i^{\text{th}}$  PSU in the  $h^{\text{th}}$  stratum, and  $P_{2hi}$  is the probability of selecting a household in the  $i^{\text{th}}$  PSU of the  $h^{\text{th}}$  stratum. The overall probability of selection of a household in the  $i^{\text{th}}$  selected PSU of the  $h^{\text{th}}$  stratum is given by:

$$F_{hi} = P_{1hi} * P_{2hi}$$

$$= \frac{a_h b}{\sum M_{hi}} * \frac{M_{hi}}{M_{hi}^*}$$

## II. Design Weight (Base Weight)

Since the PPS selection is not self-weighting, the sample data was weighted. These weights which are generally called sample weights or design weights/base weights are the inverse of the inclusion probability.

Therefore, the weighting factor (or expansion factor),  $W_{hi}$ , for a household in the  $i^{\text{th}}$  selected PSU in the  $h^{\text{th}}$  stratum is the reciprocal (inverse) of the overall probability of selecting that household.

That is, 
$$W_{hi} = \frac{1}{F_{hi}}$$

$$= \frac{\sum M_{hi}}{a_h b} * \frac{M_{hi}^*}{M_{hi}}$$

## III. Non-response Adjustment

To cater for non-response the number of households successfully interviewed in each PSU were used in the computation. Therefore,

The final weight for the sample households in the  $j^{\text{th}}$  cluster within the  $i^{\text{th}}$  sample PSU in stratum  $h$  is given as:

$$W'_{hi} = W_{hi} * \frac{b'}{b''},$$

Where:

$b'$  = The number of interviews plus the number of no interviews in the sample cluster

$b''$  = Total number of interviewed sample households selected in the  $j^{\text{th}}$  sample PSU within the  $i^{\text{th}}$  sample stratum  $h$ .

## IV. Post Stratified Adjustment

Finally, the estimated totals and sub groups of the population were compared with current statistics. It was observed that there were marked differences, consequently, using this information another adjustment factor was applied to the non-response adjusted weights so that the sub group totals from the census data were reconciled with the system of current statistics.

## **1.5 Field Organization and Data Collection**

### **1.5.1 Census Period**

The reference period for Agricultural censuses/surveys follows the Lesotho's agricultural year, which starts from 1<sup>st</sup> August to 31<sup>st</sup> July of the subsequent year. The 2019/2020 Agricultural census reference period for crop production was from 1<sup>st</sup> August 2019 to 31<sup>st</sup> July 2020 while the reference period for livestock was the day of enumeration.

### **1.5.2 Confidentiality**

The information collected from agricultural households is strictly confidential as per Statistical Act 2001 and it will only be used for statistical purposes. Identity of individual respondents is anonymized and only aggregated results is published.

### **1.5.3 Census Implementation**

Bureau of statistics (BOS) in collaboration with Ministry of Agriculture and Food Security (MAFS) were responsible for preparation and implementation of 2019/2020 Agricultural census activities, which began in April 2018.

### **1.5.4 Sampling**

The 2019/2020 Agricultural Census adopted a stratified multi-stage cluster sampling design with two or more enumeration areas combined to form a Primary Sampling Unit (PSU). A total of 500 rural PSUs were selected in all the four ecological zones. In each PSU, 16 agricultural holdings were selected for enumeration making a total of 8,000 agricultural holdings.

### **1.5.5 Questionnaires**

The 2019/2020 Agricultural Census was implemented using three questionnaires: Household questionnaire which collected information at household level Commercial questionnaire which collected information from commercial farmers Community Profile questionnaire which collected data at community level.

### **1.5.6 Pilot**

The Pilot survey was undertaken from 14<sup>th</sup> September to 14<sup>th</sup> October 2020 in five districts namely; Botha-Bothe, Leribe, Maseru, Mohale's Hoek and Thaba-Tseka. The exercise covered the four ecological zones and was meant to test the efficiency of the census tools and the workload of the entire exercise.

### **1.5.7 Listing**

Listing for the main census took place in all the districts starting from 31<sup>st</sup> October to 29<sup>th</sup> November 2020. It was followed by a systematic sampling of 16 agricultural holdings in each PSU.

### **1.5.8 Recruitment and Training**

A total of 258 enumerators were recruited and trained to interview the selected holdings. Training of trainers started on the 30th November to 6th December 2020. It was followed by training of supervisors which took place on the 7th to 18th December 2020. Training of enumerators was conducted on the 17th February to 7th March 2021.

### **1.5.9 Data Collection and Processing**

Data collection commenced on the 7<sup>th</sup> March to 13<sup>th</sup> April 2021. A face-to-face interview method was used to conduct the survey. A computer Assisted Personal Interview (CAPI) method was adopted. A public domain software named Census and Survey Processing package (CSPRO) was used for CAPI development. Data collected from the field was sent to the server and this was the first Agricultural Census to use CAPI. Statistical Package for Social Sciences (SPSS) was used for data cleaning and tabulation.

## CHAPTER 2: DEMOGRAPHIC CHARACTERISTICS

### 2.1 Introduction

The chapter covers the household characteristics of rural Agricultural holdings for 2019/2020 Agricultural Year. The discussion focuses on household population size, age, sex, marital status, relationship of household members to head, educational characteristics of holding members, main household activities, main purpose of production, other economic activities performed by holders, main source of income and contribution of farming to the household income. Agricultural operation as well as decision making in Agricultural activities are also covered.

### 2.2 Agricultural Households

A household is considered to be an agricultural household when at least one member of the household is operating on farming. Table 2.1 shows that during 2019/2020 Agricultural Census, Lesotho had 199,059 agricultural holdings of which 69.3 percent were male headed households. The number of households had decreased by 11.7 percent from 225,435 households observed in 2009/2010 Agricultural Census. The highest proportion of farming households was found in Leribe and Maseru with 15.6 percent each, while Qacha's Nek had the lowest with 4.0 percent. Generally, male headed households were more than female headed households in all districts.

**Table 2.1: Number and Percentage Distribution of Agricultural Holdings and Household Heads by District and Sex 2019/2020 Agricultural Census**

District	Number	Percent	Sex		% of Female Headed
			Male	Female	
Botha-Bothe	12,536	6.3	8,071	4,464	35.6
Leribe	31,147	15.6	22,329	8,818	28.3
Berea	24,847	12.5	16,944	7,903	31.8
Maseru	31,138	15.6	21,113	10,025	32.2
Mafeteng	23,384	11.7	15,764	7,620	32.6
Mohale's Hoek	20,562	10.3	12,558	8,004	38.9
Quthing	14,480	7.3	9,569	4,911	33.9
Qacha's Nek	7,944	4.0	5,622	2,322	29.2
Mokhotlong	16,663	8.4	12,487	4,177	25.1
Thaba-Tseka	16,358	8.2	11,427	4,931	30.1
<b>Lesotho</b>	<b>199,059</b>	<b>100.0</b>	<b>135,884</b>	<b>63,174</b>	<b>31.7</b>

### 2.3 Household Population Size

Household Size refers to the number of persons, irrespective of age, living as an economic unit. Table 2.2 shows that the average agricultural household size in Lesotho was 5.1. Qacha's Nek had the highest average household size (5.9) followed by Quthing with 5.7 while Mafeteng was the lowest with 4.8.



**Table 2. 2: Number of Agricultural Holdings by Household Size and District, 2019/2020 Agricultural Census**

District	Household Size					Average	Total
	1	2 - 3	4 - 5	6 - 9	10 +		
Botha-Bothe	593	3,016	4,547	3,726	653	5.0	<b>12,536</b>
Leribe	2,402	6,552	10,585	10,108	1,500	5.0	<b>31,147</b>
Berea	1,674	5,321	8,111	8,723	1,018	5.0	<b>24,847</b>
Maseru	2,240	6,931	11,238	8,977	1,752	4.9	<b>31,138</b>
Mafeteng	1,757	5,418	8,534	6,381	1,294	4.8	<b>23,384</b>
Mohale's Hoek	1,720	4,169	7,251	6,687	736	4.9	<b>20,562</b>
Quthing	1,267	2,548	3,744	5,316	1,604	5.7	<b>14,480</b>
Qacha's Nek	654	982	2,366	3,023	919	5.9	<b>7,944</b>
Mokhotlong	631	3,089	5,807	6,232	904	5.3	<b>16,663</b>
Thaba-Tseka	977	3,582	5,576	5,521	703	5.0	<b>16,358</b>
<b>Lesotho</b>	<b>13,914</b>	<b>41,608</b>	<b>67,760</b>	<b>64,693</b>	<b>11,083</b>	<b>5.1</b>	<b>199,059</b>

## 2.4 Household Population

Table 2.3 indicates that during 2019/2020 Agricultural Census, Lesotho had about 1,009,228 people living in agricultural households which is 13.6 percent decrease from the 1,168,378 populations of 2009/2010 Agricultural Census. Results also show that there were more males (534,293) than females (474,936) living in the farming household. Leribe had the highest agricultural population (155,457) followed by Maseru with 153,723. Qacha's Nek had the least population of 46,539.

**Table 2. 3: Agricultural Population by District and Sex, 2019/2020 Agricultural Census**

District	Population	Sex	
		Male	Female
Botha-Bothe	62,926	31,557	31,369
Leribe	155,457	82,079	73,378
Berea	124,823	67,512	57,311
Maseru	153,723	81,558	72,165
Mafeteng	112,534	60,142	52,392
Mohale's Hoek	100,459	53,340	47,119
Quthing	82,605	43,107	39,498
Qacha's Nek	46,539	24,774	21,765
Mokhotlong	88,569	47,408	41,161
Thaba-Tseka	81,594	42,816	38,778
<b>Lesotho</b>	<b>1,009,228</b>	<b>534,293</b>	<b>474,936</b>

## 2.5 Relationship of Households Members to Head

Members of the agricultural households were asked of their relationship to the household head, and the results are tabulated in Table 2.4. In the Table, most of the respondents were sons and daughters of the household heads, accounting to 35.1 percent of people living in the farming household, followed by the household heads with 19.7 percent.

**Table 2.4: Agricultural Population by Relationship to the Households Head, 2019/2020 Agricultural Census**

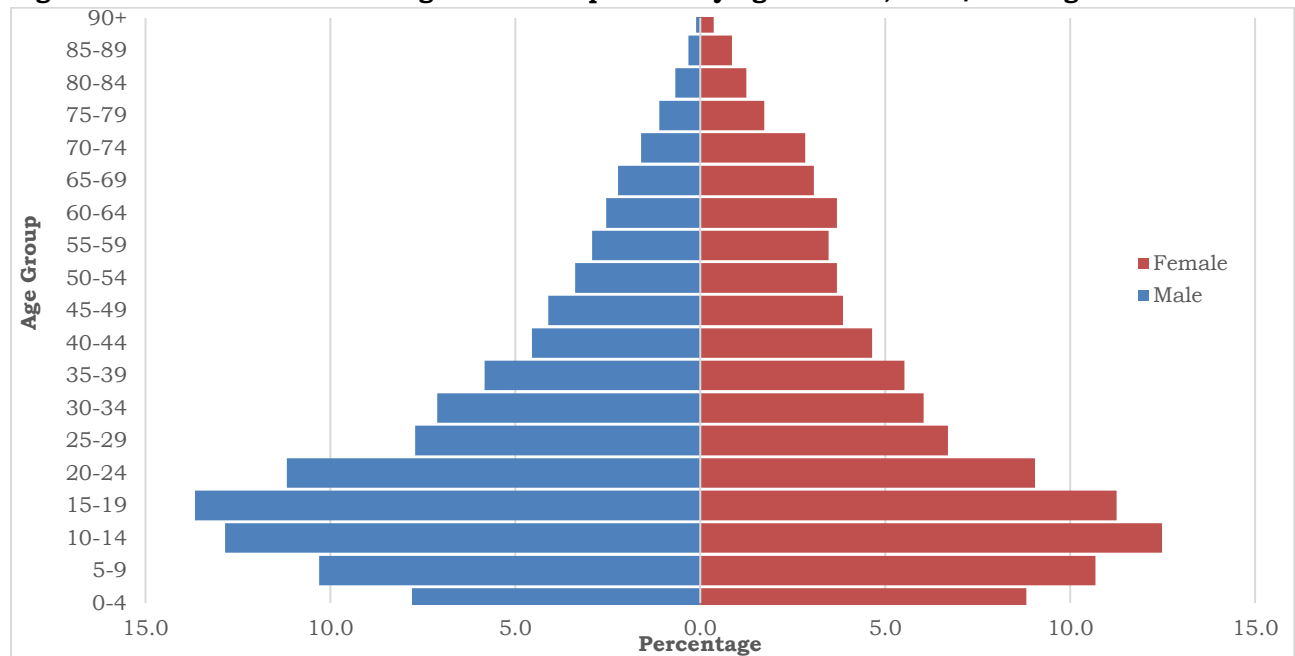
<b>Relationship</b>	<b>Number</b>	<b>Percent</b>
Head of Household	199,059	19.7
Spouse	107,341	10.6
Partner (Cohabiting)	745	0.1
Son/Daughter	353,784	35.1
Son/Daughter-in-law	43,292	4.3
Step Child	4,879	0.5
Sibling	18,821	1.9
Own Parent	5,507	0.5
Step Parent	244	0.0
Parent-in-law	2,022	0.2
Grand Parent	973	0.1
Great/Grandchild	198,848	19.7
Other Relative	45,910	4.5
Not Related	27,803	2.8
<b>Total</b>	<b>1,009,228</b>	<b>100.0</b>

## 2.6 Age Distribution

Age distribution is important for studying the relationship between age and the characteristics of agricultural holdings and, in particular, to compare young and old farmers. It is also useful for analyzing gender issues. Age refers to the age in completed years at the time of the census.

Figure 2.1 presents the distribution of rural agricultural population by age and sex for 2019/ 2020 Agricultural Census. The structure of the pyramid is such that, it has a broad base and tapers at the apex. The agricultural population is considered to be young because of the broad base observed, representing 13.7 percent of the male population aged 15 to 19 years and 12.5 percent of the female population aged 10 to 14 years. Moreover, the agricultural population aged 40 years and above constituted less than 5 percent.

**Figure 2. 1: The Distribution of Agricultural Population by Age and Sex, 2019/2020 Agriculture Census**



## 2.7 Marital Status

Marital status refers to the status of the household member in relation to the marriage laws or customs of the country.

Table 2.5 shows that the highest marital status of persons aged 15 years and older was monogamously married (312,392), followed by those who were never married (263,523). Cohabiting was the lowest status with 1,263 persons.

**Table 2. 5: Number of Persons 15 years and above by Marital Status and Sex, 2019/2020  
Agricultural Census**

Marital Status	Sex		Total
	Male	Female	
Never Married	174,514	89,010	<b>263,523</b>
Monogamously Married	157,496	154,895	<b>312,392</b>
Polygamously Married	2,823	3,043	<b>5,865</b>
Cohabiting	668	595	<b>1,263</b>
Separated	14,503	15,000	<b>29,503</b>
Divorced	1,882	2,689	<b>4,571</b>
Widowed	16,890	57,688	<b>74,578</b>

## 2.8 Educational Characteristics

The Agricultural Census (AC) measured the educational attainment of agricultural population aged three (3) years and above, shown in Table 2.6. The table shows that primary level (556,973) was highly attained followed by high school level (225,234). The table further reveals that there were more female graduates (3,019) than males.

**Table 2.6: Population Aged 3 Years and Above by Educational Attainment and Sex, 2019/2020**  
Agricultural Census

Educational Attainment	Sex		Total
	Male	Female	
Pre-school	18,438	15,761	<b>34,199</b>
Primary	299,907	257,066	<b>556,973</b>
Secondary	96,008	129,226	<b>225,234</b>
Non-Formal	5,069	6,950	<b>12,018</b>
Vocation/Certificate/Diploma	2,153	286	<b>2,439</b>
Graduate	1,891	3,019	<b>4,909</b>
Other	70	31	<b>100</b>
None	84,959	37,827	<b>122,785</b>

## 2.9 Employment Status

Census data on status in employment of main job and on forms of payment by selected characteristics, such as types of agricultural holdings or main purpose of production of the holding, are a valuable source of data to support labour and other social policies related to the quality of employment, as well as for macroeconomic purposes.

Table 2.7 presents agricultural population by district and main employment status. According to the table most household members were own-account workers (183,341) followed by employees with 149,756. Leribe had the highest number of own-account workers (29,133). Maseru had more employees (23,644) and was followed by Leribe with 21,938. Mohale's Hoek had the highest number of employers (590).

**Table 2.7: Agricultural Population aged by District and Main Employment Status, 2019/2020**  
Agricultural Census

District	Main Employment Status					Other
	Employee	Employer	Own-Account Worker	Contributing Family Worker	Member of Producers' Cooperative	
Botha-Bothe	6,966	72	10,572	5,389	105	0
Leribe	21,938	263	29,133	13,149	0	0
Berea	18,373	314	21,314	10,128	34	0
Maseru	23,644	175	28,195	9,865	37	0
Mafeteng	16,539	272	21,798	8,925	78	0
Mohale's Hoek	17,414	590	18,160	8,317	10	0
Quthing	16,877	137	12,671	7,019	50	40
Qacha's Nek	8,437	90	7,569	3,964	32	0
Mokhotlong	11,128	192	18,277	10,150	111	86
Thaba-Tseka	8,442	452	15,653	10,338	6	22
<b>Lesotho</b>	<b>149,756</b>	<b>2,557</b>	<b>183,341</b>	<b>87,243</b>	<b>463</b>	<b>148</b>

## 2.10 Agricultural Holders

Agricultural holder refers to a person who makes the major decisions regarding resource use and exercises management control over the agricultural holding operation.

Table 2.8 shows the number of agricultural holders by District, sex and age. It is evident from the table that highest number of holders was in the age group 65+ (28,489 males and 29,899 females) while the lowest was under 18 years (4,514 males and 133 females). There were more male holders (156,676) than females (72,223) across all the districts. The table further shows that, there were no female holders under 18 years in Berea, Mafeteng, Qacha's Nek and Mokhotlong. Most holders (37,902) were in Leribe, and least holders (8,542) were in Qacha's Nek.

**Table 2.8: Number of Agricultural Holders by District, Sex and Age Group, 2019/2020 Agricultural Census**

District	Sex	Age Categories							Total
		Under 18	18 - 24	25 - 34	35 - 44	45 - 54	55 - 64	65 +	
Botha-Bothe	Male	129	362	1,295	1,803	1,848	1,494	2,016	<b>8,947</b>
	Female	20	31	271	497	607	1,037	2,229	<b>4,692</b>
Leribe	Male	1,370	1,363	4,423	5,281	5,297	4,206	4,386	<b>26,327</b>
	Female	42	308	636	1,642	1,919	2,483	4,545	<b>11,575</b>
Berea	Male	142	1,277	2,977	3,856	3,893	3,672	3,369	<b>19,187</b>
	Female	0	79	350	737	1,650	2,312	3,797	<b>8,925</b>
Maseru	Male	562	882	3,443	4,867	5,054	3,675	4,809	<b>23,293</b>
	Female	5	246	424	986	1,846	2,287	5,145	<b>10,939</b>
Mafeteng	Male	261	1,344	1,772	3,631	3,525	3,222	3,588	<b>17,343</b>
	Female	0	27	597	1,147	1,143	2,276	3,495	<b>8,685</b>
Mohale's Hoek	Male	229	490	1,727	2,491	3,058	2,866	3,180	<b>14,040</b>
	Female	31	48	233	690	1,340	2,061	3,795	<b>8,200</b>
Quthing	Male	143	824	1,672	2,271	1,968	1,852	2,182	<b>10,912</b>
	Female	13	26	209	697	1,120	1,332	2,046	<b>5,444</b>
Qacha's Nek	Male	70	293	889	1,472	1,149	1,280	1,180	<b>6,334</b>
	Female	0	20	99	233	345	767	744	<b>2,208</b>
Mokhotlong	Male	818	1,823	3,381	3,928	2,619	2,016	1,582	<b>16,167</b>
	Female	0	155	415	694	621	1,022	1,826	<b>4,733</b>
Thaba-Tseka	Male	789	1,256	2,500	3,460	2,222	1,705	2,196	<b>14,127</b>
	Female	22	101	528	828	1,073	995	2,277	<b>5,824</b>
	<b>Male</b>	<b>4,514</b>	<b>9,915</b>	<b>24,079</b>	<b>33,058</b>	<b>30,633</b>	<b>25,987</b>	<b>28,489</b>	<b>156,676</b>
<b>Lesotho</b>	<b>Female</b>	<b>133</b>	<b>1,042</b>	<b>3,761</b>	<b>8,153</b>	<b>11,664</b>	<b>16,572</b>	<b>29,899</b>	<b>71,223</b>

## 2.11 Main Agricultural Activity

Main agricultural activity of the holder reflects whether the holder is oriented mainly on crop production, livestock production or mixture of crop and livestock production.

Table 2.9 represent the main agricultural activities of holders. Most holders practiced a mixture of livestock and crop production (129,288). Number of holders who were engaged in crop production only was highest in Leribe (7,848) and lowest in Qacha's Nek (1,132).

Maseru had the highest number of holders (9,438) who practiced livestock production only while Qacha's Nek had the lowest holders (1,715).

**Table 2.9: Number of Agricultural Holders by Agricultural Activity and District, 2019/2020  
Agricultural Census**

District	Activity			Total
	Crop	Livestock	Mixed	
Botha-Bothe	2,936	2,257	8,446	<b>13,638</b>
Leribe	7,848	7,947	22,107	<b>37,902</b>
Berea	3,880	7,760	16,472	<b>28,112</b>
Maseru	4,232	9,438	20,561	<b>34,231</b>
Mafeteng	3,545	6,816	15,666	<b>26,028</b>
Mohale's Hoek	3,241	7,748	11,251	<b>22,240</b>
Quthing	2,279	7,035	7,041	<b>16,355</b>
Qacha's Nek	1,132	1,715	5,694	<b>8,542</b>
Mokhotlong	4,023	6,477	10,400	<b>20,900</b>
Thaba-Tseka	4,455	3,846	11,650	<b>19,951</b>
<b>Lesotho</b>	<b>37,571</b>	<b>61,040</b>	<b>129,288</b>	<b>227,899</b>

## 2.12 Main Purpose of Production

Main purpose of production of the holding is a useful measure for analyzing holdings according to their market orientation. Table 2.10 shows the distribution of holdings by main purpose of production, that is whether they produce with an intension to sell or for their own consumption. The table shows that 62.5 percent of the agricultural holdings said that were producing mainly for own consumption. About 1.8 percent of the holdings in Lesotho were producing for sale only.

**Table 2.10: Percentage Distribution of Holdings by District and Main Purpose of Production, 2019/2020 Agricultural Census**

District	No. of Holdings	Purpose of Production			
		Sales	Sales with some Own Consumption	Own Consumption with some Sales	Own Consumption
Botha-Bothe	12,536	3.8	6.2	22.2	67.9
Leribe	31,147	1.4	6.4	22.3	69.9
Berea	24,847	2.3	6.8	23.7	67.2
Maseru	31,138	2.0	7.1	29.0	61.9
Mafeteng	23,384	1.2	11.4	28.2	59.2
Mohale's Hoek	20,562	1.6	8.4	39.8	50.2
Quthing	14,480	1.5	10.6	34.2	53.7
Qacha's Nek	7,944	2.1	11.3	35.0	51.6
Mokhotlong	16,663	2.3	9.1	26.9	61.7
Thaba-Tseka	16,358	1.2	4.3	22.5	72.1
<b>Percent</b>		<b>1.8</b>	<b>7.9</b>	<b>27.8</b>	<b>62.5</b>
<b>Lesotho</b>	<b>199,059</b>	<b>3,665</b>	<b>15,712</b>	<b>55,297</b>	<b>124,385</b>



### 2.13 Agricultural Training

Agricultural training refers to the education of the holder. Table 2.11 represents the number of agricultural holders by type of agricultural training and sex. The Highest number of holders (166,985) did not have any agricultural training of which 68.7 percent were males. Majority of holders with agricultural training had informal learning (46,716).

**Table 2.11: Number of Agricultural Holders by Type of Agricultural Training and Sex, 2019/2020  
Agricultural Census**

Type of Training	Sex		Total
	Male	Female	
None	114,713	52,273	<b>166,985</b>
Informal Learning	32,636	14,080	<b>46,716</b>
Non-formal Education	7,168	3,899	<b>11,067</b>
Secondary Education	1,925	771	<b>2,696</b>
Tertiary Education	234	201	<b>434</b>
<b>Total</b>	<b>156,676</b>	<b>71,223</b>	<b>227,899</b>

### 2.14 Other Economic Activities

Other economic activities refer to activities, other than agricultural production on the holding, carried out by the enterprise of which the holding is a part.

Table 2.12 below shows the number of agricultural households by other economic activities. The majority of households did not have other economic activities, these households account for 149,493 respondents. Those who were engaged in “Support activities to agriculture and post-harvest crop activities” were 11,231, “Wholesale and retail trade, repair of motor vehicles and motorcycles” were 4,815 and “Manufacturing - Processing of agricultural products (agro-processing), Handicrafts” were 3,647. Few households were engaged in fishing and aquaculture, accounting for 345.

**Table 2.12: Number of Holdings by District and Type of Other Economic Activities by District, 2019/2020 Agricultural Census**

District	Type of Activities									
	Support Agric. & Post-harvest Crop	Hunting, Trapping & Related	Forestry & Logging	Fishing and Aqua.	Agro-processing, Handicrafts	Wholesale, Retail Trade, Motor Repairs	Hotels and Restaurants	Agro-Tourism	Other	None
Botha-Bothe	476	70.96	106.22	0	318	410	19.97	0	2,810	8,359
Leribe	494	45.9	71.41	81.45	317	649	148.6	19.51	7,549	21,938
Berea	1,080	75.67	313	0	171	562	72.06	157.42	2,854	19,652
Maseru	3,591	100.01	337	87.54	565	258	105.1	233	2,280	23,641
Mafeteng	1,653	40.56	584	78.72	503	890	0	0	3,157	16,871
Mohale's Hoek	857	60.01	495	8.3	858	970	34.29	0	2,981	14,604
Quthing	444	62.4	122.23	0	67.94	359	0	0	1,362	12,075
Qacha's Nek	602	32.82	182	38.5	268	248	0	0	1,030	5,601
Mokhotlong	1,195	119.66	151.65	25.38	274	391	0	0	1,841	12,729
Thaba-Tseka	840	0	196.64	25.25	303	76.26	25.25	25.25	881	14,022
<b>Lesotho</b>	<b>11,231</b>	<b>608</b>	<b>2,559</b>	<b>345</b>	<b>3,647</b>	<b>4,815</b>	<b>405</b>	<b>435</b>	<b>26,744</b>	<b>149,493</b>

\*\*Notes. This is multiple response. Total of Types of Activities is not the same as Total Agricultural holdings

## 2.15 Main Source of Income

The section indicates the proportion of income from holding's agricultural production in household's total income. Table 2.13 represents the contribution of agriculture to household's income. In Lesotho, 68,356 holdings indicated that agriculture contributed less than a quarter of their income. Furthermore, 39,919 holdings responded that all their income was generated from agricultural production. Maseru had the highest number of holdings (8,752) which all income was from agriculture and Thaba-Tseka followed with 4,659 holdings.

**Table 2.13: Number of Holdings by District and Main Source of Income, 2019/2020 Agricultural Census**

District	Contribution to the Income					All Income
	Less than a Quarter	A Quarter to less than a Half	A Half to less than Three-Quarters	Three-Quarters to less than All		
Botha-Bothe	4,554	2,133	1,779	1,627	2,442	
Leribe	14,208	5,995	4,288	3,391	3,265	
Berea	9,222	4,329	3,607	3,105	4,585	
Maseru	8,584	4,769	3,702	5,331	8,752	
Mafeteng	7,884	4,077	2,473	4,322	4,629	
Mohale's Hoek	6,759	2,841	2,857	4,035	4,071	
Quthing	5,324	1,954	2,274	2,574	2,353	
Qacha's Nek	2,381	1,148	745	1,563	2,107	
Mokhotlong	5,509	2,769	2,689	2,641	3,056	
Thaba-Tseka	3,932	2,303	1,864	3,601	4,659	
<b>Lesotho</b>	<b>68,356</b>	<b>32,318</b>	<b>26,277</b>	<b>32,188</b>	<b>39,919</b>	

## 2.16 Contribution of Agriculture to Household Income

The section indicates the proportion of income from holding's agricultural production in household's total income. Table 2.14 represents the contribution of agriculture to household's income. In Lesotho, 22,702 holdings indicated that agriculture contributed less than a quarter of their income. Furthermore, 22,702 holdings indicated that agriculture did not contribute in their household's income. Moreover, 39,919 holdings responded that all their income was generated from agricultural production. Maseru had the highest number of holdings (8,752) which all income was from agriculture and Thaba-Tseka followed with 4,659 holdings.

**Table 2.14: Number of Holdings by District and Contribution of Agriculture to Household's Total Income by District, 2019/2020 Agricultural Census**

District	Contribution to the Income					
	None	Less than a Quarter	A Quarter to less than a Half	A Half to less than Three-Quarters	Three-Quarters to less than All	All Income
Botha-Bothe	1,476	3,078	2,133	1,779	1,627	2,442
Leribe	4,487	9,721	5,995	4,288	3,391	3,265
Berea	3,856	5,366	4,329	3,607	3,105	4,585
Maseru	3,414	5,170	4,769	3,702	5,331	8,752
Mafeteng	2,105	5,778	4,077	2,473	4,322	4,629
Mohale's Hoek	1,806	4,952	2,841	2,857	4,035	4,071
Quthing	1,794	3,530	1,954	2,274	2,574	2,353
Qacha's Nek	696	1,685	1,148	745	1,563	2,107
Mokhotlong	1,534	3,975	2,769	2,689	2,641	3,056
Thaba-Tseka	1,534	2,397	2,303	1,864	3,601	4,659
<b>Lesotho</b>	<b>22,702</b>	<b>45,653</b>	<b>32,318</b>	<b>26,277</b>	<b>32,188</b>	<b>39,919</b>

## CHAPTER 3: LAND USE AND CROPS

### 3.1 Introduction

The section discusses location of fields, tenure, land use, ownership, conservation methods and disposition among others.

### 3.2 Field Location

The Location of the field refers to where the parcel is found. Some holdings operate land parcels within the same PSU, a different one or even in a different district. Table 3.1 illustrates that out of 833,016 fields, 770,684 were operated within their respective PSUs. Mokhotlong farmers operated the highest number of fields outside the district (474).

**Table 3.1: Number of Fields by District and Location, 2019/2020 Agricultural Census**

District	Type of Location			Total
	Within PSU	Outside PSU but within District	Outside PSU and District	
Botha-Bothe	54,678	2,470	0	57,147
Leribe	118,155	16,452	461	135,068
Berea	116,008	8,075	193	124,275
Maseru	113,307	15,908	350	129,565
Mafeteng	111,615	3,797	0	115,412
Mohale's Hoek	57,151	4,269	0	61,420
Quthing	30,853	2,105	0	32,957
Qacha's Nek	40,337	1,556	0	41,893
Mokhotlong	70,741	2,946	474	74,161
Thaba-Tseka	57,839	3,059	219	61,117
<b>Lesotho</b>	<b>770,684</b>	<b>60,636</b>	<b>1,697</b>	<b>833,016</b>

### 3.3 Land Tenure

Land tenure refers to the legality at which the holdings use the land. Table 3.2 shows the number of agricultural holders by land tenure and sex. From the table, it is observed that most holders attained the fields through purchases with 122,420 holders followed by those who inherited (226,283). The least holders are those who got use community land (3,887). Males dominated in all tenure categories.

**Table 3.2: Number of Agricultural Holders by District, Land Tenure and Sex, 2019/2020 Agricultural Census**

District	Land Tenure					
	Inherited	Purchased	Community Land	Use right from Local Authority	Rented	Other
Botha-Bothe	8,179	8,575	824	2,311	2,000	32
Leribe	18,924	20,604	263	5,993	4,902	243
Berea	14,618	15,621	482	5,047	3,890	94
Maseru	17,762	18,909	836	4,669	4,140	313
Mafeteng	14,843	15,821	398	3,285	3,739	130
Mohale's Hoek	10,675	11,159	154	2,438	2,855	0
Quthing	6,814	6,889	123	622	2,043	49
Qacha's Nek	5,025	5,166	49	1,350	1,527	47
Mokhotlong	9,293	9,472	426	2,558	3,369	117
Thaba-Tseka	10,148	10,204	331	3,566	2,579	122
<b>Sex</b>						
Male	78,796	82,832	2,168	20,138	24,435	790
Female	37,487	39,587	1,720	11,701	6,609	356
<b>Lesotho</b>	<b>116,283</b>	<b>122,420</b>	<b>3,887</b>	<b>31,840</b>	<b>31,044</b>	<b>1,146</b>

Table 3.3 indicates that in Lesotho, most area planted (192,357ha) was on inherited fields followed by rented fields with 49,149ha. The least area planted was on community land (4,079ha).

**Table 3. 3: Area of Holding by District and Type of Land Tenure, 2019/2020 Agricultural Census**

District	Land Tenure					
	Inherited	Purchased	Community Land	Use Right from Local Authority	Rented	Other
Botha-Bothe	9,309	452	593	1,735	2,489	29
Leribe	25,719	1,753	231	6,092	8,113	122
Berea	26,250	1,893	502	5,241	6,191	54
Maseru	31,727	1,469	924	6,107	8,319	86
Mafeteng	29,848	2,323	551	4,413	6,574	162
Mohale's-Hoek	19,543	534	201	2,940	4,956	0
Quthing	11,276	66	148	581	3,598	29
Qacha's-Nek	9,433	183	15	1,988	2,035	19
Mokhotlong	12,562	262	623	2,121	4,001	11
Thaba-Tseka	16,691	136	293	4,127	2,872	10
<b>Lesotho</b>	<b>192,357</b>	<b>9,071</b>	<b>4,079</b>	<b>35,343</b>	<b>49,149</b>	<b>523</b>

### 3.4 Soil Conservation Measures Used

Some of the agricultural practices needed to enhance food production is conserving the soil. Table 3.4 shows the number of fields by district and soil conservation measures.

From the table, it is observed that across all the districts, terraces (167,344) were the most common method of soil conservation. Conservation agriculture was the least method used (606). Fields which no method of conservation was used were 57,546.

**Table 3.4: Number of Fields by District and Soil Conservation Measures, 2019/2020 Agricultural Census**

District	Types of Soil Conservation					
	None	Terraces	Cover Cropping	Crop Rotation	Conservation Agriculture	Other
Botha-Bothe	4,371	11,335	978	3,187	71	99
Leribe	9,518	24,404	4,529	6,468	39	75
Berea	9,498	20,594	1,094	2,280	203	137
Maseru	9,172	27,028	730	440	61	257
Mafeteng	10,286	13,592	649	1,884	116	1,031
Mohale's Hoek	3,984	13,173	629	1,725	36	195
Quthing	2,154	11,128	39	716	0	65
Qacha's Nek	1,485	8,884	95	2,002	81	226
Mokhotlong	3,861	16,578	2,380	6,199	0	100
Thaba-Tseka	3,216	17,627	334	1,765	0	44
<b>Lesotho</b>	<b>57,546</b>	<b>164,344</b>	<b>11,456</b>	<b>26,666</b>	<b>606</b>	<b>2,229</b>

**\*\*Note: This is a multiple response. Soil Conservation measures are not equal to number of fields**

### 3.5 Land Use

Land use is the classification of land according to the activity undertaken on the land. It includes land under temporary crops, land under permanent crops, land temporarily fallow amongst others. Table 3.5 discusses area of holding by land use types. The table shows that most of the area was used for temporary crops (212,456ha). Land under permanent meadows and pastures was lowest with 372ha. Land temporarily fallow was estimated at 69,613ha.

**Table 3.5: Area of Holding (ha) and Percentage Distribution by of Land Use, 2019/2020 Agricultural Census**

Types of Land Use	Area	Percent
Land under Temporary Crops	212,456	73.1
Land under Temporary Meadows and Pastures	5,155	1.8
Land under Permanent Crops	414	0.1
Land under Permanent Meadows and Pastures	372	0.1
Forest and Other Wooded Land	822	0.3
Land under Temporary and Permanent Crops	871	0.3
Other Area not elsewhere Classified	818	0.3
Land Temporarily Fallow	69,613	24.0
<b>Total</b>	<b>290,521</b>	<b>100.0</b>

### 3.5.1 Area of Holding and Sex of Holder

Table 3.6 shows area and sex of the holder by district. According to the table, Maseru had the highest area owned by males (33,381ha) followed by Leribe with 32,003ha. Qacha's Nek had the least percentage of area owned by females (4.6 percent). Generally, males had more land as opposed to females. Males had 207,308ha of land while females had 83,213ha. The table further shows that on average agricultural holdings in Lesotho owned about 1.5ha. Again, on average, Mafeteng and Qacha's Nek holdings had about 1.9ha and 1.7ha of the land.

**Table 3. 6: Area (ha) and Percentage Distribution by District and Sex, 2019/2020 Agricultural Census**

District	Male		Female		Total Area	Average Area	No. of Holdings
	Area	Percent	Area	Percent			
Botha-Bothe	10,229	4.9	4,378	5.3	14,607	1.2	12,536
Leribe	32,003	15.4	10,026	12	42,029	1.3	31,147
Berea	29,554	14.3	10,577	12.7	40,131	1.6	24,847
Maseru	33,381	16.1	15,251	18.3	48,632	1.6	31,138
Mafeteng	31,763	15.3	12,107	14.5	43,871	1.9	23,384
Mohale's Hoek	18,476	8.9	9,698	11.7	28,174	1.4	20,562
Quthing	10,445	5	5,252	6.3	15,697	1.1	14,480
Qacha's Nek	9,858	4.8	3,815	4.6	13,673	1.7	7,944
Mokhotlong	14,550	7	5,029	6	19,579	1.2	16,663
Thaba-Tseka	17,048	8.2	7,080	8.5	24,127	1.5	16,358
<b>Lesotho</b>	<b>207,308</b>	<b>100</b>	<b>83,213</b>	<b>100</b>	<b>290,521</b>	<b>1.5</b>	<b>199,059</b>

### 3.5.2 Total Area of Holding

Table 3.7 illustrates the number of holdings by district and area of holding. Most holdings had land area under 1ha (189,444ha) and the least number of holdings owned land between 2-4.99ha (28,167ha).

**Table 3. 7: Area (ha) and Number of Holdings by District 2019/2020 Agricultural Census**

District	Area	No. of Holdings		
		Under 1 ha	1 - 1.99	2 - 4.99
Botha-Bothe	14,607	16,654	3,702	711
Leribe	42,029	31,977	13,233	3,749
Berea	40,131	26,059	13,403	3,115
Maseru	48,632	25,600	17,664	4,421
Mafeteng	43,871	20,402	15,616	4,705
Mohale's Hoek	28,174	13,042	10,151	3,033
Quthing	15,697	8,672	5,081	1,632
Qacha's Nek	13,673	9,112	3,714	1,771
Mokhotlong	19,579	21,157	4,327	1,628
Thaba-Tseka	24,127	16,769	6,053	3,402
<b>Lesotho</b>	<b>290,521</b>	<b>189,444</b>	<b>92,945</b>	<b>28,167</b>

### 3.6 Area Planted, Production and Disposition of Crops

The section discusses area planted to both temporary and permanent crops of the holding, crop harvest and disposition.

#### 3.6.1 Temporary Crops

Temporary crops are crops with a less than one-year growing cycle and are grown more than once on the same land in the same agricultural year. They include maize, wheat, sorghum, cabbages and many others. The section covers area planted, area harvested and production of temporary crops.

##### 3.6.11 Area Planted to Temporary Crops

Table 3.8 illustrates the number of holdings by area planted to temporary crops and household size. The table shows that 50,965 holdings planted land under 1ha. The smallest number of holdings (757) planted more than 10-19.99ha. Generally, most holdings had planted areas under 1ha.

**Table 3.8: Number of Agricultural Holdings by Area Planted (ha) and Size of Household, 2019/2020 Agricultural Year**

Area	Household Size					Total
	1 Person	2 - 3 Persons	4 - 5 Persons	6 - 9 Persons	10+ Persons	
Under 1 ha	4,016	11,106	17,635	16,190	2,018	50,965
1 - 1.99 ha	2,334	7,431	11,418	12,479	2,655	36,317
2 - 4.99 ha	2,545	7,155	12,816	14,734	2,696	39,946
5 - 9.99 ha	92	639	1,442	1,858	377	4,409
10 - 19.99 ha	73	2	302	310	70	757
<b>Total</b>	<b>9,060</b>	<b>26,334</b>	<b>43,613</b>	<b>45,571</b>	<b>7,816</b>	<b>132,394</b>

Table 3.9 shows that Maseru had highest area planted to maize with 27,332ha followed by Leribe with 22,729ha. The least area planted to maize was in Qacha's Nek (6,019ha). Nationally, Maize had the highest area planted (147,133ha) followed by beans (38,865ha) and Sorghum (26,847ha) respectively.

**Table 3.9: Area Planted (ha) to Temporary Crops by District and Type, 2019/2020 Agricultural Census**

District	Type of Crop							
	Maize	Wheat	Sorghum	Beans	Peas	Cabbage	Rape	Potatoes
Botha-Bothe	8,640	184	2,248	1,557	21	33	27	35
Leribe	22,729	1,303	4,665	5,348	157	88	65	63
Berea	19,640	969	4,710	7,702	70	41	27	212
Maseru	27,332	1,222	4,206	5,716	305	86	39	274
Mafeteng	17,995	368	4,434	4,369	276	14	8	30
Mohale's Hoek	12,943	1,050	1,855	3,745	122	15	63	83
Quthing	8,236	1,386	1,298	3,014	209	5	169	67
Qacha's Nek	6,019	1,056	840	2,641	184	6	100	60
Mokhotlong	9,735	1,824	809	2,007	397	55	6	195
Thaba-Tseka	13,866	2,286	1,782	2,766	455	81	11	107
<b>Lesotho</b>	<b>147,133</b>	<b>11,648</b>	<b>26,847</b>	<b>38,865</b>	<b>2,196</b>	<b>424</b>	<b>516</b>	<b>1,126</b>



### 3.6.12 Area of Field Fertilized

Table 3.10 shows percentage distribution of area planted and fertilized by crop. From the table, it is observed that all the area planted to green pepper and onion was fertilized. Only a small portion (8.5 percent) of area planted to wheat was fertilized.

**Table 3.10: Percentage Distribution of Area Planted and Fertilized by Type of Crop, 2019/2020 Agricultural Census**

Type of Crop	Area		
	Planted	Fertilized	% Fertilized
Maize	147,133	65,846	44.8
Beans	38,865	20,733	53.3
Sorghum	26,847	15,143	56.4
Wheat	11,648	992	8.5
Peas	2,196	307	14.0
Potatoes	1,126	454	40.3
Cabbage	424	174	41.1
Rape	516	136	26.4
Mustard Spinach	196	136	69.1
Spinach	82	48	58.2
Tomato	80	48	60.1
Beetroot	38	24	63.3
Carrots	32	18	55.5
Green Pepper	13	13	100.0
Onion	11	11	100.0
Other	3,643	793	21.8
<b>Total</b>	<b>232,853</b>	<b>104,874</b>	<b>45.0</b>

### 3.6.13 Production of Temporary Crops Harvested

Production is the actual quantity of produce, ready for consumption or sale. Table 3.11 shows quantity harvested of temporary crops by district and crop. The table demonstrates that while the total area planted to temporary crops was 234,262ha, the area harvested was 179,198 (76.5 percent). Out of the total area planted, 51,016,290kg of maize was harvested. Leribe had the highest quantity harvested (12,651,724kg) followed by Maseru (9,893,248kg). The least quantity of maize was harvested in Qacha's Nek with 1,253,199kg.

**Table 3.11: Quantity Harvested of Temporary Crops (kg) by District and Type, 2019/2020 Agricultural Census**

District	Type of Crop							
	Maize	Wheat	Sorghum	Beans	Peas	Rape	Cabbage	Potatoes
Botha-Bothe	3,571,009	14,974	621,613	143,017	476	23,505	49,832	43,266
Leribe	12,651,724	425,829	1,490,452	695,048	4,703	47,340	203,647	49,173
Berea	9,186,229	406,820	1,520,858	983,104	11,204	14,477	1,250,640	213,942
Maseru	9,893,248	405,847	894,629	2,684,415	12,833	64,324	225,783	272,701
Mafeteng	5,444,365	75,991	975,950	555,223	16,994	3,004	34,155	30,201
Mohale's Hoek	3,469,732	1,157,473	400,611	608,773	15,320	11,608	4,420	16,190
Quthing	2,080,350	203,514	299,192	509,906	20,517	41,539	2,868	107,457
Qacha's Nek	1,253,199	147,159	154,012	342,994	7,841	94,139	170,412	36,804
Mokhotlong	1,743,550	549,765	60,978	306,001	52,785	1,800	126,755	69,776
Thaba-Tseka	1,722,883	319,489	141,768	201,880	16,908	5,694	163,207	16,982
<b>Lesotho</b>	<b>51,016,290</b>	<b>3,706,862</b>	<b>6,560,062</b>	<b>7,030,361</b>	<b>159,579</b>	<b>307,429</b>	<b>2,231,719</b>	<b>856,492</b>

### 3.6.14 Area Planted and Harvested for Temporary Crops

Table 3.12 shows area planted and harvested for temporary crops. The table shows that out of 147,133ha area planted to maize, 76.0 percent was harvested. Beans had highest area harvested constituting 80.9 percent, followed by sorghum with 78.2 percent respectively.

**Table 3.12: Area Planted (ha) and Harvested (ha) for Temporary Crops by Type, 2019/2020 Agricultural Census**

Type of Crop	Area		
	Planted	Harvested	% Harvested
Maize	147,133	111,868	76.0
Wheat	11,648	8,240	70.7
Sorghum	26,847	20,995	78.2
Beans	38,865	31,429	80.9
Peas	2,196	1,332	60.7
Rape	516	325	63.0
Potatoes	1,126	827	73.4

### 3.6.15 Yield of Major Temporary Crops

Yield is measured as production of crops per area harvested. Yield is considered to be poor when it is below 0.5mt/ha, and good at 0.5mt/ha and above. According to Table 3.13, all cereals had poor yield below 0.5mt/ha. Maize had 0.21 mt/ha while wheat and sorghum had 0.14mt/ha and 0.19mt/ha respectively. Yield has been fluctuating throughout the years for all crops.

**Table 3.13: Area Planted (ha), Production (mt) and Yield (mt/ha) of Major Crops by Year and Type, 1989/1990 to 2019/2020 Agricultural Censuses**

Year	Type of Crop								
	Maize			Wheat			Sorghum		
	Area	Prod	Yield	Area	Prod	Yield	Area	Prod	Yield
1989/1990	177,900	171,600	0.96	27,800	30,500	1.1	48,100	36,100	0.75
1999/2000	170,102	277,626	1.63	14,284	12,841	0.9	27,802	26,807	0.96
2009/2010	151,717	128,213	0.85	14,088	20,119	1.43	35,614	23,830	0.67
2019/2020	147,133	51,016	0.21	11,648	3,707	0.14	26,847	6,560	0.19

Notes: Figures for 2019/2020 are holder estimates while figures for 1989/1990, 1999/2000 and 2009/2010 are crop cutting estimates.

### 3.6.16 Disposition of Temporary Crops

The section covers disposition of temporary crops harvested. Disposition refers to how crops were used after harvest. It is evident from table 3.14 that most of the production of cereals was meant for household consumption while vegetables were mainly for sales. Out of 51,016,290kg of maize produced, 49.1 percent was consumed by the households.

**Table 3. 14: Disposition of Temporary Crops by Method/Type of Disposal and Type of Crop, 2019/2020 Agricultural Census**

Method of Disposal	Type of Crop							
	Maize	Wheat	Sorghum	Beans	Peas	Rape	Cabbage	Potatoes
Production	51,016	3,707	6,560	7,030	160	307	2,232	856
Sold	13.0	10.1	18.3	24.5	26.2	56.8	59.2	62.4
Processed for Sale	1.7	0.7	8.8	6.1	1.1	8.7	6.0	5.8
Consumed	49.1	36.6	47.5	36.5	46.4	16.0	4.3	16.5
<b>Given to:</b>								
-Landlord	5.2	1.7	4.0	19.5	1.8	0.0	0.0	5.0
-Labour	3.6	4.4	3.6	1.8	3.0	0.5	0.1	1.0
-Friends/Relation	5.3	4.1	6.1	4.1	4.7	4.9	5.4	3.2
-Others	0.8	2.3	1.4	0.6	3.1	0.3	6.2	1.0
-Exchange	0.5	0.1	1.0	0.3	0.0	0.1	0.0	1.6
Seeds	2.0	7.5	2.3	3.6	7.5	0.0	0.0	0.7
Animal Feeds	11.8	28.5	1.4	0.1	1.4	7.6	11.9	0.5
Lost after Harvest	1.4	2.4	1.2	0.9	2.6	5.0	6.9	2.2
Stored	5.5	1.6	4.3	2.0	2.3	0.0	0.0	0.0

### 3.6.17 End Use of Harvested Temporary Crops

End use refers to the purpose of the crop, that is, crops can be used either as food for human consumption or animal feeds. Table 3.15 demonstrates area harvested of temporary crop by end use. According to the table, the area was harvested for human consumption (172,723ha). Maize had the highest area harvested for human consumption (109,260ha). Cabbage had the least area harvested for animal feeds (2ha).

**Table 3.15: Area (ha) of Temporary Crop Harvested by Type of Crop and End Use, 2019/2020**  
Agricultural Census

Type of Crop	Human Consumption	Animal Feeds	Other
Maize	109,260	11,986	24
Wheat	8,155	295	64
Sorghum	20,869	654	0
Beans	31,386	434	10
Peas	1,332	0	0
Cabbage	276	2	0
Tomato	51	0	0
Spinach	60	0	0
Carrots	20	0	0
Mustard Spinach	140	0	0
Rape	321	56	0
Beetroot	26	0	0
Potatoes	827	18	0
<b>Total</b>	<b>172,723</b>	<b>13,445</b>	<b>98</b>

### 3.6.18 End Use of Harvested Temporary Crops

The agro-processing of agricultural crops discussed in the section referred to the sale of harvested crops to government organisation, parastatals, private traders, NGOs as well as at farmgate.

Table 3.16 shows the quantity of crop sold to the market. According to the table, cereals and pulses were mostly sold to neighbours at 97.2 percent, 80.1 percent, 62.8 percent, 56.2 percent and 47.6 percent of peas, wheat, sorghum, beans and maize respectively. Vegetables were mostly sold to private traders (80.6 percent spinach, 65.8 percent cabbage, 49.6 percent carrots, 47.4 percent rape and 43.4 percent pumpkin).

**Table 3.16: Quantity ('000kg) of Crop Sold by Type of Crop and Type of Farm Market, 2019/2020**  
Agricultural Census

Type of Crop	Quantity Sold	Farm Market					
		Govt. organizations	Parastatals	Private Traders	NGOs	Neighbour	Other
Maize	6,634	415	89	2,944	9	3,159	17
Wheat	376	0	0	75	0	301	0
Sorghum	1,203	23	19	346	3	756	56
Beans	1,721	42	34	540	73	967	65
Peas	42	0	0	1	0	41	0
Cabbage	1,320	0	0	914	0	300	107
Potatoes	535	0	0	353	0	178	3
Pumpkin	121	0	0	78	0	43	0
Rapa	175	0	23	83	0	50	19
Spinach	55	0	0	44	0	11	0
Tomato	61	0	0	21	0	31	9
Carrots	4	0	0	2	0	1	0
Green							
Pepper	8	0	0	7	0	1	0
Other	6	0	0	0	0	4	2

### 3.6.2 Permanent Crops

The section discusses number and area planted to permanent crops. Permanent crops are crops with a more than one-year growing cycle. Permanent crops may be grown in a compact plantation or as scattered trees or plants

#### 3.6.21 Number of Permanent Crops in Scattered Plantation

Scattered plantation is that which has no regular pattern. Table 3.17 illustrates the number of trees in scattered plantations. According to the table, peach dominated in this criterion, (14,390) followed by apple with 1,204 trees. The crop with the least number of trees in scattered plantation is plum (34 trees). Botha-Bothe had the highest number of plum trees (29 trees).

**Table 3.17: Number of Permanent Crops in Scattered Plantation by District and Type of Crop, 2019/2020 Agricultural Census**

District	Type of Crop								
	Apple	Peach	Grape	Pear	Apricot	Plum	Quince	Orange	Pomegranate
Botha-Bothe	43	209	0	0	0	29	0	0	0
Leribe	126	3,679	0	0	474	0	0	0	0
Berea	44	3,225	16	62	78	5	8	0	2
Maseru	354	5,834	0	44	530	0	88	0	0
Mafeteng	590	1,219	0	0	208	0	0	0	0
Mohale's Hoek	0	0	0	0	0	0	0	0	0
Quthing	0	0	0	0	0	0	0	0	0
Qacha's Nek	47	0	47	142	111	0	32	142	126
Mokhotlong	0	27	0	0	0	0	0	0	0
Thaba-Tseka	0	197	0	0	0	0	0	0	0
<b>Lesotho</b>	<b>1,204</b>	<b>14,390</b>	<b>63</b>	<b>248</b>	<b>1,401</b>	<b>34</b>	<b>128</b>	<b>142</b>	<b>128</b>

#### 3.6.22 Number of Permanent Crops in Compact Plantation

Table 3.18 shows the number of permanent crops in compact plantation which is that is planted in a systematic manner. The table illustrates that peach is the most popular crop (444,529) followed by apple with 15,270. The least common crop was quince with 45 trees.

**Table 3.18: Number of Permanent Crops in Compact Plantation by District, 2019/2020 Agricultural Census**

District	Type of Crop						
	Apple	Peach	Grape	Pear	Apricot	Plum	Quince
Botha-Bothe	696	9,871	0	0	0	285	0
Leribe	7,676	228,388	57	188	676	566	45
Berea	125	1,008	4	0	14	0	0
Maseru	1,294	203,213	293	117	0	8	0
Mafeteng	0	0	0	0	406	0	0
Mohale's Hoek	0	0	0	0	0	0	0
Quthing	0	0	0	0	0	0	0
Qacha's Nek	5,426	1,996	48	28	0	95	0
Mokhotlong	0	0	0	0	0	0	0
Thaba-Tseka	53	53	0	0	0	980	0
<b>Lesotho</b>	<b>15,270</b>	<b>444,529</b>	<b>402</b>	<b>333</b>	<b>1,096</b>	<b>1,934</b>	<b>45</b>

### 3.6.23 Area Planted to Permanent Crops in Compact Plantation

The section discusses area planted to permanent crops in compact plantation by district. From Table 3.19, it is evident that peaches were the most planted crop with 1,050ha followed by apples with 832ha. The least area planted was on quince, (54ha).

**Table 3.19: Area Planted (ha) to Permanent Crops by District and Type of Crop, 2019/2020 Agricultural Census**

District	Type of Crop						
	Apple	Peach	Grape	Pear	Apricot	Plum	Quince
Botha-Bothe	56	33	0	0	0	4	0
Leribe	421	512	70	57	289	198	54
Berea	32	77	9	0	9	0	0
Maseru	195	342	147	0151	0	5	0
Mafeteng	0	0	0	0	41	0	0
Mohale's Hoek	0	0	0	0	0	0	0
Quthing	0	0	0	0	0	0	0
Qacha's Nek	110	69	208	20	0	16	0
Mokhotlong	0	0	0	0	0	0	0
Thaba-Tseka	18	18	0	0	0	25	0
<b>Lesotho</b>	<b>832</b>	<b>1,050</b>	<b>253</b>	<b>228</b>	<b>338</b>	<b>247</b>	<b>54</b>

### 3.6.24 Number of Permanent Crops of Productive Age

Permanent crops of a productive age are those that are already bearing fruit. Table 3.20 discusses the number of permanent crops of productive age in compact plantations. The table shows that peach trees had the highest number productive, 22,050 trees followed by apple with 9,111 trees. Pears trees had the least number of productive trees (333).

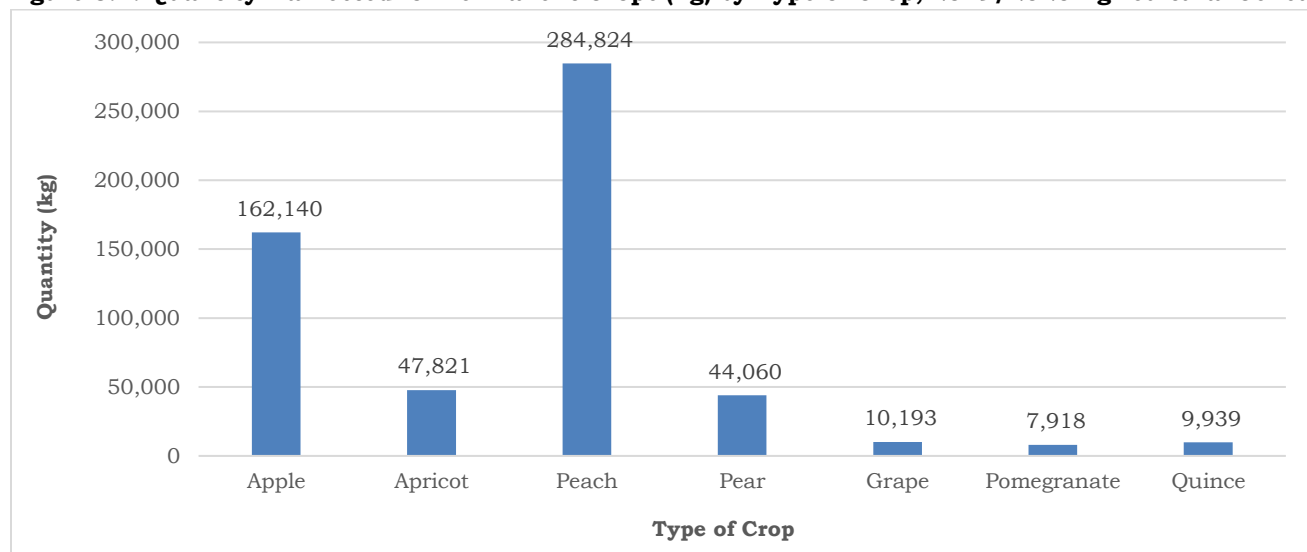
**Table 3.20: Number of Permanent Crops of Productive Age in Compact Plantation by District and Type, 2019/2020 Agricultural Census**

District	Type of Crop					
	Apple	Peach	Grape	Pear	Apricot	Plum
Botha-Bothe	696	9,770	0	0	0	285
Leribe	7,045	5,369	57	188	676	79
Berea	121	742	4	0	14	0
Maseru	498	4,173	293	117	0	8
Mafeteng	0	0	0	0	244	0
Mohale's Hoek	0	0	0	0	0	0
Quthing	0	0	0	0	0	0
Qacha's Nek	751	1,996	29	28	0	95
Mokhotlong	0	0	0	0	0	0
Thaba-Tseka	0	0	0	0	0	0
<b>Lesotho</b>	<b>9,111</b>	<b>22,050</b>	<b>383</b>	<b>333</b>	<b>934</b>	<b>467</b>

### 3.6.25 Production of Permanent Crops Harvested

Figure 3.1 illustrates quantity harvested for permanent crops. Peaches had the highest harvest with 284,824kg followed by apples with 162,140kg. The least harvested crop was pomegranate with 7,918kg.

**Figure 3.1: Quantity Harvested for Permanent Crops (kg) by Type of Crop, 2019/2020 Agricultural Census**



### 3.6.26 Disposition of Permanent Crops

The section covers disposition of permanent crops harvested. From the table, it is observed that most crops were meant for consumption and sales. Peaches, apples, apricot, grapes and pears were mainly for consumption while oranges, plums, pomegranates and quinces were for sales.

**Table 3. 21: Quantity of Crops Disposed by Method of Disposal and Type of Crop, 2019/2020  
Agricultural Census**

Method of Disposal	Type of Crop								
	Apple	Apricot	Grape	Orange	Peach	Pear	Plum	Pomegranate	Quince
Production	162,140	47,821	10,193	4,737	284,824	44,060	4,245	7,918	9,939
Sold	39,895	13,810	5,976	4,421	58,313	2,487	2,234	6,316	5,346
Processed for Sale	879	1,326	913	0	5,321	83	0	0	42
Consumed	66,169	21,330	2,682	158	150,086	28,049	976	406	2,024
Given to Labour	18	0	0	0	281	0	0	790	0
Friends	3,846	9,098	569	158	19,238	2,671	802	406	907
Others	0	263	0	0	56	0	0	0	0
Animal Feeds	2,851	752	9	0	21,587	2,619	0	0	12
Lost after Harvest	48,481	1,242	43	0	29,825	8,152	233	0	1,608

### 3.6.27 End Use of Harvested Permanent Crops

Table 3.22 demonstrates area harvested of permanent crop by end use. According to the table, area was harvested for human consumption (1,226ha). The highest area harvested for human consumption was recorded for peaches with 542ha followed by apples with 383ha. The least area harvested for consumption was for quince, (14ha). 79ha of apples was harvested for animal feeds.

**Table 3. 22: Area (ha) of Temporary Crop Harvested by Type of Crop and End Use, 2019/2020  
Agricultural Census**

Type of Crop	Human Consumption	Animal Feeds	Other
Apple	383	79	54
Apricot	112	0	0
Grape	63	0	0
Peach	542	6	122
Pear	56	0	14
Plum	56	0	0
Quince	14	0	0
<b>Total</b>	<b>1,226</b>	<b>85</b>	<b>190</b>

### 3.6.28 Farm Markets

The agro-processing of agricultural crops discussed in the section referred to the sale of harvested crops to government organisation, parastatals, private traders, NGOs as well as at farmgate.

Table 3.23 shows the quantity of crop sold to the market. According to the table, cereals and pulses were mostly sold to neighbours at 97.2 percent, 80.1 percent, 62.8 percent, 56.2



percent and 47.6 percent of peas, wheat, sorghum, beans and maize respectively. Vegetables were mostly sold to private traders (80.6 percent spinach, 65.8 percent cabbage, 49.6 percent carrots, 47.4 percent rapa and 43.4 percent pumpkin).

**Table 3.23: Quantity ('000kg) of Crop Sold by Type of Crop and Type of Farm Market, 2019/2020  
Agricultural Census**

Type of Crop	Farm Market						
	Quantity Sold	Govt. organizations	Parastatals	Private Traders	NGOs	Neighbour	Other
Maize	6,634	415	89	2,944	9	3,159	17
Wheat	376	0	0	75	0	301	0
Sorghum	1,203	23	19	346	3	756	56
Beans	1,721	42	34	540	73	967	65
Peas	42	0	0	1	0	41	0
Cabbage	1,320	0	0	914	0	300	107
Potatoes	535	0	0	353	0	178	3
Pumpkin	121	0	0	78	0	43	0
Rapa	175	0	23	83	0	50	19
Spinach	55	0	0	44	0	11	0
Tomato	61	0	0	21	0	31	9
Carrots	4	0	0	2	0	1	0
Green							
Pepper	8	0	0	7	0	1	0
Other	6	0	0	0	0	4	2

## CHAPTER 4: AGRICULTURAL PRACTICES

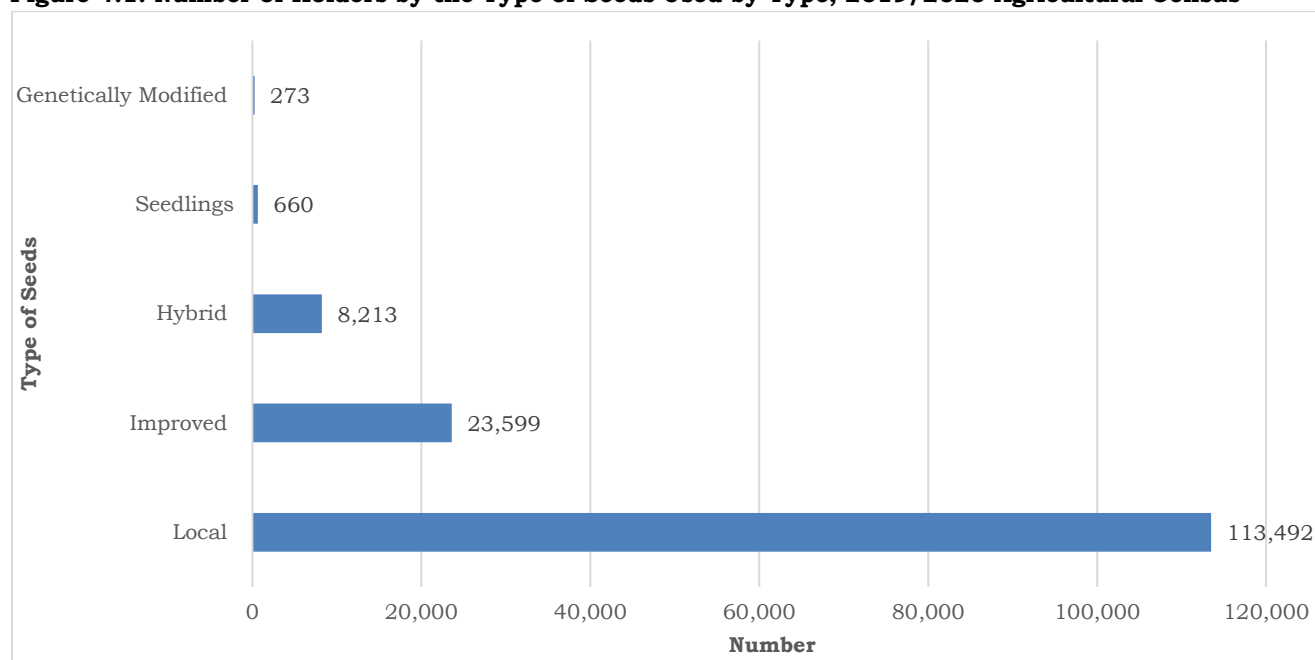
### 4.1 Introduction

Agricultural practices encompass of the use and source of seed inputs, use and source of fertilizers as well as agricultural pesticides.

### 4.2 Seeds

There are many different types on inputs that farmers use: Genetically Modified (GM), hybrid, improved and local seeds as well as seedlings. Figure 4.1 shows the number of holders by the type of seeds used. The holders had used different types of seeds. The highest number of holders used local seeds (113,492) while the lowest number of holders (273) used Genetically Modified seeds.

**Figure 4.1: Number of Holders by the Type of Seeds Used by Type, 2019/2020 Agricultural Census**



### 4.3 Main Source of Seeds

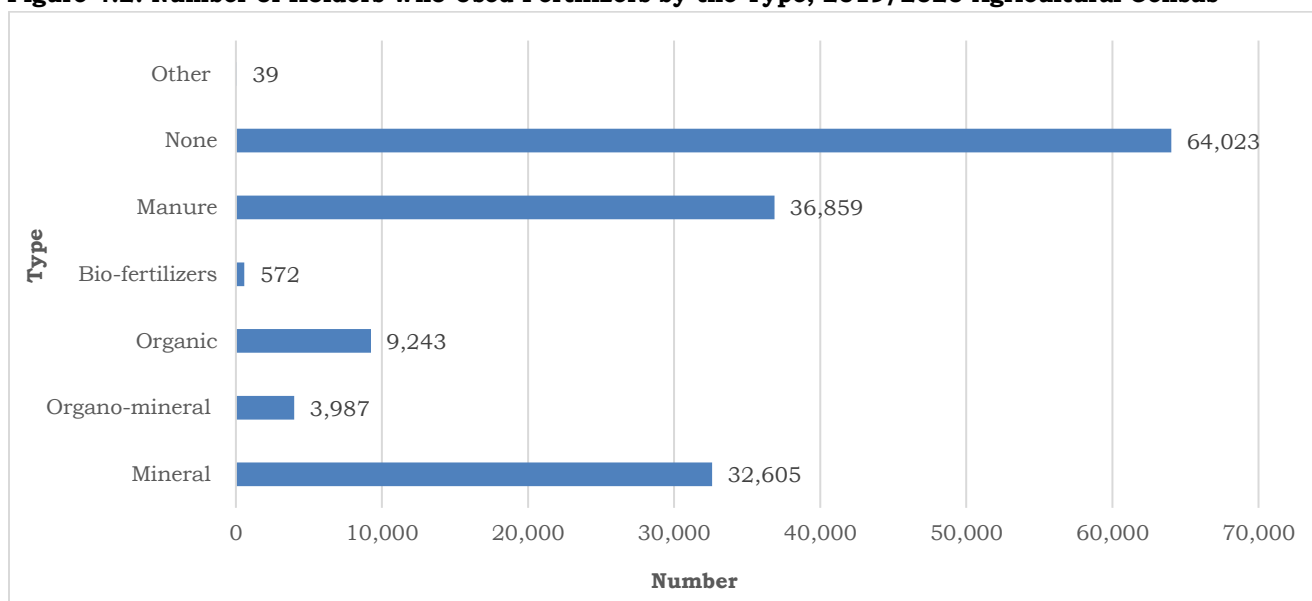
Table 4.1 presents the total number of holders by district and source. The highest number of holders used their own seeds (86,422) followed by those who made within community (17,416). who used seeds supplied by NGOs were the least (491 holders). The table further shows that Leribe had the highest number of holders (13,700) who used their own seeds followed by Maseru with 11,687 holders.

**Table 4.1: Number of Holders Who Seeds by District and Source, 2019/2020 Agricultural Census**

District	Main Source of Seeds							
	Own	Exchange	Markets	Seed				NGOs
				Company	Donation	Cooperatives	Government	
Botha-Bothe	6,322	741	1,835	224	20	669	115	0
Leribe	13,700	2,733	2,613	783	280	2,642	267	0
Berea	10,528	1,265	2,946	291	3	1,629	410	180
Maseru	11,687	3,379	2,820	636	223	1,071	343	
Mafeteng	8,654	1,680	2,571	448	209	1,237	87	160
Mohale s' Hoek	7,075	1,239	1,389	208	260	456	245	124
Quthing	6,166	1,096	508	148	86	160	137	27
Qachas' Nek	4,309	1,015	147	36	31	46	220	0
Mokhotlong	8,472	2,332	679	49	47	27	81	0
Thaba-Tseka	9508	1,937	479	44	28	4	181	0
<b>Lesotho</b>	<b>86,422</b>	<b>17,416</b>	<b>15,986</b>	<b>2,866</b>	<b>1,187</b>	<b>7,941</b>	<b>2,087</b>	<b>491</b>

#### 4.4 Fertilizers

Fertilizer are minerals or organic substances either natural or manufactured to supply soil with nutrients to enhance plants growth. Figure 4.2 shows the number holders by type of fertilizers used. About 64,023 holders did not applied fertilizer. Figure 4.3 shows the number holders by type of fertilizers used. The highest number of holders used manure (36,859) followed by those who used mineral fertilizers (32,605).

**Figure 4.2: Number of Holders Who Used Fertilizers by the Type, 2019/2020 Agricultural Census**

#### 4.5 Main Source of Fertilizers

Table 4.2 indicates the number of holders who used fertilizers by district and source. The highest number of holders bought fertilizers from the markets (29,603). The least number of used fertilizers supplied by Non-Governmental Organizations (661). Furthermore, Berea had the highest number of holders (8,152) who bought fertilizers from the markets, followed by Leribe with 6,400.

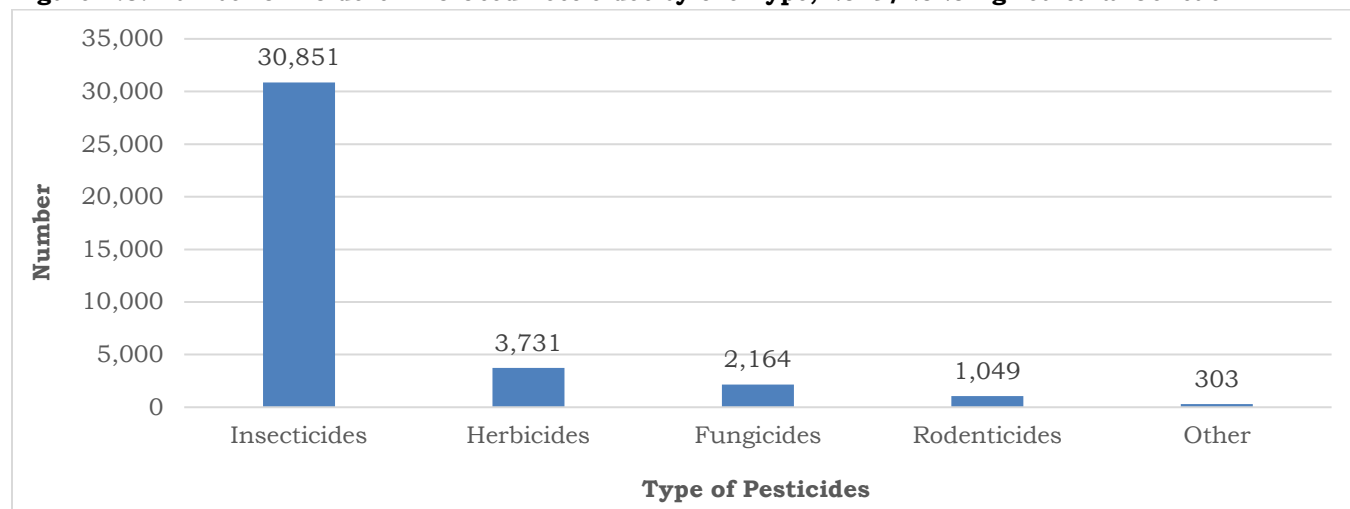
**Table 4.2: Number of Holders by District and Source of Fertilizers, 2019/2020 Agricultural Census**

District	Main Source of Fertilizers				
	Own	Markets	Cooperatives	Government	NGOs
Botha-Bothe	2,759	3,886	1,260	596	55
Berea	4,099	8,152	1,980	658	481
Leribe	6,917	6,400	2,914	774	0
Mafeteng	3,488	3,079	1,590	246	44
Maseru	5,210	5,007	1,273	577	0
Mohale's Hoek	2,068	1,837	360	208	12
Mokhotlong	425	365	0	56	0
Qacha's Nek	612	219	34	68	0
Quthing	1,005	551	73	154	69
Thaba-Tseka	602	107	0	68	0
<b>Lesotho</b>	<b>27,185</b>	<b>29,603</b>	<b>9,484</b>	<b>3,405</b>	<b>661</b>

#### 4.6 Pesticides

Pesticides are used to protect plants from pests, insects, and rodents during. Figure 4.3 indicates the number of holders who used pesticides by type. The large number of holders (30,851) used insecticides while few used rodenticides (1,049).

**Figure 4.3: Number of Holders Who Used Pesticides by the Type, 2019/2020 Agricultural Census**



#### 4.7 Main Source of Pesticides

Table 4.3 indicates the number of holders who used pesticides by district and source. The highest number of holders bought pesticides from the markets (26,175) while the least used pesticides from NGO's (51). The table further shows that Berea and Leribe were highest with 6,926 holders and 6,433 holders who bought pesticides from the markets respectfully.

**Table 4.3: Number of Holders Who Used Pesticides by District and Main Source, 2019/2020 Agricultural Census**

District	Main Source of Pesticides				
	Own	Markets	Cooperatives	Government	NGOs
Botha-Bothe	132	3,624	412	137	0
Leribe	483	6,433	2,748	146	0
Berea	317	6,926	1,481	231	40
Maseru	228	5,042	854	61	0
Mafeteng	147	1,186	603	44	0
Mohale's Hoek	40	421	145	0	0
Quthing	0	272	39	35	11
Qacha's Nek	14	279	22	26	0
Mokhotlong	0	1,020	63	0	0
Thaba-Tseka	30	971	27	49	0
<b>Lesotho</b>	<b>1,391</b>	<b>26,175</b>	<b>6,395</b>	<b>728</b>	<b>51</b>

#### 4.7 Agricultural Training and Use of Inputs

Table 4.4 depicts the distribution of holders who attended agricultural trainings versus the use of agricultural inputs. The highest number of holders (15,185) who had informal education used seeds from their own production. There were 8,749 holders with informal training who used insecticides.

On the other hand, the largest number of holders (49,765) who did not apply fertilizers had no agricultural training. The least number of holders who used fertilizers, applied bio-fertilizers and 349 had no training, 81 had informal while 142 had a non-formal training.

**Table 4.4: Number of Holders Who Attended Agricultural Training by Type of Input Used, 2019/2020  
Agricultural Census**

Type of Inputs	Type of Training				
	None	Informal	Non-Formal	Secondary	Tertiary
<b>Seeds</b>					
Local	82,134	24,494	5,548	1,182	134
Improved	14,571	6,742	1,719	319	248
Hybrid	5,018	1,852	1,028	280	35
GM	161	68	44	0	0
Seedlings	394	176	24	67	0
<b>Pesticides</b>					
Insecticides	19,115	8,749	2,248	498	239
Herbicides	1,781	1,306	448	163	34
Fungicides	1,185	842	105	0	32
Rodenticides	376	534	139	0	0
None	73,898	19,681	4,819	1,095	128
<b>Fertilizers</b>					
Mineral	20,935	8,986	1,980	543	161
Organo-mineral	1,465	1,883	606	33	0
Organic	6,594	1,833	519	194	103
Bio-fertilizers	349	81	142	0	0
Manure	24,439	9,125	2,511	658	126
None	49,765	11,203	2,582	419	55
Other	39	0	0	0	0

## Chapter 5: IRRIGATION SYSTEM

### 5.1 Introduction

Irrigation refers to providing land with water, other than rain, for improving crop production and pastures. It also includes the process of moving water from the sources (such as pumps, dams, rivers, wells and others) to apply to agricultural crops. The chapter on irrigation system discusses area irrigated, sources of irrigation water and reasons for not practicing irrigation system.

### 5.2 Irrigation

Table 5.1 presents the percentage distribution of holders who practiced irrigation and those who did not practiced irrigation. The total number of 154,414 holders did not practice irrigation system for the whole country. Leribe and Maseru were highest with 16.9 and 15.4 percent respectfully, while Qacha's Nek was the least with 4.2 percent

**Table 5.1: Number and Percentage Distributions of Holders by District and Irrigation Practices, 2019/2020 Agricultural Census**

District	Irrigated		Not Irrigated	
	Number	Percent	Number	Percent
Botha-Bothe	597	13.3	10,617	6.9
Leribe	1,172	26.1	26,041	16.9
Berea	555	12.4	19,387	12.6
Maseru	610	13.6	23,839	15.4
Mafeteng	294	6.5	18,675	12.1
Mohale's Hoek	112	2.5	14,078	9.1
Quthing	171	3.8	8,644	5.6
Qacha's Nek	160	3.6	6,490	4.2
Mokhotlong	575	12.8	12,667	8.2
Thaba-Tseka	241	5.4	13,975	9.0
<b>Lesotho</b>	<b>4,486</b>	<b>100.0</b>	<b>154,414</b>	<b>100.0</b>

### 5.2 Main Sources of Irrigation Water

Table 5.1 presents the number of holders who practiced irrigation by sources of irrigation water and area irrigated. The total number of holders who practiced irrigation stood at 4,486 and had irrigated about 3,214ha of the area planted. The highest number of holders (1,636) had used water from dams/reservoirs by manual watering for irrigating 1,411ha.

**Table 5.2: Number of Holders Who Practiced Irrigation by Sources of Irrigation Water and Area Irrigated (ha), 2019/2020 Agricultural Census**

<b>Sources of Irrigation</b>	<b>Number of Holders</b>	<b>Area</b>
Surface Water River/Lake/Pond/Mountain (Gravity)	647	465
Surface Water (River/Lake/Pond (Pump)	433	218
Dam /Reservoir/Earth Dam (Manual Watering)	1,636	1,411
Dam /Reservoir/Earth Dam (Pump)	248	244
Ground Water (Deep Well/Tube Well) (Pump)	147	90
Ground Water (Shallow Well) Dam/Reservoir/Earth Dam (Manual Watering)	478	261
Piped Water	655	408
Harvested	86	40
Borehole (Manual)	55	24
Borehole (Mechanized)	101	50
<b>Total</b>	<b>4,486</b>	<b>3,214</b>

#### 5.4 Reasons for not Practicing Irrigation System

Table 5.2 shows the main reasons why holders did not practice irrigation system. However, lack of irrigation system is a hindrance to some of the holders. Maseru had reported the highest number of holders (13,949) with no irrigation system. On the other hand, Mokhotlong had reported the highest number of holders (2,684) who did not practice irrigation due to inadequate water, followed by Leribe with 2,558.

**Table 5.3: Number of Holders Who Did Not Practice Irrigation by District and Reasons, 2019/2020 Agricultural Census**

<b>District</b>	<b>Reasons for Not Irrigating</b>			
	<b>No Irrigation System</b>	<b>Inadequate Water</b>	<b>Adequate Rains</b>	<b>Other</b>
Botha-Bothe	5,569	768	3,833	447
Leribe	12,930	2,558	8,502	2,051
Berea	7,565	695	10,067	1,060
Maseru	13,949	877	8,120	894
Mafeteng	11,084	1,815	4,323	1,453
Mohale's Hoek	8,581	1,130	3,599	768
Quthing	5,948	889	1,768	39
Qacha's Nek	4,494	1,321	433	242
Mokhotlong	6,572	2,684	3,004	407
Thaba-Tseka	10,697	1,552	1,643	83
<b>Lesotho</b>	<b>87,389</b>	<b>14,289</b>	<b>45,291</b>	<b>7,444</b>



## CHAPTER 6: AGRICULTURAL SERVICES

### 6.1 Introduction

The chapter discusses agricultural services, which include extension services, agriculture related information received, satisfaction of holders and access to agricultural credit.

### 6.2 Type of Extension Services

Table 6.1 depicts the percentage of holders who received and those who did not receive Agricultural services. The highest percentage of holders who received agricultural services was from Mohale's Hoek with 15.7 percent. Mafeteng followed with 12.6 percent. The smallest percent was from Qacha's Nek with 5.5. Leribe had the highest percentage of holders who did not receive agricultural services estimated at 17.1 percent. The second largest was from Maseru with 15.4 percent with Qacha's Nek being the least with 3.6 percent.

**Table 6.1: Number of Agricultural Holders Who Received and Who did not Received Extension Services by District, 2019/2020 Agricultural Census**

District	Number of Holders	Number of Holders	
		Received	Not Received
Botha-Bothe	1,3631	10.1	5.6
Leribe	37,863	11.9	17.1
Berea	28,088	9.8	12.6
Maseru	34,229	11.2	15.4
Mafeteng	25,991	12.6	11.3
Mohale's Hoek	22,175	15.7	9.2
Quthing	16,322	8.3	7.1
Qacha's Nek	8,542	5.5	3.6
Mokhotlong	20,864	9.1	9.2
Thaba-Tseka	19,927	5.8	9.0
<b>Lesotho</b>	<b>227,632</b>	<b>100.0</b>	<b>100.0</b>

### 6.3 Extension Service Providers and Services

Table 6.2 demonstrates number of agricultural holders who received extension services by type of service provider and type of extension service. Most holders (8,339) received extension service on crop selection from MAFS extension officers, followed by NGOs with 1,197 of holders. However, MAFS extension services provided many holders with most of the services.

**Table 6.2: Number of Agricultural Holders Who Received Extension Services by Type of Service Provider and Type of Service, 2019/2020 Agricultural Census**

Service Provider	Type of Service											
	Farm Mgt	Crop Selection	Input Use	Credit	Farm Mechanization	Livestock Husbandry	Plant Protection	Environmental Conservations	Marketing	Water Irrigation & Drainage	Nutrition	Other
Vet. Staff Officer	474	623	153	0	0	1,445	373	138	120	47	80	0
Agric Ext. Officers	2,567	8,339	3,019	124	595	4,816	4,498	1,854	797	911	944	51
Farmers' Unions	488	875	405	0	99	680	580	182	102	116	77	59
NGO's	543	1,197	286	0	182	859	596	307	130	162	333	63
Forestry Private Dealers	78	125	2	0	0	74	182	75	0	23	40	0
EPA	27	171	119	0	0	13	86	24	0	36	0	0
Nutrition	87	190	76	0	0	184	69	83	46	0	70	0
Other	0	23	0	0	0	0	23	0	0	0	120	0
	41	0	0	0	0	0	0	0	0	0	0	0

#### 6.4 Extension Service Provider and Satisfaction of Holders

Table 6.3 shows the number of agricultural holders who were satisfied with service providers and percentage by type of service and district. The highest percentage was from MAFS extension officers throughout the ten districts. In Botha-Bothe, MAFS extension officers constituted 88.1 percent of satisfied holders, which had the highest percentage, while Forestry contributed only 0.7 percent of satisfied holders.

**Table 6.3: Number and Percentage of Agricultural Holders Who were Satisfied with Service Providers by Type and District, 2019/2020 Agricultural Census**

Service Provider	District									
	Botha-Bothe	Leribe	Berea	Maseru	Mafeteng	Mohale's Hoek	Quthing	Qacha's Nek	Mokhotlong	Thaba-Tseka
No. of Holders	1,923	2,279	1,876	2,146	2,413	2,992	1,594	1,046	1,740	1,098
Vet. Staff	5.4	11	16.8	3.9	11.7	7.9	5.5	16.3	1.6	12.1
Agric Ext Officer	88.1	68.4	40.9	67.1	67.9	79.9	79.9	68.5	68.6	51
Farmers' Unions	4.6	9.5	10.6	12.1	3.6	7.3	0.8	10.9	17.1	27.8
NGO's	4.7	13.3	25.1	6.6	12.6	8.4	15.1	9.1	7.5	11.4
Fisheries	0	0	0	0	0	0	0	0	0	0
Forestry	0.7	1.9	0	2.8	1.4	1.5	0.6	2.4	0	0
Private Dealers	4.2	0.1	2.2	0	1.4	0.4	0	0.9	0	0
EPA	0	0	0	1.3	0	0	0	0	7.1	0
Nutrition	0	0	0	2.8	1.6	0	0	2.2	0	0
None	0.7	2.1	0	2	3.2	1.1	3.4	0	4.9	0
Other	0	1.5	4.4	1.9	0	0	0	0	0	0

## 6.5 Agricultural Information

Table 6.4 presents percentage distribution of holders who received and who did not receive agricultural information by districts. Leribe had the highest percentage of holders who received information with 23.3 percent while Mafeteng followed with 12.5 percent. Qacha's Nek was the least with 3.7 percent. Considering the case of the holders who did not receive agricultural information, Maseru had the highest percentage with 16.0 percent, followed by Leribe with 14.3 percent. Qacha's Nek was the least with 3.8 percent.

**Table 6.4: Percentage Distribution of Agricultural Holders Who Received and Did Not Receive Agricultural Information by District, 2019/2020 Agricultural Census**

District	No. of Holders	
	Received	Not Received
Botha-Bothe	8.5	5.1
Leribe	23.3	14.3
Berea	8.1	13.9
Maseru	12.4	16.0
Mafeteng	12.5	11.0
Mohale's Hoek	10.6	9.4
Quthing	6.7	7.3
Qacha's Nek	3.7	3.8
Mokhotlong	9.1	9.2
Thaba-Tseka	5.2	10.0
<b>Lesotho</b>	<b>100</b>	<b>100.0</b>

## 6.6 Agricultural Information Received

Table 6.5 shows number and percentage distribution of agricultural holders who received information by district and type. Mohale's Hoek had the highest percentage of holders who received information on crop varieties with 55.1 percent, followed by some new agricultural practices at 52.8 percent. Information on credit facilities had the least percentage with 2.1 percent in Mohale's Hoek.

**Table 6.5: Number and Percentage Distribution of Agricultural Holders Who Received Information by District and Type, 2019/2020 Agricultural Census**

Type of Information	District									
	Botha-Bothe	Leribe	Berea	Maseru	Mafeteng	Mohale' s Hoek	Quthing	Qacha' s Nek	Mokhotlong	Thaba-Tseka
No. of Holders	5,060	13,928	4,821	7,388	7,485	6,339	3,990	2,237	5,467	3,089
Weather	38.1	24	21.4	23.7	19.1	32.5	22.7	24.3	32.6	49
Crop varieties	49.3	49.1	40.1	49.9	45.1	55.1	44.7	47.3	52.1	27.6
New Practices	40.6	34.2	31.5	37.4	32.3	52.8	51.5	49.7	28.1	20.3
Farm machinery	7.5	0.6	6.5	1.7	0.5	8.5	14.2	0	2.9	0.7
Credit Facilities	3.6	0.5	0.2	0	0.6	2.1	7.3	0.4	0	0
Plant Diseases and Pests	23.3	21.3	13.5	24.4	12.1	18.5	21.7	10.5	16.8	11.1
Marketing	5.5	2.7	7.4	2.1	1.3	10.4	8.2	4.9	7.3	2.1
Livestock Husbandry & Diseases	38.3	37.4	18.7	27.3	25.7	39.1	49.5	24.1	30.8	23.5
Agronomic Practices	10.8	1.3	0.2	1.7	0.5	7	2	2.3	1.7	0
Water & Irrigation	3.8	3.3	1.6	2.7	1.8	8	12.7	2.6	2.1	3.2
Fish Farming	1.1	0	0	0	0	0	0	0.7	0	0
HIV/AIDS	25.8	13.5	4.5	1.6	0.5	3.1	3.7	2.2	3.1	4.3
Nutrition	12	17.9	4.1	6.2	3.3	6.1	4.5	2.3	7.3	1.7
Other	0.4	0.3	0.8	1.7	1.5	2.3	0	1.8	0.6	0.8

## 6.7 Main Source of Information

Table 6.6 presents number and percentage distribution of holders who received information by main source of information and district. The highest percentage of holders had received some agricultural information through use of Radio. Mohale's Hoek was highest with 60.7 percent. Extension officers provided information to about 14.2 percent of the holders and least was agricultural shows and/or exhibitions with 0.5 percent.

**Table 6.6: Number and Percentage Distribution of Agricultural Holders Who Received Information by Main Source of Information and District, 2019/2020 Agricultural Census**

Main Source of Information	District									
	Botha-Bothe	Leribe	Berea	Maseru	Mafeteng	Mohale's Hoek	Quthing	Qacha's Nek	Mokhotlong	Thaba-Tseka
Number of Holders	5,060	13,928	4,821	7,388	7,485	6,339	3,990	2,237	5,467	3,089
Radio	29	55.1	53.6	60	58.4	60.7	56.4	59.8	47.4	57.4
Television	3.8	4.6	2	2.4	2.6	1.8	0.4	1	0.4	2.3
Internet	1.2	0.9	2.7	0.1	0.1	0	0	0	0	3.6
Newspaper	0.2	0.5	0	1.9	0.1	0	0.7	0	0	0
Agric. Magazines/Bulletins	0	0.2	0	0	0.1	0.2	0	2.7	0.4	0
Extension Officers	20.5	2.7	13.5	9.1	11.2	14.2	14	13.9	6.4	8.9
Farmer to Farmer	21.7	13.2	11.9	17.9	10.3	8.5	16.6	9.2	21.8	7.9
Farmers' Associations	2.6	6.5	7	3.2	7.5	3.1	4.5	1.4	2.9	3.8
Agric. Shows/Exhibitions	0	1.1	0.7	0.8	0.5	0.5	0	0	0.4	0.1
Neighbour	19.5	13.9	7	2.5	7.7	5.9	5.5	12	20.1	15.9
Other	1.4	1.3	1.5	2.1	1.4	5.1	1.8	0	0	0

## 6.8 Access to Agricultural Credit/Loan

Table 6.7 reveals the number and percentage distributions of agricultural holders who applied for credit/loans. It can be deduced from the table that the largest number of applicants came from Mafeteng (685), followed by Leribe (659) while the least number was in Thaba-Tseka (185). Holders who applied for credit/loans in Qacha's Nek were all granted with loans in Qacha's Nek while 94.4 percent while Botha-Bothe. Mokhotlong had the least percent of holders who were granted loans.

**Table 6.7: Number and Percentage Distributions of Holders who Applied for Credit/Loans and Loan Granted by District, 2019/2020 Agricultural Census**

District	No. Applied for Credit/Loan	No. Granted Credit/Loan	Percent Granted Credit/Loan
Botha-Bothe	429	405	94.4
Leribe	659	546	82.9
Berea	498	418	83.9
Maseru	561	492	87.7
Mafeteng	685	589	86.0
Mohale's Hoek	323	279	86.4
Quthing	238	194	81.5
Qacha's Nek	216	216	100.0
Mokhotlong	231	142	61.5
Thaba-Tseka	185	164	88.6
<b>Lesotho</b>	<b>4,025</b>	<b>3,445</b>	<b>85.6</b>

## 6.9 Main Source of Credit/Loan

Table 6.8 presents the percentage distribution of holdings who received loan by main source of credit, sex and period of loan or credit. About 47.5 percent male holders received loans for period of less than 12 months from family and friends. Male holders who managed to get loans for 12 to 36 months and for more than 36 months from commercial banks constituted 51.5 percent and 61.6 percent respectively.

In the same manner, female holders who got loans for a period of less than 12 months from family and friends had the highest percentage estimated at 35.8 percent. There were also more female holders (80.6 percent and 67.8 percent) who were given loans by commercial banks for period of more than 36 months and 12 to 36 months respectively.

**Table 6.8: Percentage Distribution of Holders Received Loan by Main Source of Credit, Sex and Period, 2019/2020 Agricultural Year**

Main Source	Sex							
	Male				Female			
	> 12 Months	12 - 36 Months	< 36 Months	Other	> 12 Months	12 - 36 Months	< 36 Months	Other
Commercial Banks	0.0	51.5	61.6	0.0	0.0	67.8	80.6	0.0
Micro-finances Institutions	2.8	0.0	1.5	0.0	0.3	0.0	0.0	0.0
Farmers' Union	1.5	1.3	0.0	0.0	3.1	0.0	0.0	0.0
Input supplier	4.1	0.0	0.0	0.0	4.9	0.0	0.0	0.0
Money Lenders	20.5	1.3	0.0	55.8	20.1	0.0	0.0	0.0
Self-help Group	21.8	17.0	0.0	1.4	28.9	0.0	0.0	78.9
Government	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NGO	0.0	12.7	0.0	0.0	0.0	32.2	0.0	0.0
Family & Friends	47.5	0.0	36.9	18.8	35.8	0.0	19.4	21.1
Other	1.7	15.3	0.0	23.9	6.8	0.0	0.0	0.0
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

## 6.10 Purpose of Credit/Loans

Table 6.9 illustrates the number and percentage distribution of agricultural holders who were granted credit/loan by district and main purpose of applying for loan. The highest percentage of holders were granted credit/loans for purchasing seeds with 29.5 percent, followed by those who purchased livestock with 21.4 percent. The least percentage was for holders were granted loans for trading agricultural products with 0.4 percent.

**Table 6. 9: Number and Percentage Distribution of Holders Who Applied for Credit/Loans by District and Main Purpose, 2019/2020 Agricultural Census**

District	Credit/ Loan Granted	Main Purpose of Credit/Loan							
		Agric. Labour	Seeds	Fertilizer	Farm Implements & Machinery	Livestock	Trading Produce	Tractor	Other
Botha-Bothe	405	0.0	1.8	6.3	0.6	1.1	0.4	1.6	0.0
Leribe	546	2.0	2.8	2.1	2.2	2.3	0.0	2.3	2.2
Berea	418	1.0	2.1	3.3	1.9	0.2	0.0	2.2	1.4
Maseru	492	2.3	6.5	1.8	1.0	0.9	0.0	0.1	1.6
Mafeteng	589	0.0	4.3	3.6	0.8	2.2	0.0	4.3	2.0
Mohale's Hoek	279	1.0	2.5	1.0	0.3	1.0	0.0	0.7	1.6
Quthing	194	0.0	1.0	3.0	0.0	1.6	0.0	0.0	0.0
Qacha's Nek	216	0.0	2.9	0.4	0.4	2.6	0.0	0.0	0.0
Mokhotlong	142	0.0	1.9	0.0	0.0	2.2	0.0	0.0	0.0
Thaba-Tseka	164	0.6	3.6	0.0	0.0	0.0	0.0	0.0	0.6
<b>Lesotho</b>	<b>3,445</b>	<b>6.9</b>	<b>29.5</b>	<b>21.4</b>	<b>7.2</b>	<b>14.2</b>	<b>0.4</b>	<b>11.1</b>	<b>9.4</b>

### 6.11 Reasons Credit/Loan Not Granted

Table 6.10 shows the number and percentage distribution of holders who were not granted loans by reasons and sex. Most of male applicants were not granted credit/loan because they did not meet requirements with 33.4 percent, followed by those who did not have any collateral security at 20.5 percent.

Female applicants who were not granted credit/loan because they did not meet requirements constituted 80.6 percent, followed by those who could not get a guarantor at 14.0 percent.

**Table 6.10: Number and Percentage Distribution of Holders Who were not Granted Credit/Loans by Reasons and Sex, 2019/2020 Agricultural Census**

Reasons	No. of Holders	Sex	
		Male	Female
Lack Collateral Security	100	20.5	0.0
Not Profitable	37	6.8	4.3
Income Too Low	38	7.8	0.0
Previous Debt Problems	0	0.0	0.0
No Guarantor	110	19.7	14.0
Amount Applied Too High	0	0.0	0.0
Inappropriate Purpose of Loan	0	0.0	0.0
Did Not Meet Requirements	238	33.4	80.6
Late Application	43	8.8	0.0
Other	14	2.9	0.0
<b>Total</b>	<b>580</b>	<b>100</b>	<b>100</b>

### 6.12 Reasons for Not Seeking Credit/Loan

Table 6.11 presents number and percentage distribution of holders who did not seek for credit/loan by sex and reasons for not seeking credit/loan. 52.0 percent of the males felled like there was no need for them to apply for credit/loan, followed by those who were unaware of credit/loan services with 32.2 percent. The least were those who had negative past experience on credit/loan services with 0.2 percent.

The same picture was observed for female counterpart, where 55.1 percent felled like there was no need for them to apply for credit/loan, fo0llowed by those who were unaware of the credit/loan services. The least percent come from females who had negative past experience with 0.3 percent.

**Table 6.11: Number and Percentage Distribution of Holders Who did not Seek Credit/Loans by Reasons and Sex, 2019/2020 Agricultural Census**

Reasons for Not Seeking Credit/Loan	No. of Holders Who Did Not Apply for Loan	Sex	
		Male	Female
No Need	118,370	52.0	55.1
Unavailability of Lending Facilities	12,972	5.5	6.5
Interest Too High	17,208	7.6	7.9
Negative Past Experience	539	0.2	0.3
Unaware of the Service	69,062	32.2	27.9
Other	5,453	2.5	2.4
<b>Total</b>	<b>223,605</b>	<b>100</b>	<b>100</b>



## CHAPTER 7: FARM IMPLEMENTS AND ASSETS

### 7.1 Introduction

The chapter reviews machinery or equipment and non-residential buildings used on the holding, wholly or partly for agricultural production and purpose. It includes manual tools and machinery. Non-residential buildings are used for storage purposes and they are used regardless of their physical location.

### 7.2 Machinery

Table 7.1 illustrates number of holdings who used machinery by type and source of ownership. Most holdings rented tractors (26,329) and the least number of holdings (31) who used tractor were those that were provided by cooperatives. At least 4 holdings own incubators while 41 holdings that used incubators were provided by cooperatives.

**Table 7.1: Number of Holdings who used Machinery by Type and Source of Ownership, 2019/2020**  
Agricultural Census

Type of Machinery	Source of Ownership								
	Solely by Household	Jointly with Other Households	Landlord	Private Holders	Cooperatives	Agric. Service Est.	Gov. Agency	Rented	Borrowed
Forage									
Harvester	45	0	4	0	0	0	47	108	3
Combine									
Harvester	36	0	0	4	0	37	70	171	0
Vehicle	2,396	103	42	101	23	0	44	1,827	504
Generator	1,720	0	0	0	34	0	0	114	348
Sprayer	963	0	29	75	0	53	95	145	341
Incubator	4	0	0	0	41	0	0	1	24
Ridger	40	0	0	0	0	0	0	112	40
Scotch Cart	1,458	72	30	51	0	23	102	2,398	1,186
Seed									
Planter	1,058	130	29	209	0	27	154	3,144	986
Tractor	2,184	251	52	651	31	27	584	26,329	1,290
Plough	2,314	241	29	720	31	57	622	24,426	1,911
Threshers	92	0	0	27	0	23	2	674	33
Power Tiller	130	0	0	0	0	0	0	116	3
Milking									
Machine	17	0	0	0	0	0	0	0	0
Disk									
Harrower	446	10	27	162	0	0	93	859	443
Water									
Pump	309	3	0	0	34	0	54	57	63
Honey									
Extractor	22	74	0	0	0	0	60	0	0
Drip									
Irrigation	392	33	0	0	0	0	0	0	0
Other	62	0	0	0	0	0	0	33	25

### 7.3 Manual Equipment

Table 7.2 illustrates number of holdings who used manual equipment by type and source of ownership. Most holdings (99,056) solely owned spade, followed by those who borrowed (9,665). The least number of holdings (61) used rented spade. Most holdings (88,159) used owned yoke, and the least number of holdings (2) used yoke provided by cooperatives.

**Table 7.2: Number of Holdings who used Manual Equipment by Type and Source of Ownership, 2019/2020  
Agricultural Census**

Type Equipment Machinery	Source of Ownership								
	Solely by Household	Jointly with other Households	Landlord	Private Holders	Coo per.	Agric Service Est.	Gov. Agency	Rented	Borrowed
Digging Fork	32,144	602	48	96	0	0	86	23	5,011
Rake	38,692	729	35	120	0	0	79	82	6,920
Spade	99,056	1,601	73	85	0	0	129	61	9,665
Hand Pump	10,440	77	0	47	0	0	0	0	668
Transplanter	5,034	62	29	37	0	0	0	757	1,660
Sprayer	10,859	300	0	261	0	30	0	490	3,785
Ox-Plough	66,677	4,390	587	548	0	0	0	5,199	36,329
Seed Planter	29,780	1,981	176	341	36	30	48	8,163	23,437
Scotch Cart Disk	32,484	2,068	102	166	0	0	0	5,021	20,395
Harrower	11,066	611	238	210	0	0	0	2,249	8,279
Cultivator	41,049	2,516	410	611	0	0	2	7,176	28,489
Yoke	88,159	4,194	540	733	2	0	33	5,526	37,274
Other	8,080	140	0	0	0	0	0	152	1,041

### 7.4 Type of Non-Residential Buildings Used

Table 7.3 presents number of holders, area and number of buildings by purpose and type of land tenure. The highest number of holders (10,697) used buildings for storing agricultural products. Most of the buildings (10,436) owned by holders occupied the largest area of 110,747ha.

**Table 7.3: Number of Holders, Area (ha) of Buildings by Purpose and Land Tenure Type 2019/2020  
Agricultural Census**

Main Purpose	No. of Holders	Type of Land Tenure			Area
		Owned	Rented	Borrowed	
Livestock other than Poultry	1,657	2,002	0	0	43,170
Poultry	1,376	1,453	0	3	14,729
Storing Agric. Products	10,697	10,436	4	830	110,747
Mixed	2,948	3,051	0	186	33,967
Other	444	553	0	0	4,076

## CHAPTER 8: LABOUR INPUT

### 8.1 Introduction

The section includes labour input of household members and employees by working time, form of payment and type of services rendered. For 2019/2020 Agricultural Census the measurement of working time was categorized into full-time work and part-time work depending on the number of months worked. Full-time work is the main job with longest hours usually worked. Part-time work involves time units of production regarding amount of work and these units maybe short such as minutes or hours, or long such as days, week or months.

### 8.2 Labour Input of Household Members

Labour input of household members involves all volume of work contributed by household members to the operation of agricultural activities in the holding.

Table 8.1 presents the number of household members who participated in agricultural work on the holding by district and working time. About 360,508 household members aged 10 years and above contributed to agricultural work on the holding. Most household members worked full time for seven months and above (59.0 percent) and least members worked full-time for less than one month (10.5 percent). Leribe had the highest proportion of members who worked on full time basis constituting 16.4 percent, followed by Maseru with 16.0 percent. The majority of household members working on part-time basis (36.0 percent) worked for “1 to 3 months”.

**Table 8.1: Number of Household Members Aged 10 Years and Over who Participated in Agricultural Work by District and Working Time, 2019/2020 Agricultural Census**

District	Number of Household Members	Full-time				Part-time			
		< 1 Month	1-3 Months	4-6 Months	7+ Months	< 1 Month	1-3 Months	4-6 Months	7+ Months
Botha-Bothe	22,213	2,560	2,915	1,895	8,405	1,109	3,446	792	1,091
Leribe	59,767	3,086	4,909	6,231	24,553	7,869	6,975	1,924	4,220
Berea	53,072	3,800	8,082	6,441	19,465	5,319	5,717	2,331	1,917
Maseru	55,250	4,120	7,577	4,778	18,680	7,863	6,730	2,936	2,566
Mafeteng	32,615	3,427	3,090	2,211	10,908	5,109	4,677	1,399	1,794
Mohale's									
Hoek	36,687	1,463	1,956	1,442	16,164	4,073	4,700	2,269	4,620
Quthing	29,416	1,465	2,930	1,508	13,675	3,371	3,721	1,321	1,425
Qacha's Nek	15,568	806	1,505	1,131	5,968	2,146	2,195	978	839
Mokhotlong	26,848	1,574	3,048	2,852	10,370	2,154	3,885	1,405	1,560
Thaba-Tseka	29,072	2,464	4,177	3,433	11,209	2,035	2,675	1,396	1,683
<b>Lesotho</b>	<b>360,508</b>	<b>24,764</b>	<b>40,189</b>	<b>31,923</b>	<b>139,398</b>	<b>41,048</b>	<b>44,722</b>	<b>16,750</b>	<b>21,715</b>

### 8.3 Labour Inputs of Employees

An employee on the holding is a person who had a job on holding at some time during 2019/19 Agricultural year. This includes both full-time and part-time workers.

Table 8.2 illustrates the number of employees working on the holding by district and working time for 2019/2020 Agricultural Year. There were 84,136 people employed for agricultural purposes and Berea dominated with 21,595 followed by Leribe with 17,589 employees. There were more part-time employees (44,628) than full-time employees (39,508). Most employees were employed on part-time basis for less than one month in a year (26,194) and Leribe dominated with 7,349.

**Table 8.2: Number of Employees by District and Working Time, 2019/2020 Agricultural Census**

District	No. of Employees	Full-Time				Part-Time			
		<1 Month	1-3 Months	4-6 Months	7+ Months	<1 Month	1-3 Months	4-6 Months	7+ Months
Botha-Bothe	5,547	1,161	798	108	637	1,545	892	345	61
Leribe	17,589	2,211	1,941	905	1,794	7,349	2,376	373	639
Berea	21,595	4,662	3,921	1,028	3,129	4,044	3,885	719	206
Maseru	14,569	1,947	1,072	603	2,727	5,169	2,582	242	227
Mafeteng	7,465	1,298	684	145	482	3,498	949	80	328
Mohale's Hoek	5,096	211	362	126	1,528	1,548	351	277	693
Quthing	3,590	36	133	61	1,442	1,015	501	150	251
Qacha's Nek	1,938	29	95	47	1,096	224	243	128	75
Mokhotlong	3,906	123	117	85	987	1,466	872	118	138
Thaba-Tseka	2,839	451	259	139	926	336	260	303	167
<b>Lesotho</b>	<b>84,136</b>	<b>12,129</b>	<b>9,383</b>	<b>3,247</b>	<b>14,749</b>	<b>26,194</b>	<b>12,912</b>	<b>2,736</b>	<b>2,786</b>

### 8.4 Form of Payment for Employees

Form of payment for employees can be cash, in-kind; either by farm produce or any other in-kind payment and by exchange of labour. Table 8.3 presents form of payment for employees on the holding by district for 2019/2020 Agricultural Census. Most employees (51,334) were paid in the form of money followed by employees (30,748) who were paid with farm produce.

**Table 8.3: Form of Payment for Employees by District, 2019/2020 Agricultural Census**

District	No. of Employees	Form of Payment			
		Money	Farm produce	Exchange of Labour	Other
Botha-Bothe	5,547	2,849	2,459	85	154
Leribe	17,589	11,166	6,042	254	356
Berea	21,595	15,199	6,869	298	73
Maseru	14,569	9,777	4,380	41	147
Mohale's Hoek	5,096	2,515	2,366	54	89
Quthing	3,590	2,231	1,236	11	8
Qacha's Nek	1,938	1,118	765	23	241
Mokhotlong	3,906	1,468	2,239	29	166
<b>Lesotho</b>	<b>84,135</b>	<b>51,334</b>	<b>30,748</b>	<b>807</b>	<b>1,496</b>

## 8.5 Type of Services Rendered

The types of agricultural services rendered by employees in the agricultural activities include; tree pruning, planting, crop harvesting, weeding, herding or farm administration and many other. Table 8.4 shows number of employees by district and type of services rendered in 2019/2020 Agricultural Year. According to the table majority of employees (53,960) were employed for weeding. The least number of employees (158) were engaged in tree pruning. Berea dominated with 16,762 employees who were employed for weeding.

**Table 8.4: Number of Employees by District and Services Rendered, 2019/2020 Agricultural Census**

District	Type of Services								
	Tree Pruning	Crop Harvesting	Weeding	Planting	Applying Pesticides	Herding	Sheep/Goat Shearing	Farm Admin	Other
Botha-Bothe	30	2,618	3,223	1,018	190	511	33	4	37
Leribe	79	8,675	12,251	3,213	1,007	1,458	108	0	57
Berea	34	8,813	16,762	2,584	1,008	1,572	157	44	89
Maseru	0	5,490	10,168	1,908	47	2,560	220	81	41
Mafeteng	0	2,465	4,703	1,053	0	1,032	140	0	0
Mohale's Hoek	0	2,299	1,806	612	6	2,103	89	33	77
Quthing	0	1,203	1,476	452	26	1,406	10	38	19
Qacha's Nek	14	572	235	152	10	1,306	39	27	0
Mokhotlong	0	2,314	1,877	907	359	948	173	0	0
Thaba-Tseka	0	854	1,459	854	63	863	78	215	0
<b>Lesotho</b>	<b>158</b>	<b>35,302</b>	<b>53,960</b>	<b>12,753</b>	<b>2,716</b>	<b>13,758</b>	<b>1,048</b>	<b>442</b>	<b>320</b>

**\*\*Note: This is a multiple response. Total services rendered is not the same as total number of employees.**

## APPENDIX

### I. Estimates of Sampling Errors

The SPSS Software Complex Samples (CSPlan) module was used for estimating the sampling errors, the coefficient of variation (CV), the confidence limits, the design effect and the square root of the design effect for key indicators (Table A2). A CV exceeding 20% is considered very low and signifies that the sample size is too small (Table A1).

**Table A1: Interpretation of the Reliability co-efficients**

No.	CV %	Indicator
1	1% - < 5%	Highly precise
2	5% - < 10%	Good precision
3	10% - < 15%	Acceptable if close to 10%
4	15% - < 20%	Less precise
5	20% or more	Very low precision (sample size is too small)

**Table A2: Sampling Errors for Key Indicators**

No.	Indicator	Estimate	Base Population
1	Total Agric. Population	Number	All Agric. household members
2	Total Agric. Households	Number	All Agric. Households
3	Agric. Household size	Mean	All Agric. Households
4	Total Agric. Holders	Number	All Agric. Holders
5	Area Harvested of Maize	Hectares	All Agric. Holders
6	Total Maize Produced	MT	All Agric. Holders
7	Area Harvested of Sorghum	Hectares	All Agric. Holders
8	Total Sorghum Produced	MT	All Agric. Holders
9	Area Harvested of Wheat	Hectares	All Agric. Holders
10	Total Wheat Produced	MT	All Agric. Holders

### II. Sampling Errors for Selected Indicators

The design effect is the ratio of the variance of an indicator used in the sample design to the variance calculated under a simple random sampling. The square root of the design effect of 1.0 indicates that the sample design is as efficient as a simple random sample, whereas a value greater than 1.0 indicates the increase in the sampling error due to the use of a more complex and less statistically efficient design. Again, a CV not exceeding 15% is deemed precise enough for the indicator and indicates that the sample size for the domain is appropriate. The results are shown in Tables A3-A16.

**Table A3: Total Agriculture Population**

District	Estimate	Standard Error	95% Confidence Interval		Coefficient of Variation	Design Effect	Square Root Design Effect	Unweighted Count
			Lower	Upper				
Botha-Bothe	62,926	4,293.710	54,489.383	71,362.177	6.8	12.974	3.602	3,299
Leribe	155,457	10,103.076	135,606.543	175,308.137	6.5	32.227	5.677	5,567
Berea	124,823	7,655.582	109,781.446	139,865.234	6.1	22.247	4.717	4,812
Maseru	153,723	16,038.871	122,209.092	185,236.308	10.4	81.969	9.054	5,915
Mafeteng	112,534	7,457.213	97,881.415	12,7185.685	6.6	23.093	4.806	3,970
Mohale's Hoek	100,459	7,181.274	86,348.729	11,4568.651	7.1	23.671	4.865	3,647
Quthing	82,605	7,095.414	68,663.969	96,546.491	8.6	27.562	5.250	3,246
Qacha's Nek	46,539	3,702.916	39,263.271	53,814.449	8.0	12.825	3.581	2,684
Mokhotlong	88,569	2,570.966	83,517.537	93,620.543	2.9	3.397	1.843	3,181
Thaba-Tseka	81,594	4,391.744	72,964.773	90,222.807	5.4	10.678	3.268	3,914
<b>Zone</b>								
Lowlands	385,055	21,623.509	342568.504	42,7541.416	5.6	81.524	9.029	16,294
Foothills	200,388	21,700.473	157750.132	24,3025.488	10.8	121.749	11.034	6,535
Mountains	322,071	20,761.266	281278.592	362,863.188	6.4	81.613	9.034	11,956
Senqu River Valley	101,715	11,339.164	79435.163	123,994.157	11.1	58.370	7.640	5,450
<b>Lesotho</b>	<b>1,009,228</b>	<b>25,169.344</b>	<b>959,774.912</b>	<b>1,058,681.728</b>	<b>2.5</b>			<b>40,235</b>

**Table A4: Total Number of Households**

District	Estimate	Standard Error	95% Confidence Interval		Coefficient of Variation	Design Effect	Square Root Design Effect	Unweighted Count
			Lower	Upper				
Botha-Bothe	12,536	845.342	10,874.799	14,196.701	6.7	2.499	1.581	650
Leribe	31,147	1921.984	27,370.534	34,923.266	6.2	5.775	2.403	1,121
Berea	24,847	1482.713	21,933.506	27,760.054	6.0	4.152	2.038	951
Maseru	31,138	3101.628	25,044.147	37,232.473	10.0	15.042	3.878	1,189
Mafeteng	23,384	1451.226	20,532.411	26,235.229	6.2	4.191	2.047	818
Mohale's Hoek	20,562	1510.887	17,593.368	23,530.632	7.3	5.085	2.255	740
Quthing	14,480	1190.382	12,140.954	16,818.746	8.2	4.335	2.082	565
Qacha's Nek	7,944	546.106	6,871.027	9,017.033	6.9	1.606	1.267	463
Mokhotlong	16,663	426.875	15,824.445	17,501.915	2.6	.490	.700	595
Thaba-Tseka	16,358	876.421	14,636.064	1,8080.096	5.4	2.101	1.450	762

District	Estimate	Standard Error	95% Confidence Interval		Coefficient of Variation	Design Effect	Square Root Design Effect	Unweighted Count
			Lower	Upper				
<b>Zone</b>								
Lowlands	385,055	21623.509	342,568.504	427,541.416	5.6	81.524	9.029	16,294
Foothills	200,388	21700.473	157,750.132	243,025.488	10.8	121.749	11.034	6,535
Mountains	322,071	20761.266	281,278.592	362,863.188	6.4	81.613	9.034	11,956
Senqu River Valley	101,715	11339.164	79,435.163	123,994.157	11.1	58.370	7.640	5,450
<b>Lesotho</b>	<b>199,059</b>	<b>4825.099</b>	<b>189,578.215</b>	<b>208,539.185</b>	<b>2.4</b>			<b>7,854</b>

**Table A5: Mean Household Size**

District	Estimate	Standard Error	95% Confidence Interval		Coefficient of Variation	Design Effect	Square Root Design Effect	Unweighted Count
			Lower	Upper				
Botha-Bothe	5.0	.134	4.76	5.28	2.7	1.438	1.199	650
Leribe	5.0	.087	4.82	5.16	1.7	1.514	1.230	1,121
Berea	5.0	.077	4.87	5.18	1.5	.994	.997	951
Maseru	4.9	.100	4.74	5.13	2.0	1.905	1.380	1,189
Mafeteng	4.8	.109	4.60	5.03	2.3	1.824	1.351	818
Mohale's Hoek	4.9	.111	4.67	5.10	2.3	1.721	1.312	740
Quthing	5.7	.149	5.41	6.00	2.6	1.297	1.139	565
Qacha's Nek	5.9	.180	5.50	6.21	3.1	1.134	1.065	463
Mokhotlong	5.3	.114	5.09	5.54	2.1	1.541	1.241	595
Thaba-Tseka	5.0	.091	4.81	5.17	1.8	.975	.987	762
<b>Zone</b>								
Lowlands	4.8	.050	4.71	4.91	1.0	1.395	1.181	3,334
Foothills	5.0	.081	4.88	5.20	1.6	1.577	1.256	1,301
Mountains	5.3	.061	5.21	5.45	1.1	1.373	1.172	2,233
Senqu River Valley	5.4	.125	5.18	5.67	2.3	1.351	1.162	986
<b>Lesotho</b>	<b>5.1</b>	<b>.035</b>	<b>5.00</b>	<b>5.14</b>	<b>0.7</b>	<b>1.502</b>	<b>1.226</b>	<b>7,854</b>

**Table A6: Number of Holders**

District	Estimate	Standard Error	95% Confidence Interval		Coefficient of Variation	Design Effect	Square Root Design Effect	Unweighted Count
			Lower	Upper				
Botha-Bothe	13,638	975.98339	11,720.68	15,555.96	7.2	3.031	1.741	744
Leribe	37,902	2,461.92191	33,064.56	42,739.06	6.5	7.748	2.784	1,456
Berea	28,112	1,762.14471	24,649.91	31,574.53	6.3	5.112	2.261	1,168



District	Estimate	Standard Error	95% Confidence Interval		Coefficient of Variation	Design Effect	Square Root Design Effect	Unweighted Count
			Lower	Upper				
Maseru	34,231	3,527.34595	27,300.51	41,161.75	10.3	17.306	4.160	1,363
Mafeteng	26,028	1,697.35807	22,692.56	29,362.60	6.5	5.074	2.253	986
Mohale's Hoek	22,240	1,644.95999	19,008.06	25,472.18	7.4	5.483	2.342	851
Quthing	16,355	1,388.52067	13,626.96	19,083.36	8.5	5.177	2.275	750
Qacha's Nek	8,542	587.75509	7,386.91	9,696.59	6.9	1.718	1.311	565
Mokhotlong	20,900	750.66663	19,425.10	22,374.96	3.6	1.208	1.099	807
Thaba-Tseka	19,951	1,174.89430	17,642.50	22,259.42	5.9	3.087	1.757	1,022
<b>Zone</b>								
Lowlands	89,752	5,098.16647	79,735.40	9,9769.44	5.7	18.671	4.321	3,973
Foothills	44,153	4,715.16536	34,888.22	53,417.18	10.7	25.151	5.015	1,517
Mountains	73,575	4,701.58539	64,336.94	82,812.54	6.4	17.559	4.190	2,976
Senqu River Valley	20,419	2,275.30487	15,948.64	24,889.80	11.1	11.334	3.367	1,246
<b>Lesotho</b>	<b>227,899</b>	<b>5689.03919</b>	<b>216,721.10</b>	<b>239,077.06</b>	<b>2.5</b>	<b>76.981</b>	<b>8.774</b>	<b>9,712</b>

**Table A7: Number of Holdings**

District	Estimate	Standard Error	95% Confidence Interval		Coefficient of Variation	Design Effect	Square Root Design Effect	Unweighted Count
			Lower	Upper				
Botha-Bothe	13,638	975.460	11,722	15555	7.2	3.033	1.742	700
Leribe	37,902	2,455.968	33,076	42,727	6.5	7.802	2.793	1,335
Berea	28,145	1,761.840	24,683	31,607	6.3	5.143	2.268	1,094
Maseru	34,234	3,577.975	27,203	41,264	10.5	17.986	4.241	1,311
Mafeteng	26,028	1,671.646	22,743	29,312	6.4	4.954	2.226	903
Mohale's Hoek	22,252	1,643.255	19,024	25,481	7.4	5.497	2.344	803
Quthing	16,395	1,421.120	13602	19,187	8.7	5.425	2.329	636
Qacha's Nek	8,542	591.425	7380	9,704	6.9	1.739	1.319	500
Mokhotlong	20900	743.804	19,439	22,361	3.6	1.191	1.091	745
Thaba-Tseka	19,951	1,169.070	17,,654	22,248	5.9	3.069	1.752	927
<b>Zone</b>								
Lowlands	89,787	5,102.294	79,762	99,813	5.7	19.552	4.422	3,725
Foothills	44,165	4,724.085	34,883	53,447	10.7	25.617	5.061	1440
Mountains	73,614	4,730.759	64,319	82,909	6.4	18.353	4.284	2701
Senqu River Valley	20,419	2,290.431	15,919	24,920	11.2	11.535	3.396	1,088

District	Estimate	Standard Error	95% Confidence Interval		Coefficient of Variation	Design Effect	Square Root Design Effect	Unweighted Count
			Lower	Upper				
Lesotho	227,986	5,716.057	21,6755	239,217	2.5			8,954

**Table A8: Area Planted Maize (Ha)**

District	Estimate	Standard Error	95% Confidence Interval		Coefficient of Variation	Design Effect	Square Root Design Effect	Unweighted Count
			Lower	Upper				
Botha-Bothe	8,640	843,28	6982,99	10296,79	0,10	3,54	1,88	670
Leribe	22,729	2119,73	18564,06	26893,91	0,09	7,20	2,68	941
Berea	19,640	1783,30	16135,73	23143,52	0,09	5,92	2,43	833
Maseru	27,332	4050,92	19372,93	35291,73	0,15	20,39	4,52	1008
Mafeteng	17,995	1669,52	14714,74	21275,42	0,09	5,14	2,27	593
Mohale's Hoek	12,943	1378,51	10234,03	15651,13	0,11	4,69	2,17	507
Quthing	8,236	1136,14	6003,67	10468,34	0,14	5,36	2,32	320
Qacha's Nek	6,019	770,96	4503,78	7533,40	0,13	3,51	1,88	429
Mokhotlong	9,735	822,40	8118,98	11350,75	0,08	2,68	1,64	525
Thaba-Tseka	13,866	1205,17	11497,54	16233,47	0,09	3,30	1,82	718
<b>Zone</b>								
Foothills	37,187	4785,96	27783,75	46591,03	0,13	23,66	4,86	1351
Lowlands	54,776	3945,95	47023,06	62529,34	0,07	12,50	3,54	2531
Mountains	43,477	3883,17	35847,58	51107,18	0,09	13,52	3,68	1926
Senqu River Valley	11,692	1621,58	8506,35	14878,63	0,14	7,99	2,83	736
<b>Lesotho</b>	<b>147,133</b>	<b>5787,58</b>	<b>135761.81</b>	<b>158505,11</b>	<b>0,04</b>	<b>23,62</b>	<b>4,86</b>	<b>6,544</b>

**Table A9: Area Harvested Maize (Ha)**

District	Estimate	Standard Error	95% Confidence Interval		Coefficient of Variation	Design Effect	Square Root Design Effect	Unweighted Count
			Lower	Upper				
Botha-Bothe	7,461.64	768.80	5,951.06	8,972.22	0.10	3.37	1.84	670
Leribe	18,666.81	1,986.55	14,763.55	22,570.06	0.11	7.47	2.73	941
Berea	18,089.85	1,714.42	14,721.30	21,458.40	0.10	5.98	2.45	833
Maseru	21,007.53	3,163.62	14,791.53	27,223.54	0.15	16.35	4.04	1,008
Mafeteng	13,439.14	1,258.83	10,965.75	15,912.52	0.09	3.89	1.97	593
Mohale's Hoek	8,645.70	975.20	6,729.59	10,561.81	0.11	3.70	1.92	507
Quthing	6,041.69	915.58	4,242.72	7,840.66	0.15	4.83	2.20	320
Qacha's Nek	4,602.46	577.49	3,467.79	5,737.12	0.13	2.81	1.68	429

District	Estimate	Standard Error	95% Confidence Interval		Coefficient of Variation	Design Effect	Square Root Design Effect	Unweighted Count
			Lower	Upper				
Mokhotlong	4,966.96	603.49	3,781.21	6,152.72	0.12	3.19	1.79	525
Thaba-Tseka	8,946.01	933.60	7,111.63	10,780.38	0.10	3.10	1.76	718
<b>Ecological Zone</b>								
Lowlands	45,234.87	3,289.00	38,772.53	51,697.22	0.07	10.46	3.23	2,531
Foothills	30,268.45	4,103.91	22,204.93	38,331.97	0.14	20.58	4.54	1,351
Mountains	27,549.02	2,683.11	22,277.14	32,820.90	0.10	9.70	3.11	1,926
SRV	8,815.44	1,241.55	6,375.99	11,254.88	0.14	6.44	2.54	736
<b>Lesotho</b>	<b>111,867.79</b>	<b>4,735.87</b>	<b>102,562.58</b>	<b>121,172.99</b>	<b>0.04</b>	<b>14.44</b>	<b>3.80</b>	<b>6,544</b>

**Table A10: Total Maize Produced (MT)**

District	Estimate	Standard Error	95% Confidence Interval		Coefficient of Variation	Design Effect	Square Root Design Effect	Unweighted Count
			Lower	Upper				
Botha-Bothe	3571.01	367.83072	2,848.28	4,293.74	10.3	.949	.974	458
Leribe	12,651.72	2,481.26268	7,776.45	17,527.00	19.6	1.544	1.242	671
Berea	9,186.23	915.40154	7387.61	10,984.84	10.0	1.930	1.389	588
Maseru	9,893.25	1,756.73623	6,441.55	13,344.95	17.8	1.712	1.308	681
Mafeteng	5,444.37	691.29982	4,086.07	6,802.66	12.7	2.827	1.681	425
Mohale's Hoek	3,469.73	599.44598	2,291.92	4,647.55	17.3	2.359	1.536	365
Quthing	2,080.35	288.18636	1,514.11	2,646.59	13.9	1.748	1.322	237
Qacha's Nek	1,253.20	190.93488	878.04	1,628.35	15.2	1.535	1.239	296
Mokhotlong	1,743.55	199.05574	1,352.44	2,134.66	11.4	1.549	1.244	346
Thaba-Tseka	1,722.88	200.22296	1,329.48	2,116.29	11.6	1.841	1.357	507
<b>Ecological Zone</b>								
Lowlands	2,7734.91	3,023.09202	2,1795.03	3,3674.80	10.9	1.657	1.287	1834
Foothills	12,963.74	2,028.64192	8,977.79	16,949.69	15.6	4.190	2.047	890
Mountains	7,270.74	726.77172	5,842.75	8,698.73	10.0	4.522	2.126	1316
SRV	3,046.90	411.83223	2,237.72	38,56.09	13.5	2.390	1.546	534
<b>Lesotho</b>	<b>51,016.29</b>	<b>3,354.47417</b>	<b>44425.29</b>	<b>57,607.28</b>	<b>6.6</b>	<b>1.773</b>	<b>1.332</b>	<b>4,574</b>

**Table A11: Area Planted Sorghum (Ha)**

District	Estimate	Standard Error	95% Confidence Interval		Coefficient of Variation	Design Effect	Square Root Design Effect	Unweighted Count
			Lower	Upper				
Botha-Bothe	2,248	239,44	1777,30	2719,16	0,11	1,26	1,12	208
Leribe	4,665	634,81	3416,62	5913,70	0,14	3,68	1,92	194
Berea	4,710	583,95	3561,06	5858,08	0,12	2,92	1,71	179
Maseru	4,206	836,62	2561,00	5851,93	0,20	6,92	2,63	200
Mafeteng	4,434	595,89	3262,02	5606,00	0,13	2,93	1,71	134
Mohale's Hoek	1,855	386,77	1094,36	2615,78	0,21	2,59	1,61	83
Quthing	1,298	328,55	651,83	1944,23	0,25	3,04	1,75	53
Qacha's Nek	840	162,16	520,95	1158,81	0,19	1,18	1,09	71
Mokhotlong	809	138,32	537,06	1081,15	0,17	0,90	0,95	44
Thaba-Tseka	1,782	331,13	1130,69	2433,22	0,19	2,05	1,43	115
<b>Zone</b>								
Foothills	9,248	1355,17	6582,35	11913,07	0,15	9,39	3,06	365
Lowlands	11,656	1047,22	9596,18	13715,55	0,09	4,79	2,19	561
Mountains	3,297	456,66	2398,73	4195,03	0,14	2,44	1,56	169
Senqu River Valley	2,647	454,87	1752,38	3541,66	0,17	3,10	1,76	186
<b>Lesotho</b>	<b>26,847</b>	<b>1506,30</b>	<b>23884,89</b>	<b>29810,07</b>	<b>0,06</b>	<b>10,53</b>	<b>3,25</b>	<b>1,281</b>

**Table A12: Area Harvested Sorghum (Ha)**

District	Estimate	Standard Error	95% Confidence Interval		Coefficient of Variation	Design Effect	Square Root Design Effect	Unweighted Count
			Lower	Upper				
Botha-Bothe	1,828.29	216.57	1,402.338	2,254.245	0.118	1.254	1.120	208
Leribe	3,687.73	553.97	2,598.188	4,777.277	0.150	3.490	1.868	194
Berea	4,175.34	542.41	3,108.524	5,242.157	0.130	2.879	1.697	179
Maseru	3,125.43	680.82	1,786.384	4,464.478	0.218	5.886	2.426	200
Mafeteng	3,553.50	539.12	2,493.156	4,613.851	0.152	3.017	1.737	134
Mohale's Hoek	1,489.38	369.62	762.404	2,216.349	0.248	2.842	1.686	83
Quthing	1,041.53	282.20	486.500	1,596.552	0.271	2.767	1.664	53
Qacha's Nek	601.22	112.28	380.383	822.056	0.187	0.758	0.871	71
Mokhotlong	429.38	120.26	192.846	665.918	0.280	1.501	1.225	44
Thaba-Tseka	1,063.60	203.78	662.815	1,464.392	0.192	1.464	1.210	115
<b>Ecological Zone</b>								
Lowlands	7,391.30	1,131.48	5,165.906	9,616.694	0.153	7.534	2.745	365
Foothills	9,725.51	941.36	7,874.043	11,576.980	0.097	4.516	2.125	561
Mountains	1,890.62	299.85	1,300.867	2,480.369	0.159	1.960	1.400	169
SRV	1,987.98	364.72	1,270.635	2,705.320	0.183	2.619	1.618	186

District	Estimate	Standard Error	95% Confidence Interval		Coefficient of Variation	Design Effect	Square Root Design Effect	Unweighted Count
			Lower	Upper				
Lesotho	20,995.41	1,298.85	18,440.819	23,549.994	0.062	6.759	2.600	1,281

**Table A13: Total Sorghum Produced (MT)**

District	Estimate	Standard Error	95% Confidence Interval		Coefficient of Variation	Design Effect	Square Root Design Effect	Unweighted Count
			Lower	Upper				
Botha-Bothe	621.61	109.71564	405.82	837.40	17.7	.945	.972	174
Leribe	1,490.45	222.26725	1,053.30	1,927.61	14.9	.817	.904	170
Berea	1,520.86	198.74936	1,129.96	1,911.76	13.1	1.170	1.082	149
Maseru	894.63	219.75295	462.42	1,326.84	24.6	1.688	1.299	178
Mafeteng	975.95	250.82017	482.64	1,469.26	25.7	2.081	1.443	121
Mohale's Hoek	400.61	88.79789	225.96	575.26	22.2	1.533	1.238	78
Quthing	299.19	86.31429	129.43	468.95	28.8	1.544	1.243	48
Qacha's Nek	154.01	36.64238	81.94	226.08	23.8	1.006	1.003	61
Mokhotlong	60.98	14.05367	33.34	88.62	23.0	.646	.804	34
Thaba-Tseka	141.77	30.38787	82.00	201.53	21.4	1.072	1.035	100
<b>Ecological Zone</b>								
Lowlands	4,006.57	438.63160	3143.87	4,869.27	10.9	1.479	1.216	494
Foothills	1,726.62	277.72652	1,180.38	2,272.85	16.1	2.701	1.643	308
Mountains	315.85	61.70962	194.47	437.22	19.5	1.175	1.084	148
SRV	511.03	107.18413	300.22	721.84	21.0	2.013	1.419	163
<b>Lesotho</b>	<b>6,560.06</b>	<b>479.52319</b>	<b>5,616.93</b>	<b>7503.19</b>	<b>7.3</b>	<b>1.563</b>	<b>1.250</b>	<b>1113</b>

**Table A14: Area Planted Wheat (Ha)**

District	Estimate	Standard Error	95% Confidence Interval		Coefficient of Variation	Design Effect	Square Root Design Effect	Unweighted Count
			Lower	Upper				
Botha-Bothe	184	42,61	100,17	268,30	0,23	0,35	0,59	13
Leribe	1,303	462,96	389,63	2216,21	0,36	5,55	2,36	49
Berea	969	274,25	428,42	1510,45	0,28	2,39	1,54	38
Maseru	1,222	427,03	379,56	2064,38	0,35	4,81	2,19	57
Mafeteng	368	70,23	229,72	506,80	0,19	0,61	0,78	21
Mohale's Hoek	1,050	226,44	603,41	1496,82	0,22	1,42	1,19	31
Quthing	1,386	358,90	677,72	2093,75	0,26	2,97	1,72	42

District	Estimate	Standard Error	95% Confidence Interval		Coefficient of Variation	Design Effect	Square Root Design Effect	Unweighted Count
Qacha's Nek	1,056	424,63	217,88	1893,26	0,40	4,53	2,13	52
Mokhotlong	1,824	332,27	1168,51	2479,48	0,18	3,09	1,76	112
Thaba-Tseka	2,286	362,61	1570,80	3001,46	0,16	1,70	1,30	93
<b>Zone</b>								
Foothills	240	82,69	76,59	402,82	0,35	1,37	1,17	13
Lowlands	1,878	317,98	1251,03	2505,61	0,17	1,71	1,31	94
Mountains	8,449	1030,25	6416,83	10481,63	0,12	7,57	2,75	366
Senqu River Valley	1,081	359,39	372,13	1790,10	0,33	3,52	1,88	35
<b>Lesotho</b>	<b>11,648</b>	<b>1039,68</b>	<b>9597,37</b>	<b>13699,37</b>	<b>0,09</b>	<b>8,45</b>	<b>2,91</b>	<b>508</b>

**Table A15: Area Harvested Wheat (Ha)**

District	Estimate	Standard Error	95% Confidence Interval		Coefficient of Variation	Design Effect	Square Root Design Effect	Unweighted Count
			Lower	Upper				
Botha-Bothe	72.99	19.25	35.01	110.97	0.26	0.35	0.59	13
Leribe	843.13	306.84	237.82	1,448.44	0.36	4.93	2.22	49
Berea	821.60	267.88	293.15	1,350.06	0.33	2.88	1.70	38
Maseru	781.26	314.30	161.23	1,401.29	0.40	4.61	2.15	57
Mafeteng	206.77	45.26	117.48	296.06	0.22	0.60	0.78	21
Mohale's Hoek	602.10	185.08	236.99	967.22	0.31	2.03	1.43	31
Quthing	1,052.76	301.22	458.53	1,646.98	0.29	2.53	1.59	42
Qacha's Nek	829.48	318.03	202.09	1,456.88	0.38	3.37	1.84	52
Mokhotlong	1,265.30	261.59	749.26	1,781.34	0.21	2.50	1.58	112
Thaba-Tseka	1,764.95	306.97	1,159.38	2,370.52	0.17	1.56	1.25	93
<b>Ecological Zone</b>								
Lowlands	108.14	48.36	12.73	203.54	0.45	0.91	0.96	13
Foothills	1,112.65	210.32	697.74	1,527.56	0.19	1.48	1.22	94
Mountains	6,090.57	770.04	4,571.48	7,609.66	0.13	5.05	2.25	366
SRV	928.98	329.85	278.28	1,579.69	0.36	3.30	1.82	35
<b>Lesotho</b>	<b>8,240.34</b>	<b>809.88</b>	<b>6,642.67</b>	<b>9,838.02</b>	<b>0.10</b>	<b>5.12</b>	<b>2.26</b>	<b>508</b>

**Table A16: Total Wheat Produced (MT)**

District	Estimate	Standard Error	95% Confidence Interval		Coefficient of Variation	Design Effect	Square Root Design Effect	Unweighted Count
			Lower	Upper				
Botha-Bothe	14.97	6.59431	1.97	27.98	44.0	.547	.739	10
Leribe	425.83	154.95745	120.15	731.51	36.4	3.929	1.982	41
Berea	406.82	179.39488	52.93	760.71	44.1	1.673	1.294	38
Maseru	405.85	149.13910	111.65	700.05	36.7	2.154	1.468	53
Mafeteng	75.99	23.49397	29.65	122.34	30.9	.848	.921	21
Mohale's Hoek	1,157.47	967.65053	-751.37	3,066.32	83.6	1.203	1.097	29
Quthing	203.51	41.32299	122.00	285.03	20.3	1.310	1.145	38
Qacha's Nek	147.16	50.45835	47.62	246.70	34.3	2.181	1.477	45
Mokhotlong	549.76	84.58085	382.92	716.61	15.4	1.081	1.040	95
Thaba-Tseka	319.49	75.02188	171.50	467.48	23.5	1.507	1.228	88
<b>Ecological Zone</b>								
Lowlands	621.57	207.46902	212.30	1,030.84	33.4	1.651	1.285	84
Foothills	36.56	21.80896	-6.46	79.58	59.7	1.873	1.369	11
Mountains	2,932.39	1,001.98419	955.82	4908.97	34.2	1.277	1.130	332
SRV	116.34	39.56328	38.29	194.38	34.0	2.420	1.555	31
<b>Lesotho</b>	<b>3,706.86</b>	<b>1,016.07856</b>	<b>1,702.48</b>	<b>5,711.24</b>	<b>27.4</b>	<b>1.285</b>	<b>1.134</b>	<b>458</b>

**Questionnaire**

**THE KINGDOM OF LESOTHO  
2019/2020 LESOTHO AGRICULTURAL CENSUS  
HOUSEHOLD QUESTIONNAIRE**

**SECTION A: IDENTIFICATION**

A.	IDENTIFICATION INFORMATION	Codes	
A1. District			
A2. Constituency			
A3. Community Council			
A4. PSU Code			
A5. Serial Number of PSU			
A6. Agro-Zone			
A7. Village Name			
A8. Chief/Headman			
A9. Structure Number			
A11. Household Number			
A12. Name of Household Head			
A13. Name of Respondent		A14. Contact number of Respondent	

STAFF DETAILS			
<b>Name of Enumerator</b>			
<b>Number of Visits</b>	<b>1</b>	<b>2</b>	<b>3</b>
<b>Start Date</b>			
<b>Start Time</b>			
<b>End Date</b>			
<b>End Time</b>			
<b>Name of Supervisor</b>			
<b>Date of Inspection</b>			



**SECTION B: DEMOGRAPHIC AND SOCIAL CHARACTERISTICS (THEME 1 and THEME 8)**

<b>CODES FOR RELATIONSHIP TO HEAD(B2)</b>	<b>CODES FOR MARITAL STATUS(B5)</b>	<b>CODES FOR EDUCATIONAL LEVEL ATTAINED(B6)</b>	<b>CODES FOR MAIN &amp; SECONDARY ACTIVITIES (B7 and B8)</b>	<b>CODES FOR STATUS OF MAIN &amp; SECONDARY ACTIVITY (B7_1 and B8_1)</b>	<b>CODES FOR AGRICULTURAL TRAINING/ EDUCATION OF HOLDER (B12)</b>
01 Head of Household	00 Never Married	00= Pre-school	1=Crop production	1= Employee	00=None
02 Spouse	01 Monogamously Married	(01-07) Std 1-7	2= Livestock	2= Employer	01= Informal learning in agriculture
03 Partner (Cohabiting)	02 Polygamously Married	(11-15) Form 1-5	3= Fisheries	3 = Own-account Worker	02=non-formal education in agriculture
04 Son/Daughter	03 Cohabiting	18=None	4= Forestry	4= Contributing family worker	03=Secondary Education in Agriculture
05 Son/Daughter-in-law	04 Separated	19= Non-Formal Education	5=Aquaculture	5= Member of Producers' Cooperative	04= Tertiary Education in Agriculture
06 Step Child	05 Divorced	20= Diploma/Certificate after Primary	6=Trader	6=N/A (if B7&B8=14)	
07 Sibling	06 Widowed	21= Vocational and Technical after Primary	7= Artisan	11= Other (Specify) .....	
08 Own Parent	07 Don't know	22= Diploma/Certificate after Secondary	8= Agricultural paid job outside holding		
09 Step Parent		23=.Vocational Technical after Secondary	9 = Non agriculture paid job		
10 Parent-in-law		24= Diploma/Certificate after High School	10= No activity-looking for work		
11 Grand Parent		25= Vocational and Technical after High School	11= No activity - not looking for work		
12 Great/Grandchild		26=Graduate	12 = Student		
13 Other Relative		27=Post Graduate Diploma /Honours	13 = Household work		
14 Not Related		28=Masters	14 = Too young/old		
		29=PHD			
		30= Other (Specify).....			
		...			
		99= Don't Know			

<b>B14.</b> What is the main purpose of production of the holding?	<b>B15.</b> Apart from agricultural production, what were the other economic activities of the household? (Multiple response)	<b>B16.</b> What is the MAIN source of income for the household?	<b>B17.</b> How much is the contribution of agriculture to the total household income?
1=Producing only for sale	A=Support activities to agriculture and post-harvest crop activities	01=Subsistence Farming	<b>0=NONE</b> (For a livestock farming household, if livestock is still too young (kids or calves only))
2=Producing mainly for sale with some own consumption	B=Hunting, trapping, and related service activities	02= Cash Crop	1=Less than a quarter
3=Producing mainly for own consumption with some sales	C=Forestry and logging	03= Livestock	2=A quarter to less than a half
4=Producing mainly for own consumption	D= Fishing and aquaculture	04 = Livestock Products	3=A half to less than three-quarters
	E= Manufacturing - Processing of agricultural products (agro-processing), Handicrafts	05= Remittance/Transfers	4=Three-quarters to less than all
	F= Wholesale and retail trade, repair of motor vehicles and motorcycles	06 = Wage/Salary	5=All income
	G=Hotels and restaurants (excluding agrotourism)	09= Social Grant	
	H=Agrotourism	13 = Other (Specify).....	
	Q=None		
	X= Other (specify.....)		

**SECTION C: LAND USE AND CROPS (THEME 2 AND THEME 4)**

<b>Ci: Land Use during 2019/2020 Agricultural Year (ask for each field)</b>								
<b>Holder ID (from Section B11)</b>  <b>CAPI (INCLUDE NAME OF HOLDER FOR EASY ADMINISTRATION OF QUESTIONNAIRE)</b>	<b>C1_1.</b> How many fields does (Holder) operate? (If B11=1 or 3)	<b>C1_2.</b> Field No.	<b>C1.</b> Where is the field located?  1= Within PSU 2= Outside PSU but within District	<b>C2.</b> What is the Land use (LU) type for this field? ( <b>Refer to codes</b> )	<b>C3.</b> What is the area of the field by land use in acres?  <b>(Holder Estimate)</b>	<b>C4.</b> What is the tenure of the land?  1= Inherited 2= Purchased 3= Community land 4= Use right from Local Authority 5= Sharecropping 6= Borrowed 7= Rented 11= Other (Specify... )  <b>End of question for fallow fields</b>	<b>C5.</b> What were the soil conservation measures used in the field? ( <b>Multiple response</b> )  A= Terraces/Contour B= Cover Cropping C= Crop Rotation D= Conservation Agriculture Q= None X= Other (specify).....	<b>C6.</b> Check C2, if holder has: 1. Temporary crops only, <b>Continue to Cii;</b> 2. Permanent Crops only, <b>Skip to Ciii;</b> 3. Both Temporary and Permanent Crops <b>Continue to Cii and Ciii</b>

**Cii: Land Use Under Temporary Crops during 2019/2020 Agricultural Year (ask for each field) If a field is planted to more than one crop, field number must be divided by each crop**

<b>Holder ID (from Section B11)</b>  <b>CAPI (INCLUDE NAME OF HOLDER FOR EASY ADMINISTRATION OF QUESTIONNAIRE)</b>	Field No.	<b>C7_1.</b> Is this (field) Pure (Compact) stand or mixed?  1= Yes, pure	<b>C7.</b> What type of crop is planted on the field?  <b>(See Crop)</b>	<b>C8.</b>	<b>C9.</b> What proportion of the area was planted to temporary crops?  01=1/4 of field	<b>C10.</b> What proportion of the area planted was harvested?  00=None	<b>C11.</b> What was the purpose for harvested crop? ( <b>Multiple response</b> ) A=Food for human consumption	<b>C12.</b> Was the area harvested fertilized?  <b>1= Yes</b> <b>2= No</b>	<b>C13.</b> What type of fertilizer was used?  <b>(Refer to codes)</b>

		2= Yes, mixed	Codes )		02=1/2 of field 03=3/4 of field 04=Whole field	01=1/4 of field 02=1/2 of field 03=3/4 of field 04=Whole field  If None Skip to next Field	B=Feed for animals C=Biofuels X=Other uses (Specify)	<b>If no skip to C14_1</b>	

**Ciii: Land under Permanent Crops during 2019/2020 Agricultural Year. If a field is planted to more than one crop, field number must be divided by each crop**

Holder ID (from B11)  CAPI (INCLUDE NAME OF HOLDER FOR EASY ADMINISTRATION OF QUESTIONNAIRE)	Field No.	C14_1. Is this field Scattered or Compact?  1= Scattered 2= Compact	C14. What was the type of tree planted on the field?  (See tree codes)  Check if C14_1 =1 Skip to C21	C15. What was the total number of trees in compact plantations?	C16. What proportion of the area was planted to compact plantations  01=1/4 of field 02=1/2 of field 03=3/4 of field 04=Whole field	C17. Was the area planted fertilized?  1= Yes 2= No  (If No Skip to C19)	C18. What type of fertilizer was used?  (Refer to codes)	C19. What was the total number of bearing trees in compact plantations?	C20. What was the purpose for harvested crop?  01=Food for human consumption 02=Feed for animals 03=Biofuels 05=Other uses (Specify)	C21. What was the total number of trees in scattered plantations?  Write 00 if none

Codes for Temporary Crops (C7)	Codes for Permanent Crops (C14)	Land Use Codes(C2)	Codes for Types of Fertilizer(C13 and C18)
A=Maize	A= Apple	01= Land under temporary crops	1= Mineral fertilizers (Inorganic fertiliser)
B=Wheat	B= Peach	02= Land under temporary meadows and pastures	2=Organo-mineral fertilizers
C=Sorghum	C= Grape	03= Land temporary fallow	3= Organic fertiliser
D=Beans	D= Pear	04= Land under permanent crops	4=Biofertilizers
E=Peas	E= Apricot	05= Land under permanent meadows and pastures	5=Manure
	F= Plum	06= Land under farm buildings and farmyards	9=Other organic materials to enhance plant growth
	G= Quince	07= Forest and other wooded land	
	H= Orange	08= Area used for aquaculture ( including inland and coastal waters if part of the holding)	
I=Cabbage	I= Pomegranate	09= Land under temporary and permanent crops	

J=Tomato	J=Nectarines	013= Other area not elsewhere classified	
K=Spinach	K= Cherry		
L=Carrots	L= Blueberries		
M=Sepaile	M=Raspberry		
N=Rapa	N=Fig		
O=Beetroot	O= Chest Nuts		
P= Potatoes	P= Lemon		
Q=Onion	Q= Olives		
R=Lettuce	R= Prickle pears		
S=Spring onions			
T=Green pepper	X= Other (Specify)		
U=Bell pepper			
V=Pumpkin			
X= Other (Specify....)			

**Civ: Production and Disposition of Crop Products (Sum of All crops from individual holders) (C23=C25+C27+C28+C29+C30+C31+C32+C33)**

Holder ID (from B11)	C22.Crop Code (refer to crop codes)	C23. What was the quantity harvested? (Response in kg)  Enter 00 if no harvest and skip to next crop	C24.	C25. What quantity of unprocessed crop harvested was sold? (If no sale, record 00 and skip to C27)	C26. To whom was quantity mostly sold to? 1= Govt. organizations (through auction sales) 2=Parastatals 3= Private trader local market village 4= Private trader district market 5= Private trader at farm gate 6= Development Partners 7=NGOs 8= Neighbour/Relative 11= Other, specify
01					
02					
03					

**Production and Disposition of Crop Products Cont'd**

Holder ID	Crop Name	Crop Code (refer to crop codes)	C27. What quantity was processed for sale? (if none record 00).	C28. What quantity was used for animal feed? (if none record 00).	C29. What quantity was given to: (if none record Q). A. Land lord / proprietor B. For labour C. Friends/relatives D. Exchange for other goods Q. None X. Others (specify)	C30. What quantity was consumed by household? (including that before harvest)	C31. What quantity was used for seed? (if none record 00). Not applicable to fruits and vegetables	C32. What quantity was stored/ currently in storage? (if none record 00).	C33. How much was lost after harvest (%)? (Holder estimate)  Write 00 if none then skip C34 to D1	C34. Where did MOST losses occur?  1= on the field 2= during the storage 3= during the transport 4=Loss at Processing 5=Loss at Packaging 6=Loss at Sales 8 = Others
01										

02										

**SECTION D: AGRICULTURAL PRACTICES (THEME 6)**

<b>Holder ID (From B11)</b>  CAPI (INCLUDE NAME OF HOLDER FOR EASY ADMINISTRATION OF QUESTIONNAIRE)	<b>D1.</b> Which of the following seed inputs did (holder) use?  <b>01=Yes</b> <b>02= No</b> <i>(if no, skip to next input)</i>  <b>Multiple response</b>	<b>D2.</b> What was the main source of seeds?	<b>D3.</b> Which of the following fertilizer inputs did (holder) use?  <b>01=Yes</b> <b>02= No</b>  <i>If none skip to D5</i> <b>Multiple response</b>	<b>D4.</b> What was the main source of fertilizer used?	<b>D5.</b> Which of the following pesticides inputs did (holder) use?  01=Yes 02= No  <i>If none skip next holder</i> <b>Multiple response</b>	<b>D6.</b> What was main source of Pesticides?
	A. Self-production		A= Mineral fertilizers (Inorganic fertilizer)		A. Insecticides	
	B. Local seeds	1=Own	B=Organo-mineral fertilizers	1=Own	B. Herbicides	1=Own
	C. Improved seeds	2=Exchanges within community	C= Organic fertilizer	2=Markets	C. Fungicides	2=Markets
	D. Hybrid seeds	3=Markets	D=Biofertilizers	3=Cooperatives	D. Rodenticides	3=Cooperatives
	E. Genetically Modified (GM) seeds	4=Seed company	E=Manure	4=Government	Q=None	4=Government
	F. Seedlings	5=Donation	Q=None	5=NGOs	X. Other pesticides (Specify...)	5=NGOs
		6=Cooperatives	X=Other organic materials to enhance plant growth			
		7=Government				
		8=NGOs				

## SECTION E: IRRIGATION SYSTEM (THEME 3)

<b>E. IRRIGATION SYSTEM</b>						
<b>E1.</b> Was any of the holding's field irrigated during 2019/2020 Agricultural Year? 01= Yes (Skip to E3) 02=No if No, continue <b>E2.</b> What was the main reason for not irrigating? <i>(Refer to codes) Skip to Next Section</i>						
Holder ID (From B11) CAPI (INCLUDE NAME OF HOLDER FOR EASY ADMINISTRATION OF QUESTIONNAIRE)	Field No.	E3. What was the main source of irrigation water? <i>(Refer to codes)</i>	E4. What was the main method of irrigation used? <i>(Refer to codes)</i>	E5. What area was irrigated (acres)?		
1						
2						

<p><b>(E2)</b> <b>Reasons for not Irrigating</b></p> <p>01 No irrigation System          02 Inadequate Water          03 Adequate rains (no need)          09 Other (Specify) <i>(for each field)</i></p>	<p><b>(E3)</b> <b>Source of Irrigation Water</b></p> <p>1= Surface water River /Lake/Pond/Mountain <i>(by gravity)</i>          2= Surface water (River /Lake/Pond <i>(pump)</i>)          3= Dam /Reservoir /earth dam (Manual watering (buckets/cans)          4=Dam /Reservoir /earth dam (pump)          5= Ground water (Deep Well/Tube well) (Motor Pump)          6= Ground water (Shallow well) Dam /Reservoir /earth dam (Manual watering (buckets/cans)          7=Mixed surface water and groundwater          8= Standpipe          9= Harvested          10 = Borehole (manual)          11 = Borehole (mechanized)          12 = Treated Waste water/untreated</p>	<p><b>(E4)</b> <b>Irrigation Method</b></p> <p>01 Gravity          02 Hand Pump          03 Motor Pump          04 Manual watering (buckets/cans)          07 Other (Specify) <i>(for each field)</i></p>
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## SECTION F: SERVICES FOR AGRICULTURE (THEME 7)

### Fi: Extension Services

<b>Holder ID (Form B11)</b>	<b>F1.</b> Did the holder receive extension services during 2019/2020 Agricultural Year?  1= Yes 2= No <b>(IF NO, skip to F5)</b>	<b>F2.</b> Which of the following extension service providers did the holder interact with? <b>(SELECT ALL THAT APPLY)</b>  A. MAFS veterinary staff B. MAFS agricultural extension officer C. Farmers' unions D. Local/INGO E. Fisheries F. Forestry G. Private sector Dealers H. Environmental Protection Agency (EPA) X. Other .....	<b>F3.</b> Which of the following extension services did holder receive? <b>(SELECT ALL THAT APPLY)</b>  A. Farm management B. Selection of crop C. Input use D. Credit E. Farm mechanization F. Livestock husbandry G. Plant protection H. Environmental conservation I. Marketing J. Water irrigation and drainage K. Nutrition X. Other	<b>F4.</b> Which of the following extension service providers' best satisfied the holder's need? <b>(SELECT ALL THAT APPLY)</b>  A. MAFS veterinary staff B. MAFS agricultural extension officer C. Farmers' unions D. Local/INGO E. Fisheries F. Forestry G. Private sector Dealers H. Environmental Protection Agency (EPA) I. Nutrition  Q. None. X. Other .....  <b>(Note: evaluate only the selected responses in F2.)</b>	<b>F5.</b> Did the holder receive any agricultural related information?  1= Yes 2= No  <b>IF NO, GO TO SECTION F8</b>	<b>F6.</b> What type of Information did holder receive? <b>(SELECT ALL THAT APPLY)</b>  A. Weather B. Crop varieties C. New agricultural practices D. Farm machinery E. Credit facilities F. Plant diseases and pests G. Marketing H. Livestock husbandry & diseases I. Agronomic practices J. Water & Irrigation K. Fish farming L. HIV/AIDS M. Nutrition X. Other	<b>F7.</b> What was the MAIN source of information? 01= Radio 02= Television 03= Internet 04= Newspaper 05= Agric. Magazines/Bulletins 06= Extension officers 07= Farmer to farmer 08= Farmers' associations 09= Agric. show/exhibitions 10= Neighbour 15= Other (Specify...)
01							
02							
03							



## Fii: Access to Agricultural Credit/Loan

Holder ID (From B11)	F8. Did this holder apply for a Credit/Loan for agricultural purposes in the last 5 years?  1= Yes 2 = NO, <i>Skip to F15</i>	F9. Was the credit/loan granted?  1= Yes 2 = No <i>If No, Skip to F14</i>	F10. What was the MAIN Source of Credit/Loan received during last 5 years?  01= Commercial Banks 02= Microfinances institutions 03= Farmers' Union 04= Input supplier 05= Money lenders 06= Self-help group 07= Government 08= Cooperatives 09= NGO 10= Family and friends 15= Other	F11. What was the credit/Loan Period?  1= Less than 12 months 2= Between 12 and 36 months 3= More than 36 months 8= Others (specify)	F12. What was the MAIN purpose for the credit/Loan?  01= Agriculture labour 02= Seeds 03= Fertilizer 04= Agro chemicals 05= Farm implements and machinery 06= Irrigation structures 07= Livestock 08= Aquaculture (marine resources and fisheries) 09= Trading agricultural produce 10= Tractor 11= Borehole 12= De-bushing (clearing of land) 13= Threshing 18= Other agricultural purpose (Specify)	F13. What was the MAIN Type collateral security?  0= No collateral 1= Land title 2= Crops 3= Livestock 4= Salary 5= Third party 6= Property (Movable/Immovable) 7= Investment 11= Other (specify)	F14. Why was the credit/loan not granted? (MAIN Reason)  1= Lack collateral security 2= Not profitable 3= Income too low 4= Previous debt problems 5= Could not get a guarantor 6= Amount applied for too high 7= Inappropriate purpose of loan 8= Did not meet requirements 9= Late application 12= Other	F15. What were the reasons for not seeking credit/loan?  01= No need for credit 02= Unavailability of lending facilities 03= Interest too high 04= Negative Past experience 05= Unaware of the service 09= Other (specify)
01								
02								
03								

## SECTION G: FARM IMPLEMENT AND ASSETS (Household Level)

Farm implements and assets used and owned by the household during 2019/2020 Agricultural Year			
Machinery/Equipment	G1. Did the holding use (Name of Equipment) during the past 12 months?  01=Yes 02= No <i>(If no, go to next equipment)</i>	G2. What was the source of ownership?  1= Owned solely by the holder 2= Owned by a member(s) of the holder's household 3= Owned by the household jointly with other households 4= Provided by the landlord 5= Provided by other private holders (excluding cooperatives) 6= Provided by a cooperative (farmers' Union)	G3. How many of the equipment used were owned by the holding?  <i>(If G2=1)</i>

				7=Provided by a private agricultural service establishment 8=Provided by a government agency 9=Rented 10=Borrowed 14=other (specify)	
S/N	Machinery	Crops	Livestock		
1	Forage Harvester				
2	Combine Harvester/				
3	Truck/Other Vehicles				
4	Generator				
5	Sprayer				
6	Incubator				
7	Ridger				
8	Scotch Cart				
9	Tractor Seed Planter				
10	Tractor				
11	Tractor Plough				
12	Threshers				
13	Power Tiller				
14	Milking Machine				
15	Disks Harrower				
16	Water Pump (Pompi)				
17	Honey Extractor				
18	Drip Irrigation				
19	Other (specify).....				
	<b>Manual</b>				
20	Hoe				
21	Digging Fork				
22	Rake				
23	Spade				
24	Hand Pump And Other Hand Irrigation Devices				
25	Transplanter				
26	Sprayer (Knap Sack)				
27	Ox-Plough				
28	Seed Planter				

29	Scotch Cart				
30	Disks Harrower				
31	Cultivator (Sekofolo)				
32	Yoke				
33	Other (specify)				

**SECTION H. Non- Residential Buildings (Holding Level)**

**H1.** Did the holding use non-residential building for agricultural purposes during 2019/2020 Agricultural Year? 01= Yes 02= No **(If No Skip to Section J)**

ID (CAPI generated)	<b>H2.</b> What was the purpose of the non-residential building? 1=Keeping livestock other than poultry 2=Keeping poultry 3=Storing agricultural products 4=Mixed or other purposes	<b>H3.</b> What was the Area (acres) for each type?	<b>H4.</b> What is the tenure of the building? 01=Owned 02=Rented 03=Borrowed 07=Other
1			
2			

**SECTION J: LABOUR INPUT (WORK ON THE HOLDING) (THEME 9) Ji: Labour Input of Household Members**

Household member ID(From B1, Col 1)	J2. Name of Household member	J3. Was (name) male or female? 01=Male 02=Female	J4. What was (name's) age? <i>(In completed years)</i>	J5. Did (name) work on the holding during the past agricultural year? 1= Yes 2= No <b>If No, end interview for member</b>	J6. What was (name's) working time on the holding? <i>(Refer to codes)</i>

J1. Did any member of the household work on this holding in the past agricultural year? Yes= 1, No=2 **if No skip to J7**

Employee ID (CAPI generated)	J8. Names of farm employees	J9. Was (name) male or female? 01=Male 02=Female	J10. What was (name's) age? <i>(In completed years)</i>	J11. What was (name's) terms (nature) of employment?	J12. What was (name's) working time on the holding? <i>(Refer to codes)</i>	J13. What types of services were provided by (name)?(multiple response) <i>(Refer to codes)</i>	J14. Did (name) work for pay? 01=Yes 02= No <i>(Skip to Next employee)</i>	J15. What was the form of payment? <i>(Multiple response)</i> <i>(Refer to codes)</i>

J7. Did this holding have any employees for the past agricultural year? Yes= 1, No=2 **if No skip to Next Section**

Codes for Working Time	Codes for Type of Service	Codes for Form of Payment	Codes for Terms (Nature) of Employment
01= Full-time work for less than 1 month in a Year	01=Tree pruning	01= Money	01= Temporary
02=Full-time work 1-3 months in a Year	02= Crop harvesting	02= Farm produce	02= Permanent
03=Full-time work 4-6 months in a Year	03= Weeding	03= Exchange of Labour	
04= Full-time work 7+ months in a Year	04= Planting	05= Other forms of in-kind labour	
05= Part-time work for the less than 1 month in a Year	05= Applying pesticides		
06 = Part-time work 1-3 months in a Year	06= Herding		
07= Part-time work 4-6 months in a Year	07= Sheep/goat Shearing		
08= Part-time work 7 + months in a Year	08= Farm Administrations		
	11= Other (Specify)		

**SECTION K: LIVESTOCK (THEME 5) (Holding)**

<b>Ki. Type of Livestock</b>	<b>K1. Does the holding keep/rear any livestock? (Note that the reference period for the livestock is the day of enumeration) 01= Yes 02= No (Multiple response)</b>	<b>K2. What is MAIN the type of livestock system for the holding? (If Ki=01to06) 01= Grazing System 02= Industrial System 03= Mixed System</b>
01=Cattle		
02=Sheep		
03=Goats		
04=Horses		
05=Donkeys		
06=Mules		
07=Pigs		
08=Rabbits		
09=Chicken		
10=Duck		
11=Geese		
12=Turkey		

**Kii. CATTLE**

<b>Type of Cattle</b>	<b>K3a. Did the holding keep any Improved Cattle (Exotic)? 1=Yes 2=No if No, skip to K3d</b>	<b>K3b. How many improved cattle does the holding have?</b>	<b>K3c. How many are owned by female holders?</b>	<b>K3d. Did the holding keep any indigenous cattle? 1=Yes 2=No if No, skip to next type</b>	<b>K3e. How many indigenous cattle does the holding have?</b>	<b>K3f. How many are owned by female holders?</b>	<b>K4. How many cattle are kept mainly for meat/milk/breeding/draught Power?</b>			
							Meat	Dairy	Breeding	Draught Power
	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>		<b>B</b>	<b>C</b>	<b>D</b>
Females Calves under 1 Year										
Female Calves 1 Year but less than 2 Years										
Males Calves under 1 Year										

Male Calves 1 Year but less than 2 Years										
Bulls (2 years and over)										
Cows (2 years and over)										
Oxen										
<b>Total Cattle</b>										

**Kiii. SHEEP**

Type of Sheep	K5a. Did the holding keep any Improved Sheep (Exotic)? 1=Yes 2=No if No, skip to K5d	K5b. How many improved sheep does the holding have?	K5c. How many are owned by female holders?	K5d. Did the holding keep Sheep? 1=Yes 2=No if No, skip to next type	K5e. How many indigenous sheep does the holding have?	K5f. How many are owned by female holders?	K6. How many sheep are kept mainly for meat/wool/breeding?		
							Meat	Wool	Breeding
	A	B	C	D	E	F	A	B	C
<b>Improved Sheep (Exotic)</b>				<b>Indigenous Sheep</b>					
Females Sheep under 1 Year									
Female Sheep 1 Year and above									
Males Sheep under 1 Year									
Male Sheep 1 Year and above									
<b>Total Sheep</b>									

**Kiv. GOATS**

Type of Goats	K7a. Did the holding keep any Improved Goats (Exotic)? 1=Yes 2=No if No, skip to K7d	K7b. How many improved goats does the holding have?	K7c. How many are owned by female holders?	K7d. Did the holding keep any Improved Goats (Exotic)? 1=Yes 2=No if No, skip to next type	K7e. How many improved goats does the holding have?	K7f. How many are owned by female holders?	K8. How many Goat are kept mainly for meat/mohair//breeding?		
							Meat	Mohair	Breeding
	A	B	C	D	E	F	A	B	C
	<b>Improved Goats (Exotic)</b>			<b>Indigenous goats</b>					
Females Kids under 1 Year									
Female Goats 1 Year and above									
Males Kids under 1 Year									
Male Goats 1 Year and above									
<b>Total Goats</b>									

**Kv. PIGS**

Type of Pigs	K9a. Did the holding keep any Improved Pigs (Exotic)? 1=Yes 2=No if No, skip to K9d	K9b. How many improved pigs does the holding have?	K9c. How many are owned by female holders?	K9d. Did the holding keep any indigenous Pigs? 1=Yes 2=No if No, skip to next type	K9e. How many indigenous pigs does the holding have?	K9f. How many are owned by female holders?	K10. How many pigs are kept mainly for meat/breeding?							
							A	B	C	D	E	F	Meat	Breeding
													A	B
Piglet less than 3months														
Pigs 3months to 6months														
Pigs Over 6months														
<b>Total</b>														

**Kvi. EQUINES**

Type	K11. How many male/female equines does the holding own, raise or manage?		K12. How many of each are owned by female holders?		K13. How many equines are kept mainly for transport/draught power/breeding?		
	Male	Female	Male	Female	Transport	Breeding	Draught Power
					A	B	C
Horses							
Donkeys							
Mules							

**Kix. Livestock Feeding Practices during 2019/2020 Agricultural Year**

K19. What is the type of feeding for each type of livestock? (*multiple response*)

**Kvii. POULTRY**

Type of Poultry	K14. What is the number of poultry kept by the holding?	K15. How many are owned by female holders?	K16. How many are kept mainly for meat/eggs/breeding		
			Meat	Eggs	Breeding
<b>Improved Chicken</b>					
Koekoek					
Other Improved					
<b>Sub-Total</b>					
Indigenous Chicken					
<b>Total Chicken</b>					
Ducks					
Geese					
Turkeys					
<b>Grand Total</b>					

**Kviii. RABBITS**

	Male	Female	Total
K17. How many male/female rabbits does the household own, raise or manage?			
K18. How many are owned by female holders?			

**Type of Feeding**

- 01 Forages/Roughages
- 02 Agro-industrial by-products
- 03 Swill/Household Waste
- 04 Supplements/Additives
- 05 N/A
- 09 Other (Specify)



<b>Type</b>	<b>Improved</b>	<b>Unimproved</b>
Cattle		
Sheep		
Goats		
Pigs		
Horse		
Donkeys		
Mules		
Poultry		
Rabbits		