REPUBLIC OF ZAMBIA
**MINISTRY OF FISHERIES
AND LIVESTOCK**

ZAMBIA
STATISTICS
AGENCY
"Quality Statistics for Development"

2023 LIVESTOCK SURVEY REPORT

OFFICIAL STATISTICS
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Republic of Zambia

REPUBLIC OF ZAMBIA

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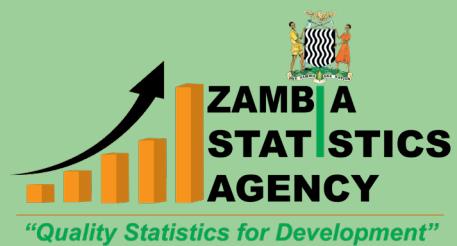
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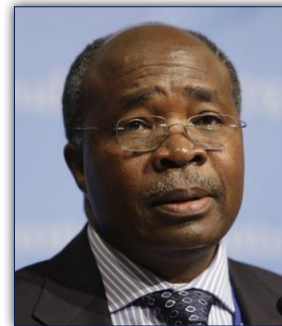
"Quality Statistics for Development"

2023 LIVESTOCK SURVEY REPORT

August 2024

Preface

In pursuit of evidence-based planning, monitoring, and evaluation, the Government of the Republic of Zambia has prioritized the importance of quality statistics. Livestock statistics, among other key indicators, play a crucial role in analysing sector performance and assessing contributions to the National Gross Domestic Product (GDP). Accurate and up-to-date statistics therefore, are essential for informed decision-making and for reporting on various national and international frameworks such as the **Sustainable Development Goals, the Malabo Declaration, the National Agricultural Investment Plans (NAIP), Vision 2030 and National Development Plans**.

The 2023 Livestock survey report is the third (3rd) in the series of surveys following the Livestock and Aquaculture Census of 2017/18 and the Livestock Survey of 2022 that have been produced in the past. The Government conducted the 2023 Livestock Survey, to reaffirm its commitment to maintaining updated livestock information as a top priority. The objective of this report is to compile key livestock statistics for purposes of sharing performance trends in livestock development so as to inform operational policy making. It provides more insights on how the sector has performed towards the target of achieving seven (7) million cattle by the year 2027. This report remains critical in providing the much-needed information to inform the aforementioned trajectory.

We are confident that the results and recommendations contained in this report will not only gauge the economic performance of the livestock sub-sector but also contribute to better informed policies, programmes and practices. This report will also serve as feedback to ascertain whether actions in the livestock subsector and beyond are successful in improving livestock development in the country. Ultimately, these findings will empower policymakers to allocate resources effectively, justify investments, and foster the development of the livestock industry.

We therefore urge all readers to interrogate the findings in this report, not only as a national report but to contextualise the findings to their local circumstances. We thank all our Partners for the invaluable support towards the compilation, analysis and reporting on the performance of the livestock subsector.

Hon. Peter C. Kapala, MP
MINISTER OF FISHERIES AND LIVESTOCK

Hon. Dr. Situmbeko Musokotwane, MP
MINISTER OF FINANCE AND NATIONAL PLANNING

August, 2024

Acknowledgements

The Ministry of Fisheries and Livestock (MFL) is tasked with overseeing the development and management of the fisheries and livestock sub sectors in Zambia, with the aim of contributing to sustainable food security, nutrition, and income generation. Despite ongoing interventions to improve production and productivity, accurate and comprehensive statistics have remained elusive, hindering informed decision-making and assessment of sectoral contributions to various socio-economic indicators. To address this challenge, the Government allocated funds in the 2023 Budget to support the implementation of a Livestock Survey, conducted nationwide. Conducting the Livestock Survey is always a collaborative effort that draws participation from the **Ministry of Fisheries and Livestock, at the national, provincial and district levels, the Zambia Statistics Agency and the Indaba Agricultural Policy Research Institute (IAPRI)**.

This report is one of the many outputs resulting from this collaboration. Without contribution from these institutions, the statistics generated, from which the information presented in this report was derived, would not have been possible. Special appreciations are extended to IAPRI for their invaluable contribution to this endeavour; **Technical staff of the Ministry of Fisheries and Livestock; and Zambia Statistics Agency**, for their dedication in producing high quality statistics. Finally, we would like to acknowledge and appreciate the role of all Officers who validated the contents of the report and thereby contributing to its accomplishment.

It is hoped that the insights provided in this report will enhance decision-making and policy formulation in the fisheries and livestock sector.

Eng. Himba Cheelo (Ms.)
Permanent Secretary
MINISTRY OF FISHERIES AND
LIVESTOCK

Danies K. Chisenda (Mr.)
Permanent Secretary – Economic Management and Finance
MINISTRY OF FINANCE AND NATIONAL PLANNING

August, 2024

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Statement by the Statistician General

The Zambia Statistics Agency was established in 2018 under the **Statistics Act No. 13 of 2018** as the sole designated entity responsible for the publication of official statistics in the country. The Agency is also responsible for the development and coordination of an **Integrated National Statistical System**. The Agency is required to provide for the production and compilation of official statistics in a transparent and impartial manner.

It is against the above background that the Ministry of Fisheries and Livestock collaborated with Zambia Statistics Agency in conducting the 2023 Livestock Survey. The 2023 Livestock Survey used sound methodology and internationally accepted fundamental principles for the production of official statistics. It was designed to provide livestock estimates at national and provincial levels. The survey collected information on livestock-raising household characteristics, livestock production, poultry production, animal reproduction and management, milk production and honey production.

The information in this report is useful to policy makers, researchers, programme managers and other data users for the development of the livestock industry and the entire Zambian economy. Any other data concerning the 2023 Livestock Survey not provided, and any specialized tabulations can be made available to users upon request.

Goodson Sinyenga
Statistician General
ZAMBIA STATISTICS AGENCY

August, 2024

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LIST OF ACRONYMS

8NDP   - Eighth National Development Plan

EAs   - Enumeration Areas

GDP   - National Gross Domestic Product

IAPRI   - Indaba Agricultural Policy Research Institute

MFL   - Ministry of Fisheries and Livestock

NAIP   - National Agricultural Investment Plans

PPES   - Probability Proportional to Estimated Size

PSUs   - Primary Sampling Units

SDGs   - Sustainable Development Goals

Zamstats   - Zambia Statistics Agency

EXECUTIVE SUMMARY

The Ministry of Fisheries and Livestock is mandated to develop and manage the fisheries and livestock subsector to contribute to sustainable food, nutritional security and income generation. In the recent past, the Government has continued to implement several interventions aimed at improving fisheries and livestock production and productivity in line with the aspirations of the Eight National Development Plan (8NDP) and the Vision 2030. To fulfil its key mandate of improving livestock production and productivity, the notable programmes that are being implemented include livestock stocking and restocking using improved livestock breeds, promotion of forage and fodder production and utilization, improved livestock infrastructure and improved livestock disease control. Despite these interventions, the livestock sub sector still faces a number of disease outbreaks and other challenges throughout the country which has negatively affected its growth.

The situation thus requires regular updating of livestock statistics to guide policy decisions. Therefore, in order to be able to provide accurate, reliable and comprehensive livestock production and productivity statistics, surveys must be regularly conducted to substantiate the growth of the sub-sector. The 2017/18 Livestock and Aquaculture Census (2017/18 LAC) and the 2022 Livestock Survey Reports conducted for both households and establishments (commercial entities) gave a current situation overview of the livestock status in the country. This report gives a description of the Livestock Sub-Sector as at 30th April, 2023.

A total of 1,875,298 households were engaged in livestock-raising (this included livestock, poultry, honey and forage) as at 30th April 2023 which included honey and fodder production. Overall, 72.1 percent of livestock-raising household heads were married, monogamously (68.2%) and polygamously (3.9%), and 5.8 percent were not married. Meanwhile, 12.1 percent were widowed and 6.3 percent divorced. From the total 1,875,298 livestock-raising household heads 1,390,283 were male-headed accounting for 74.1% and 485,015 were female-headed (25.9%). Youth-headed households comprising the age group 15-35 years, made up 38.5 percent of the total number of members of livestock-raising households. Meanwhile, the adult population represented 24.7 percent. In the case of sex against age, the household heads with the age range of 15 to 35 years topped among the male-headed households raising livestock at 82.2 percent while female-headed households raising livestock were at 17.8 percent. Overall, 53.5 percent of the household heads raising livestock had completed primary education and 3.5 percent had tertiary education.

The total number of livestock and/ or poultry-raising households stood at 1,849,463. Out of the total number of livestock and/ or poultry-raising households recorded, 535,371 households were involved in cattle rearing. Southern Province had the highest contribution to this national total accounting 31.5 percent of the Cattle-raising households. With regard to Goat-raising, 723,740 households were recorded with Southern Province accounting for the highest percentage at 27.9 percent. A total of 271,474 households were recorded to be involved in Pig-raising with the highest percentage of households coming from Southern Province (26.3%). There were 42,653 households rearing sheep in the country of which the majority, 42.9 percent were from Southern Province. Donkeys were raised by a total of 5,601 households countrywide. Southern Province had the highest contribution of donkey-raising households at 58.4 percent.

Disease was reported as the major constraint faced by livestock and poultry raising households. The Cattle population was 5,115,495, Goats (5,568,730), Sheep (308,354) and Pigs (1,613,248) as at 30th April, 2023. Meanwhile, the Dog and Cat population stood at 1,007,659 and 338,405, respectively.

A total 290,827,428 Litres of milk was produced by both households and establishments, with households contributing a major share, 234,118,524 litres. At provincial level, the highest quantity of milk produced was reported from Southern Province at 97,718,009 Litres followed by Copperbelt and Central at 84,520,262 litres and 58,851,519 litres respectively while Luapula was lowest at 20,756 litres.

The total number of households that raised Village Chickens was 1,682,160. Broiler and Layer Chicken-raising household stood at 46,927 and 21,105 respectively. The Village Chicken population from both Household and Establishment was estimated at 26,162,649 as at 30th April 2023. Southern Province reported the highest number at 5,267,171 (20.1%) of the total national stock. The Broiler Chicken population from both Household and Establishment was 5,325,381 as at 30th April, 2023. Lusaka Province recorded the highest number at 2,680,661 (50.3 %). The Layer Chicken population from both Household and Establishment was 2,127,690 and North-Western Province accounted for the highest percentage of 30.0 percent.

A total of 56,899 households were involved in forage production during the reference period. Among provinces, Central reported the highest percentage of forage producing households at 32.7 percent followed by North-western at 18.6 percent. A total 170,115 hectares of land was cultivated by households and Central Province reported the largest cultivated land for forage production at 103,671 hectares.

A total of 44,003 households were involved in honey production. Among the provinces, Copperbelt Province recorded the highest percentage of Households at 25.1 percent. Meanwhile, 14,718.4 metric tonnes of honey were produced by households. Among the provinces, North-western contributed the highest percentage of comb honey produced by households at 38.8 percent (5,836.8 metric tonnes). Most households reported that the severe major-constraint they faced in honey production was pests at 26.3 percent.
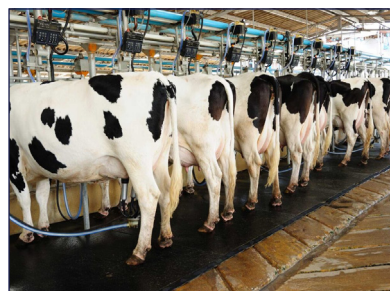
Chapter One: BACKGROUND

1.0 Background

The Government of the Republic of Zambia through the Zambia Statistics Agency (ZamStats) conducts various censuses and sample surveys to produce comprehensive official statistics across sectors including agriculture. Zambia's agricultural sector encompasses crop, livestock and fish production. While detailed information on crop production is widely available, data on the contributions of livestock, fisheries, and honey to the national economy is limited.

It is worth noting that agricultural censuses have been conducted since independence, with the first in the 1970/1971 agricultural season and the second in the 1991/1992 agricultural season. These censuses provided comprehensive agricultural statistics, which were primarily focused on crop production. However, recognizing the need for accurate information on livestock and aquaculture, the 2017/18 Livestock and Aquaculture Census was conducted to address this gap.

Since then, significant changes have occurred in livestock and aquaculture parameters, necessitating an update to facilitate effective policy formulation based on current data. Further, the 2022 Livestock Survey was conducted to assess trends and to take livestock inventory. Due to growing demand for information on livestock production and productivity for various policy reasons, the Government has continued to support the collection of Livestock statistics data hence the 2023 Livestock Survey.

1.1 Introduction

The Zambian economy has seen notable growth across key sectors, particularly in Livestock as it plays a pivotal role in the livelihoods of many. Livestock serves as a crucial source of food, income, draught power, and possesses aesthetic value. Presently, the livestock sub-sector contributes 3.2% to the national GDP and 42% to the agricultural GDP, with the potential to drive agricultural-led growth and socioeconomic transformation as outlined in the **Eighth National Development Plan (8NDP), sustainable Development Goals (SDGs) and Vision 2030.**

In alignment with the goals of the strategic direction in the 8NDP and Vision 2030, the Ministry of Fisheries and Livestock is mandated with overseeing the development and management of the fisheries and livestock subsector in order to realize sustainable food security, nutrition and income generation. In doing so, the government has implemented various initiatives to enhance among other priorities, livestock production

and productivity. Key programs include livestock stocking and restocking with improved breeds, promotion of forage and fodder production, infrastructure improvements, and disease control measures. Despite these efforts, the livestock subsector continues to face challenges such as disease outbreaks nationwide. This has not only affected the growth in the livestock population but also the availability of livestock and livestock products to satisfy the high demand on the regional and international market.

As a result, statistics play a crucial role in informing policy decisions. Therefore, it is essential to provide accurate, reliable and comprehensive statistics regularly to aid policy formulation, programme planning and monitoring and evaluation. Following the baseline statistics provided in the 2017/18 Fisheries and Livestock census on the livestock status in the country, the 2023 survey was conducted to validate the accuracy of the administrative data, track progress in the livestock population, and to update the existing information for evidence-based decision-making. These results will also be used to monitor progress on the implementation towards the achievement of the 8NDP, Sustainable Development Goals and Vision 2030.

1.2 Objectives of the Survey

The overall objective is to collect up-to-date estimates of basic demographics and livestock statistics that will be used to guide policy formulation; support cooperating partners; and the private sector decisions regarding investments and the development of the sector.

Specifically, the survey seeks to determine the following:
- The number of households and establishments participating in livestock and poultry raising as well as honey production
- Population changes for major livestock species
- The livestock productivity levels in Zambia
- Population of poultry in the country
- The herd-structure for the major livestock species in the country
- The number of slaughters for the major livestock
- The livestock reproduction and management practices applied by the households in raising the livestock;
- Milk production from households and establishments
- The major challenges affecting livestock and poultry production in Zambia;
- Forage production from households and establishments
- The number of eggs produced by households
- The quantity of honey produced by households and establishments
- The number of households engaged in raising major livestock breeds
- Provide data for measuring key economic performance indicators such Gross Value Added (GDP) and its contribution to the economy
- Provide statistics which can be used to determine the deficit or surplus status of the different types of livestock raised in Zambia
- Provide information to be used as a basis for determining the export potential of the country with regard to livestock products
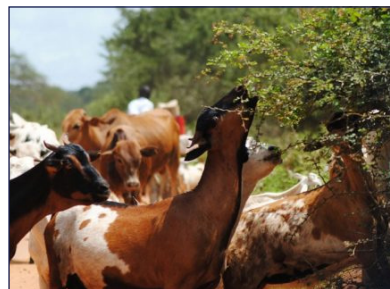
Chapter Two: CONCEPTS AND DEFINITIONS

2.0. Introduction

The following concepts and definitions are as articulated by the Ministry of Fisheries and Livestock (MFL) in collaboration with Zambia Statistics Agency during the Livestock Survey of 2023.

2.1. General Concepts and Definitions

Adult member:	A member of the household who is 12 years or older.
Aesthetic Value:	The enjoyment of beauty or display of great beauty of something.
Agricultural Activity:	The growing of any crop and/or raising of livestock, raising of poultry and/or fish farming.
Agricultural Household:	A household in which at least one member is carrying out some agricultural activity.
Agricultural Marketing Season:	Zambia's marketing season starts from 1st May of a given year to 30th April of the following year.
Animal draught power:	Energy to do work, derived from domesticated/trained animals, e.g. oxen, donkeys etc.
Animal manure:	All forms of livestock manure e.g., chicken droppings, cattle dung etc.
Artificial Insemination:	It is the process of collecting sperm cells from a male animal and manually depositing them into the reproductive tract of a female. It is used as an alternative to natural mating.
Bulls:	Uncastrated adult male cattle.
Calves:	Young male or female cattle that are not yet weaned.
Cats:	A small domesticated carnivorous mammal with soft fur, a short snout and retractable claws widely kept as a pet.
Chickens (Broilers):	Exotic chickens raised mainly for meat.
Chickens (Layers):	Exotic chickens raised mainly for egg production.
Controlled mating:	The animals are mated in such a way that the offspring can be guaranteed to be the progeny of the animals concerned, the number of matings can be counted and the use of the animals for breeding is controlled
Cows:	Female cattle that have given birth at least once. Include female cattle that have not yet given birth but are beyond the stage of being termed heifers.

Crop production:	The growing of field crops such as maize, millet, cassava etc. The crops of interest in this survey are maize, rice, sorghum, sunflower, soya beans, groundnuts, sweet potatoes and cassava.
Demographics:	Statistical data relating to the population and particular groups within it.
Dipping:	A method of tick control which involves the plunging of the animal into the Plunge Dip containing a mixture of water and an acaricide.
Doe:	mature female breeding goat. Also known as nanny goat.
Dogs:	A domesticated carnivorous mammal with non-retractable claws widely kept as a pet, for guarding or hunting.
Donkey:	An animal which is similar to a horse but is smaller and has longer ears.
Ducks:	These are mostly water birds, smaller in size than geese and are found both in fresh water and sea water.
Establishment:	A business or other organization, or the place where an organization operates.
Exotic livestock:	Non-indigenous species of domesticated livestock e.g. brahman, boran, black astrolopes, kroilers and sasols.
Guinea fowl:	Large speckled grey African bird that is often eaten as meat.
Guinea pig:	Small furry animal without a tail.
Hand dressing:	Removing ticks using the application of tick grease on the body of an animal.
Head of Household:	A person who is considered to be the head by the members of the household.
Heifers:	Female cattle that have not yet given birth and have not reached the stage of being termed cows.
Herd:	A large group of animals, especially hoofed mammals, which live together or are kept together as livestock.
Holding:	Land wholly or partly operated for agricultural purposes such as growing crops, fish farming and/or raising livestock and/or raising poultry for production under single technical management. A holding may consist of one or more activities listed above in one or separate areas.
Livestock:	All domesticated animals that are used/may be used for food and agriculture purposes such as cattle, pigs, goats, sheep and poultry.
Livestock	Activity: the raising of livestock.
Livestock extension:	Support services rendered to farmers with regards to improved methods of raising livestock e.g. Educating farmers on animal health services, livestock feeding practice, or animal housing etc.
Livestock Household:	A household engaged in any livestock activity. For the 2023 livestock survey, this definition includes a household involved in Honey Production.
Livestock Management:	All activities pertaining to the control and organization of livestock production.
Livestock Production:	All activities pertaining to the raising of all types of livestock.
Oxen:	Castrated male cattle.Not all oxen are trained as draught power animals.
Pigeons:	Birds usually white/grey in colour mostly kept at home.
Poultry:	All domesticated fowls such as chickens, ducks, geese, pigeons, guinea fowls, turkeys and quails. Poultry also includes rabbits.

Poultry production:	All activities pertaining to the raising of all types of fowls including rabbits.
Pour-on:	Is a method of tick control which involves the applying of acaricide on the skin and hair along the back of an animal.
Quails:	A small bird, essentially streaked brown with a white eye stripe and has long wings.
Rabbit:	A burrowing mammal with long ears and a short tail.
Ram:	Mature male breeding sheep.
Sheep:	Include ram, ewe and lambs.
Sire:	The male parent of an animal, kept for breeding.
Spraying:	The application of a chemical (acaricide) using a sprayer or a spray race.
Turkey:	A large bird of the genus Meleagris.
Vaccination:	Administration of vaccines in order to prevent diseases.
Vaccine:	A preparation administered to an animal to prevent it from suffering from a particular disease or condition.
Village chicken:	Traditional indigenous chickens.
Water Source:	Source of water for animals to drink e.g. boreholes, rivers, lakes.

Chapter Three: SURVEY METHODOLOGY AND ORGANIZATION

3.1. Sample Design and Coverage

The 2023 Livestock survey was designed to cover a representative sample of about 10,000 households residing in both rural and urban parts of the country. A total of 500 Enumeration Areas (EAs) were drawn from 36,770, EAs nationwide. The survey produced reliable estimates at national, provincial and Residence (rural/urban) levels.

3.2. Sample Stratification and Allocation

At the time of sampling, the 2022 Census of population and Housing frame was used to provide data on the proportions of households that raised livestock. This information was used to categorize enumeration areas according to percentage of households rearing livestock.

According to the census frame, the country is administratively demarcated into 10 provinces, which are further divided into 116 districts. The districts are further subdivided into constituencies, which are in turn divided into wards. For the purposes of conducting household surveys, wards are further divided into Enumeration Areas (EAs). The EA's constitute the Primary Sampling Units (PSUs) for the survey.

In order to have reasonable estimates at provincial level and at the same time take into account variation in the sizes of the provinces, the survey adopted the Optimal Square Root sample allocation method (Leslie Kish, 1987). This approach offers a better compromise between equal and proportional allocation, that is, small sized strata (province) are allocated larger samples compared to proportional and equal allocations. The following was the rural/urban allocation within each province.

Provincial and Rural/Urban allocation of EAs

Province	Allocation of Enumeration Ares			Households		
	Urban	Rural	Total	Urban	Rural	Total
Central	10	47	57	200	940	1,140
Copperbelt	17	31	48	340	620	960
Eastern	11	55	66	220	1,100	1,320
Luapula	5	40	45	100	800	900
Lusaka	15	24	39	300	480	780
Muchinga	5	39	44	100	780	880
Northern	7	45	52	140	900	1,040
North western	6	32	38	120	640	760
Southern	14	53	67	280	1,060	1,340
Western	6	38	44	120	760	880
Total	96	404	500	1,920	8,080	10,000

3.3. Coverage

The 2023 Livestock survey was conducted with a sample of 500 EAs. All rural and urban households were explicitly stratified into categories based on the scale of their l livestock activities, that is, raising livestock and/poultry or bee keeping.

Note that the survey also collected data from all livestock raising institutions/farms which operated as establishments on a 100 percent basis using a separate large scale questionnaire.

3.4. Selection of Households

The 2023 Livestock survey used a two-stage stratified cluster sample design. During the first stage, 500 EAs were selected with Probability Proportional to Estimated Size (PPES) within the respective strata. The measure of size used was population figures for each EA taken from the 2022 Census of Population and Housing. During the survey, households were listed and stratified according to their scale of livestock, poultry or bee keeping activities. Listing of all households in the selected EAs was done to provide basic agricultural data. A sample of 20 households was drawn and detailed interview conducted. They were three explicit categories created at the second sampling stage in each EA namely A, B and C. For the purposes of the survey 5, 5 and 10 households were selected from A, B and C categories, respectively. In cases where they were shortfalls in category C, all households in this category were included and the difference from 20 was equally allocated to categories B and A. If the difference from 20 could not be equally allocated to the two categories, one (1) more was allocated to category B households than category A

Where there was no household in category C, 10 sample households were allocated to category B, and 10 to category A.

Where there was no household in category C and less than 10 in category B, all those in B were included in the sample and the allocation in category A was increased to make up for the shortfall from the required number of 20 sample households.

Where all households in an EA fell in category A, all the required 20 sample households were selected from this category.

The following criteria was used to stratify households into the three (3) explicit categories: A, B and C.

Category C:

1. Households reporting Bee keeping or special livestock (sheep). When only 1 or 2 households in the EA reported Bee keeping or specified special livestock (sheep).
2. Households raising 50 or more cattle, 20 or more pigs, 30 or more goats, and
3. Households raising 50 or more chickens.

Category B:

1. Households reporting Bee keeping or sheep. When 3 to 5 households in the SEA report Bee keeping or specified livestock.
2. Households raising 10 to 49 cattle, 10 to 19 pigs, 10 to 29 goats, and households raising any number of chickens but less than 50.

Category A:

All households not in Category C and Category B.

Households raising less than 10 cattle, less than 10 goats, less than 10 pigs, and less than 50 chickens. All such households belong to category A.

3.5. Estimation procedure and sampling weights

Due to the disproportionate allocation of the sample points to various strata, sampling weights were required to correct for differential representation of the sample at the national and sub-national levels. The weights of the sample were in this case equal to the inverse of the product of the two selection probabilities employed at each stage of sampling.

Therefore, the probability of selecting an EA was calculated as follows:

$$P_{hi}{}^1 = \frac{a_h M_{hi}}{\sum M_{hi}}$$

Where:

P_{hi} = the first selection probability of EAs

ah = the number of EAs selected in stratum h

Mhi = the size (in terms of the population count) of the **i^{th}** EA in stratum h

∑ M hi = the total size of the stratum h (I = 1, 2, 3...n)

The selection probability of the household will be calculated as follows:
Example of category A

$$P_{hiA}{}^2 = \frac{nhiA}{NhiA}$$

Where:

Phi A ^2 = the second selection probability of households in category A

nhiA = the number of households selected in category A from the **i^{th}** EA

N hi A = the total number of households listed in category A in an EA.

Therefore, the EA specific sample weight for category A will be calculated as follows:

$$W_{iA}{}' = \frac{1}{P_{hi}^1 \times P_{hiA}^2}$$

3.6. Non-Response Adjustment

For the 2023 Livestock survey, no substitution was allowed for non-responding households therefore adjustments needed to be made.

The adjustment was equal to the livestock raising households (responding plus non-responding households) divided by the responding households.

3.7 Limitations

The 2023 Livestock Survey was designed to cover a representative sample of 9,680 households residing in both rural and urban parts of the country. The inadequacies in the sampling design could be attributed to the 2010 sampling frame which had not been updated over time.

At the planning stage, not every concept or definition was included but as much as possible, an attempt was made to conform to the international standards.

Further, the results of the survey can only be generalized to the entire population at national, provincial and regional (urban/rural) levels. The reference period for the survey is 1st May 2022 to 30th April 2023 [Marketing Season]. Therefore, comparison of results of this survey should only be made to surveys conducted during similar periods.

Furthermore, as much as possible, remedial measures were taken to ensure representativeness and `accuracy of the survey results.

Chapter 4 : DEMOGRAPHIC CHARACTERISTICS OF HOUSEHOLDS

4.0 Introduction

This chapter presents a summary of demographic and agricultural characteristics of households and establishments engaged in livestock activities as at 30th April 2023. The main agricultural characteristics include households involved in livestock/poultry production, honey production and crop/forage production. The main demographic characteristics highlighted in this section include sex, age, education and marital status of livestock household heads.

4.1.1. Distribution of Households

Table 4.1 shows the distribution of livestock and non-livestock raising households by province. In total, there are 4,245,158 households in Zambia. Of these, 1,875,298 representing 44.2 percent of all households were engaged in livestock/poultry activities as at 30th April 2023, while 2,369,860 households were not engaged in any livestock activities.

Among the provinces, Southern had the highest percentage of livestock raising households at 17.5 percent, followed by Eastern at 15.9 percent while Lusaka Province had the lowest percentage of livestock raising households at 5.8 percent. On the other hand, Lusaka Province had the highest number of households that were not engaged in any livestock activities at 31.2 percent while Northwestern Province recorded the lowest at 4.5 percent in terms of the households with least involvement in livestock activities.

Table 4.1: Distribution of Livestock and Non-Livestock Households by Province, 2023

Province	Total Households		Livestock-Raising Households		Non-Livestock Raising Households	
	Number	Percent	Number	Percent	Number	Percent
Central	410,455	9.7	222,989	11.9	187,465	7.9
Copperbelt	597,141	14.1	160,045	8.5	437,096	18.4
Eastern	460,346	10.8	297,808	15.9	162,538	6.9
Luapula	314,191	7.4	159,114	8.5	155,077	6.5
Lusaka	848,922	20.0	108,927	5.8	739,995	31.2
Muchinga	267,109	6.3	135,715	7.2	131,394	5.5
Northern	371,118	8.7	208,639	11.1	162,479	6.9
North-Western	222,636	5.2	116,639	6.2	105,996	4.5
Southern	498,094	11.7	327,568	17.5	170,526	7.2
Western	255,145	6.0	137,853	7.4	117,293	4.9
Zambia	4,245,158	100.0	1,875,298	100.0	2,369,860	100.0

4.1.2 Distribution of Agricultural Households by Activity

Table 4.2 shows the distribution of agricultural households according to agricultural activities namely Livestock/Poultry, Honey and Crop/Forage production.

Livestock/Poultry producing households: A total of 1,849,463 households were involved in livestock/ poultry production as at 30th April 2023. Southern Province had the highest number of Livestock/Poultry raising households (17.7%), followed by Eastern Province (15.7%). North-western Province reported the lowest number of households engaged in Livestock/poultry production at 5.7 percent.

Honey producing households: A total of 44,003 households were involved in honey production as at 30th April 2023. Copperbelt Province had the highest number of households involved in honey production at 25.1 percent, followed by Southern Province at 19.9 percent, while Luapula Province accounted for the lowest number at 0.8 percent.

Crop/Forage producing households: A total of 56,899 households were engaged in crop/forage production as at 30th April 2023. Central Province recorded the highest percentage at 32.7 percent while Western Province accounted for the lowest at 0.4 percent.

Table 4.2: Distribution of Agricultural Households by Type of Agricultural Activity and Province, 2023

Province	Livestock-Raising Households including Honey and Forage	Livestock/Poultry Raising Households		Honey Producing Households		Forage producing Households	
		Number	Percent	Number	Percent	Number	Percent
Central	222,989	222,491	12.0	4,282	9.7	18,627	32.7
Copperbelt	160,045	159,217	8.6	11,033	25.1	7,760	13.6
Eastern	297,808	291,209	15.7	5,205	11.8	565	1.0
Luapula	159,114	156,635	8.5	362	0.8	1,838	3.2
Lusaka	108,927	108,792	5.9	2,022	4.6	4,776	8.4
Muchinga	135,715	134,967	7.3	2,791	6.3	5,094	9.0
Northern	208,639	208,606	11.3	1,002	2.3	1,890	3.3
North-Western	116,639	104,975	5.7	7,559	17.2	10,568	18.6
Southern	327,568	326,489	17.7	8,735	19.9	5,538	9.7
Western	137,853	136,082	7.4	1,012	2.3	244	0.4
Zambia	1,875,298	1,849,463	100.0	44,003	100.0	56,899	100.0

4.1.3 Distribution of Livestock Raising Households by Sex of Household Head

Table 4.4 shows the distribution of livestock-raising household heads by sex and province. A total of 1,390,283 households were male-headed accounting for 74.1 percent of the total livestock households, while 485,015 were female-headed (25.9%) in the country. Among the provinces, Lusaka had the highest percentage of male-headed households (78.8%) while Western had the lowest at 59.3 percent. Further, Western Province had the highest percentage of female-headed households (40.7%) while Lusaka Province had the lowest at 21.2 percent.

Table 4.4: Distribution of Livestock/Poultry Raising Households by Sex of Head of Household and Province, 2023

Province	Total number of heads of livestock/ Poultry raising households	Sex of Household Heads			
		Male	Percent	Female	Percent
Central	222,989	164,455	73.8	58,535	26.2
Copperbelt	160,045	117,834	73.6	42,211	26.4
Eastern	297,808	224,092	75.2	73,716	24.8
Luapula	159,114	119,986	75.4	39,128	24.6
Lusaka	108,927	85,882	78.8	23,046	21.2
Muchinga	135,715	104,776	77.2	30,939	22.8
Northern	208,639	163,948	78.6	44,691	21.4
North-Western	116,639	86,218	73.9	30,421	26.1
Southern	327,568	241,374	73.7	86,194	26.3
Western	137,853	81,718	59.3	56,135	40.7
Zambia	1,875,298	1,390,283	74.1	485,015	25.9

4.1.4 Age Group and Sex of Household Head of Livestock/Poultry Households

Table 4.5 shows the age group and sex of household heads of livestock/poultry raising households in the country as at 30th April, 2023. At national level, the majority of the household heads were aged between 35- and 39-years accounting for 13.1 percent, the same applied for the male-headed households with the majority being at 13.6 percent. female-headed households were the majority between the ages of 40 to 44 at 13.2 percent. The 15-19 age groups had the least at 0.4 percent.

Table 4.5: Sex of Household Heads by five-year Age Group of Livestock/Poultry raising Households, 2023

Age Group	Sex of Household Heads				Total number of heads of livestock raising households including Honey and Forage Producers	
	Male		Female			
	Number	Percent	Number	Percent	Number	Percent
15-19	6,029	0.4	2,176	0.4	8,205	0.4
20-24	66,372	4.8	14,997	3.1	81,369	4.3
25-29	148,485	10.7	25,746	5.3	174,232	9.3
30-34	176,735	12.7	39,074	8.1	215,809	11.5
35-39	189,321	13.6	55,891	11.5	245,212	13.1
40-44	176,083	12.7	63,869	13.2	239,952	12.8
45-49	167,451	12.0	53,988	11.1	221,440	11.8
50-54	137,512	9.9	46,927	9.7	184,439	9.8
55-59	97,237	7.0	37,756	7.8	134,993	7.2
60-64	88,237	6.3	52,219	10.8	140,456	7.5
65-69	58,247	4.2	31,499	6.5	89,746	4.8
70-74	37,515	2.7	27,708	5.7	65,223	3.5
75-79	17,449	1.3	18,267	3.8	35,716	1.9
80+	23,610	1.7	14,897	3.1	38,508	2.1
Total	1,390,283	100.0	485,015	100.0	1,875,298	100.0

Figure 4.1: Five-year Age Group by Sex of Heads of Livestock/Poultry raising Households, 2023
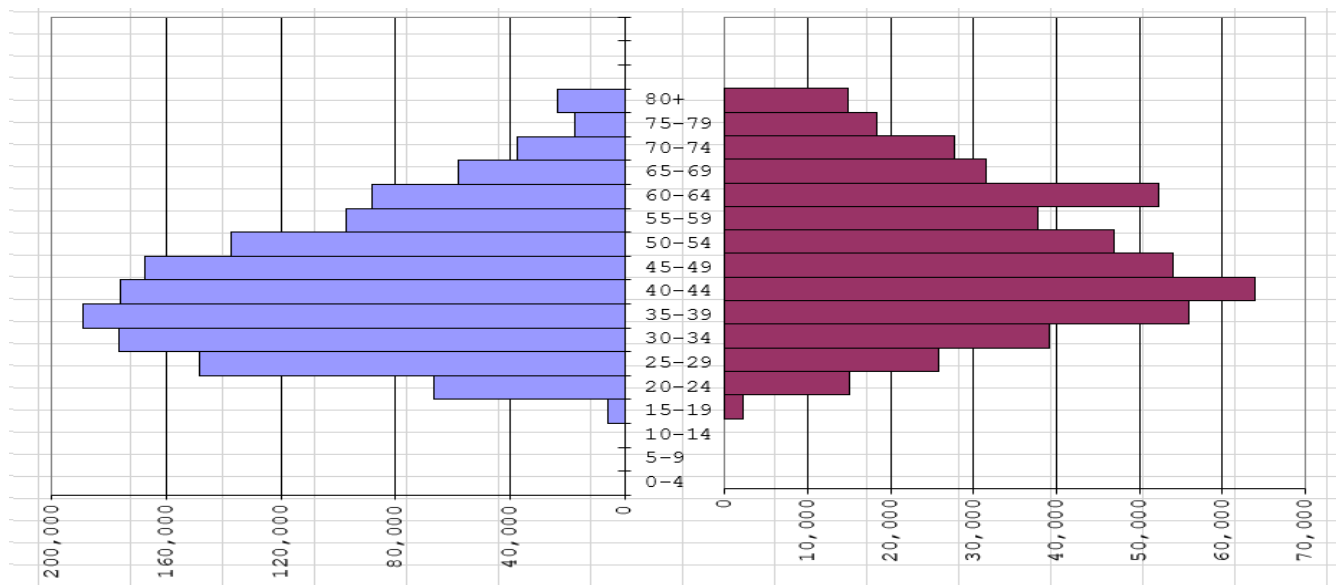
4.1.5 Distribution of Household Heads by Sex and Broad Age Group, 2023

Table 4.6 shows the distribution of livestock raising household heads by sex and age group. Of the total 1,875,298 households that were engaged in livestock raising, honey and forage production, the majority household heads were male-headed (1,390,283) compared to female-headed at 485,015. There were more male and female heads of livestock raising households in the age group above 35 years old (69 and 80%, respectively) compared to male-headed (31%) and female-headed (20%) in the 15 to 35 years age group.

Table 4.6: Distribution of Heads of Livestock Raising Households by Sex and Broad Age Group, 2023

Age Group	Sex of Heads of livestock Household				Total number of heads of livestock raising households including Honey and Forage Producers	
	Male		Female			
	Number	Percent	Number	Percent	Number	Percent
Less than 15 years old	-	-	-	-	-	-
15 to 35 years old	435,868	31.0	94,696	20.0	530,564	28.0
Above 35 years old	954,415	69.0	390,319	80.0	1,344,734	72.0
Total	1,390,283	100.0	485,015	100.0	1,875,298	100.0

4.1.6 Distribution of Household Members by Sex and Broad Age Group

Table 4.7 shows that the highest number of household members (both male and female) from livestock/poultry raising households was in the age group 15-35 years (38.5%), followed by those who were less than 15 years (36.8%) and lastly, household members above 35 years old (24.7%).

Among female household members the majority were 15 to 35 years old (38.5%), while among male household members, the majority were 15 to 35 years old (38.5%).

Table 4.7: Distribution of Livestock/Poultry Raising Household Members by Sex and Broad Age Group, 2023

Age Group	Sex of Household Members				Total household members	
	Male		Female			
	Number	Percent	Number	Percent	Number	Percent
Less than 15 years old	1,687,595	37.5	1,660,411	36.1	3,348,006	36.8
15 to 35 years old	1,732,365	38.5	1,770,539	38.5	3,502,905	38.5
Above 35 years old	1,078,219	24.0	1,171,652	25.5	2,249,871	24.7
Total	4,498,180	100.0	4,602,603	100.0	9,100,783	100.0

4.1.7 Distribution of Household Heads by Marital Status

Table 4.8 shows the distribution of livestock raising household heads by marital status and province. The majority of the household heads were monogamously married (68.2%), followed by widowed (12%) and divorced household heads at 6.3 percent. The least common category was cohabiting at 0.1 percent.

At provincial level, the highest percentage of heads of livestock raising households was in monogamous marriages and was reported in Northern Province (75.2%) followed by Luapula Province at 71.4 percent. The lowest proportion of household heads who were monogamously married was reported in Western Province at 55.3 percent.

Table 4.8: Distribution of Heads of Livestock/Poultry Raising Households by Marital Status and Province, 2023

Province	Total number of heads of livestock raising households	Marital Status (Percent)						
		Never married	Monoga-mously	Polyga-mously	Divorced	Widowed	Separated	Cohabiting
Central	222,989.0	6.8	67.5	6.4	7.1	9.1	3.0	-
Copperbelt	160,045.0	5.3	70.0	1.8	6.8	11.8	4.3	-
Eastern	297,808.0	5.0	70.1	3.2	6.6	9.8	5.3	-
Luapula	159,114.0	2.4	71.4	1.2	6.1	12.9	5.9	-
Lusaka	108,927.0	5.4	70.5	1.7	3.5	15.9	3.0	-
Muchinga	135,715.0	5.2	70.1	4.2	4.7	11.9	3.6	0.4
Northern	208,639.0	4.8	75.2	1.1	2.9	13.1	3.0	-
North-Western	116,639.0	8.1	69.2	1.3	7.2	11.7	2.4	-
Southern	327,568.0	4.6	63.6	9.1	5.4	13.6	3.3	0.4
Western	137,853.0	13.2	55.3	2.5	14.1	13.2	1.6	-
Zambia	1,875,298.0	5.8	68.2	3.9	6.3	12.1	3.7	0.1

4.1.8 Summary Distribution of Household Heads by level of Education Completed

Table 4.9 shows the distribution of livestock/poultry raising household heads by level of education completed by province. The table shows that most livestock/poultry raising household heads (53.5%) had completed primary school education, followed by those who had completed secondary school education (35.4%). The household heads who had completed tertiary education were the least accounting for 3.5 percent.

Table 4.9: Summary Distribution of Livestock/Poultry Raising Household Heads by level of Education Completed by Province, 2023

Province	None	Primary	Secondary	Tertiary	Total number of heads of livestock raising/ Honey/ Forage households
	Percent	Percent	Percent	Percent	
Central	8.1	53.3	36.3	2.3	222,989
Copperbelt	7.9	43.1	44.3	4.7	160,045
Eastern	9.1	59.6	28.6	2.7	297,808
Luapula	5.0	60.2	32.7	2.1	159,114
Lusaka	10.4	40.7	35.2	13.7	108,927
Muchinga	3.8	54.0	39.6	2.6	135,715
Northern	4.5	59.0	33.7	2.7	208,639
North-Western	11.4	48.7	37.5	2.4	116,639
Southern	6.7	51.4	38.2	3.7	327,568
Western	12.0	55.4	30.8	1.8	137,853
Zambia	7.7	53.5	35.4	3.5	1,875,298

4.1.9 Detailed Distribution of Livestock/Poultry Raising Household Heads by level of Education Completed, 2023

Table 4.10 shows detailed distribution of livestock/poultry raising household heads by level of education completed by province. The highest percentage of livestock/poultry raising household heads had completed primary school education level (53.5%), followed by those who had completed secondary school education (21.6%). The least percentage of household heads accounting for 0.2 percent reported having masters' degree level as their highest level of education attained.

Table 4.10: Detailed Distribution of Livestock/Poultry Raising Household Heads by level of Education Completed by Province, 2023

Province	None	Primary	Junior Sec	Senior Sec	A level	College/ Under graduate	Certif-icate/ Diploma	Bachelor's Degree	Master's Degree and Be-yond	Total Number
	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	
Central	8.1	53.3	19.9	16.2	0.1	0.0	1.6	0.6	0.0	222,989
Copperbelt	7.9	43.1	24.2	18.6	0.3	1.2	3.5	1.0	0.2	160,045
Eastern	9.1	59.6	16.8	11.8	0.1	0.0	1.8	0.7	0.1	297,808
Luapula	5.0	60.2	19.9	12.8	-	-	1.6	0.5	-	159,114
Lusaka	10.4	40.7	18.7	16.1	-	0.3	7.9	3.8	2.0	108,927
Muchinga	3.8	54.0	23.4	15.1	0.0	1.1	0.9	1.6	-	135,715
Northern	4.5	59.0	23.1	10.2	-	0.4	1.6	1.1	-	208,639
North-Western	11.4	48.7	21.5	15.6	-	0.4	1.9	0.5	-	116,639
Southern	6.7	51.4	26.2	11.8	0.1	0.1	1.4	1.7	0.6	327,568
Western	12.0	55.4	20.5	10.2	-	0.1	1.4	0.4	-	137,853
Total	7.7	53.5	21.6	13.4	0.1	0.3	2.1	1.1	0.2	1,875,298

4.1.10 Average Size of Livestock/Poultry Raising Households

Table 4.11 shows that the average number of household members of livestock/poultry raising households (both male and female headed) was 5 countrywide. The average number of household members was 5 for male and 4 for female headed households.

Luapula, Northern, and North-Western provinces reported the largest average household members of 6 for male headed livestock/poultry raising households. Meanwhile, the largest average household size for the female-headed households was reported in Copperbelt, Lusaka and Southern at 5.

Table 4.11: Average Household Size of Livestock/Poultry Raising Households by Sex of Heads and Province, 2023

Province	Average Household Size		
	Male Headed	Female Headed	Both Male and Female Headed
Central	5	4	5
Copperbelt	5	5	5
Eastern	5	4	4
Luapula	6	4	5
Lusaka	5	5	5
Muchinga	4	4	4
Northern	5	4	5
North-Western	6	4	5
Southern	6	5	5
Western	5	4	5
Zambia	5	4	5

Chapter 5 : LIVESTOCK PRODUCTION AND MANAGEMENT

5.0. Introduction

This chapter presents livestock production statistics, including the number of various types of livestock, households and establishments raising various types of livestock, sales of live cattle in households and establishments, and herd structure during the reference period. The chapter further highlights detailed statistics on the purpose of raising livestock, major constraints and diseases in the livestock sector during the period.

5.1 Livestock Production

5.1.1 Households Raising Various Types of Livestock

Table 5.1 shows the number and percentage of households raising various types of livestock. A total of 535,371 households were involved in cattle raising. Among Provinces, Southern had the highest number of cattle-raising households at 168,608 followed by Eastern with 166,184. Luapula recorded the lowest at 977.

With regard to Goat rearing, a total of 723,740 households were recorded. Southern Province recorded the highest with 201,797 households followed by Eastern Province with 98,535. The lowest was Western Province with 19,760 households.

A total of 42,653 households were reported to be involved in Sheep farming. Southern Province recorded the highest with 18,305 households while Northern and Western provinces both recorded 176 households and were the lowest.

Under Pig rearing, 271,474 households were raising Pigs. Southern Province had the highest 71,370 households. The lowest number of households (11,465) involved in Pig raising were from Lusaka Province. A total of 5,601 households were involved in donkey raising. Southern Province had the highest with 3,270 households while Eastern, Luapula and Lusaka provinces did not record any household raising donkeys.

Table 5.1: Number and Percentage of Households Raising Various Types of Livestock by Province, 2023

Province	Number of Households by Type of Livestock Raised									
	Cattle		Goats		Sheep		Pigs		Donkeys	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Central	71,497	13.4	90,803	12.5	8,484	19.9	17,305	6.4	639	11.4
Copperbelt	24,675	4.6	40,765	5.6	5,334	12.5	23,436	8.6	277	4.9
Eastern	166,184	31.0	98,535	13.6	3,596	8.4	45,713	16.8	0	0.0
Luapula	977	0.2	57,406	7.9	716	1.7	16,003	5.9	0	0.0
Lusaka	13,871	2.6	32,388	4.5	4,045	9.5	11,465	4.2	0	0.0
Muchinga	19,178	3.6	55,241	7.6	962	2.3	21,059	7.8	183	3.3
Northern	6,069	1.1	92,942	12.8	176	0.4	37,653	13.9	35	0.6
North-Western	14,853	2.8	34,104	4.7	861	2.0	14,425	5.3	1,075	19.2
Southern	168,608	31.5	201,797	27.9	18,305	42.9	71,370	26.3	3,270	58.4
Western	49,458	9.2	19,760	2.7	176	0.4	13,045	4.8	124	2.2
Zambia	535,371	100.0	723,740	100.0	42,653	100.0	271,474	100.0	5,601	100.0

5.1.2 Purpose of Raising Livestock by Number of Households

Table 5.2 shows the distribution of households by the purpose of raising livestock. A total of 535,371 households were recorded as cattle-raising of which 66.0 percent indicated their main purpose of keeping cattle was for draught power. About 80.8 percent of the total 723,740 goat raising households indicated that their main purpose was for selling/income. Sheep raising households were 42,653, of which 66.4 percent raised sheep for selling/income. Out of a total of 271,474 pig raising households, 78.9 percent reported raising for selling/income. Further, 94.0 percent of donkey raising households reported raising donkeys for draught power.

Table 5.2: Percentage Distribution of Households by Purpose of Raising and Type of Livestock

Livestock type	Number of Households by Type of Livestock Raised	Purpose of Raising Livestock							
		Meat	Milk	Draught power	Aesthetic value	Selling/ income	Breeding	Manure	Other Purposes
Cattle	535,371	5.6	1.7	66.0	4.3	20.9	0.1	1.3	0.2
Goats	723,740	16.1	0.1	0.0	2.5	80.8	0.0	0.5	0.0
Sheep	42,653	24.6	0.0	0.0	8.7	66.4	0.3	0.0	0.0
Pigs	271,474	18.0	0.0	0.0	1.9	78.9	0.0	1.2	0.1
Donkeys	5,601	0.0	0.0	94.0	5.3	0.0	0.0	0.0	0.6

5.2 Cattle Production

5.2.1 Opening and Closing Stock of Cattle for Households and Establishments

Table 5.3 shows the number of cattle raised by province on 1st May, 2022 (Opening Stock) and on 30th April, 2023 (Closing Stock). At national level, the cattle population increased by 174,777 representing 3.5 percent. Eastern, Luapula, Lusaka, Muchinga, Northern, North-Western and Southern provinces posted increases while reductions were reported in Central, Copperbelt and Western provinces.

Table 5.3: Opening and Closing Stock of Cattle by Province, 2023

Province	Total Cattle Raised		Population Change	
	1st May 2022	30th April, 2023	Increase/Decrease	Percent
Central	810,846	746,354	-64,492	-8.0
Copperbelt	200,424	174,844	-25,580	-12.8
Eastern	916,434	1,014,051	97,617	10.7
Luapula	14,333	15,978	1,645	11.5
Lusaka	176,876	189,692	12,816	7.2
Muchinga	108,333	119,803	11,470	10.6
Northern	69,195	78,406	9,211	13.3
North-western	60,764	65,056	4,292	7.1
Southern	1,978,456	2,129,796	151,341	7.6
Western	605,059	581,515	-23,543	-3.9
Zambia	4,940,718	5,115,495	174,777	3.5

5.2.2 Number of Cattle Raised by Households and Establishments

Table 5.4 shows the number and percentage of cattle raised by households and establishments as at 30 April 2023. Of the total 5,115,495 cattle in the country, 94.8 percent (4,851,838) were raised by households while 5.2 percent (263,657) were raised by establishments.

Table 5.4: Number and Percentage of Cattle Raised by Households and Establishments, 2023

Province	Total Cattle Raised	Households		Establishments	
		Number	Percent	Number	Percent
Central	746,354	657,033	88.0	89,321	12.0
Copperbelt	174,844	143,717	82.2	31,128	17.8
Eastern	1,014,051	1,011,108	99.7	2,943	0.3
Luapula	15,978	10,998	68.8	4,980	31.2
Lusaka	189,692	174,323	91.9	15,369	8.1
Muchinga	119,803	115,172	96.1	4,631	3.9
Northern	78,406	77,014	98.2	1,392	1.8
North-western	65,056	60,482	93.0	4,573	7.0
Southern	2,129,796	2,026,264	95.1	103,533	4.9
Western	581,515	575,728	99.0	5,787	1.0
Zambia	5,115,495	4,851,838	94.8	263,657	5.2

5.2.3 Cattle Herd Structure under Households

The cattle herd structure for households by province as at 30th April, 2023 is shown in Table 5.5. Cows constituted a larger percentage at 38.0 percent, followed by oxen and heifers at 19.8 percent and 13.2 percent, respectively. The least were Steers at 4.1 percent.

Table 5.5: Cattle Herd Structure for households by Province, 2023

Province	Total number of Cattle	Cattle Category Raised						
		Cows	Heifers	Bulls	Weaners	Oxen	Tollies/Steers	Calves
Central	657,033	259,493	98,656	56,262	44,246	130,621	16,630	51,124
Copperbelt	143,717	56,623	24,679	16,225	11,404	17,317	3,806	13,663
Eastern	1,011,108	371,324	101,691	130,687	42,026	251,717	24,753	88,910
Luapula	10,998	7,133	784	707	265	200	725	1,183
Lusaka	174,323	82,338	13,407	23,525	9,839	28,847	4,018	12,349
Muchinga	115,172	52,346	14,190	15,465	9,388	5,698	5,513	12,572
Northern	77,014	33,275	10,110	9,200	6,772	8,082	1,326	8,248
North-Western	60,482	27,662	4,678	6,995	3,483	14,322	1,195	2,147
Southern	2,026,264	719,106	320,990	68,019	179,572	386,051	115,862	236,664
Western	575,728	236,544	50,272	26,095	47,679	118,620	23,764	72,755
Zambia	4,851,838	1,845,844	639,458	353,182	354,672	961,475	197,592	499,615
Percent	100.0	38.0	13.2	7.3	7.3	19.8	4.1	10.3

5.2.4 Average Number of Cattle Raised per Household and Establishment

Table 5.5 shows the average number of cattle raised by households and establishments as at 30th April 2023. At national level, the average number of cattle raised per household was 9 and 186 for establishment. At provincial level, Lusaka and Northern provinces recorded the highest average number of cattle per household at 13 while North-Western Province recorded the lowest at 4. Southern Province reported the highest average number of cattle per establishment at 364, while the lowest was Eastern Province at 33.

Table 5.6: Average Number of Cattle Raised Per Household and Establishment, 2023

Province	Number of Cattle Raised		Number of Cattle-raising Households and Establishments		Average number Cattle raised	
	Households	Establishments	Households	Establishments	Households	Establishments
Central	657,033	89,321	71,497	476	9	188
Copperbelt	143,717	31,128	24,675	258	6	121
Eastern	1,011,108	2,943	166,184	90	6	33
Luapula	10,998	4,980	977	94	11	53
Lusaka	174,323	15,369	13,871	70	13	220
Muchinga	115,172	4,631	19,178	43	6	108
Northern	77,014	1,392	6,069	23	13	59
North-western	60,482	4,573	14,853	50	4	92
Southern	2,026,264	103,533	168,608	284	12	364
Western	575,728	5,787	49,458	27	12	210
Zambia	4,851,838	263,657	535,371	1,415	9	186

5.2.5 Cattle-raising Households by Size of Herd Raised, 2023.

Table 5.7 shows the distribution of cattle raising households by herd size and province. Of the total 535,371 households, the majority (55.9 percent) had a herd size of 1 to 5 cattle, followed by those raising from 6 to 10 cattle at 20.9 percent. Households with a herd size of 11 cattle or more collectively accounted for 23.2 percent of the total cattle-raising households in Zambia.

Table 5.7: Percentage of Cattle-Raising Households by Size of Herd Raised, 2023

Province	Total number of Cattle-raising Households	Size of Herd Raised (Percent)									
		1-5	6-10	11-15	16-20	21-30	31-40	41-50	51-100	101-150	150+
Central	71,497	49.3	26.5	8.4	6.0	6.1	1.4	1.1	0.8	0.3	0.0
Copperbelt	24,675	68.0	19.6	8.7	2.1	0.8	0.8	0.0	0.0	0.0	0.0
Eastern	166,184	66.8	19.7	7.8	2.7	2.6	0.4	0.0	0.0	0.0	0.0
Luapula	977	30.3	12.1	24.3	33.2	0.0	0.0	0.0	0.0	0.0	0.0
Lusaka	13,871	40.6	22.6	21.4	0.8	10.8	2.4	0.0	0.1	0.0	1.3
Muchinga	19,178	52.4	29.5	18.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Northern	6,069	15.0	22.5	46.4	7.3	5.7	0.0	3.0	0.0	0.0	0.0
North-Western	14,853	82.0	10.3	3.5	2.3	1.8	0.0	0.0	0.0	0.0	0.0
Southern	168,608	49.4	19.8	10.2	5.8	5.8	4.0	2.5	1.9	0.1	0.4
Western	49,458	47.5	20.8	9.3	6.1	7.1	3.2	3.9	2.1	0.0	0.1
Zambia	535,371	55.9	20.9	9.9	4.4	4.5	2.0	1.3	0.9	0.1	0.2

5.2.6 Number of Cattle raised by Sex

Table 5.8 shows that out of the total 4,851,838 cattle raised by households in the country, female cattle constituted 52.7 percent (2,555,814), while male cattle constituted 47.3 percent (2,296,024).

Table 5.8: Number and Percentage of Cattle by Sex and Province, 2023

Province	Total number of Cattle Raised by Households	Female Cattle		Male Cattle	
		Number	Percent	Number	Percent
Central	657,033	393,874	59.9	263,159	40.1
Copperbelt	143,717	80,899	56.3	62,817	43.7
Eastern	1,011,108	450,363	44.5	560,745	55.5
Luapula	10,998	8,599	78.2	2,399	21.8
Lusaka	174,323	102,663	58.9	71,660	41.1
Muchinga	115,172	82,652	71.8	32,520	28.2
Northern	77,014	54,259	70.5	22,754	29.5
North-Western	60,482	35,423	58.6	25,059	41.4
Southern	2,026,264	1,022,874	50.5	1,003,390	49.5
Western	575,728	324,208	56.3	251,520	43.7
Zambia	4,851,838	2,555,814	52.7	2,296,024	47.3

5.2.7 Number of Cattle Owned by Households

Table 5.9 shows the distribution of cattle raised by ownership, sex and province as at 30th April 2023. Overall, 84.1 percent of cattle in Zambia (4,082,180) were owned by the households. Of this number, female members of the households owned 26.7 percent of the cattle, while 73.3 percent were owned by male members of the households.

Table 5.9: Cattle Ownership by Sex of Members of Household, 2023

Province	Cattle Raised by Households	Cattle Owned by Households		Cattle owned by Female Household Members		Cattle owned by Male Household Members	
	Number	Number	Percent	Number	Percent	Number	Percent
Central	657,033	638,366	97.2	253,418	39.7	384,947	60.3
Copperbelt	143,717	122,752	85.4	27,989	22.8	94,763	77.2
Eastern	1,011,108	677,715	67.0	162,920	24.0	514,795	76.0
Luapula	10,998	7,488	68.1	6,829	91.2	660	8.8
Lusaka	174,323	161,343	92.6	44,518	27.6	116,825	72.4
Muchinga	115,172	95,318	82.8	14,449	15.2	80,869	84.8
Northern	77,014	37,985	49.3	3,292	8.7	34,693	91.3
North-western	60,482	52,950	87.5	20,647	39.0	32,303	61.0
Southern	2,026,264	1,820,712	89.9	408,142	22.4	1,412,570	77.6
Western	575,728	467,550	81.2	147,544	31.6	320,006	68.4
Zambia	4,851,838	4,082,180	84.1	1,089,749	26.7	2,992,431	73.3

Figure 5.1 shows the distribution of cattle owned by female household members by province. Overall, all provinces reported less than 40 percent of cattle having been owned by female household members except for Luapula Province that reported the highest at 91.2 percent. The lowest was recorded in Northern Province at 8.7 percent.

Figure 5.1: Percent of Cattle owned by Female Household Members, 2023
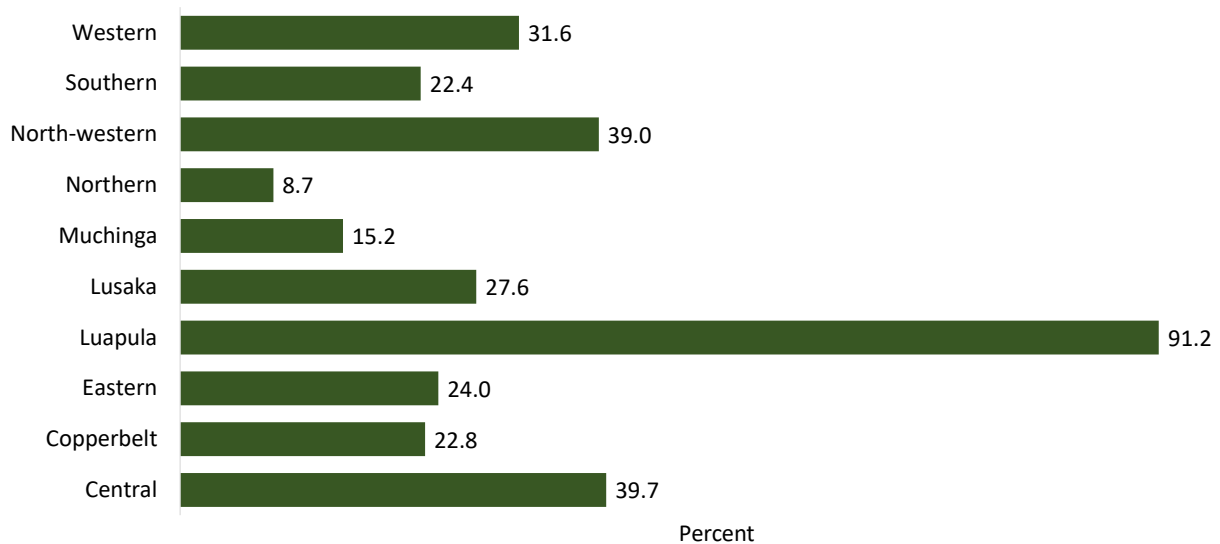
5.2.8 Number of Cattle Slaughtered by Households and Establishments

A total of 188,725 cattle slaughters were recorded in the country from both households and establishments between 1st May 2022 and 30th April 2023. Overall, Southern Province recorded the highest number of cattle slaughters at 73,038, while Luapula Province recorded the lowest at 1,707.

At Household level, Southern Province recorded the highest share at 39.5 percent while Luapula Province reported the lowest at 0.9 percent. However, at establishment level Lusaka Province recorded the highest at 45.3 percent, followed by Southern Province (26.3%) while Luapula Province recorded the lowest at 0.7 percent (**Table 5.10**). Please note that this information does not include cattle slaughtered in abattoirs and butcheries across the country.

Table 5.10: Number and Percentage of Cattle Slaughtered by Households and Establishments, 2023

Province	Total Number of Cattle Slaughtered	Households		Establishments	
		Number	Percent	Number	Percent
Central	18,865	17,787	10.1	1,078	9.1
Copperbelt	23,717	22,347	12.6	1,370	11.6
Eastern	23,338	23,165	13.1	173	1.5
Luapula	1,707	1,621	0.9	86	0.7
Lusaka	11,123	5,763	3.3	5,360	45.3
Muchinga	13,095	12,922	7.3	173	1.5
Northern	3,733	3,619	2.0	114	1.0
North-Western	2,266	2,057	1.2	209	1.8
Southern	73,038	69,929	39.5	3,109	26.3
Western	17,842	17,678	10.0	164	1.4
Zambia	188,725	176,890	100.0	11,835	100.0

5.3.9 Number of Cattle Sold Live by Households and Establishments

Table 5.11 shows the cumulative number and percentage of cattle sold live by households and establishments during the period, 1st May 2022 to 30th April 2023

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A total of 477,351 cattle were sold live from both households and establishments. Southern Province recorded the highest number of cattle sold live by both households and establishments at 180,233, while Luapula Province reported the lowest at 1,685. At Household level, Southern Province recorded the highest percentage of live cattle sales at 36.8 percent while Luapula Province reported the lowest at 0.3 percent. A similar pattern was observed for the sales by establishments.

Table 5.11: Number and Percentage of Cattle Sold Live by Households and Establishments, 2023

Province	Total number of cattle sold Live	Cattle sold by Households		Cattle sold by Establishments	
		Number	Percent	Number	Percent
Central	104,485	87,170	20.7	17,315	21.9
Copperbelt	45,887	42,257	10.1	3,630	9.6
Eastern	66,776	65,837	15.7	939	14.0
Luapula	1,685	1,342	0.3	343	0.4
Lusaka	16,858	9,000	2.1	7,858	3.5
Muchinga	19,003	18,828	4.5	175	4.0
Northern	4,378	4,186	1.0	191	0.9
North-Western	5,807	4,901	1.2	906	1.2
Southern	180,233	154,726	36.8	25,507	37.8
Western	32,239	31,986	7.6	252	6.8
Zambia	477,351	420,234	100.0	57,117	100.0

5.2.10 Calving Percentage

The calving percentage is the number of calves born in relation to the number of cows exposed for mating or servicing in the herd. The calving percentage by province during the reference period is shown in Table 5.12.

The average calving percentage in the country was at 26.8 percent. Among Provinces, the highest calving percentage was recorded in Southern Province at 32.6 percent followed by Western Province at 31.0 percent. The least calving percentage was recorded in North-Western Province at 7.5 percent .

Table 5.12: Cattle Calving Rate for Households by Province, 2023

Province	Number of cows	Number of calves born	Calving Rate
Central	259,697	51,264	19.7
Copperbelt	56,807	12,673	22.3
Eastern	371,702	88,459	23.8
Luapula	7,133	1183	16.6
Lusaka	82,172	12,337	15
Muchinga	52,241	12,600	24.1
Northern	33,699	8,032	23.8
North-Western	27,431	2,046	7.5
Southern	719,920	234,963	32.6
Western	236,390	73,298	31.0
Zambia	1,853,498	496,893	26.8

5.3 Goat Production

5.3.1 Opening and Closing Stock of Goats for Households and Establishments

Table 5.13 shows the number of goats raised by province on 1st May, 2022 (Opening Stock) and on 30th April, 2023 (Closing Stock). At national level, the goat population decreased by 3.0 percent (169,713 goats). The decrease was reported in Central, Copperbelt, Eastern, Southern and Northern provinces while Luapula, Lusaka, Muchinga, North-Western and Western provinces recorded increases.

Table 5.13: Opening and Closing Stock of Goats by Province, 2023

Province	Total Goats Raised		Population Change	
	1st May 2022	30th April, 2023	Increase/Decrease	Percent
Central	998,486	901,464	-97,022	-9.7
Copperbelt	390,455	300,082	-90,373	-23.1
Eastern	577,607	554,305	-23,303	-4.0
Luapula	263,837	264,626	789	0.3
Lusaka	314,159	346,165	32,007	10.2
Muchinga	289,388	305,386	15,997	5.5
Northern	409,461	371,486	-37,975	-9.3
North-western	219,851	260,552	40,701	18.5
Southern	2,147,274	2,122,485	-24,789	-1.2
Western	127,924	142,179	14,255	11.1
Zambia	5,738,443	5,568,730	-169,713	-3.0

5.3.2 Number of Goats Raised by Households and Establishments

Table 5.14 shows the number and percentage of goats raised by households and establishments as at 30th April, 2023. Of the total 5,568,730 goats in the country, 99.2 percent (5,522,772) were raised by households while 0.8 percent (45,957) were raised by establishments.

Table 5.14: Number of Goats Raised by Households and Establishments, 2023

Province	Households		Establishments		Total Goats Raised
	Number	Percent	Number	Percent	
Central	886,341	98.3	15,123	1.7	901,464
Copperbelt	293,157	97.7	6,925	2.3	300,082
Eastern	552,507	99.7	1,797	0.3	554,305
Luapula	263,178	99.5	1,447	0.5	264,626
Lusaka	345,121	99.7	1,045	0.3	346,165
Muchinga	303,848	99.5	1,538	0.5	305,386
Northern	371,151	99.9	335	0.1	371,486
North-western	259,076	99.4	1,476	0.6	260,552
Southern	2,107,053	99.3	15,432	0.7	2,122,485
Western	141,341	99.4	838	0.6	142,179
Zambia	5,522,772	99.2	45,957	0.8	5,568,730

5.3.3 Number of Goats raised in Households by Sex

Table 5.15 shows the number of goats raised in Households by sex. Out of a total 5,522,772 goats raised by households in the country, female goats constituted 68.8 percent (3,797,753), while male goats constituted 31.2 percent (1,725,019).

Table 5.15: Number and Percentage of Goats by Sex and Province, 2023

Province	Total number of Goats Raised by Households	Female Goats		Male Goats	
		Number	Percent	Number	Percent
Central	886,341	592,065	66.8	294,276	33.2
Copperbelt	293,157	190,826	65.1	102,331	34.9
Eastern	552,507	364,210	65.9	188,297	34.1
Luapula	263,178	170,677	64.9	92,501	35.1
Lusaka	345,121	252,935	73.3	92,186	26.7
Muchinga	303,848	214,912	70.7	88,936	29.3
Northern	371,151	253,783	68.4	117,367	31.6
North-Western	259,076	181,160	69.9	77,916	30.1
Southern	2,107,053	1,482,581	70.4	624,472	29.6
Western	141,341	94,604	66.9	46,737	33.1
Zambia	5,522,772	3,797,753	68.8	1,725,019	31.2

5.3.4 Average Number of Goats raised per Household and Establishment

Table 5.16 shows the average number of goats raised by households and establishments as at 30th April 2023. At national level, the average number of goats raised per Household was 8 and 53 for establishments.

At provincial level, Lusaka reported the highest average number of goats per household at 11 and Northern recorded the lowest number of goats at 4. Southern Province reported the highest average number of goats per establishment at 108, while Luapula recorded the lowest at 20.

Table 5.16: Average Number of Goats Raised Per Household and Establishment, 2023

Province	Number of Goats Raised		Number of households and establishments		Average number Goats raised	
	Households	Establishments	Households	Establishments	Households	Establishments
Central	886,341	15,123	90,803	303	10	50
Copperbelt	293,157	6,925	40,765	146	7	47
Eastern	552,507	1,797	98,535	67	6	27
Luapula	263,178	1,447	57,406	74	5	20
Lusaka	345,121	1,045	32,388	23	11	46
Muchinga	303,848	1,538	55,241	49	6	31
Northern	371,151	335	92,942	16	4	21
North-western	259,076	1,476	34,104	36	8	41
Southern	2,107,053	15,432	201,797	142	10	108
Western	141,341	838	19,760	13	7	62
Zambia	5,522,772	45,957	723,740	869	8	53

5.3.5 Percentage of Goat-raising Households by Herd Size

Table 5.17 shows the distribution of goat raising households by herd size and province. Of the total 723,740 households, the majority (50.4 percent) had a herd size of 1 to 5 goats, followed by those raising 6 to 10 goats at 26.6 percent. Households with a herd size of 21 goats or more collectively accounted for 6.8 percent of the total goat-raising households in Zambia.

Table 5.17: Percentage of Goat-Raising Households by Size of Herd Raised, 2023

Province	Total number of Goat-raising Households	Size of Herd Raised (Percent)									
		1-5	6-10	11-15	16-20	21-30	31-40	41-50	51-100	101-150	150+
Central	90,803	44.7	23.1	13.3	8.0	6.2	2.3	1.0	1.2	0.0	0.0
Copperbelt	40,765	47.4	28.3	10.0	7.1	3.4	2.1	1.1	0.5	0.0	0.0
Eastern	98,535	58.5	25.8	9.5	3.2	1.5	0.9	0.5	0.0	0.1	0.0
Luapula	57,406	71.9	21.0	5.6	1.2	0.2	0.1	0.0	0.0	0.0	0.0
Lusaka	32,388	33.6	25.0	16.9	6.1	14.0	1.5	0.4	1.9	0.0	0.6
Muchinga	55,241	56.0	28.9	9.9	3.2	1.7	0.3	0.0	0.0	0.0	0.0
Northern	92,942	71.4	20.5	5.7	1.5	0.7	0.2	0.0	0.0	0.0	0.0
North-Western	34,104	44.0	33.5	15.5	2.8	3.4	0.8	0.0	0.0	0.0	0.0
Southern	201,797	35.4	31.2	13.6	8.2	7.6	2.0	1.4	0.6	0.1	0.0
Western	19,760	56.8	26.8	8.0	4.5	2.1	0.3	1.2	0.2	0.3	0.0
Zambia	723,740	50.4	26.6	10.9	5.2	4.4	1.2	0.7	0.4	0.0	0.0

5.3.6 Number of Goats Owned by Households and Female Members of Households

Table 5.18 shows the distribution of goats owned by households and female members of households by province as at 30th April 2023. Overall, 91.3 percent (5,041,723) of goats in Zambia were owned by households raising them. Of this number, female members of the households owned 39.7 percent, while 60.3 percent were owned by male members of the households.

Table 5.18: Goat Ownership by Sex of Members of Household, 2023

Province	Goat Raised by Households	Goat Owned by Households		Goat owned by Female Household Members		Goat owned by Male Household Members	
	Number	Number	Percent	Number	Percent	Number	Percent
Central	886,341	846,192	95.5	365,562	43.2	480,629	56.8
Copperbelt	293,157	281,550	96.0	95,454	33.9	186,096	66.1
Eastern	552,507	395,392	71.6	152,202	38.5	243,191	61.5
Luapula	263,178	255,082	96.9	142,206	55.7	112,876	44.3
Lusaka	345,121	325,213	94.2	146,907	45.2	178,306	54.8
Muchinga	303,848	251,063	82.6	65,944	26.3	185,119	73.7
Northern	371,151	341,148	91.9	110,519	32.4	230,629	67.6
North-western	259,076	242,133	93.5	128,344	53.0	113,789	47.0
Southern	2,107,053	1,970,344	93.5	720,719	36.6	1,249,624	63.4
Western	141,341	133,607	94.5	74,853	56.0	58,753	44.0
Zambia	5,522,772	5,041,723	91.3	2,002,710	39.7	3,039,013	60.3

Western Province reported the highest share of goats owned by female members of the households at 56.0 percent of the total goats owned by households in the province. The lowest share of goats owned by female members of the households was recorded in Muchinga Province at 26.3 percent (**Figure 5.1**).

Figure 5.2: Percent of Goats owned by Female Household Members, 2023
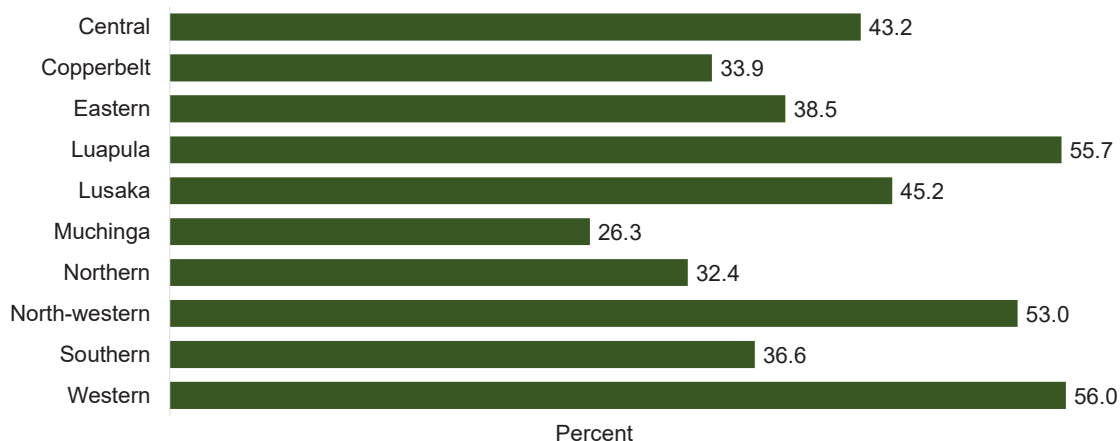
5.3.7 Number of Goats Slaughtered by Households and Establishments

A total of 716,712 goat slaughters were recorded in the country from both households and establishments between 1st May 2022 and 30th April 2023. Southern Province recorded the highest number of slaughters at 169,804 while Western reported the lowest at 16,114.

At Household level, Southern Province recorded the highest share at 23.7 percent while Western Province reported the lowest at 2.3 percent. At establishment level, Central Province recorded the highest at 47.1 percent and Western Province reported the lowest at 0.1 percent. (See Table 5.19)

Table 5.19: Number and Percentage of Goats Slaughtered by Households and Establishments, 2023

Province	Total number Slaughtered	Households		Establishments	
		Number	Percent	Number	Percent
Central	107,709	106,787	14.9	922	47.1
Copperbelt	74,049	73,773	10.3	276	14.1
Eastern	87,278	87,134	12.2	145	7.4
Luapula	47,750	47,678	6.7	72	3.7
Lusaka	40,328	40,325	5.6	2	0.1
Muchinga	54,894	54,816	7.7	77	4.0
Northern	95,513	95,499	13.4	14	0.7
North-Western	23,273	23,178	3.2	95	4.8
Southern	169,804	169,478	23.7	325	16.6
Western	16,114	16,084	2.3	30	1.5
Zambia	716,712	714,754	100.0	1,958	100.0

5.3.8 Number of Goats sold live by Households and Establishments

Table 5.20 shows the number and percentage of goats sold live by households and establishments during the reference period, 1st May 2022 to 30th April 2023. A total of 1,392,211 goats were sold live from both households and establishments. Southern Province recorded the highest number of goats sold live by both households and establishments at 483,064, while Western was lowest at 21,090.

At Household level, Southern Province reported the highest percentage of sales at 34.7 percent while Western reported the lowest at 1.5 percent. Under establishments, Central Province recorded the highest percentage of sales at 29.4 percent, while Northern reported the lowest at 0.3 percent.

Table 5.20: Number and Percentage of Goats Sold Live by Households and Establishments, 2023

Province	Total number of Goats sold Live	Goats sold by Households		Goats sold by Establishments	
		Number	Percent	Number	Percent
Central	222,942	220,926	15.9	2,016	29.4
Copperbelt	116,563	115,284	8.3	1,278	18.6
Eastern	125,206	124,965	9.0	241	3.5
Luapula	87,794	87,536	6.3	257	3.8
Lusaka	96,932	96,768	7.0	164	2.4
Muchinga	86,860	86,747	6.3	114	1.7
Northern	91,171	91,149	6.6	22	0.3
North-Western	60,590	60,237	4.3	353	5.1
Southern	483,064	480,721	34.7	2,343	34.2
Western	21,090	21,020	1.5	71	1.0
Zambia	1,392,211	1,385,353	100.0	6,859	100.0

5.4 Sheep Production

5.4.1 Opening and Closing Stock of Sheep for Households and Establishments

Table 5.21 shows the number of sheep raised by province on 1st May, 2022 (Opening Stock) and on 30th April, 2023 (Closing Stock). At national level, the Sheep population increased by 0.2 percent (630 Sheep). The increases in the Sheep population were reported in Central, Copperbelt, Lusaka, Northern, Southern and Western provinces. Conversely, Eastern, Luapula, Muchinga and North-Western Provinces posted a decrease in sheep population.

Table 5.21: Opening and Closing Stock of Sheep Raised by Households and Establishments by Province, 2023

Province	Total Sheep Raised		Population Change	
	1st May 2022	30th April, 2023	Increase/Decrease	Percent
Central	91,054	91,751	698	0.8
Copperbelt	44,724	46,486	1,762	3.9
Eastern	20,915	19,818	-1,096	-5.2
Luapula	2,735	2,154	-580	-21.2
Lusaka	15,486	20,945	5,459	35.3
Muchinga	3,806	3,561	-244	-6.4
Northern	608	793	184	30.3
North-western	9,907	3,541	-6,366	-64.3
Southern	118,329	118,982	653	0.6
Western	161	322	161	100.0
Zambia	307,724	308,354	630	0.2

5.4.2 Number of Sheep Raised by Households and Establishments

Table 5.22 shows the number and percent of sheep raised by households and establishments as at 30th April, 2023. Of the total 308,354 Sheep, 92.2 percent (284,353) were raised by households while 7.8 percent (24,001) were raised by establishments.

Table 5.22: Number of Sheep Raised by Households and Establishments, 2023

Province	Households		Establishments		Total Sheep Raised
	Number	Percent	Number	Percent	
Central	84,124	91.7	7,627	8.3	91,751
Copperbelt	41,303	88.9	5,183	11.1	46,486
Eastern	19,532	98.6	287	1.4	19,818
Luapula	1,869	86.7	286	13.3	2,154
Lusaka	19,647	93.8	1,298	6.2	20,945
Muchinga	2,807	78.8	754	21.2	3,561
Northern	728	91.9	64	8.1	793
North-western	3,085	87.1	456	12.9	3,541
Southern	110,937	93.2	8,045	6.8	118,982
Western	322	100.0		0.0	322
Zambia	284,353	92.2	24,001	7.8	308,354

5.4.3 Number of Sheep raised by Sex under Households

Of the 284,353 sheep raised by households in the country, female Sheep constituted 71.6 percent (203,723), and 28.4 percent (80,629) were male (**Table 5.23**).

Table 5.23: Number and Percentage of Goats by Sex and Province, 2023

Province	Total number of Sheep Raised by Households	Female Sheep		Male Sheep	
		Number	Percent	Number	Percent
Central	84,124	58,547	69.6	25,577	30.4
Copperbelt	41,303	22,803	55.2	18,499	44.8
Eastern	19,532	13,279	68.0	6,253	32.0
Luapula	1,869	1,338	71.6	531	28.4
Lusaka	19,647	15,236	77.5	4,411	22.5
Muchinga	2,807	2,048	73.0	759	27.0
Northern	728	552	75.9	176	24.1
North-Western	3,085	2,550	82.7	535	17.3
Southern	110,937	87,102	78.5	23,835	21.5
Western	322	268	83.3	54	16.7
Zambia	284,353	203,723	71.6	80,629	28.4

5.4.4 Average Number of Sheep Raised Per Household and Establishment

Table 5.24 shows the average number of Sheep raised per household and establishment as at 30th April, 2023. At national level, the average number of sheep raised per household was 7 and 60 sheep per establishment.

At provincial level, Central Province recorded the highest average number of sheep per household at 10, followed by Copperbelt and Southern at 8 and 6 respectively. Under establishments, Southern Province reported the highest at 87 followed by Copperbelt at 68.

Table 5.24: Average Number of Sheep Raised per Household and Establishment, 2023

Province	Number of Sheep Raised		Number of Households/ Establishments		Average Number of Sheep Raised	
	Households	Establishments	Households	Establishments	Households	Establishments
Central	84,124	7,627	8,484	142	10	54
Copperbelt	41,303	5,183	5,334	77	8	68
Eastern	19,532	287	3,596	13	5	23
Luapula	1,869	286	716	28	3	10
Lusaka	19,647	1,298	4,045	17	5	76
Muchinga	2,807	754	962	18	3	41
Northern	728	64	176	4	4	15
North-western	3,085	456	861	11	4	41
Southern	110,937	8,045	18,305	93	6	87
Western	322	0	176	0	2	0
Zambia	284,353	24,001	42,653	402	7	60

5.4.5 Percentage of Sheep-raising Households by Herd Size, 2023

Table 5.25 shows the distribution of sheep raising households by herd size and province. Of the total 42,653 households, 55.4 percent had a herd size of 1 to 5 sheep, this was followed by those raising 6 to 10 goats at 29.6 percent. Households with a herd size of 11 sheep or more collectively accounted for 15.0 percent of the total Sheep-raising households in Zambia.

Table 5.25: Percentage of Sheep Raising Households by Size of Herd Raised, 2023

Province	Total number of Sheep-raising Households	Size of Herd Raised (Percent)									
		1-5	6-10	11-15	16-20	21-30	31-40	41-50	51-100	101-150	150+
Central	8,484	37.2	33.0	12.9	4.8	10.9	0.0	0.0	1.1	0.0	0.0
Copperbelt	5,334	55.2	23.6	9.4	6.0	2.6	1.1	1.1	1.1	0.0	0.0
Eastern	3,596	80.1	8.7	0.0	7.7	0.0	3.5	0.0	0.0	0.0	0.0
Luapula	716	74.4	25.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lusaka	4,045	59.8	34.7	4.7	0.0	0.7	0.0	0.0	0.0	0.0	0.0
Muchinga	962	77.8	22.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Northern	176	57.1	42.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
North-Western	861	81.1	18.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Southern	18,305	54.8	33.7	7.9	1.1	1.8	0.6	0.1	0.0	0.0	0.0
Western	176	69.4	30.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Zambia	42,653	55.4	29.6	7.6	2.8	3.3	0.7	0.2	0.4	0.0	0.0

5.4.6 Number of Sheep Owned by Households and Female Members of Households

Table 5.26 shows the distribution of sheep raised by households as well as those owned by female and male members of the households as at 30th April, 2023. Overall, 88.4 percent of sheep in Zambia (251,508) were owned by households of this number, female members of the households owned 31.7 percent, while 68.3 percent were owned by male members of the households.

Table 5.26: Sheep Ownership by Sex of Members of Household, 2023

Province	Sheep Raised by Households	Sheep Owned by Households	Sheep owned by Female Household Members		Sheep owned by Male Household Members	
	Number	Number	Number	Percent	Number	Percent
Central	84,124	75,383	48,730	64.6	26,653	35.4
Copperbelt	41,303	31,044	8,323	26.8	22,722	73.2
Eastern	19,532	11,277	2,413	21.4	8,864	78.6
Luapula	1,869	1,869	238	12.7	1,630	87.3
Lusaka	19,647	18,602	7,561	40.6	11,041	59.4
Muchinga	2,807	2,380	1,177	49.5	1,202	50.5
Northern	728	728	728	100.0	0	0.0
North-western	3,085	3,085	1,355	43.9	1,730	56.1
Southern	110,937	106,819	8,994	8.4	97,824	91.6
Western	322	322	268	83.3	54	16.7
Zambia	284,353	251,508	79,787	31.7	171,720	68.3

Northern Province recorded the highest share of sheep owned by female members of the households at 100.0 percent of the total sheep owned by households in the province. The lowest share of sheep owned by female members of the households was recorded in Southern Province at 8.4 percent (**Figure 5.2**).

Figure 5.3: Percent of Sheep owned by Female Household Members, 2023.
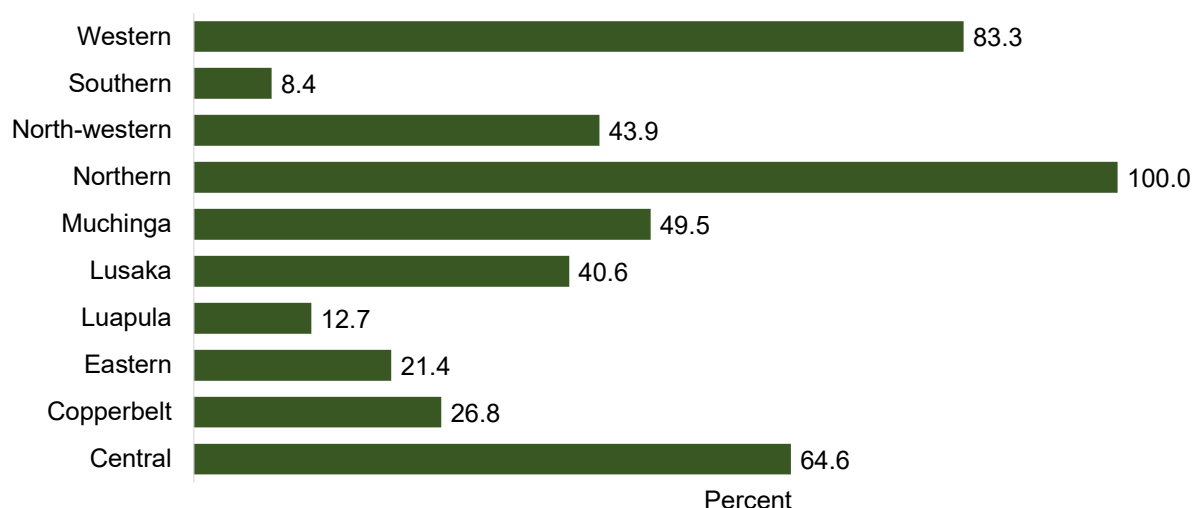
5.3.7 Number of Sheep Slaughtered by Households and Establishments

A total of 35,081 sheep slaughters were recorded in the country from both households and establishments between 1st May 2022 and 30th April 2023. Central Province recorded the highest number of sheep slaughters at 11,831, while Northern and Western recorded the lowest number of slaughters.

At household level, Central Province recorded the highest share at 34.4 percent while Northern and Western reported the lowest at 0.2 percent each. Under establishments, Southern Province recorded the highest at 38.3 percent, while Northern and Western reported no slaughters. (**Table 5.26**)

Table 5.26: Number and Percentage of Sheep Slaughtered by Households and Establishments, 2023

Province	Total number Slaughtered	Households		Establishments	
		Number	Percent	Number	Percent
Central	11,831	11,710	34.4	122	11.6
Copperbelt	5,696	5,466	16.1	230	22.1
Eastern	5,223	5,200	15.3	23	2.2
Luapula	562	556	1.6	6	0.6
Lusaka	1,074	863	2.5	210	20.1
Muchinga	301	265	0.8	36	3.4
Northern	75	75	0.2	0	0.0
North-Western	2,976	2,958	8.7	18	1.7
Southern	7,289	6,889	20.2	400	38.3
Western	54	54	0.2	0	0.0
Zambia	35,081	34,036	100.0	1,045	100.0

5.4.8 Number of Sheep sold live by Households and Establishments

Table 5.27 shows the number and percentage of sheep sold live by households and establishments during the reference period, 1st May 2022 to 30th April 2023. A total of 61,416 sheep were sold live during the reference period from both households and establishments. Southern Province recorded the highest number of sheep sold live by both households and establishments at 23,500, while Northern and Western provinces did not record any live sales.

At household level, Southern Province recorded the highest percentage of sales at 39.1 percent, followed by Central at 28.8 percent. Under establishments, Copperbelt Province recorded the highest percentage of sales at 45.2 percent, this was followed by Southern Province at 24.9 percent.

Table 5.27: Number and Percentage of Sheep Sold Live by Households and Establishments, 2023

Province	Total number of Sheep Sold Live	Sheep sold by Households		Sheep sold by Establishments	
		Number	Percent	Number	Percent
Central	17,318	16,618	28.8	701	18.5
Copperbelt	7,780	6,067	10.5	1,713	45.2
Eastern	3,939	3,924	6.8	15	0.4
Luapula	446	419	0.7	27	0.7
Lusaka	5,265	4,969	8.6	296	7.8
Muchinga	299	236	0.4	63	1.7
Northern	0	0	0.0	0	0.0
North-Western	2,867	2,835	4.9	32	0.9
Southern	23,500	22,554	39.1	946	24.9
Western	0	0	0.0	0	0.0
Zambia	61,416	57,622	100.0	3,794	100.0

5.5 Pig Production

5.5.1 Opening and Closing Stock of Pigs for Households and Establishments

The number of pigs raised by province on 1st May, 2022 (Opening Stock) and on 30th April, 2023 (Closing Stock) is shown in Table 5.31. At national level, the population of pigs decreased by 153,274 representing 8.7 percent.

All provinces with the exception of Western and North-Western reported a decrease in pig population. Lusaka Province reported the largest population decrease in the number of pigs raised at 58,441 accounting for 22.1 percent, followed by Central at 38,234 (18.6 percent). Conversely, North-western and Western Provinces posted increases in pig population at 35.8 percent and 22.7 percent, respectively.

Table 5.31: Opening and Closing Stock of Pigs by Province, 2023

Province	Total Pigs Raised		Population Change	
	1st May 2022	30th April, 2023	Increase/Decrease	Percent
Central	206,123	167,889	-38,234	-18.5
Copperbelt	183,713	168,730	-14,983	-8.2
Eastern	303,039	269,371	-33,668	-11.1
Luapula	52,121	40,855	-11,266	-21.6
Lusaka	264,729	206,288	-58,441	-22.1
Muchinga	98,618	97,868	-750	-0.8
Northern	143,843	123,957	-19,886	-13.8
North-western	73,411	99,696	26,285	35.8
Southern	370,738	352,481	-18,257	-4.9
Western	70,186	86,114	15,927	22.7
Zambia	1,766,522	1,613,248	-153,274	-8.7

5.5.2 Number of Pigs Raised by Households and Establishments

Table 5.14 shows the number and percent of pigs raised by households and establishments as at 30th April, 2023. Of the total 1,613,248 pigs, 97.9 percent (1,579,287) were raised by households and 2.1 percent (33,961) by establishments.

Central Province posted the highest percentage of establishments' contributing to the total pig population at 6.8 percent followed by Copperbelt at 5.4 percent and eastern was the least at 0.2 percent.

Table 5.32: Number of Pig Raised by Households and Establishments, 2023

Province	Households		Establishments		Total Pigs Raised
	Number	Percent	Number	Percent	
Central	156,466	93.2	11,423	6.8	167,889
Copperbelt	159,556	94.6	9,173	5.4	168,730
Eastern	268,891	99.8	480	0.2	269,371
Luapula	39,735	97.3	1,120	2.7	40,855
Lusaka	201,814	97.8	4,474	2.2	206,288
Muchinga	96,652	98.8	1,216	1.2	97,868
Northern	123,370	99.5	587	0.5	123,957
North-western	98,646	98.9	1,049	1.1	99,696
Southern	348,372	98.8	4,109	1.2	352,481
Western	85,784	99.6	330	0.4	86,114
Zambia	1,579,287	97.9	33,961	2.1	1,613,248

5.5.3 Number of Pigs Raised under Households by Sex

Table 5.33 shows the number of pigs raised by households by sex as at 30th April, 2023. Of the total 1,579,287 pigs, female pigs constituted the majority at 993,913 accounting for 62.9 percent, and male pigs 37.1 percent (585,374).

Table 5.33: Number and Percentage of Pigs by Sex and Province, 2023

Province	Total number of Pigs Raised by Households	Female Pigs		Male Pigs	
		Number	Percent	Number	Percent
Central	156,466	101,566	64.9	54,900	35.1
Copperbelt	159,556	101,766	63.8	57,790	36.2
Eastern	268,891	152,475	56.7	116,416	43.3
Luapula	39,735	22,685	57.1	17,050	42.9
Lusaka	201,814	148,480	73.6	53,334	26.4
Muchinga	96,652	66,419	68.7	30,232	31.3
Northern	123,370	76,281	61.8	47,089	38.2
North-Western	98,646	66,788	67.7	31,859	32.3
Southern	348,372	206,759	59.4	141,613	40.6
Western	85,784	50,692	59.1	35,091	40.9
Zambia	1,579,287	993,913	62.9	585,374	37.1

5.5.4 Average Number of Pigs Raised per Household and Establishment

Table 5.34 shows the average number of pigs raised by households and establishments as at 30th April, 2023. At national level, the average number of pigs raised was 6 per household and 89 pigs per establishment.

At provincial level, Lusaka Province reported the highest average number of pigs per household at 18 while Luapula was lowest at 2. Similarly, under establishments, Lusaka Province recorded the highest average number at 350, while Eastern Province posted the lowest at 13.

Table 5.34: Average Number of Pigs Raised Per Household and Establishment, 2023

Province	Number of Pigs Raised		Number of Households and Establishments		Average Number of Pigs Raised	
	Households	Establishments	Households	Establishments	Households	Establishments
Central	156,466	11,423	17,305	77	9	149
Copperbelt	159,556	9,173	23,436	78	7	118
Eastern	268,891	480	45,713	36	6	13
Luapula	39,735	1,120	16,003	48	2	23
Lusaka	201,814	4,474	11,465	13	18	350
Muchinga	96,652	1,216	21,059	32	5	37
Northern	123,370	587	37,653	19	3	30
North-western	98,646	1,049	14,425	17	7	62
Southern	348,372	4,109	71,370	49	5	84
Western	85,784	330	13,045	11	7	30
Zambia	1,579,287	33,961	271,474	380	6	89

5.5.5 Percentage of Pig-raising Households by Size of Herd Raised

Table 5.35 shows the distribution of pig-raising households by herd size and province. Of the total 271,474 households, 66.1 percent had a herd size of 1 to 5 pigs, followed by those raising 6 to 10 pigs at 20.4 percent. Households with a herd size of 21 pigs or more collectively accounted for 4.6 percent of the total pig-raising households in Zambia.

Table 5.35: Percentage of Pig-Raising Households by Size of Herd Raised, 2023

Province	Total number of Pig-raising Households	Size of Herd Raised (Percent)									
		1-5	6-10	11-15	16-20	21-30	31-40	41-50	51-100	101-150	150+
Central	17,305	61.1	27.6	2.2	1.6	1.2	3.8	0.2	0.5	1.2	0.6
Copperbelt	23,436	57.3	23.2	5.0	3.8	1.4	2.3	1.5	2.3	0.0	3.2
Eastern	45,713	63.8	22.5	5.5	3.4	3.9	0.9	0.0	0.0	0.0	0.0
Luapula	16,003	76.6	18.9	4.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0
Lusaka	11,465	60.4	12.2	9.9	0.0	6.1	0.0	2.5	5.6	0.0	3.2
Muchinga	21,059	65.7	18.1	7.8	4.7	3.4	0.3	0.0	0.0	0.0	0.0
Northern	37,653	81.0	15.2	1.1	1.0	1.4	0.1	0.0	0.0	0.3	0.0
North-Western	14,425	52.1	25.6	13.4	7.0	1.9	0.0	0.0	0.0	0.0	0.0
Southern	71,370	68.2	19.8	8.5	1.2	1.6	0.5	0.2	0.0	0.0	0.0
Western	13,045	49.2	24.1	13.7	5.3	5.5	2.2	0.0	0.0	0.0	0.0
Zambia	271,474	66.1	20.4	6.5	2.4	2.4	0.9	0.3	0.5	0.1	0.5

5.5.6 Number of Pigs Owned by Households and Female Members of Households

Table 5.36 shows the distribution of pigs raised and owned by household members and female members of the households. Overall, 88.0 percent of pigs (1,389,192) were owned by households that were raising them. Of this number, the female members owned 35.5 percent, and 64.5 percent by male members of the households.

Table 5.36: Pig Ownership by Sex of Members of Household, 2023

Province	Pigs Raised by Households	Pigs Owned by Households		Pigs owned by Female Household Members		Pigs owned by Male Household Members	
	Number	Number	Percent	Number	Percent	Number	Percent
Central	156,466	137,426	87.8	49,718	36.2	87,708	63.8
Copperbelt	159,556	129,395	81.1	58,831	45.5	70,563	54.5
Eastern	268,891	176,736	65.7	64,769	36.6	111,967	63.4
Luapula	39,735	38,851	97.8	32,516	83.7	6,335	16.3
Lusaka	201,814	199,355	98.8	51,276	25.7	148,078	74.3
Muchinga	96,652	84,442	87.4	21,779	25.8	62,664	74.2
Northern	123,370	113,985	92.4	24,737	21.7	89,248	78.3
North-western	98,646	88,338	89.6	43,618	49.4	44,720	50.6
Southern	348,372	335,954	96.4	104,862	31.2	231,092	68.8
Western	85,784	84,710	98.7	41,179	48.6	43,531	51.4
Zambia	1,579,287	1,389,192	88.0	493,285	35.5	895,907	64.5

Luapula Province recorded the highest share of pigs owned by female members of the households at 83.7 percent of the total pigs owned by households in the province. The lowest share of pigs owned by female members of the households was recorded in Northern Province at 21.7 percent (**Figure 5.2**).

Figure 5.4: Percent of Pigs owned by Female Household Members
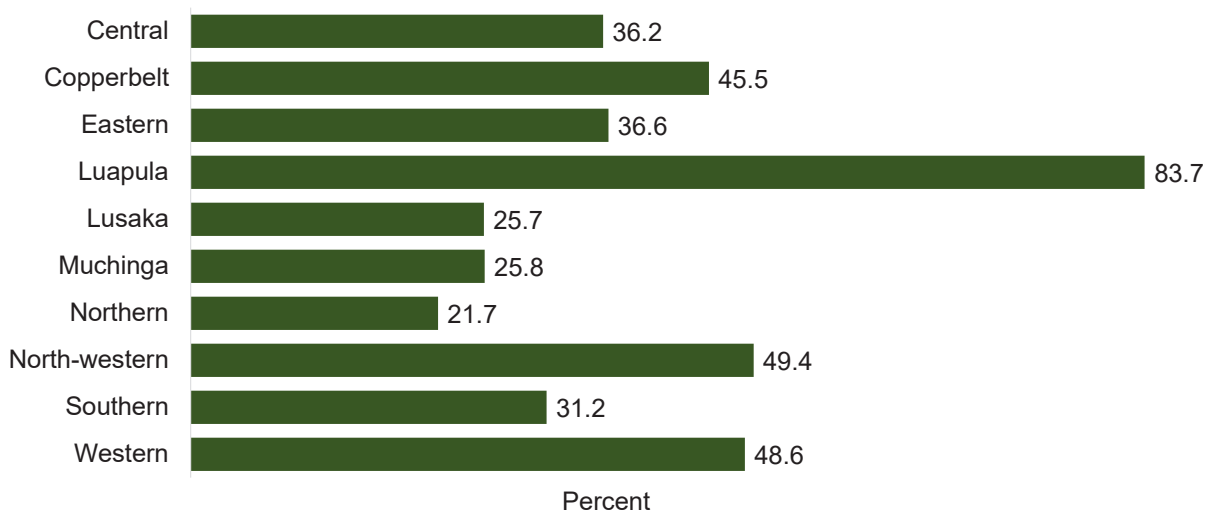
5.5.7 Number of Pigs slaughtered by Households and Establishments

A total of 306,529 pig slaughters were recorded from both households and establishments between 1st May 2022 and 30th April 2023. Copperbelt Province recorded the highest number of pig slaughters at 109,469 while Western Province reported the lowest at 3,388.

At household level, Copperbelt Province recorded the highest percentage of pig slaughters at 35.7 percent while Western Province posted the lowest at 1.1 percent. At establishment level Copperbelt Province reported the highest at 37.8 percent and Western the lowest at 0.2 percent (**Table 5.37**).

Table 5.37: Number and Percentage of Pigs Slaughtered by Households and Establishments, 2023

Province	Total number of Pigs Slaughtered	Households		Establishments	
		Number	Percent	Number	Percent
Central	16,751	16,369	5.5	382	6.0
Copperbelt	109,469	107,072	35.7	2,397	37.8
Eastern	38,904	38,832	12.9	72	1.1
Luapula	14,648	14,321	4.8	327	5.2
Lusaka	35,400	33,236	11.1	2,164	34.1
Muchinga	17,966	17,881	6.0	85	1.3
Northern	36,165	35,995	12.0	170	2.7
North-Western	14,468	13,890	4.6	578	9.1
Southern	19,371	19,216	6.4	154	2.4
Western	3,388	3,376	1.1	12	0.2
Zambia	306,529	300,189	100.0	6,341	100.0

5.5.8 Number of Pigs Sold Live by Households and Establishments

Table 5.38 shows the number and percentage of Pigs sold live by households and establishments during the period, 1st May, 2022 to 30th April, 2023. A total of 687,427 pigs were sold live from both households and establishments. Southern Province recorded the highest number of pigs sold live by both households and establishments at 194,550, while Luapula reported the lowest at 15,150.

At household level, Southern Province recorded the highest sales at 28.6 percent while Luapula was lowest at 2.2 percent. Under establishments, Central Province posted the highest percentage of sales at 39.3 percent, and Western was the lowest at 1.1 percent.

Table 5.38: Number and Percentage of Pigs Sold Live by Households and Establishments, 2023

Province	Total number of Pigs sold Live	Pigs sold by Households		Pigs sold by Establishments	
		Number	Percent	Number	Percent
Central	146,994	142,367	21.1	4,626	39.3
Copperbelt	58,828	56,443	8.4	2,385	20.3
Eastern	69,250	69,035	10.2	215	1.8
Luapula	15,150	14,710	2.2	440	3.7
Lusaka	86,813	85,145	12.6	1,667	14.2
Muchinga	35,036	34,821	5.2	214	1.8
Northern	39,664	39,559	5.9	105	0.9
North-Western	23,397	22,823	3.4	574	4.9
Southern	194,550	193,132	28.6	1,417	12.0
Western	17,747	17,618	2.6	129	1.1
Zambia	687,427	675,655	100.0	11,773	100.0

5.6 Other Animal Species

This section covers other animal species such as donkeys, cats and dogs and the number raised by households and establishments.

5.6.1 Dogs

Table 5.39 shows the number of dogs raised by households and establishments by province. The dog population from both household and establishment stood at 1,007,659. Southern Province reported the highest number at 311,872, followed by Central Province at 155,939. Luapula Province accounted for the lowest at 20,243.

Table 5.39: Number of Dogs Raised by Households and Establishments by Province, 2023

Province	Households		Establishments		Total number of Dogs Raised
	Number of Households Raising Dogs	Number of Dogs raised	Number of Establishments Raising Dogs	Number of Dogs Raised	
Central	74,903	155,317	206	622	155,939
Copperbelt	48,597	91,563	103	347	91,910
Eastern	45,970	97,181	28	74	97,255
Luapula	11,863	20,189	24	54	20,243
Lusaka	37,302	88,393	10	39	88,432
Muchinga	27,053	51,473	21	71	51,544
Northern	33,205	47,184	1	5	47,189
North-Western	21,756	54,274	6	16	54,290
Southern	170,248	311,339	108	533	311,872
Western	51,117	88,959	9	25	88,984
Zambia	522,014	1,005,872	516	1,787	1,007,659

5.6.2 Cats

Table 5.40 shows the number of cats raised by households and establishments by province. The Cat population from both households and establishment was 338,405. Southern Province recorded the highest number at 132,242, followed by Central Province at 49,384. North-Western Province accounted for the lowest at 6,943 cats.

Table 5.40: Number of Cats Raised by Households and Establishments by Province, 2023

Province	Households		Establishments		Total number of Cats Raised
	Number of Households Raising Cats	Number of Cats Raised	Number of Establishments Raising Cats	Number of Cats Raised	
Central	31,354	49,111	124	273	49,384
Copperbelt	27,188	39,381	52	140	39,521
Eastern	19,203	32,427	3	3	32,431
Luapula	6,043	7,586	6	12	7,599
Lusaka	7,434	10,172	1	14	10,186
Muchinga	7,134	10,803	7	16	10,819
Northern	4,772	6,936	3	7	6,943
North-Western	4,589	9,678			9,678
Southern	99,008	131,985	87	257	132,242
Western	25,847	39,590	6	12	39,602
Zambia	232,573	337,670	290	735	338,405

5.7 Livestock Management

5.7.1 Fencing of Livestock Holding

Table 5.41 shows the number and percentage of livestock keeping households with fenced livestock holdings by province. The total number of livestock-keeping households with fenced livestock holdings was 541,798 representing 29.3 percent of the livestock keeping households in the country.

Among provinces, Eastern had the highest percentage of households with fenced livestock holdings at 56.5 percent. Luapula Province recorded the least percentage of households with fenced livestock holdings at 2.7 percent.

Table 5.41: Number and Percentage of Livestock Raising Households with Fenced Livestock Holding, 2023

Province	Households Involved in Livestock Farming	Total Households with Fenced Livestock Holding	
	Number	Number	Percent
Central	222,491	40,891	18.4
Copperbelt	159,217	55,751	35.0
Eastern	291,209	164,405	56.5
Luapula	156,635	4,193	2.7
Lusaka	108,792	43,825	40.3
Muchinga	134,967	19,107	14.2
Northern	208,606	45,349	21.7
North Western	104,975	28,619	27.3
Southern	326,489	117,056	35.9
Western	136,082	22,603	16.6
Zambia	1,849,463	541,798	29.3

5.7.2 Livestock Record Keeping

Table 5.42 shows the number and percentage of livestock keeping households that keep records. The total number of households reported to be keeping records was 73,314 representing 4.0 percent.

Among provinces, Lusaka had the highest number of households that kept livestock records at 8.7 percent. Luapula and Muchinga provinces had the least number of households that kept livestock records with 1.5 percent and 1.0 percent, respectively.

Table 5.42: Households Keeping Livestock Records by Province, 2023

Province	Total Number of Households Raising Livestock	Total Households Keeping Livestock Records	
	Number	Number	Percent
Central	222,491	4,756	2.1
Copperbelt	159,217	11,287	7.1
Eastern	291,209	18,154	6.2
Luapula	156,635	2,386	1.5
Lusaka	108,792	9,454	8.7
Muchinga	134,967	1,329	1.0
Northern	208,606	3,354	1.6
North Western	104,975	2,814	2.7
Southern	326,489	14,660	4.5
Western	136,082	5,119	3.8
Zambia	1,849,463	73,314	4.0

Table 5.43 shows the number and percentage of households keeping records by education level of household heads. Out of the total households keeping livestock records, the highest percentage of household heads(16.9%) had tertiary education, this was followed by households with household heads who had secondary education at 5.1 percent. Households with household heads who had primary education reported the least at 2.5 percent households keeping livestock records.

Table 5.43: Number and Percentage of Households Keeping Livestock Production Records by Level of Education of Household Heads, 2023

Level of Education of Household Head	Total Households	Households Keeping Livestock Records	
		Number	Percent
None	140,278	3,661	2.6
Primary	988,654	24,996	2.5
Secondary	655,448	33,678	5.1
Tertiary	65,084	10,979	16.9
TOTAL	1,849,463	73,314	4.0

5.7.3 Households and Establishments Practicing Supplementary Feeding, 2023.

Table 5.44 shows the number and percentage of households and establishments practising supplementary feeding by province. Of the 1,849,463 livestock raising households, 395,993 households were practising supplementary feeding, representing 21.4 percent. The highest percentage of households that practised supplementary feeding was in Copperbelt Province at 29.9 percent followed by Southern at 27.6 percent. The lowest percentage of Households practising supplementary feeding was reported in North-Western Province at 10.8 percent.

Of the 1,995 livestock raising establishments, a total of 1,002 were practising supplementary feeding, representing 50.2 percent. The highest percentage of establishments that practised supplementary feeding was reported in Lusaka Province at 73.6 percent, followed by Western at 68.5 percent and the least was Central at 36.2 percent.

Table 5.44: Number and Percentage of Households and Establishments Practising Supplementary Feeding by Province, 2023

Province	Households raising Livestock	Households Practising Supplementary Feeding		Establishments raising Livestock	Establishments Practising Supplementary Feeding	
	Number	Number	Percent	Number	Number	Percent
Central	222,491	60,976	27.4	629	228	36.2
Copperbelt	159,217	47,680	29.9	279	144	51.7
Eastern	291,209	71,137	24.4	121	47	38.7
Luapula	156,635	24,068	15.4	124	49	39.7
Lusaka	108,792	20,461	18.8	95	70	73.6
Muchinga	134,967	20,197	15.0	74	43	58.6
Northern	208,606	33,062	15.8	39	24	62.5
North-Western	4,975	11,366	10.8	75	49	64.9
Southern	326,489	90,056	27.6	521	321	61.7
Western	136,082	16,990	12.5	39	27	68.5
Zambia	1,849,463	395,993	21.4	1995	1002	50.2

5.7.4 Type of Feed used by Households

Table 5.45 shows the number and percentage of livestock-raising Households that used supplementary feeding by type of feed used and province.

At national level, the majority (73.6 percent) of livestock-raising households used on-farm feed, while 14.9 percent used commercial feed. The percentage of households that used other types of feed accounted for 11.4 percent.

Table 5.45: Number and Percentage of households by Type of Feed used and Province, 2023

Province	Households Practicing Supplementary Feeding	Type of Feed Used					
		Commercial		On farm		Other	
		Number	Percent	Number	Percent	Number	Percent
Central	60,976	2,825	4.6	34,463	56.5	23,687	38.8
Copperbelt	47,680	12,305	25.8	32,669	68.5	2,706	5.7
Eastern	71,137	1,121	1.6	68,432	96.2	1,584	2.2
Luapula	24,068	2,002	8.3	21,157	87.9	908	3.8
Lusaka	20,461	10,938	53.5	4,480	21.9	5,043	24.6
Muchinga	20,197	1,155	5.7	18,910	93.6	132	0.7
Northern	33,062	2,023	6.1	29,481	89.2	1,558	4.7
North Western	11,366	1,572	13.8	9,637	84.8	157	1.4
Southern	90,056	23,349	25.9	57,680	64.0	9,027	10.0
Western	16,990	1,763	10.4	14,710	86.6	517	3.0
Zambia	395,993	59,054	14.9	291,618	73.6	45,321	11.4

5.7.5 Sources of Water

Table 5.46 shows the percentage of households accessing various sources of water by province. Boreholes/wells were the most utilised source of water at 44.6 percent, followed by stream/river at 29.7 percent while the least utilised source of water were lakes at less than 1.0 percent.

Among provinces, Lusaka reported the highest percentage of households that utilised boreholes/wells at 70.9 percent while Muchinga was the least at 31.8 percent. Streams/river were the most used in Western Province (44.6 percent), followed by Muchinga and Northern at 40.6 percent and 38.6 percent, respectively.

Table 5.46: Number and Percentage of Households Accessing Various Water Sources for Livestock by Province, 2023

Province	Total Number of Households Raising Livestock	Sources of water							
		Stream/River	Spring	Lake	Water Utility company	Swamp/Dambo/wetlands	Dam/Reservoir	Borehole/Wells	Other Water Sources
	Number	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent
Central	222,491	30.4	0.9	0.0	1.8	1.6	1.4	42.7	21.1
Copperbelt	159,217	20.4	0.5	0.0	3.2	0.9	2.2	36.4	36.5
Eastern	291,209	37.4	0.9	0.0	0.9	7.4	4.1	39.8	9.4
Luapula	156,635	13.4	0.1	4.1	2.5	1.7	0.3	51.2	26.8
Lusaka	108,792	9.6	1.0	0.0	6.4	3.1	2.8	70.9	6.2
Muchinga	134,967	40.6	3.6	0.2	4.5	7.2	3.5	31.8	8.7
Northern	208,606	38.5	2.3	0.1	2.4	3.4	0.7	47.1	5.5
North-western	104,975	31.5	2.4	0.0	1.8	1.2	1.2	51.5	10.3
Southern	326,489	24.7	0.5	1.5	2.6	7.2	11.3	48.7	3.7
Western	136,082	44.6	2.9	0.0	1.4	7.1	2.6	32.3	9.1
Zambia	1,849,463	29.7	1.3	0.6	2.5	4.5	3.8	44.6	13.0

5.7.6 Distance to Nearest Source of Water

Table 5.47 shows the percentage of livestock-raising households by distance to source of water and province. At national level, less than one percent of the livestock-raising households accessed water over 10 km away from their homes.

Among provinces, Southern and North-Western reported the highest percentage of households accessing water over 10 km away from their homestead at 1.6 percent each, followed by Lusaka at 1.3 percent. However, Central Copperbelt, Eastern, Luapula, Northern, and Western Provinces had less than 1.0 percent of households accessing water beyond 10 km.

Table 5.47: Distance to Sources of water for Livestock by Province, 2023

Province	Total number of Households Raising Livestock	Distance (km) to Source of Water				
		0-1 km	2-3 km	4-6 km	7-10 km	Over 10 km
	Number	Percent	Percent	Percent	Percent	Percent
Central	222,491	85.4	11.2	3.2	0.0	0.2
Copperbelt	159,217	89.1	7.4	2.0	0.7	0.8
Eastern	291,209	80.7	11.9	5.3	1.6	0.4
Luapula	156,635	95.3	3.8	0.3	0.4	0.2
Lusaka	108,792	87.5	10.3	0.1	0.8	1.3
Muchinga	134,967	85.5	10.5	2.9	0.2	1.0
Northern	208,606	91.9	6.7	0.6	0.4	0.4
North-western	104,975	93.8	2.6	0.7	1.3	1.6
Southern	326,489	69.2	19.6	8.0	1.5	1.6
Western	136,082	93.9	5.1	0.7	0.1	0.2
Zambia	1,849,463	84.9	10.3	3.2	0.8	0.8

5.7.7 Access to Livestock Production Extension Services

Table 5.48 shows the number and percentage of households accessing livestock extension services by province. A total of 325,715 households, accounting for 17.6 percent of the livestock-raising households, accessed livestock extension services during the reference period.

Among provinces, Western recorded the highest percentage of households accessing livestock extension services at 31.0 percent followed by Eastern at 28.5 percent. North-western Province had the lowest percentage at 7.6 percent.

Table 5.48: Number and Percentage of Livestock-Raising Households Accessing Livestock Production Extension Services by Province, 2023

Province	Total number of Households Raising Livestock	Households Accessing Livestock Extension Services	
		Number	Percent
Central	222,491	31,241	14.0
Copperbelt	159,217	21,168	13.3
Eastern	291,209	83,138	28.5
Luapula	156,635	12,187	7.8
Lusaka	108,792	13,309	12.2
Muchinga	134,967	18,701	13.9
Northern	208,606	26,764	12.8
North-western	104,975	8,014	7.6
Southern	326,489	69,055	21.2
Western	136,082	42,138	31.0
Zambia	1,849,463	325,715	17.6

5.7.8 Animal Health Extension Services by Province

Table 5.49 shows the percentage of livestock raising households accessing animal health extension services by province. At national level, 20.6 percent of the livestock-raising households accessed animal health extension services. At provincial level, Southern Province reported the highest percentage of households accessing animal health extension services at 34.5 percent while Luapula recorded the lowest at 7.0 percent.

Table 5.49: Number and Percentage of Livestock Raising Households Accessing Animal Health Extension Services, 2023

Province	Total number of Households Raising Livestock	Households Accessing Animal Health Extension Services	
		Number	Percent
Central	222,491	36,531	16.4
Copperbelt	159,217	21,714	13.6
Eastern	291,209	92,073	31.6
Luapula	156,635	10,964	7.0
Lusaka	108,792	18,133	16.7
Muchinga	134,967	18,398	13.6
Northern	208,606	25,744	12.3
North-western	104,975	8,842	8.4
Southern	326,489	112,673	34.5
Western	136,082	35,228	25.9
Zambia	1,849,463	380,301	20.6

5.7.9 Tick Control Methods by Households

Table 5.50 shows the percentage of livestock raising households using various methods of tick control by province. At national level, spraying using a knapsack was the most commonly used method for tick control at 15.4 percent among livestock raising households. This was followed by the traditional method at 9.9 percent while pour-on was the least at 1.2 percent. However, majority households (50.6 percent) involved in raising livestock did not practise any tick control methods.

Table 5.50: Number and Percentage of Households Using Various Methods of Tick Control by Province, 2023

Province	Total number of House-holds Raising Livestock	Method of Tick Control								
		Dipping	Spraying using Spray race	Pour-on	Hand dressing	Traditional	Injectables	Spraying using knapsack	None	Other Methods
		Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent
Central	222,491	9.5	8.1	0.9	1.1	11.3	2.6	15.7	45.4	5.4
Copperbelt	159,217	5.0	7.2	0.9	0.8	6.4	1.2	19.3	54.4	4.9
Eastern	291,209	13.1	10.9	1.6	2.4	7.9	2.9	21.8	36.4	3.0
Luapula	156,635	0.4	1.7	4.6	1.7	10.4	0.6	2.8	76.3	1.4
Lusaka	108,792	9.6	19.3	1.7	0.8	13.3	1.3	7.2	46.0	0.6
Muchinga	134,967	3.4	15.9	0.2	0.4	19.2	1.6	1.5	54.7	3.0
Northern	208,606	0.1	1.2	0.1	1.5	8.9	1.3	1.3	84.4	1.2
North-western	104,975	1.9	1.6	0.6	0.1	20.0	1.5	3.1	68.9	2.3
Southern	326,489	25.2	6.7	0.6	0.8	2.5	1.0	35.9	25.9	1.4
Western	136,082	0.8	6.1	1.3	2.4	14.9	10.2	13.6	48.9	1.6
Zambia	1,849,463	9.1	7.6	1.2	1.3	9.9	2.3	15.4	50.6	2.6

5.8 Major Constraints in Livestock Production

5.8.1 Major Constraints in Raising Cattle

Figure 5.5 shows the percentage of households that experienced constraints in cattle production. At national level, 66.8 percent of cattle-raising households reported disease as the major constraint, followed by limited access to vet drugs/vaccines at 5.5 percent. However, about 14.0 percent of households reported that they did not experience any major constraints in cattle production.

Figure 5.5: Percentage of households experienced major constraints in Cattle production, 2023
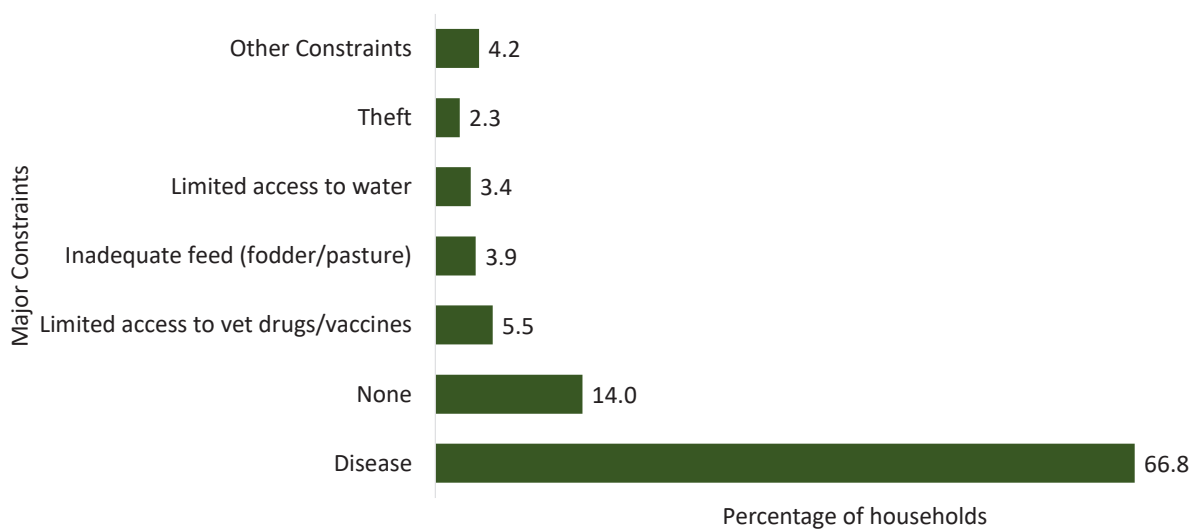
5.8.2 Major Constraints in Raising Goats

Figure 5.6 shows the percentage of households that experienced major constraints in goat production. Disease was reported as the major constraint faced by the goat-raising households at 37.4 percent, followed by thefts at 11.1 percent. However, about 35.1 percent of households did not experience any constraints in goat production.

Figure 5.6: Percentage of households experienced major constraints in Goat production, 2023
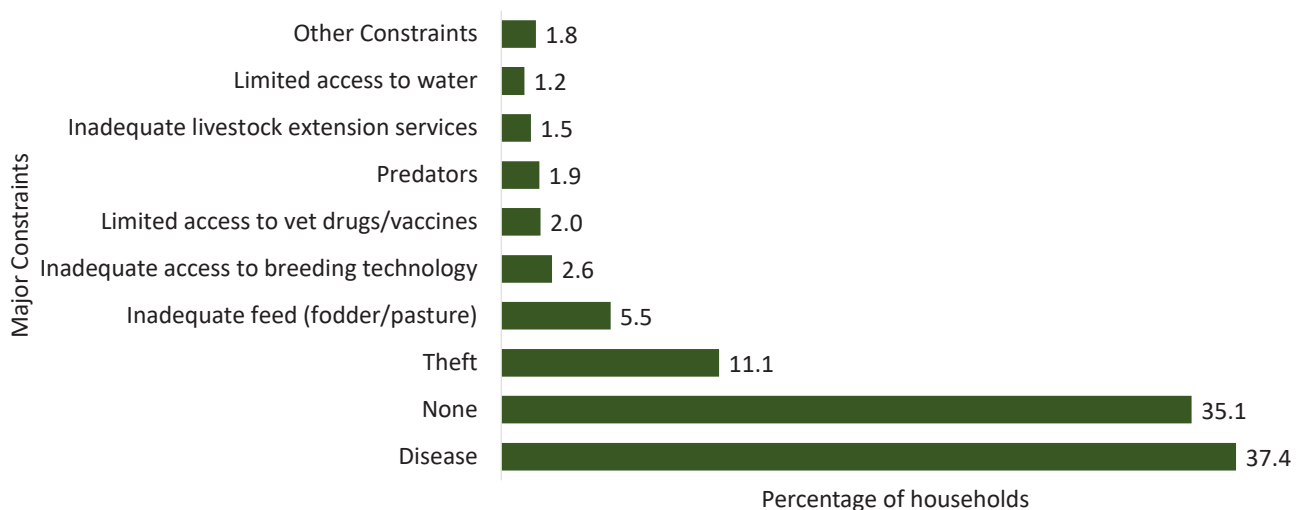
5.8.3 Major Constraints in Raising Sheep

Figure 5.7 shows the percentage of households that experienced major constraints in sheep production. Disease was reported as the major constraint faced by the sheep-raising households at 23.2 percent, followed by thefts at 3.2 percent. However, about 62.7 percent of households did not experience any constraints in sheep production.

Figure 5.7: Percentage of Households Experienced Major Constraints in Sheep Production, 2023
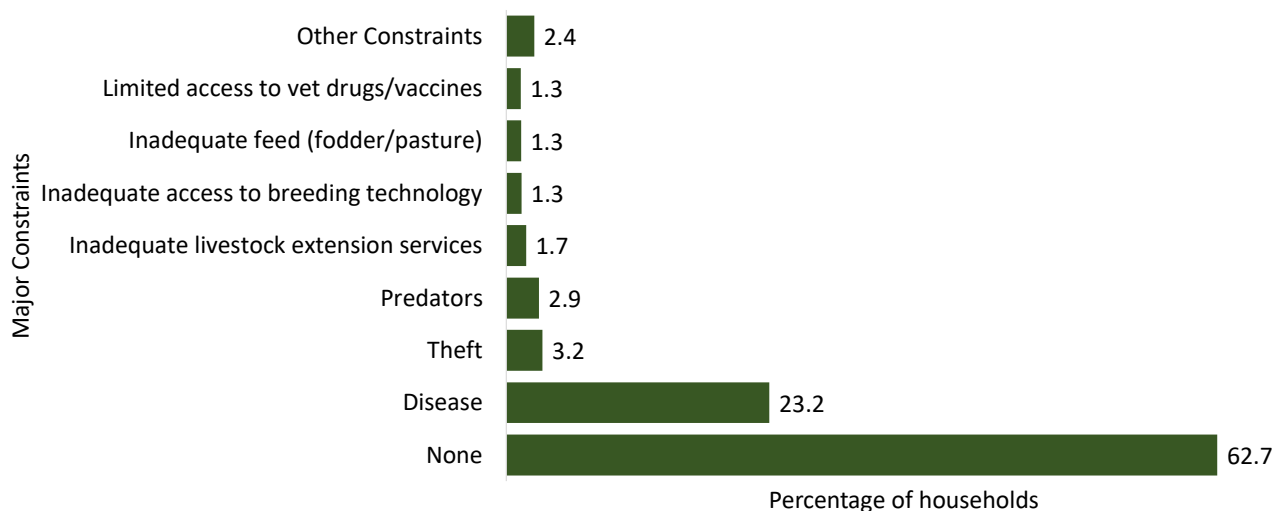
5.8.4 Major Constraints in Raising Pigs

Figure 5.8 shows the percentage of households that experienced major constraints in pig production. Disease was reported as the major constraint faced by the pig-raising households at 39.4 percent, followed by inadequate feed (Fodder/Pasture) at 16.4 percent. However, 30.4 percent of households did not experience any constraints in sheep production.

Figure 5.8: Percentage of Households Experienced Major Constraints in Pigs Production, 2023
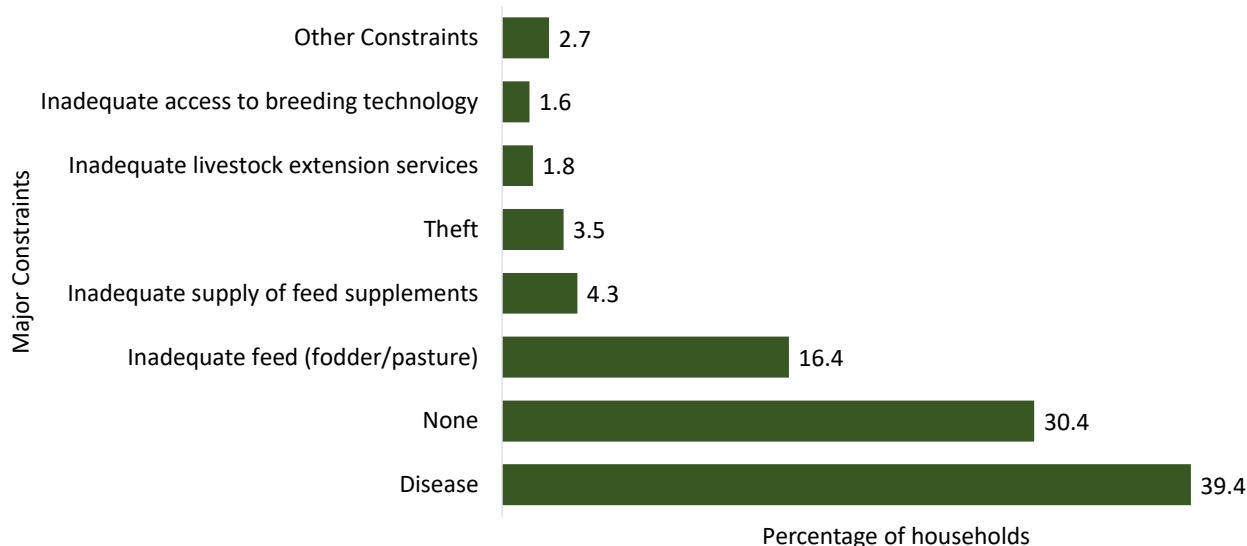
5.8.5 Major Constraints in Raising Donkeys

Figure 5.9 shows the percentage of households that experienced major constraints in donkey production. Disease was reported as the major constraint faced by the donkey-raising households at 10.5 percent, followed by inadequate livestock extension services at 3.3 percent.

Figure 5.9: Percentage of Households Experienced Major Constraints in Donkey Production, 2023
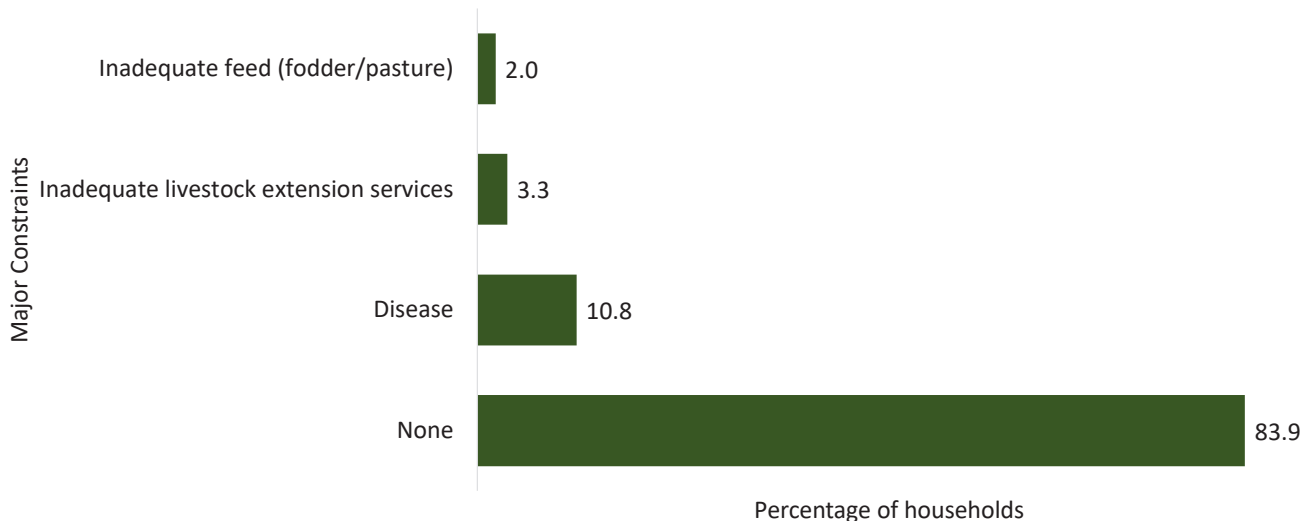
5.8.6 Livestock Theft

The number of households that reported theft of livestock as a major constraint by province are presented in Table 5.51. Households that raised goats were the most affected by theft, this was followed by those who were raising cattle. Southern and Eastern provinces had the highest number of households affected by theft, while Western Province had the least number of Households that reported theft as a major constraint.

Table 5.51: Livestock-Theft by Province, 2023

Province	Cattle	Goats	Sheep	Pigs	Total
Central	82	2,381	52	1,574	4,089
Copperbelt	0	4,636	268	144	5,048
Eastern	5,515	18,544	385	1,026	25,470
Luapula	0	7,000	0	686	7,687
Lusaka	262	9,637	15	116	10,031
Muchinga	1,511	2,771	0	743	5,026
Northern	0	9,341	0	1,107	10,448
North-Western	0	3,571	0	931	4,502
Southern	4,626	21,701	635	2,590	29,552
Western	480	535	0	599	1,614
Zambia	12,476	80,118	1,356	9,516	103,466
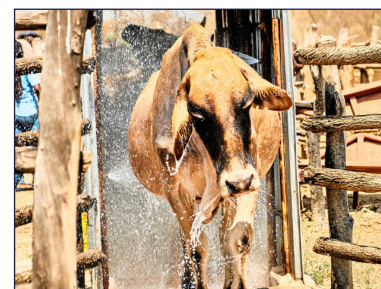
Chapter 6 : ANIMAL REPRODUCTION AND HEALTH

This chapter presents households engaged in animal reproduction. It covers animal reproduction practices for the four major livestock types; Cattle, Goats, Sheep and Pigs. Note that controlled breeding practices are discussed only for cattle where it was practised and not in any other types of livestock.

6.1 Households Engaging in Reproduction Practices for Cattle

Table 6.1 shows the distribution of cattle raising households that practised controlled breeding. At national level, 7.0 percent of cattle raising households practised controlled breeding. Within provinces, Copperbelt was the highest at 32.0 percent, followed by Muchinga province at 18.0 percent. Northern Province did not record any cattle raising households that practised controlled breeding.

Table 6.1: Number and Percentage of Cattle Raising Households Practising Controlled Breeding in Cattle by Province, 2023

Province	Total Number of Households Raising Cattle	Households Practising Controlled Breeding	
		Number	Percent
Central	71,497	4,393	6.1
Copperbelt	24,675	7,899	32.0
Eastern	166,184	3,757	2.3
Luapula	977	89	9.1
Lusaka	13,871	515	3.7
Muchinga	19,178	3,447	18.0
Northern	6,069	0	0.0
North Western	14,853	396	2.7
Southern	168,608	16,556	9.8
Western	49,458	597	1.2
Zambia	535,371	37,647	7.0

Table 6.2 shows the distribution of cattle raising households that practised controlled mating. At national level, 37.8 percent of cattle raising households practised natural mating (Sire/bull selected from within the herd), followed by natural mating (Sir/bull/hired/borrowed) at 33.9 percent.

Natural Mating (Sire/Bull Selected from within the Herd) was mostly practiced by cattle raising households in Luapula Province at 100 percent. Communal Sire was mostly practiced by cattle raising households in Muchinga Province at 43.9 percent. Natural Mating (Sire/Bull/Purchased) was mostly practiced by cattle raising households in Central Province at 37.2 percent. Natural Mating (Sire/Bull/Hired/Borrowed) was mostly practiced in Southern Province at 47.7 percent. Further, Artificial insemination was mostly practiced in Copperbelt Province at 3.4 percent.

Table 6.2: Number of Cattle Raising Households Practicing Controlled Mating by Province , 2023

Province	Total Number of Households Raising Cattle	Households Practicing Controlled Breeding	Methods of controlled mating					
			Natural Mating (Sire/ Bull Selected from Within the Herd)	Communal Sire	Natural Mating (Sire/ Bull Purchased)	Natural Mating (Sire/ Bull Hired/ Borrowed)	Artificial Insemination	Other
			Percent	Percent	Percent	Percent	Percent	Percent
Central	71,497	4,393	17.4	24.2	37.2	19.7	0.0	1.4
Copperbelt	24,675	7,899	50.3	12.3	3.3	30.6	3.4	0.0
Eastern	166,184	3,757	57.2	0.5	10.4	28.8	3.1	0.0
Luapula	977	89	100.0	0.0	0.0	0.0	0.0	0.0
Lusaka	13,871	515	97.3	0.0	0.0	0.0	2.7	0.0
Muchinga	19,178	3,447	47.6	43.9	1.9	6.6	0.0	0.0
Northern	6,069	0	0.0	0.0	0.0	0.0	0.0	0.0
North Western	14,853	396	63.0	0.0	0.0	37.0	0.0	0.0
Southern	168,608	16,556	27.4	18.2	3.8	47.7	3.0	0.0
Western	49,458	597	54.6	23.0	0.0	22.4	0.0	0.0
Zambia	535,371	37,647	37.8	17.8	7.9	33.9	2.4	0.2

Table 6.3 shows the distribution of households practising Artificial Insemination (AI) by source of semen and province. A total number of 889 households in the country were practising Artificial insemination. Of this total, 77.2 percent of households sourced the semen from private suppliers. Households that practised AI in Eastern Province sourced the semen from government, while those on the Copperbelt sourced the semen from the private suppliers. In Lusaka Province, the main source of semen was cooperatives, while the majority of households in Southern Province sourced it from private suppliers.

Table 6.3: Number and Percentage of households practising Artificial Insemination by Source of Semen and Province, 2023

Province	Number of Households Practicing Artificial Insemination	Main Source of Semen		
		Government	Private	Cooperatives
		Number	Number	Number
Copperbelt	268	0.0	100.0	0.0
Eastern	117	100.0	0.0	0.0
Lusaka	14	0.0	0.0	100.0
Southern	490	14.7	85.3	0.0
Zambia	889	21.2	77.2	1.6

6.2 Number of Households involved in Vaccination against Selected Diseases

Table 6.4 shows the distribution of households that were vaccinated against Newcastle Disease. A total of 225,994 households vaccinated their chickens against Newcastle Disease. Southern Province recorded the highest percentage at 30.4 percent, followed by Eastern Province at 25.4 percent. North-western had the lowest with 2.1 percent of households.

Table 6.4: Number and Percentage of Households that Vaccinated against Newcastle Disease by Province, 2023

Province	Households Involved in Vaccination		Households Involved in Vaccination Against Newcastle Disease	
	Number	Percent	Number	Percent
Central	39,821	8.7	16,186	7.2
Copperbelt	33,084	7.3	15,498	6.9
Eastern	108,258	23.7	57,469	25.4
Luapula	17,217	3.8	14,282	6.3
Lusaka	25,868	5.7	15,564	6.9
Muchinga	12,982	2.8	5,901	2.6
Northern	20,635	4.5	17,728	7.8
North-western	10,269	2.3	4,654	2.1
Southern	151,459	33.2	68,708	30.4
Western	36,538	8.0	10,002	4.4
Zambia	456,130	100.0	225,994	100.0

6.3 Vaccinations against Selected Livestock Diseases

Table 6.5 shows the number of households that vaccinated their animals against selected livestock diseases. The table shows that, out of the 1,848,683 livestock raising households in the country, 456,130 households were involved in vaccinating their animals against selected livestock diseases.

Southern Province had the highest number of households that vaccinated their livestock against Black Quarter (BQ) (Black leg), Haemorrhagic Septiceamia (HS), East Coast Fever (ECF)/Corridor Disease, Foot and Mouth Disease (FMD), Anthrax at 59.2, 66.2, 46.4, 44.3 and 37.7 percent, respectively.

Table 6.5: Number and Percentage of Households that Vaccinated against Selected Livestock Diseases by Province, 2023

Province	Total number of Households Raising Livestock	Households Involved in Vaccination Against the selected livestock diseases	Vaccinated Diseases									
			Black Quarter (BQ) (Black leg)	Haemorrhagic septiceamia (HS)	East Coast Fever (ECF)/ Corridor Disease	Contagious Bovine pleuro-pneumonia (CBPP)	Foot and Mouth disease (FMD)	Anthrax	Brucellosis	Lumpy skin disease (LSD)	Rabies	Other diseases
	Number	Number	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent
Central	222,491	39,821	5.4	3.6	5.3	1.5	8.3	7.1	3.2	5.4	6.0	2.4
Copperbelt	159,217	33,084	4.2	4.9	4.0	5.5	4.8	4.0	11.1	6.6	11.7	29.9
Eastern	291,209	108,258	17.2	13.6	36.0	16.6	30.6	9.8	18.6	20.2	5.4	5.2
Luapula	156,635	17,217	0.0	0.0	0.1	0.0	0.0	0.0	1.1	0.0	2.4	2.6
Lusaka	108,792	25,868	3.2	2.0	4.0	1.3	2.2	5.0	3.1	4.4	12.0	27.3
Muchinga	134,967	12,982	0.9	1.6	0.9	6.5	1.6	1.9	0.8	0.6	1.9	0.0
Northern	208,606	20,635	0.0	0.0	0.0	1.1	0.0	0.0	1.0	0.4	4.1	3.6
North-western	104,975	10,269	2.5	2.9	1.7	4.7	1.6	3.2	5.0	3.7	2.4	3.3
Southern	326,489	151,459	59.2	66.2	46.4	19.0	44.3	37.7	50.3	53.7	49.7	24.7
Western	136,082	36,538	7.5	5.1	1.7	44.0	6.7	31.3	5.7	5.1	4.3	1.0
Zambia	1,849,463	456,130	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

6.4 Major Diseases Affecting Livestock

Figure 6.1 shows the percent distribution of households by major diseases that affected cattle. The majority of cattle raising households reported that they were affected by Foot and Mouth Disease (FMD) at 21.6 percent, followed by East Coast Fever (ECF)/Corridor at 19.3 percent.

Figure 6.1: Major Diseases Affecting Cattle Raised by Households, 2023
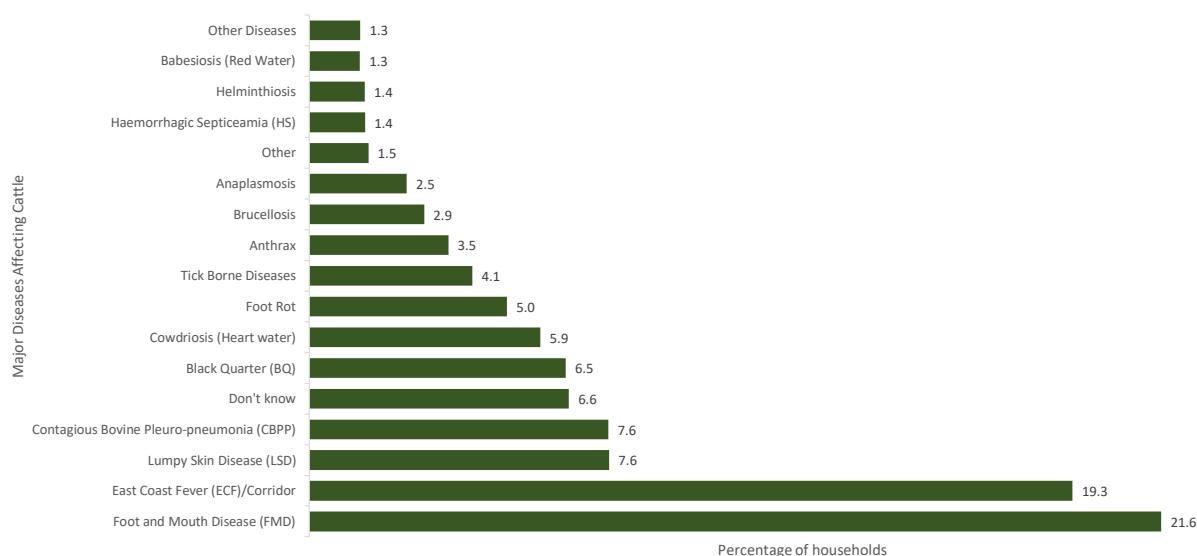
Figure 6.2 shows the percent distribution of households by major diseases that affected goats. The majority of goat raising households reported that they were affected by Mange at 20.5 percent, followed by Cowdriosis (Heart water) at 17.8 percent.

Figure 6.2: Major Diseases Affecting Goats raised by Households, 2023
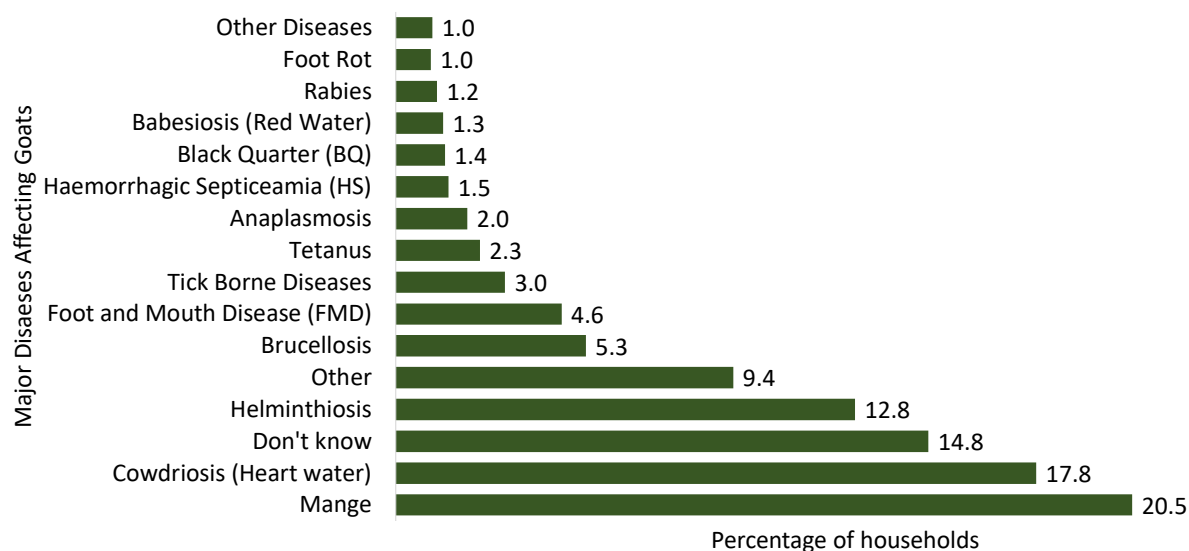
Figure 6.3 shows the percent distribution of households by major diseases that affected sheep. The majority of sheep raising households reported that they were affected by Helminthiasis at 21.3 percent, followed by Cowdriosis (Heart water) at 14.0 percent. About 22.4 percent of the households reported that they did not know the diseases that affected their sheep.

Figure 6.3: Major Diseases Affecting Sheep raised by Households, 2023
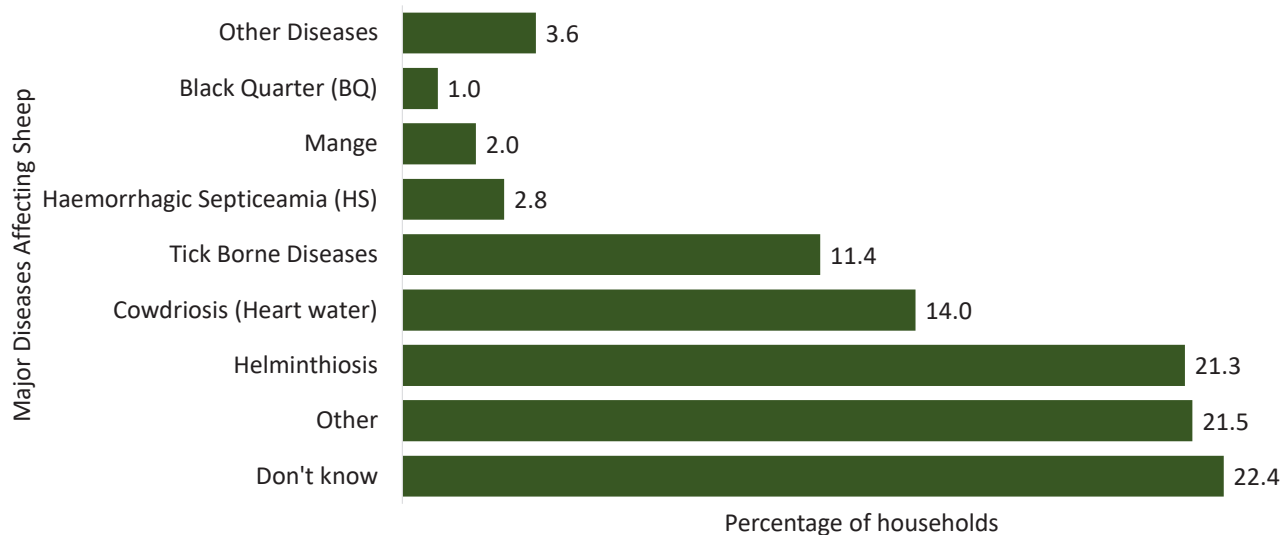
Figure 6.4 shows the percent distribution of households by major diseases that affected pigs. The majority of pig raising households reported that they were mostly affected by African Swine Fever (ASF) at 61.4 percent, followed by Helminthiosis at 5.3 percent. Approximately 16 percent of the households reported that they did not know the disease that affected the pigs.

Figure 6.4: Major Diseases Affecting Pigs raised by Households, 2023
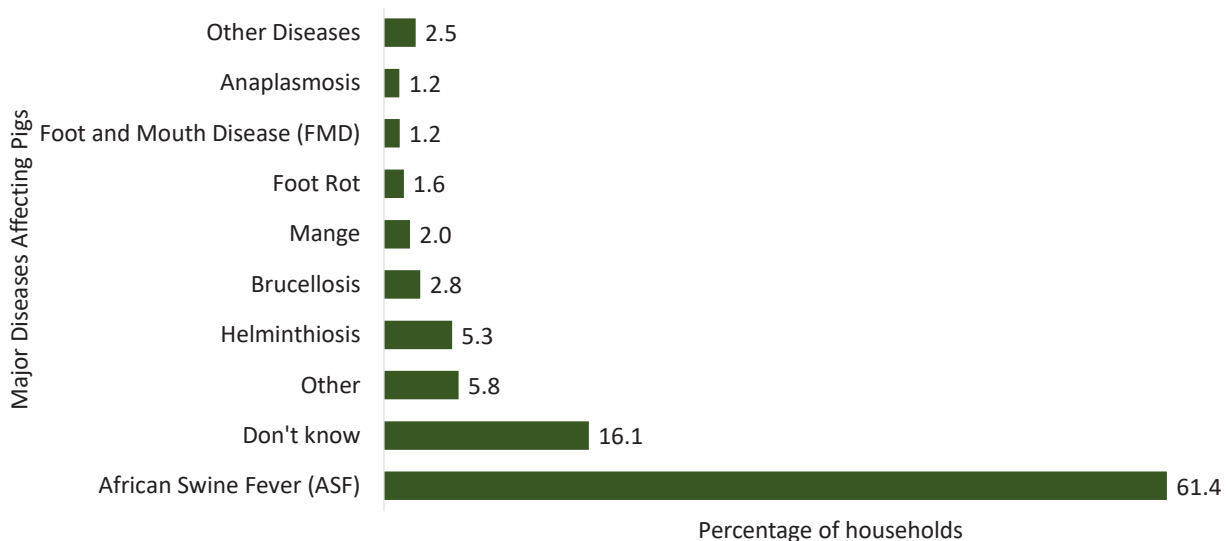
Figure 6.5 shows the percent distribution of households by major diseases that affected donkeys. The majority of donkey raising households reported that they were affected by Foot Rot at 9.1 percent, followed by Mange at 5.9 percent. A majority of the households (53.5%) reported that they did not know the diseases that affected their donkeys.

Figure 6.5: Major Diseases Affecting Donkeys raised by Households, 2023
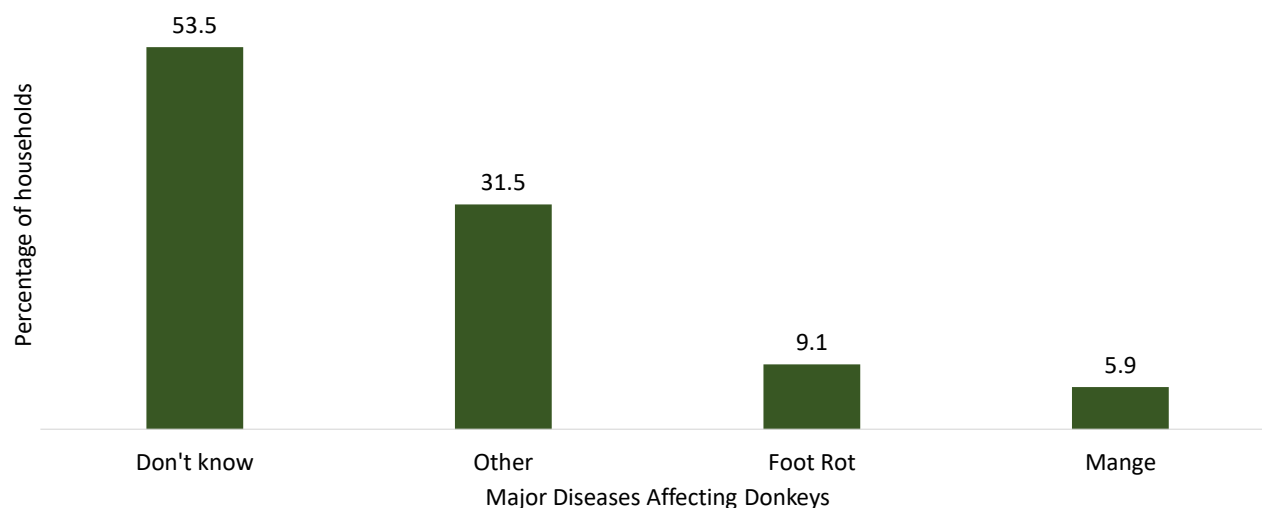
Figure 6.6 shows the percent distribution of households by major diseases that affected their livestock. The majority of other livestock raising households reported that their animals were affected by Infectious Bursal Disease (Gumboro) at 24.6 percent, followed by Newcastle Disease at 19.6 percent while 24.6 percent reported that they did not know the diseases that affected their livestock.

Figure 7.6: Major Diseases Affecting Other Livestock raised by Households, 2023
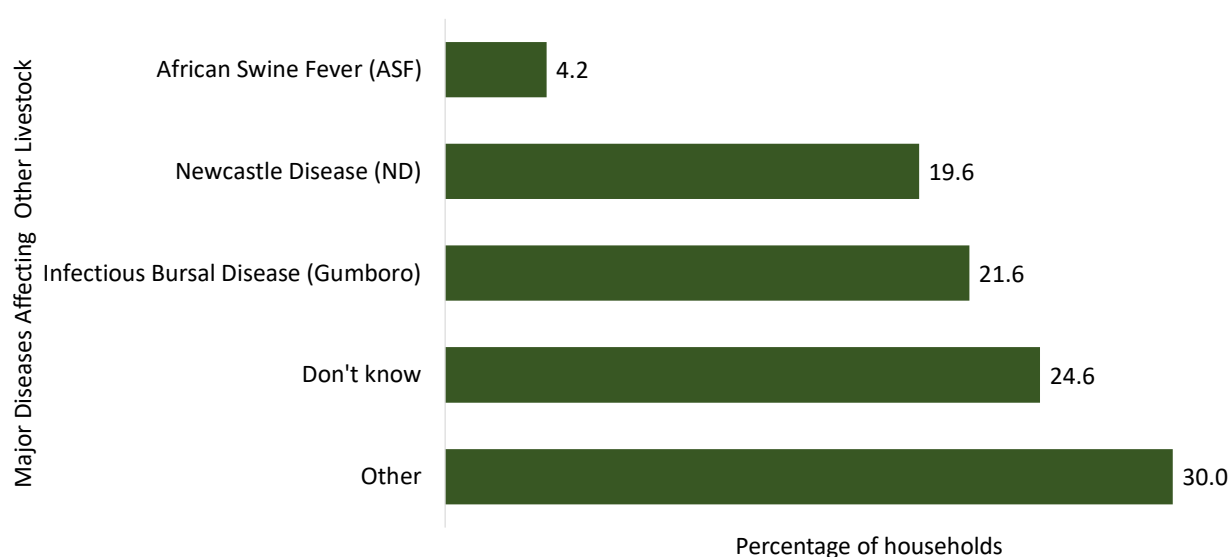
Chapter 7 : **Animal Draught Power**

This chapter highlights survey results on the usage of animal draught power by households during the reference period. The type of livestock used and purpose of draught power are discussed under this chapter.

7.1 Number of households using Animal Draught Power

Table 7.1 shows the number of households using animal draught power. Of the 447,160 households using animal draught power in the country, 446,931 used cattle while 229, used donkeys.

Southern Province had the highest number of households using cattle for animal draught power with 32.7 percent, followed by Eastern at 32.0 percent. Luapula was the lowest with 0.04 percent. While the use of cattle as draught power was highest in Eastern and Southern Provinces, donkeys were used for draught power only in Eastern and Southern Provinces at 42.1 and 57.9 percent, respectively.

Table 7.1: Number of households using Animal Draught Power by Province, 2023

| Province | Total number of households using Animal Draught Power | Type of Animal | | | |
| | | Cattle | | Donkey | |
		Number of households	Percent	Number of households	Percent
Central	64,861	64,765	14.5	96	42.1
Copperbelt	21,269	21,269	4.8	0	0.0
Eastern	143,220	143,220	32.0	0	0.0
Luapula	171	171	0.04	0	0.0
Lusaka	9,295	9,295	2.1	0	0.0
Muchinga	6,312	6,312	1.4	0	0.0
Northern	3,033	3,033	0.7	0	0.0
North-western	10,895	10,895	2.4	0	0.0
Southern	146,480	146,347	32.7	133	57.9
Western	41,624	41,624	9.3	0	0.0
Zambia	447,160	446,931	100.0	229	100.0

7.2 Purpose of Animal Draught Power

Table 7.2 shows the number of households using animal draught power for various purposes by province. Out of the total of 447,160 households that used animal draught power in the country, Southern Province had the highest percentage of households using animal draught Power for transport purposes at 45.5 percent while Northern had the lowest at 1.1 percent. Eastern Province had the highest percentage for crop production (ploughing, planting, weeding, threshing, milling) purpose at 35.1 percent. Southern Province had the highest percentage for both transport and crop agriculture purposes at 34.4 percent.

Table 7.2: Number and Percentage of Households Using Animal Draught Power for Various Purposes, 2023

Province	Total Number of Households using Animal Draught Power		Purpose of Animal Draught Power							
			Transport		Crop Agriculture (Ploughing, Planting, Weeding, Threshing, Milling)		Transport and crop agriculture		Other Uses	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Central	64,861	14.5	1,380	4.0	38,076	14.2	25,404	17.7	0	0.0
Copperbelt	21,269	4.8	1,207	3.5	15,243	5.7	4,819	3.3	0	0.0
Eastern	143,220	32.0	2,936	8.4	94,170	35.1	45,871	31.9	244	72.0
Luapula	171	0.0	0	0.0	67	0.0	104	0.1	0	0.0
Lusaka	9,295	2.1	1,124	3.2	7,587	2.8	584	0.4	0	0.0
Muchinga	6,312	1.4	441	1.3	5,317	2.0	554	0.4	0	0.0
Northern	3,033	0.7	368	1.1	2,666	1.0	0	0.0	0	0.0
North-western	10,895	2.4	4,002	11.5	6,164	2.3	729	0.5	0	0.0
Southern	146,480	32.8	15,842	45.5	80,975	30.2	49,567	34.4	95	28.0
Western	41,624	9.3	7,539	21.6	17,834	6.7	16,251	11.3	0	0.0
Zambia	447,160	100.0	34,840	100.0	268,098	100.0	143,883	100.0	338	100.0

A total of 241,801 households hired out Animal Draught Power in the Country. Eastern Province recorded the highest number of households hiring Cattle for Draught Power at 36.0 percent, followed by Southern Province at 28.7 percent. Luapula Province was the lowest at 0.1 percent.

Donkeys were hired out for Draught Power only in Eastern and Southern Province. A total of 204 households hired Donkey for Draught Power in the country. Southern Province recorded 52.5 percent while Eastern Province recorded 47.1 percent.

Table 7.3: Number and Percentage of Households Hiring out Animals for Draught Power, 2023

Province	Total number of households hiring out Animal Draught Power	Type of Animal			
		Cattle		Donkey	
		Number of households	Percent	Number of households	Percent
Central	22,264	22,167	10.8	96	47.1
Copperbelt	12,261	12,261	6.0	0	0
Eastern	73,856	73,856	36.0	0	0
Luapula	171	171	0.1	0	0
Lusaka	3,907	3,907	1.9	0	0
Muchinga	1,397	1,397	0.7	0	0
Northern	2,503	2,503	1.2	0	0
North-western	6,074	6,074	3.0	0	0
Southern	59,005	58,898	28.7	107	52.5
Western	17,703	23,921	11.7	0	0
Zambia	241,801	205,155	100.0	204	100

Chapter 8 : Milk Production and Sales (Fresh and Sour)

This section presents results for fresh milk production and sales as well as sales of sour milk from both households and establishments during the reference period.

8.1: Milk Production in Litres by Households and Establishments by Province

Table 8.1 shows that a total 290,827,428 Litres of milk was produced by both households and establishments during the reference period out of which households contributed the majority (234,118,524 litres). Among provinces, the highest quantity of milk produced was reported from Southern at 97,718,009 Litres followed by Copperbelt and Central at 84,520,262 litres and 58,851,519 litres respectively while Luapula was lowest at 20,756 litres.

Table 8.1: Quantity of Milk Produced in Litres by Households and Establishments by Province, 2023

Province	Milk Production (Litres)		
	Households	Establishments	Total Milk Production
Central	28,383,236	30,468,283	58,851,519
Copperbelt	80,530,201	3,990,061	84,520,262
Eastern	8,522,196	1,406	8,523,602
Luapula	-	20,756	20,756
Lusaka	9,307,967	4,966,065	14,274,032
Muchinga	10,641,786	19,451	10,661,237
Northern	620,838	91,532	712,370
North-Western	836,607	23,834	860,441
Southern	80,915,723	16,802,286	97,718,009
Western	14,359,969	325,230	14,685,199
Zambia	234,118,524	56,708,904	290,827,428

Figure 8.1 shows the monthly trend of milk produced by households and establishments in the period May, 2022 to April 2023. Overall, the highest quantity of milk was produced in the month of February, 2023 at 32,431,128 litres and 14,658,155 litres reported in October, 2022 was lowest. Milk production under households fluctuated with seasonal changes recording as low as 10.2 million litres to as high as 28.4 million litres. On the other hand, production under establishments was stable throughout the reference period fluctuating between 4.1 million Litres and 5.3 Million Litres.

Figure 8.1: Monthly Trends of Quantity of Milk Produced in Litres by Households and Establishments by Province, 2023

	2022 May	2022 Jun	2022 Jul	2022 Aug	2022 Sep	2022 Oct	2022 Nov	2022 Dec	2023 Jan	2023 Feb	2023 Mar	2023 Apr
Households	19,433,7	16,605,8	15,807,9	14,692,3	13,734,7	10,162,5	16,647,3	22,722,0	27,462,8	28,367,1	26,353,1	22,128,8
Establishments	5,238,49	5,320,84	4,657,74	4,808,20	4,922,06	4,495,60	4,641,63	5,349,44	4,331,90	4,063,98	4,563,96	4,315,01
Zambia	24,672,2	21,926,6	20,465,6	19,500,5	18,656,8	14,658,1	21,288,9	28,071,4	31,794,7	32,431,1	30,917,0	26,443,8
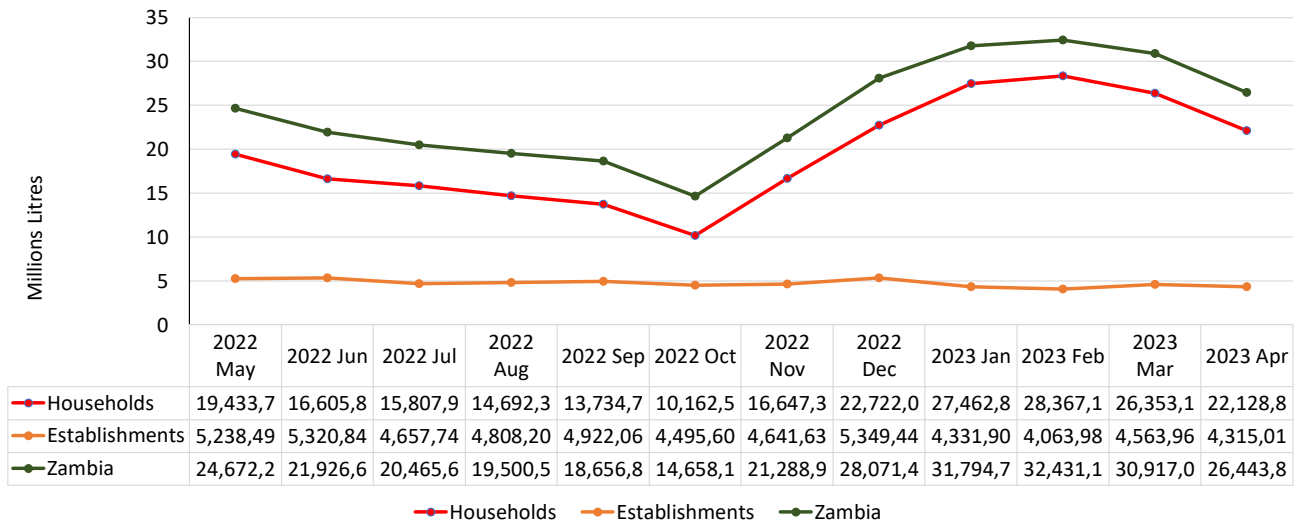
8.2: Milk Production from Households

Table 8.2 shows the milk production trends during low (August to October), moderate (May to July) and high (November to April) production months during the reference period. During the low production month, a total of 36,027,907 litres was produced by households. The production during the moderate and high months stood at 96,498,845 litres and 101,591,773 litres respectively.

Table 8.2: Quantity of Milk Produced during Low, Moderate and High Months in Litres by Households, 2023

Province	Low Month	Moderate Month	High Month	Total Milk Production
Central	5,178,838	9,668,436	13,535,962	28,383,236
Copperbelt	6,039,746	47,305,582	27,184,873	80,530,201
Eastern	3,350,772	4,815,234	356,189	8,522,196
Luapula	-	-	-	-
Lusaka	849,476	5,396,862	3,061,630	9,307,967
Muchinga	2,160,984	4,344,947	4,135,855	10,641,786
Northern	0	620,838	0	620,838
North-Western	86,217	111,784	638,606	836,607
Southern	15,559,024	19,916,641	45,440,059	80,915,723
Western	2,802,849	4,318,521	7,238,599	14,359,969
Zambia	36,027,907	96,498,845	101,591,773	234,118,524

Table 8.3 shows that at national level, the highest monthly quantity of milk produced was reported in February at 27,982,536 litres followed by January at 28,367,142 litres and the lowest was 10,162,546 litres in October. Among provinces, Southern recorded the highest milk production at 80,915,723 litres followed by Copperbelt and Central at 80,530,201 litres and 28,383,236 litres respectively. Luapula Province did not report any milk produced by the households.

Table 8.3: Monthly Quantities of Milk Produced in Litres by households by Province, 2023

Province	2022 May	2022 Jun	2022 Jul	2022 Aug	2022 Sep	2022 Oct	2022 Nov	2022 Dec	2023 Jan	2023 Feb	2023 Mar	2023 Apr	Total
Central	1,970,060	1,902,205	1,749,285	1,677,470	1,556,325	1,373,565	2,410,649	2,903,946	3,484,065	3,393,492	3,352,997	2,609,177	28,383,236
Copperbelt	7,696,649	7,084,865	6,973,423	7,223,455	6,845,802	3,110,690	5,928,319	7,290,928	7,465,989	7,472,447	6,540,879	6,896,754	80,530,201
Eastern	751,132	792,016	616,056	701,656	655,014	640,987	648,872	687,057	715,184	741,558	795,904	776,761	8,522,196
Luapula	-	-	-	-	-	-	-	-	-	-	-	-	0
Lusaka	907,011	494,722	769,579	528,248	402,357	753,293	717,003	846,465	991,106	932,676	1,068,429	897,080	9,307,967
Muchinga	889,829	790,175	788,670	714,463	687,720	468,326	704,117	1,094,925	1,370,238	1,139,698	1,038,197	955,428	10,641,786
Northern	51,737	51,737	51,737	51,737	51,737	51,737	51,737	51,737	51,737	51,737	51,737	51,737	620,838
North-Western	22,357	20,752	20,752	20,752	51,880	51,880	103,759	107,772	107,772	111,784	111,784	105,364	836,607
Southern	6,598,066	4,989,830	4,381,823	3,326,733	2,801,455	2,787,194	4,600,114	7,823,220	11,017,685	12,415,547	11,599,413	8,574,642	80,915,723
Western	546,919	479,508	456,629	447,822	682,468	924,875	1,482,777	1,915,967	2,259,091	2,108,204	1,793,779	1,261,932	14,359,969
Zambia	19,433,759	16,605,810	15,807,954	14,692,335	13,734,757	10,162,546	16,647,346	22,722,016	27,462,866	28,367,142	26,353,119	22,128,875	234,118,524

Table 8.4 shows that the national average milk yield was 1.7 litres per cow per day with a total of 378,428 milking cows. Among provinces, Copperbelt recorded the highest yields at 4.3 litres followed by Lusaka and Northwestern at 3.9 litres and 2.7 litres respectively. Southern Province reported the highest number of milking cows (184,908) followed by Copperbelt and Western with 51,181 and 48,871 milking cows, respectively.

Table 8.4: Milk production parameters (Average Milk Yield per Cow/day), 2023

Province	Number of milking Cows	Quantity of Milk	Average Milk Yield
Central	46,135	28,383,236	1.7
Copperbelt	51,181	80,530,201	4.3
Eastern	25,119	8,522,196	0.9
Luapula	-	-	-
Lusaka	6,532	9,307,967	3.9
Muchinga	13,795	10,641,786	2.1
Northern	1,035	620,838	1.6
North-Western	852	836,607	2.7
Southern	184,908	80,915,723	1.2
Western	48,871	14,359,969	0.8
Zambia	378,428	234,118,524	1.7

Table 8.5 shows the quantity of fresh milk sold by households during the reference period. At national level, a total of 96,855,686 litres of fresh milk was sold. The highest quantity of fresh milk sales was recorded in February at 11,370,157 litres followed by January and March at 13,970,428 litres and 10,277,620 litres, respectively.

Among provinces, Copperbelt Province reported the highest quantity of fresh milk sales at 55,774,416 litres followed by Southern at 29,051,771 litres while Luapula and Northern provinces did not report sales of fresh milk.

Table 8.5: Quantity of Fresh Milk Sold in Litres by households, 2023

Province	2022 May	2022 Jun	2022 Jul	2022 Aug	2022 Sep	2022 Oct	2022 Nov	2022 Dec	2023 Jan	2023 Feb	2023 Mar	2023 Apr	Total
Central	237,687	211,557	171,372	185,873	213,969	215,914	230,037	270,122	317,864	337,094	334,236	309,161	3,034,885
Copperbelt	4,294,738	4,228,823	4,024,163	4,279,614	4,206,789	4,992,976	3,873,697	5,700,660	5,612,199	5,668,992	4,468,302	4,423,464	55,774,416
Eastern	143,836	168,310	133,347	127,877	113,924	93,145	93,145	101,398	135,404	143,259	175,356	151,641	1,580,642
Luapula													0
Lusaka	386,096	189,959	157,269	156,124	156,124	186,372	187,518	157,269	324,962	324,962	367,310	220,207	2,814,174
Muchinga	220,565	296,005	226,848	177,796	101,540	166,767	205,604	320,551	331,829	267,395	169,702	155,429	2,640,031
Northern	-	-	-	-	-	-	-	-	-	-	-	-	0
North-Western	0	0	0	0	0	0	0	84,612	87,020	91,032	91,032	84,612	438,309
Southern	2,351,932	1,696,261	1,575,004	1,049,303	834,641	838,217	1,366,030	2,819,285	4,192,975	4,302,790	4,501,280	3,524,054	29,051,771
Western	51,528	55,242	49,548	49,548	58,290	71,622	158,056	205,609	243,300	234,634	170,401	173,680	1,521,459
Zambia	7,686,381	6,846,156	6,337,551	6,026,135	5,685,277	6,565,013	6,114,086	9,659,507	11,245,554	11,370,157	10,277,620	9,042,249	96,855,686

A total of 7,333,792 litres of sour milk was sold by households as indicated in Table 8.6. The quantities of sour milk sales were highest during the high milk production period with April 2023 leading at 951,208 litres followed March and February, 2023 at 945,730 litres and 945,433 litres respectively. The lowest quantities of sour milk sales were reported in November, 2022.

Among provinces, Southern posted the highest quantity of sour milk sales at 2,884,431 litres followed by Copperbelt and Western at 1,855,224 litres and 1,284,483 litres respectively. Meanwhile, there were no sour milk sales reported in Luapula and Northern Provinces during the period under review.

Table 8.6: Quantity of Sour Milk Sold in Litres by Households, 2023

Province	2022 May	2022 Jun	2022 Jul	2022 Aug	2022 Sep	2022 Oct	2022 Nov	2022 Dec	2023 Jan	2023 Feb	2023 Mar	2023 Apr	Total
Central	19,933	21,967	37,932	37,932	65,168	65,168	66,338	67,988	60,146	59,285	61,161	61,161	624,180
Copperbelt	271,385	181,835	196,915	196,915	217,196	217,196	30,254	26,873	26,873	163,261	163,261	163,261	1,855,224
Eastern	,463	3,463	-	-	-	-	-	-	-	-	-	-	6,926
Luapula	-	-	-	-	-	-	-	-	-	-	-	-	0
Lusaka	123,458	115,286	3,207	3,207	3,207	-3,207	3,207	3,207	3,207	46,793	46,793	90,379	445,159
Muchinga	29,137	29,137	20,397	20,397	11,126	11,126	10,066	10,066	21,456	23,576	23,576	21,456	231,515
Northern	-	-	-	-	-	-	-	-	-	-	-	-	0
North-Western	0	0	0	0	0	0	0	0	535	267	535	535	1,872
Southern	89,139	93,790	185,571	104,372	101,743	101,743	86,974	245,816	390,287	498,682	499,328	486,988	2,884,431
Western	147,111	147,111	65,831	80,460	65,295	65,295	76,703	66,211	138,394	153,568	151,077	127,427	1,284,483
Zambia	**683,625**	**592,588**	**509,853**	**443,283**	**463,735**	**463,735**	**273,542**	**420,161**	**640,899**	**945,433**	**945,730**	**951,208**	**7,333,792**

8.3: Milk Production from Establishments

Table 8.7 shows the monthly quantity of milk produced in litres by establishments between May, 2022 and April 2023 under which a total of 56,708,904 litres was produced. The highest milk quantity was produced in December 2022 at 5,349,443 litres followed by June and May, 2022 at 5,320,844 and 5,238,494 litres respectively and the lowest in April, 2023 at 4,315,013 litres.

Among provinces, Central produced the highest quantity of fresh milk at 30,468,283 litres followed by Southern and Lusaka at 16,802,286 litres and 4,966,065 litres respectively. The lowest was Eastern Province at 1,406 litres.

Table 8.7: Monthly Quantity of Milk Produced in Litres by Establishments by Province, 2023

Province	2022 May	2022 Jun	2022 Jul	2022 Aug	2022 Sep	2022 Oct	2022 Nov	2022 Dec	2023 Jan	2023 Feb	2023 Mar	2023 Apr	Total
Central	2,667,867	2,724,626	2,604,855	2,772,758	2,939,290	2,534,725	2,653,070	2,604,766	2,211,968	1,966,530	2,578,497	2,209,331	30,468,283
Copperbelt	379,145	344,347	343,946	337,425	279,827	286,588	297,620	353,850	341,843	328,831	352,942	343,697	3,990,061
Eastern	120	120	120	117	117	114	113	115	118	119	119	119	1,406
Luapula	2,038	1,718	1,568	1,568	1,868	1,713	2,063	1,863	1,781	1,631	1,581	1,366	20,756
Lusaka	778,255	821,821	297,662	310,185	317,166	322,853	333,671	376,843	359,178	352,366	347,341	348,724	4,966,065
Muchinga	2,297	2,285	2,300	1,883	1,833	1,819	1,886	1,279	1,282	1,281	654	655	19,451
Northern	1,470	8,330	8,120	8,190	7,980	8,092	8,260	8,330	8,120	8,120	8,400	8,120	91,532
North-Western	2,020	1,614	2,020	2,020	2,020	2,020	2,020	2,020	2,020	2,020	2,020	2,020	23,834
Southern	1,385,004	1,385,755	1,376,946	1,353,694	1,336,940	1,316,995	1,317,998	1,973,069	1,373,407	1,372,907	1,238,456	1,371,115	16,802,286
Western	20,279	30,229	20,205	20,365	35,026	20,692	24,931	27,308	32,191	30,181	33,956	29,866	325,230
Zambia	5,238,494	5,320,844	4,657,741	4,808,205	4,922,066	4,495,609	4,641,631	5,349,443	4,331,907	4,063,986	4,563,966	4,315,013	56,708,904
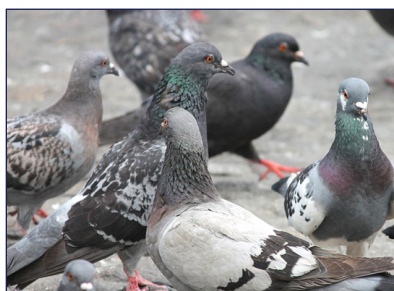
Chapter 9 : Poultry Production

Chapter 9 discusses statistics on poultry production. Specifically, discussed are: the number of poultry raised; number of households raising poultry type; number of poultry type raised by households; the number of Poultry type raised by female household members; and the average number of poultry types raised.

9.1 Number of Various Types of Poultry Raised by Households

Table 9.1 shows the various types of poultry raised as at 30th April, 2023. Of the total number of poultry raised by households, village chickens (free range) accounted for the largest number at 26,162,649 followed by broiler chickens (5,325,381) while the lowest were the quails at 101,854.

Table 9.1: Number of Poultry Raised, 2023

Poultry Type	Number
Village Chickens	26,162,649
Broiler Chickens	5,325,381
Layer Exotic Chickens	2,065,451
Ducks	1,644,821
Turkeys	154,126
Guinea fowls	1,105,052
Pigeons	1,894,672
Quails	101,854
Rabbits	369,587

9.2 Number of Households raising Various Types of Chickens

Table 9.2 shows the number and percentage of households raising chickens by province as at 30th April, 2023. At national level, the number of households raising village chicken was the highest at 1,682,160 followed by the number of those raising broiler chickens at 46,927. The number of households raising layers was the least at 21,105.

Out of the total number of Households raising village chickens, Southern Province accounted for the largest percentage at 18.3 percent, followed by Eastern at 15.2 percent. Lusaka Province recorded the lowest at 5.2 percent.

Copperbelt Province accounted for the largest percentage of households raising broiler chickens at 26.7 percent, followed by Lusaka at 20.0 percent. Western Province recorded the lowest percentage at 1.0 percent.

Among layer chicken-raising households, Southern Province accounted for the highest percentage of 50.4, followed by Luapula at 12.3 percent. Muchinga Province recorded the lowest at 0.3 percent.

Table 9.2: Number and Percentage of households Raising Chickens by Province, 2023

Province	Village Chickens		Broiler Chickens		Layer Chickens	
	Number of households	Percent	Number of households	Percent	Number of households	Percent
Central	211,570	12.6	3,034	6.5	804	3.8
Copperbelt	145,190	8.6	12,521	26.7	1,664	7.9
Eastern	255,540	15.2	9,150	19.5	1,823	8.6
Luapula	142,770	8.5	1,253	2.7	2,589	12.3
Lusaka	87,956	5.2	9,397	20.0	1,335	6.3
Muchinga	118,221	7.0	2,936	6.3	69	0.3
Northern	197,482	11.7	2,481	5.3	719	3.4
North-Western	93,400	5.6	1,039	2.2	440	2.1
Southern	307,320	18.3	4,655	9.9	10,639	50.4
Western	122,713	7.3	462	1.0	1,023	4.8
Zambia	1,682,160	100.0	46,927	100.0	21,105	100.0

9.3. Chicken Population

9.3.1 Number of Village Chickens Raised by Households and Establishments

Table 9.3 shows the number of village chickens raised by households and establishments as at 30th April 2023. At national level, the total number of village chickens (free range) raised by both households and establishments was 26,162,649. Of this, 26,086,919 were raised by households while 75,730 were raised by establishments. Southern Province accounted for the highest percentage at 20.1 percent of the total village chickens, followed by Eastern at 12.3 percent. North-Western Province accounted the lowest share at 5.20 percent.

Table 9.3: Number of Village Chickens Raised by Province, 2023

Province	Number of Village Chickens		Total	
	Households	Establishments	Number	Percent
Central	3,734,050	25,758	3,759,808	14.4
Copperbelt	3,141,389	8,499	3,149,889	12.0
Eastern	3,214,450	3,178	3,217,628	12.3
Luapula	1,401,232	2,164	1,403,396	5.4
Lusaka	2,144,031	8,034	2,152,065	8.2
Muchinga	1,883,504	4,250	1,887,755	7.2
Northern	2,534,383	445	2,534,828	9.7
North Western	1,358,993	1,144	1,360,136	5.2
Southern	5,245,636	21,535	5,267,171	20.1
Western	1,429,250	722	1,429,973	5.5
Zambia	26,086,919	75,730	26,162,649	100.0

9.3.2 Number of Broiler Chickens Raised by Households and Establishments

Table 9.4 shows the number of broiler chickens raised by households and establishments by province as at 30th April 2023. At national level, a total of 5,325,381 broiler chickens were raised by both households and establishments. Of this total, 4,380,577 were raised by households while 944,804 were raised under establishments. Lusaka Province accounted for the highest percentage at 50.3 percent of the total broiler chickens, followed by Copperbelt at 23.0 percent. Western and Eastern Provinces accounted for the lowest percentage contribution at 0.7 percent each.

Table 9.4: Number of Broiler Chickens Raised by Province, 2023

Province	Number of Broiler chickens		Total	
	Households	Establishments	Number	Percent
Central	237,596	89,839	327,434	6.1
Copperbelt	1,100,902	125,737	1,226,639	23.0
Eastern	36,326	3,092	39,417	0.7
Luapula	216,207	4,799	221,006	4.2
Lusaka	2,023,540	657,121	2,680,661	50.3
Muchinga	122,387	3,326	125,713	2.4
Northern	267,267	1,649	268,916	5.0
North Western	237,007	5,646	242,653	4.6
Southern	104,698	51,762	156,460	2.9
Western	34,649	1,833	36,482	0.7
Zambia	4,380,577	944,804	5,325,381	100.0

9.3.3 Number of Layer Chickens Raised by Households and Establishments

Table 9.5 shows the number of layer chickens by province raised by households and establishments as at 30th April 2023. At national level, the total number of layer chickens raised by both households and establishments was 2,127,690. Of this total, 880,762 were raised by households while 1,246,928 were raised under establishments. North- Western Province accounted for the highest percentage at 29.1 percent of the total layer chickens, this was followed by Lusaka Province at 24.1 percent. Muchinga Province accounted for the lowest percentage at 0.2 percent.

Table 9.5: Number of Layer Chickens Raised by Province, 2023

Province	Number of Layer chickens		Total	
	Households	Establishments	Number Raised	Percent
Central	52,790	73,278	126,068	5.9
Copperbelt	150,790	301,504	452,294	21.3
Eastern	35,817	1,407	37,224	1.7
Luapula	105,488	19,816	125,304	5.9
Lusaka	224,789	287,317	512,106	24.1
Muchinga	3,462	1,390	4,852	0.2
Northern	35,269		35,269	1.7
North Western	91,689	527,928	619,618	29.1
Southern	129,225	28,027	157,253	7.4
Western	51,442	6,260	57,702	2.7
Zambia	880,762	1,246,928	2,127,690	100.0

9.4 Average Number of Chickens Raised Per household

Table 9.6 shows the average number of chickens raised per household by type and province as at 30th April 2023. At national level, the average number of village chickens raised per household was 16, broiler chickens was 93 and 42 for layer chickens.

Lusaka Province reported the highest average number of village chickens raised per household at 24 chickens. Among broiler and layer chicken raising households, North-Western Province reported the highest average number at 228 and 208 chickens, respectively.

Table 9.6: Average Number of Chickens Raised Per Household by Province, 2023

Province	Chickens Raised Per Household								
	Village Chickens			Broilers			Layer Chickens		
	Number of House-holds	Number of Village Chickens	Average Village Chickens Raised by the House-holds	Number of Households	Number of Broilers	Average Broiler Chickens Raised by the House-holds	Number of House-holds	Number of Layer Chickens	Average Layer Chickens Raised by the House-holds
Central	211,570	3,734,050	18	3,034	237,596	78	804	52,790	66
Copperbelt	145,190	3,141,389	22	12,521	1,100,902	88	1,664	150,790	91
Eastern	255,540	3,214,450	13	9,150	36,326	4	1,823	35,817	20
Luapula	142,770	1,401,232	10	1,253	216,207	173	2,589	105,488	41
Lusaka	87,956	2,144,031	24	9,397	2,023,540	215	1,335	224,789	168
Muchinga	118,221	1,883,504	16	2,936	122,387	42	69	3,462	50
Northern	197,482	2,534,383	13	2,481	267,267	108	719	35,269	49
North Western	93,400	1,358,993	15	1,039	237,007	228	440	91,689	208
Southern	307,320	5,245,636	17	4,655	104,698	22	10,639	129,225	12
Western	122,713	1,429,250	12	462	34,649	75	1,023	51,442	50
Zambia	1,682,160	26,086,919	16	46,927	4,380,577	93	21,105	880,762	42

9.5 Chicken Ownership by Female Members of the Household

This section present statistics on chicken ownership. Specifically, these are number of village chicken, broilers and layers owned by households and female members of the household.

9.5.1 Village Chicken Ownership by Female Members of Household

Table 9.7 shows the distribution of village chickens raised and ownership status by province as at 30th April, 2024. Overall, 92.7 percent of the village chickens in Zambia (24,188,950) were owned by households raising them. Of this number, female members of the households owned 49.2 percent, while 50.8 percent were owned by male members of the households.

Western Province recorded the highest share of village chickens owned by female members of the households at 68.7 percent of the total chickens owned by households in the province. The lowest share of chickens owned by female members of the households was recorded in Copperbelt Province at 34.4 percent.

Table 9.7: Village Chicken Ownership by Female Members of Households, 2023

Province	Village Chickens raised				
	Raised by Households	Owned by Household Members		Owned by Females Household Members	
	Number	Number	Percent	Number	Percent
Central	3,734,050	3,469,113	92.9	2,045,143	59.0
Copperbelt	3,141,389	2,955,038	94.1	1,017,660	34.4
Eastern	3,214,450	2,500,643	77.8	1,272,328	50.9
Luapula	1,401,232	1,373,838	98.0	889,568	64.8
Lusaka	2,144,031	1,953,902	91.1	857,579	43.9
Muchinga	1,883,504	1,739,640	92.4	618,401	35.5
Northern	2,534,383	2,396,251	94.5	859,990	35.9
North-western	1,358,993	1,299,645	95.6	754,963	58.1
Southern	5,245,636	5,083,937	96.9	2,611,901	51.4
Western	1,429,250	1,416,943	99.1	973,675	68.7
Zambia	26,086,919	24,188,950	92.7	11,901,208	49.2

9.5.2 Broiler Chicken Ownership by Female Members of Households

Table 9.8 shows the distribution of broiler chickens raised and ownership status by province. Overall, 89.5 percent of the broiler chickens in Zambia (3,919,584) were owned by households raising them as at 30th April 2023. Of this number, female members of the households owned 41.5 percent, while 58.5 percent were owned by male members of the households.

Lusaka Province recorded the highest share of broiler chickens owned by female members of the households at 56.5 percent of the total chickens owned by households in the province. The lowest share of broiler chickens owned by female members of the households was recorded in North-Western Province at 8.5 percent.

Table 9.8: Broiler Chickens Ownership by Female Members of Households, 2023

Province	Broiler Chickens raised				
	Raised by Households	Owned by Households		Owned by Females Household Members	
	Number	Number	Percent	Number	Percent
Central	237,596	165,687	69.7	58,451	35.3
Copperbelt	1,100,902	835,693	75.9	150,065	18.0
Eastern	36,326	9,126	25.1	4,020	44.1
Luapula	216,207	187,329	86.6	50,856	27.1
Lusaka	2,023,540	1,995,277	98.6	1,126,713	56.5
Muchinga	122,387	122,387	100.0	68,324	55.8
Northern	267,267	267,267	100.0	93,315	34.9
North-western	237,007	208,370	87.9	17,667	8.5
Southern	104,698	93,800	89.6	44,968	47.9
Western	34,649	34,649	100.0	12,311	35.5
Zambia	4,380,577	3,919,584	89.5	1,626,689	41.5

9.5.3 Layer Chicken Ownership by Female Members of Households

Table 9.9 shows the distribution of layer chickens raised by households and ownership status by province. Overall, 82.4 percent of the layer chickens in Zambia (725,436) were owned by households raising them as at 30th April 2023. Of this number, female members of the households owned 35.7 percent.

Table 9.9: Layer Chickens Ownership by Female Members of Households, 2023

Province	Layer Chickens raised				
	Raised by Households	Owned by Households		Owned by Females Household Members	
	Number	Number	Percent	Number	Percent
Central	52,790	52,141	98.8	29,939	57.4
Copperbelt	150,790	51,343	34.0	13,999	27.3
Eastern	35,817	3,519	9.8	0	0.0
Luapula	105,488	100,663	95.4	22,725	22.6
Lusaka	224,789	224,789	100.0	118,313	52.6
Muchinga	3,462	3,462	100.0	3,462	100.0
Northern	35,269	35,269	100.0	9,058	25.7
North-western	91,689	91,689	100.0	0	0.0
Southern	129,225	121,743	94.2	40,652	33.4
Western	51,442	40,819	79.3	21,176	51.9
Zambia	880,762	725,436	82.4	259,324	35.7

9.6 Other Poultry

Table 9.10 shows that a total of 1,644,821 ducks were raised by households and establishments as at 30th April, 2023. Of this total, 1,641,387 were raised by households while 3,434 were raised by establishments. Southern Province posted the highest number at 371,582 of the total ducks raised, followed by Eastern at 233,691. Western Province reported the lowest number at 89,047.

Table 9.10: Number of Ducks raised by Households and Establishments by Province, 2023

Province	Ducks Raised				Total Ducks Raised by Households and Establishments
	Households		Establishments		
	Number of Households	Number of Ducks	Number of Establishments	Number of Ducks	
Central	21,148	177,576	48	828	178,404
Copperbelt	27,198	200,891	20	550	201,441
Eastern	32,189	233,587	13	104	233,691
Luapula	15,367	107,500	17	145	107,645
Lusaka	12,629	131,962	5	189	132,151
Muchinga	12,754	120,303	14	238	120,541
Northern	16,638	104,688	9	544	105,232
North-Western	9,806	104,862	8	226	105,087
Southern	40,708	370,985	29	597	371,582
Western	13,498	89,033	2	14	89,047
Zambia	201,935	1,641,387	165	3,434	1,644,821

Table 9.11 shows that a total of 1,105,052 guinea fowls were raised by households and establishments. Of this total, 1,101,098 were raised by households while 3,954 were raised by establishments. Southern Province reported the highest number at 603,429 of the total guinea fowls raised, followed by Copperbelt Province with 136,033. Luapula Province recorded the lowest at 6,889.

Table 9.11: Number of Guinea Fowls raised by Households and Establishments by Province, 2023

Province	Guinea Fowls Raised				Total Guinea Fowls raised by Households and Establishments
	Households		Establishments		
	Number of Households	Number of Guinea Fowls	Number of Establishments	Number of Guinea Fowls	
Central	16,377	92,481	99	1,254	93,735
Copperbelt	12,838	135,282	31	750	136,033
Eastern	10,763	83,424	16	323	83,748
Luapula	1,375	6,866	3	23	6,889
Lusaka	7,581	115,565	1	177	115,741
Muchinga	5,073	20,141	11	160	20,301
Northern	2,897	19,153	1	18	19,170
North-Western	2,219	14,615	1	76	14,691
Southern	71,724	602,277	41	1,152	603,429
Western	1,119	11,296	4	19	11,316
Zambia	131,966	1,101,098	208	3,954	1,105,052

Table 9.12 shows the number of turkeys raised by households and establishments as at 30th April, 2023. A total of 154,126 turkeys were raised by households and establishments. Of this total, 152,576 were raised by households while 1,549 were raised by establishments. Central Province reported the highest number with 60,721 of the total turkeys raised, followed by Southern Province at 46,667. Western Province reported the lowest with 40.

Table 9.12: Number of Turkeys raised by Households and Establishments by Province, 2023

Province	Turkeys Raised				Total Turkeys raised by Households and Establishments
	Households		Establishments		
	Number of Households	Number of Turkeys	Number of Establishments	Number of Turkeys	
Central	7,201	59,962	61	759	60,721
Copperbelt	4,945	24,303	27	322	24,625
Eastern	282	282	4	64	345
Luapula	205	1,356	3	38	1,394
Lusaka	2,554	14,379	4	58	14,437
Muchinga	649	4,866	9	44	4,909
Northern	202	748			748
North-Western	58	174	1	65	239
Southern	12,113	46,472	16	195	46,667
Western	86	35	3	4	40
Zambia	28,296	152,576	129	1,549	154,126

Table 9.13 shows that a total of 1,894,672 pigeons were raised by households and Establishments. Of this total, 1,890,144 were raised by Households while 4,528 were raised by Establishments. Southern Province reported the highest number at 622,142 of the total pigeons raised, followed by Eastern at 392,177. North-western Province recorded the lowest at 19,452.

Table 9.13: Number of Pigeons raised by Households and Establishments by Province, 2023

Province	Pigeons Raised				Total Pigeons raised by Households and Establishments
	Households		Establishments		
	Number of Households	Number of Pigeons	Number of Establishments	Number of Pigeons	
Central	8,722	180,479	59	1,853	182,332
Copperbelt	9,112	224,823	12	867	225,690
Eastern	10,847	391,513	18	664	392,177
Luapula	1,752	27,125	-	-	27,125
Lusaka	5,109	230,331	3	100	230,430
Muchinga	5,241	80,452	8	446	80,898
Northern	2,680	67,705	-	-	67,705
North-Western	1,144	19,452	-	-	19,452
Southern	37,652	621,544	26	598	622,142
Western	3,390	46,721	-	-	46,721
Zambia	85,650	1,890,144	125	4,528	1,894,672

Table 9.14 shows the number of rabbits raised by households and establishments as at 30th April, 2023. A total of 369,587 rabbits were raised by households and establishments. The majority of the rabbits were owned by households (368,565) compared to establishments (1,022). Copperbelt Province reported the highest number at 140,620 of rabbits, followed by Lusaka Province at 57,176 and Muchinga at 52,113. Western Province posted the lowest number at 477.

Table 9.14: Number of Rabbits raised by Households and Establishments by Province, 2023

Province	Rabbits Raised				Total Rabbits raised by Households and Establishments
	Households		Establishments		
	Number of Households	Number of Rabbits	Number of Establishments	Number of Rabbits	
Central	3,838	30,778	12	145	30,924
Copperbelt	7,304	140,436	7	183	140,620
Eastern	2,926	19,806	4	135	19,940
Luapula	1,113	3,250	5	232	3,481
Lusaka	3,859	57,176	-	-	57,176
Muchinga	4,166	52,066	3	47	52,113
Northern	5,517	44,443	4	140	44,583
North-Western	403	2,010	2	61	2,071
Southern	1,904	18,122	6	79	18,201
Western	35	477			477
Zambia	31,067	368,565	43	1,022	369,587

9.7 Major Constraints Affecting Poultry Production

Figure 9.1 shows the major constraints faced by village chicken-raising households. The highest percentage of households reported disease as a major constraint in poultry production at 75.6 percent. This was followed by theft (4.1%) and predators (3.8%).

Figure 9.1: Major Constraints Faced by Village Chicken-Raising Households, 2023
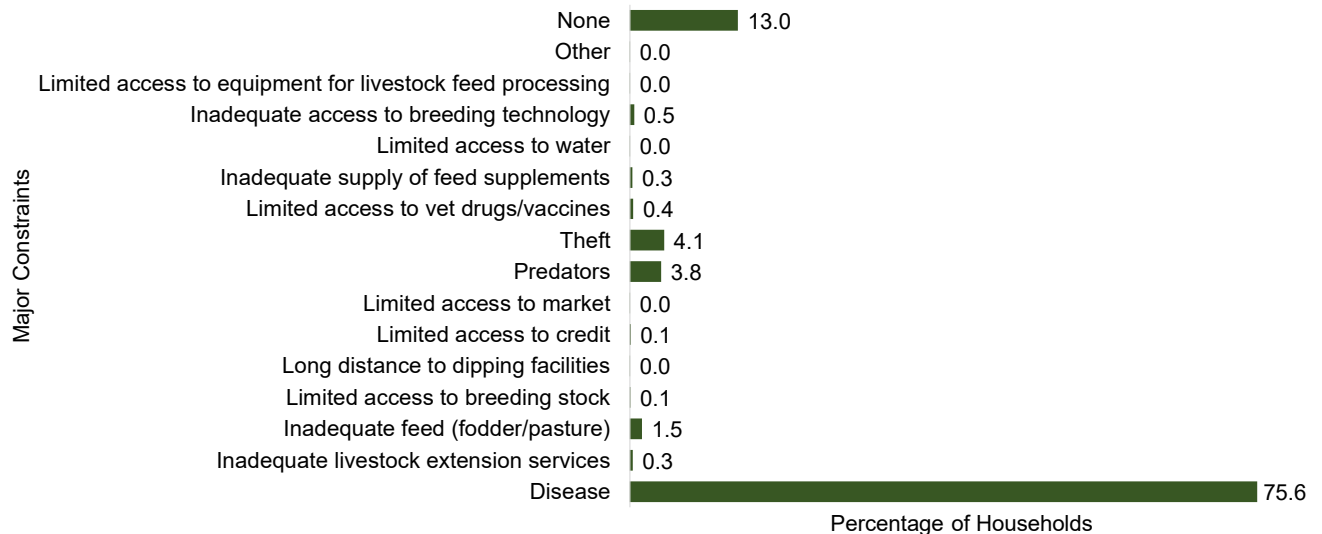
Figure 9.2 shows the major constraints faced by broiler chicken-raising households. Disease was reported as the major constraint faced by broiler chicken-raising households at 41.6 percent, followed by inadequate feed (fodder/pasture) at 9.4 percent. About 31.5 percent of the households reported that they did not face any major constraint.

Figure 9.2: Major Constraints Faced by Broiler Chicken-Raising Households, 2023
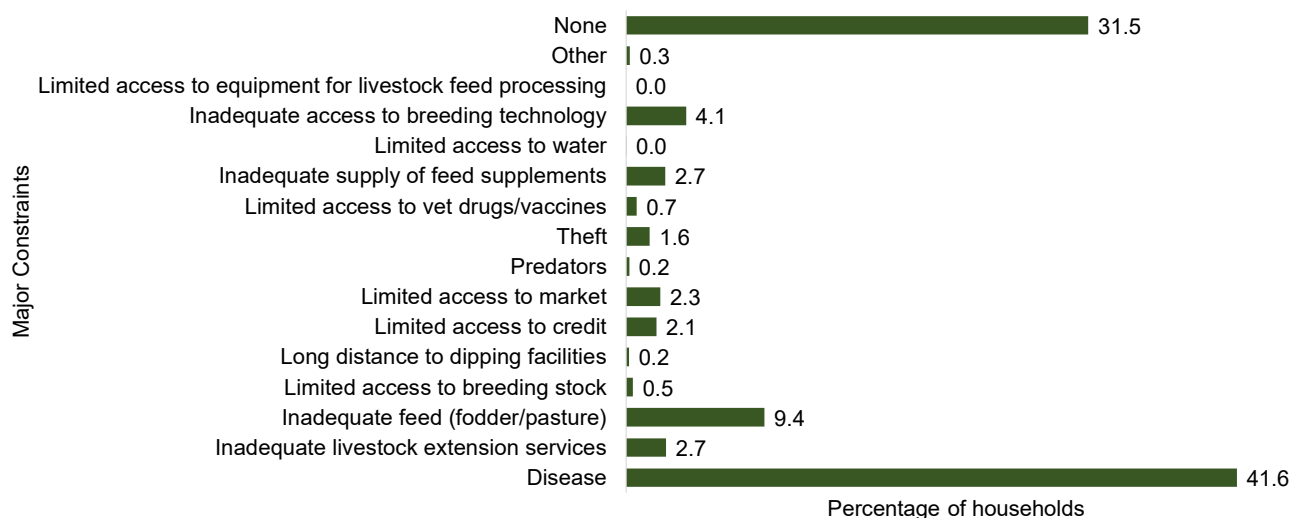
Figure 9.3 shows the major constraints faced by layer chicken-raising households. Disease was reported as the major constraint faced by layer chicken-raising households at 35 percent, followed by inadequate feed (fodder/pasture) at 11.8 percent. About 27.5 percent of the households did not report facing any major constraints

Figure 9.3: Major Constraints Faced by Layer Chicken-Raising Households, 2023

Major Constraints	Percentage of households
None	27.5
Other	0.0
Limited access to equipment for livestock feed processing	0.0
Inadequate access to breeding technology	2.5
Limited access to water	0.0
Inadequate supply of feed supplements	3.6
Limited access to vet drugs/vaccines	5.6
Theft	3.6
Predators	2.8
Limited access to market	0.6
Limited access to credit	0.6
Long distance to dipping facilities	0.0
Limited access to breeding stock	1.3
Inadequate feed (fodder/pasture)	11.8
Inadequate livestock extension services	5.2
Disease	35.0

Chapter 10 : Egg Production and Sales from Households

This Chapter discusses egg production from the village and exotic (improved) chickens by households at national level. The statistics reported include: the main purpose of egg production; the number of households involved in egg production; and productivity parameters vis-à-vis hatchability.

10.1 Households Engaged in Egg Production

Table 10.1 shows the number of households engaged in egg production by province as at 30th April, 2023. The egg production discussed under this chapter is from village chickens and other exotic (improved) chickens and excludes egg production from layer chickens. At national level, a total of 1,503,558 households were involved in egg production. Of this total, Southern Province accounted for the highest percentage of households involved in egg production at 19.8 percent followed by Eastern at 13.9 percent. Lusaka Province had the lowest percentage of households at 4.5 percent.

Table 10.1: Number and Percent of Households involved in Egg Production, 2023

Province	Number of Households	Percent
Central	194,089	12.9
Copperbelt	132,681	8.8
Eastern	209,088	13.9
Luapula	136,273	9.1
Lusaka	67,171	4.5
Muchinga	106,133	7.1
Northern	174,441	11.6
North-Western	83,092	5.5
Southern	297,387	19.8
Western	103,202	6.9
Zambia	1,503,558	100.0

10.2 The Main Purpose of Producing Eggs

Table 10.2 shows the main purpose of households involved in egg production as at 30th April, 2023. The main purpose of egg production was hatching (breeding) and this accounted for 94.9 percent of households involved in egg production from village chickens.

The main purpose of egg production from exotic (improved) chickens was for sale and this accounted for 47.2 percent.

Table 10.2: Number and Percent of Households involved in Egg Production by Main Purpose and Province, 2023

Province	Village Chickens	Exotic Chickens (Improved)						
	Number of Households	Hatching/ Breeding	Consump- tion	Sale	Number of Households	Hatching/ Breeding	Consump- tion	Sale
	Number	Percent	Percent	Percent	Number	Percent	Percent	Percent
Central	193,444	95.9	3.9	0.2	646	57.6	20.3	22.0
Copperbelt	132,027	94.0	2.6	3.5	654	13.6	14.2	72.3
Eastern	208,153	93.1	5.8	1.2	936	39.7	44.1	16.2
Luapula	134,827	97.8	2.1	0.1	1,446	31.8	36.2	32.0
Lusaka	65,789	93.4	6.6	-	1,382	28.2	10.3	61.5
Muchinga	106,064	98.5	1.5	0.0	69	-	-	100.0
Northern	173,922	94.0	5.7	0.3	260	74.4	-	25.6
North-Western	82,897	96.6	2.9	0.5	195	51.4	-	48.6
Southern	290,590	93.7	4.8	1.5	6,797	38.9	9.2	51.9
Western	103,171	94.1	5.2	0.7	30	34.9	-	65.1
Zambia	1,490,883	94.9	4.2	0.9	12,416	37.3	15.5	47.2

10.3 Reproductivity Parameters of Village Chickens

Table 10.3 shows reproductivity parameters of village chickens by province, as at 30th April, 2023. At national level, a village chicken on average had 3 clutches in a year, with 12 eggs laid per clutch. Of the 12 eggs laid per clutch, 10 eggs hatched successfully and bringing the national average hatchability to 78.3 percent.

Table 10.3: Reproductivity Parameters of Village Chickens by Province, 2023

Province	Village Chicken			
	Average number of clutches per year	Number of eggs per clutch	Number of eggs that hatched	Hatchability (percent)
Central	3	13	10	78.7
Copperbelt	3	14	10	76.8
Eastern	2	12	9	76.5
Luapula	3	11	9	77.4
Lusaka	3	13	9	72.0
Muchinga	3	12	10	80.3
Northern	3	12	9	80.0
North-Western	3	12	10	80.3
Southern	3	13	10	79.2
Western	3	12	10	79.7
Zambia	3	12	10	78.3

10.4 Main Decision Making in Relation to the Sale of Eggs

Table 10.4 shows information on the main decision maker on the sale of eggs by households as at 30th April, 2023. From the 31,826 households that reported to have sold eggs, the main decision makers on the sale of eggs in a household were male spouses accounting for 49.3 percent, this was followed by female spouses at 30.1 percent. The least decision makers in a household were male children at 0.3 percent. Other females and non-household member females were not involved in decision making on sale of eggs.

Table 10.4: Main Decision making on Egg Sales, 2023

Province	Total number of households	Household Decision making on egg sales								
		Male spouse	Female spouse	Male child	Female Child	Other Male	Other Female	Both head and spouse	Non-member Male	Non-member Female
		Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent
Central	547	25.4	25.6	0.0	49.0	0.0	0.0	0.0	0.0	0.0
Copperbelt	5,031	60.0	4.7	0.0	0.0	0.0	0.0	27.4	7.9	0.0
Eastern	2,559	29.6	52.7	0.0	5.9	0.0	0.0	11.8	0.0	0.0
Luapula	628	18.4	81.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lusaka	850	86.7	13.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Muchinga	111	37.4	0.0	0.0	0.0	0.0	0.0	62.6	0.0	0.0
Northern	5,003	41.7	54.4	0.0	0.0	0.0	0.0	4.0	0.0	0.0
North-Western	509	0.0	28.6	9.3	0.0	28.6	0.0	33.4	0.0	0.0
Southern	15,877	53.7	24.9	0.3	0.0	0.8	0.0	19.9	0.5	0.0
Western	711	40.2	59.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Zambia	31,826	49.3	30.1	0.3	1.3	0.9	0.0	16.6	1.5	0.0

Chapter 11 : Forage Production

This Chapter presents results on forage production by both households and establishments. The number of households and establishments that were engaged in forage production, total area planted, types and utilization of forage is reported under this chapter.

11.1 Number of Households and Establishments Involved in Forage Production

Table 11.1 shows that a total of 56,899 out of 1,875,298 livestock raising households and 212 out of 2,147 establishments were involved in forage production during the reference period. Among provinces, Central reported the highest percentage of forage producing households at 32.7 percent followed by North-western at 18.6 percent. The highest percentage of forage producing establishments was recorded in Central Province (31.6%) followed by Southern and Copperbelt provinces at 26.9 percent and 15.2 percent, respectively.

Table 11.1: Number and Percentage of Households and Establishments Involved in Forage Production by Province, 2023

Province	Households			Establishments		
	Involved in Livestock Raising	Involved in Forage Production		Involved in Livestock Raising	Involved in Forage Production	
	Number	Number	Percent	Number	Number	Percent
Central	222,989	18,627	32.7	667	67	31.6
Copperbelt	160,045	7,760	13.6	315	32	15.2
Eastern	297,808	565	1.0	123	1	0.5
Luapula	159,114	1,838	3.2	135	8	3.9
Lusaka	108,927	4,776	8.4	117	27	12.9
Muchinga	135,715	5,094	9.0	74	4	1.8
Northern	208,639	1,890	3.3	44	0	0.0
North Western	116,639	10,568	18.6	83	12	5.8
Southern	327,568	5,538	9.7	539	57	26.9
Western	137,853	244	0.4	51	3	1.5
Zambia	1,875,298	56,899	100.0	2,147	212	100.0

11.2 Land size used for growing forage by households and establishments

Table 11.2 shows that a total of 176,872 hectares of land were cultivated by both households and establishments for forage production. Out of this total area, 170,115 hectares were under households and Central Province reported the largest cultivated land by households for forage production at 103,671 hectares.

The total area for establishments was 6,756 hectares, of which Southern Province reported the largest area cultivated under forage at 3,535 hectares.

Table 11.2: Land size used for growing forage by households and establishments by Province, 2023

Province	Households			Establishments			Total area (ha)
	Number of households	Total area size (Ha)	Average area Size	Number of Establish-ments	Total area size (Ha)	Average area Size	
Central	18,627	103,671	5.6	67	1,074	16	104,745
Copperbelt	7,760	15,592	2	32	671	21	16,264
Eastern	565	410	0.7	1	5	5	415
Luapula	1,838	417	0.2	8	72	9	490
Lusaka	4,776	11,241	2.4	27	1,184	43	12,425
Muchinga	5,094	6,536	1.3	4	14	4	6,551
Northern	1,890	418	0.2				418
North-western	10,568	26,104	2.5	12	190	15	26,294
Southern	5,538	5,549	1	57	3,535	62	9,084
Western	244	176	0.7	3	10	3	186
Zambia	56,899	170,115	3	212	6,756	32	176,872

11.3 Type of forage grown by Households

Figure 11.1 shows the distribution of households by types of forage crop grown. The figure shows that households who produced more than one type of forage were the highest at 15.4 percent, followed by those producing Maize (12.3%), then Cowpeas and Velvet Beans at 11.4 percent each.

Figure 11.1: Percentage distribution of households by types of forage crop grown, 2023
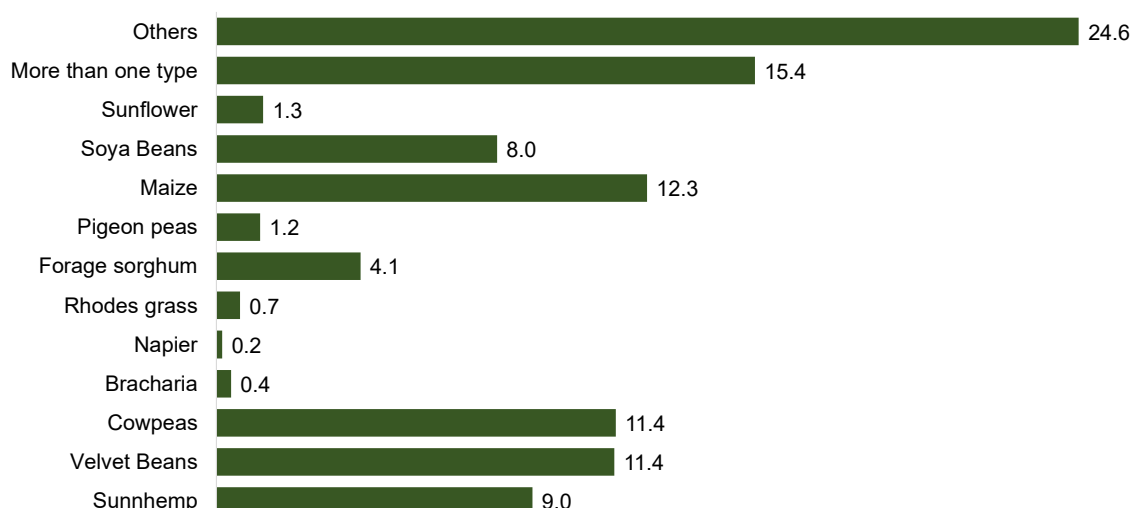
Further, Table 11.3 shows that at provincial level, Copperbelt recorded the highest percentage of households that grew maize for forage at 33.5 percent followed by Luapula and Central at 14.7 percent and 14.6 percent respectively. Meanwhile, Eastern Province reported the highest percentage of households that produced cowpeas for forage at 46.1 percent while Muchinga (32.6%) reported highest households that produced velvet beans.

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Table 11.3: Number of Households by Type of forage grown and Province, 2023

Province	Households Involved in Forage Production (Number)	Types of Forage grown by households												
		Sunn-hemp Percent	Velvet Beans Per-cent	Cowpeas Percent	Bracharia Percent	Napier Percent	Rhodes Grass Percent	Forage Sorghum Percent	Pigeon Pea Percent	Maize Percent	Soya Beans Percent	Sunflower Percent	More than One Type Percent	Others Percent
Central	18,627	2.8	3.1	1.5	0.0	0.0	0.0	0.1	1.6	14.6	14.6	1.9	18.3	41.5
Copperbelt	7,760	2.4	4.4	3.5	0.0	0.0	0.0	0.0	0.0	33.5	14.4	0.0	4.8	37.0
Eastern	565	0.0	0.0	46.1	42.2	0.0	11.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Luapula	1,838	0.0	0.0	0.0	0.0	0.0	0.0	9.9	0.0	14.7	12.4	0.0	29.2	33.7
Lusaka	4,776	9.4	0.0	24.4	0.0	0.0	0.0	0.0	0.0	11.2	0.0	4.6	24.3	26.0
Muchinga	5,094	15.9	32.6	0.0	0.0	0.0	3.1	0.0	3.7	8.9	8.0	0.0	27.8	0.0
Northern	1,890	0.0	0.0	0.0	0.0	0.0	0.0	21.6	0.0	1.4	0.0	2.3	2.8	71.9
North-western	10,568	28.6	31.2	22.8	0.0	0.0	0.0	2.6	2.0	2.6	0.7	0.0	8.9	0.5
Southern	5,538	0.0	10.4	37.5	0.0	1.7	1.6	26.3	0.0	2.1	0.2	2.5	15.5	2.1
Western	244	59.0	0.0	8.1	0.0	0.0	27.7	0.0	0.0	0.0	0.0	0.0	0.0	5.2
Zambia	56,899	9.0	11.4	11.4	0.4	0.2	0.7	4.1	1.2	12.3	8.0	1.3	15.4	24.6

11.4 Forage utilization by Households

Figure 11.2 shows the distribution of forage producing households by type of utilisation. The majority of households (51.5%) reported that they produced forage for sell followed by feed formulation at 13.3 percent.

Figure 11.2: Percentage Distribution of Forage Producing Households by Utilization Type, 2023
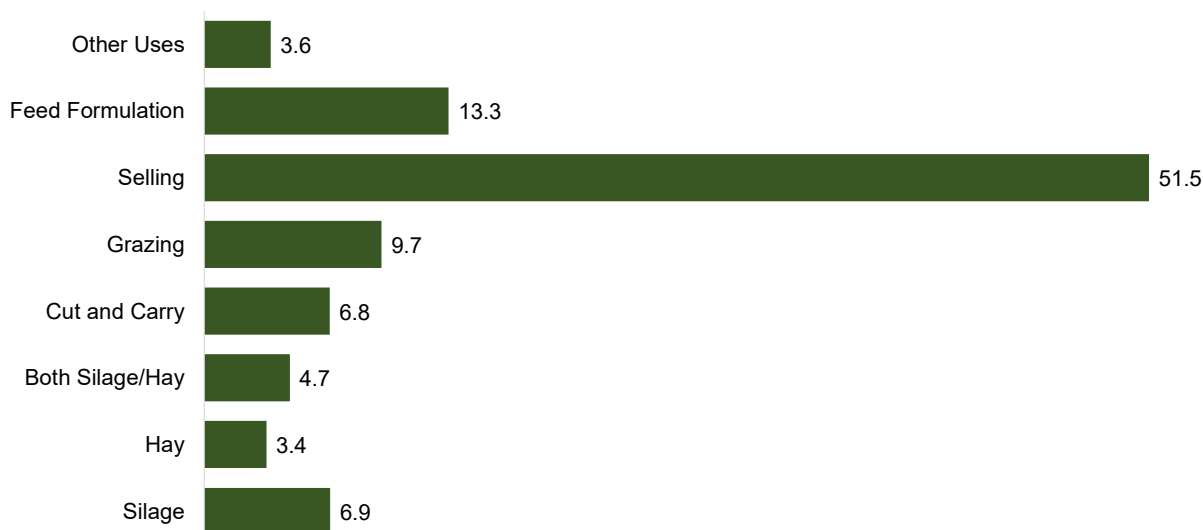
Further, Table 11.4 shows that at provincial level, Central recorded the highest percentage of households that produced forage for sale at 80.1 percent, followed by Muchinga and North-western at 75.4 percent and 70.3 percent respectively. Southern Province reported the highest percentage of households that utilized forage to formulate feed at 55.2 percent followed by Copperbelt (38.2%) and Luapula (18.5%).

Table 11.4: Households by Forage utilization Type and Province, 2023

Province	Households Involved in Forage Production	Forage utilization							
		Silage	Hay	Both Si-lage/Hay	Cut and Carry	Grazing	Selling	Feed For-mulation	Other Uses
		Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent
Central	18,627	6.9	3.4	1.9	0.4	1.1	80.1	3.6	2.6
Copperbelt	7,760	3.3	13.8	0.0	18.3	17.5	3.5	38.2	5.3
Eastern	565	0.0	11.7	0.0	0.0	46.1	42.2	0.0	0.0
Luapula	1,838	1.3	4.4	0.0	63.4	0.0	0.0	18.5	12.4
Lusaka	4,776	0.0	0.0	0.0	9.3	26.3	54.5	4.9	5.1
Muchinga	5,094	14.9	0.0	1.9	0.0	4.3	75.4	0.0	3.6
Northern	1,890	0.0	0.0	0.0	24.6	70.3	0.0	5.0	0.0
North-western	10,568	13.5	0.0	11.2	1.0	0.0	70.3	2.1	1.9
Southern	5,538	3.0	1.4	15.6	3.8	16.0	0.0	55.2	4.9
Western	244	5.2	0.0	59.0	7.2	0.0	8.1	0.0	20.5
Zambia	56,899	6.9	3.4	4.7	6.8	9.7	51.5	13.3	3.6

Chapter 12 : Honey Production and Sales

This chapter highlights results on honey production and sales in Zambia by households and establishments.

12.1 Households Involved in Honey Production

Table 12.1 shows the number of households and establishments involved in honey production during the reference period. At national level, a total of 44,003 households and 55 establishments were involved in honey production. Among the provinces, Copperbelt recorded the highest percentage of households at 25 percent involved in honey production while Luapula Province recorded the least percentage at less than 0.8. Among establishments, Central recorded the highest percentage at 42.1 percent of establishments involved in honey production, followed by Southern province at 23.6 percent.

Table 12.1: Number and Percentage of Households and Establishments Involved in Honey Production by Province, 2023

Province	Households Involved in Honey Production		Establishments Involved in Honey Production	
	Number of Households	Percent	Number of Establishments	Percent
Central	4,282	9.7	23	42.1
Copperbelt	11,033	25.1	10	18.7
Eastern	5,205	11.8	1	2.0
Luapula	362	0.8	1	1.8
Lusaka	2,022	4.6	0	0.0
Muchinga	2,791	6.3	4	6.4
Northern	1,002	2.3	0	0.0
North Western	7,559	17.2	3	5.4
Southern	8,735	19.9	13	23.6
Western	1,012	2.3	0	0.0
Zambia	44,003	100	55	100.0

12.2 Comb Honey Produced by Households and Establishments

Table 12.2 shows the quantity of comb honey produced by households and establishments. At national level, a total of 15,061.7 metric tonnes of comb honey was produced by both households and establishments. Out of this total, households contributed 14,718.4 metric tonnes while establishments contributed 343.3 metric tonnes.

Among provinces, North-western recorded the highest percentage of comb honey produced with 5,836.8 metric tonnes, followed by Central and the Copperbelt at 2,963.0 metric tonnes and 2,334.5 metric tonnes, respectively. Northern Province was the lowest at 104.2 metric tonnes.

Table 12.2: Quantity of Comb Honey Produced by Households and Establishments by Province, 2023

Province	Total Comb Honey Produced		Comb Honey Production by Households		Comb Honey Production (MT) by Establishments	
	Quantity (MT)	Percent	Quantity (MT)	Percent	Quantity (MT)	Percent
Central	2,967.9	19.7	2,963.0	20.1	4.9	1.4
Copperbelt	2,629.3	17.5	2,334.5	15.9	294.8	85.9
Eastern	1,017.0	6.8	1,016.9	6.9	0.1	0.0
Luapula	123.3	0.8	123.3	0.8	0.0	0.0
Lusaka	113.5	0.8	113.5	0.8	0.0	0.0
Muchinga	940.5	6.2	940.5	6.4	0.0	0.0
Northern	104.2	0.7	104.2	0.7	0.0	0.0
North Western	5,836.8	38.8	5,794.9	39.4	41.9	12.2
Southern	564.4	3.7	562.8	3.8	1.6	0.5
Western	764.7	5.1	764.7	5.2	0.0	0.0
Zambia	15,061.7	100.0	14,718.4	100.0	343.3	100.0

12.3 Comb Honey Sold by Households and Establishments

Table 12.3 shows the quantity of comb honey sold by households and establishments. At national level, a total of 7,513.2 metric tonnes of comb honey was sold by both households and establishments. Out of this total, 7,500. metric tonnes were sold by households while the remaining 13.3 metric tonnes by establishments.

Among provinces, North-Western recorded the highest percentage of comb honey sold at 43.2 percent, followed by Copperbelt at 17.7 percent. Lusaka province was the lowest at 0.1 percent.

Table 12.3: Quantity of Comb Honey Sold by Households and Establishments by Province, 2023

Province	Total Comb Honey Sold		Comb Honey Sold by Households		Comb Honey Sold by Establishments	
	Quantity (MT)	Percent	Quantity (MT)	Percent	Quantity (MT)	Percent
Central	908.3	12.1	907.9	12.1	0.4	3.0
Copperbelt	1,328.6	17.7	1,316.3	17.6	12.3	92.8
Eastern	620.9	8.3	620.9	8.3	0.0	0.0
Luapula	123.3	1.6	123.3	1.6	0.0	0.2
Lusaka	3.9	0.1	3.9	0.1	0.0	0.0
Muchinga	357.5	4.8	357.5	4.8	0.0	0.1
Northern	13.6	0.2	13.6	0.2	0.0	0.0
North Western	3,247.9	43.2	3,247.8	43.3	0.1	0.9
Southern	146.2	1.9	145.8	1.9	0.4	3.2
Western	763.0	10.2	763.0	10.2	0.0	0.0
Zambia	7,513.2	100.0	7,500.0	100.0	13.3	100.0

12.4 Major Buyers of Comb Honey

Table 12.4 shows the number and percentage of households that sold comb honey by type of buyer. At national level, 38.0 percent of households sold comb honey to private traders, followed by other households and honey processors at 33.2 percent and 28.8 percent, respectively.

Table 12.4: Number and Percentage of Households that sold Comb honey by Type of Buyer and Province, 2023

Province	Total number of households sold Comb honey	Honey processors		Private traders		Other households	
		Number	Percent	Number	Percent	Number	Percent
Central	1,907	582	30.5	436	22.9	889	46.6
Copperbelt	6,825	4,215	61.8	1,548	22.7	1,062	15.6
Eastern	3,379	51	1.5	903	26.7	2,426	71.8
Luapula	362	0	0.0	362	100.0	0	0.0
Lusaka	210	17	8.3	12	5.8	180	85.9
Muchinga	2,125	0	0.0	1,752	82.5	372	17.5
Northern	667	0	0.0	118	17.7	549	82.3
North Western	6,591	2,813	42.7	3,589	54.4	189	2.9
Southern	3,581	0	0.0	1,304	36.4	2,276	63.6
Western	1,012	0	0.0	111	11.0	901	89.0
Zambia	26,656	7,679	28.8	10,134	38.0	8,844	33.2

Table 12.5 shows the number of establishments that sold comb honey by type of buyer. At national level, honey processors accounted for the highest number of buyers of comb honey sold by establishments at 11 while buyers within province accounted for the lowest number of buyers of comb honey at 10.

Table 12.5: Number of Establishments that sold Comb honey by Type of Buyer and Province, 2023

Province	Honey processors	Buyers within Province
	Number	Number
Central	0	7
Copperbelt	6	1
Eastern	0	0
Luapula	0	1
Lusaka	0	0
Muchinga	0	1
Northern	0	0
North Western	1	0
Southern	4	0
Western	0	0
Zambia	11	10

12.5 Major Constraints in Honey Production Experienced by Households

Figure 12.1 shows the major constraints that households experienced in honey production during the reference period. Most severe constraints were pests at 26.3 percent, followed by low colonisation at 19.7 percent.

Figure 12.1 Most Severe Major - Constraint Households Experienced in Honey Production, 2023
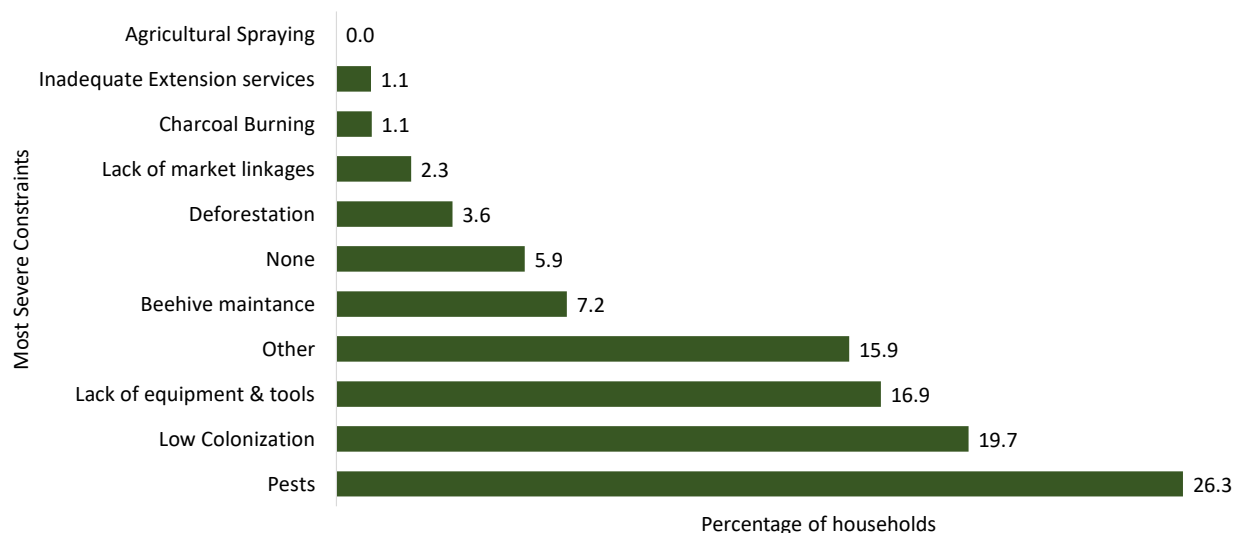

Figure 12.2 shows the second major constraint that households experienced. The second severe constraint was beehive maintenance at 24.1 percent, followed by pests at 17.4 percent. Agricultural spraying was the lowest at 0.5 percent.

Figure 12.2 Second Major - Constraint Households Experienced in Honey Production, 2023
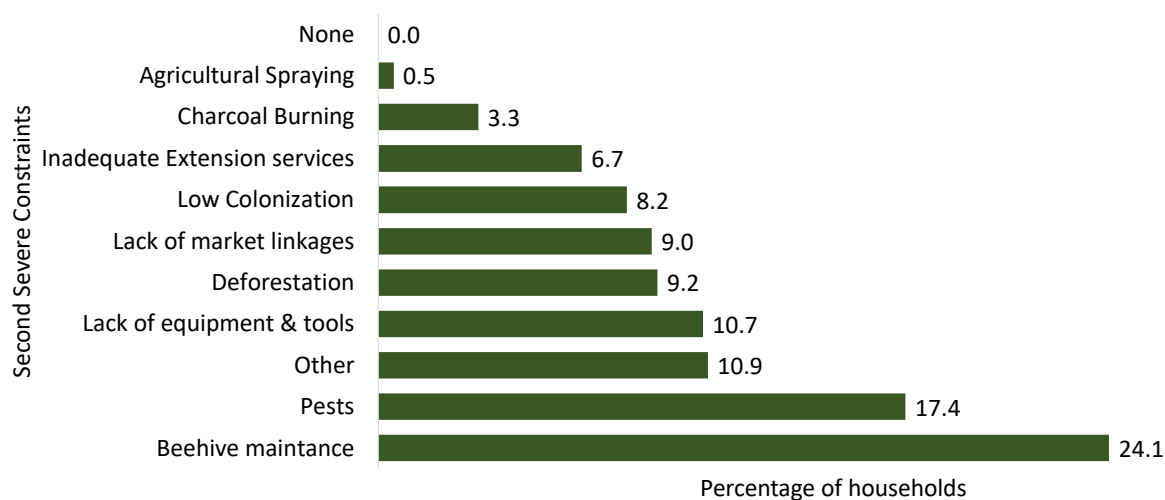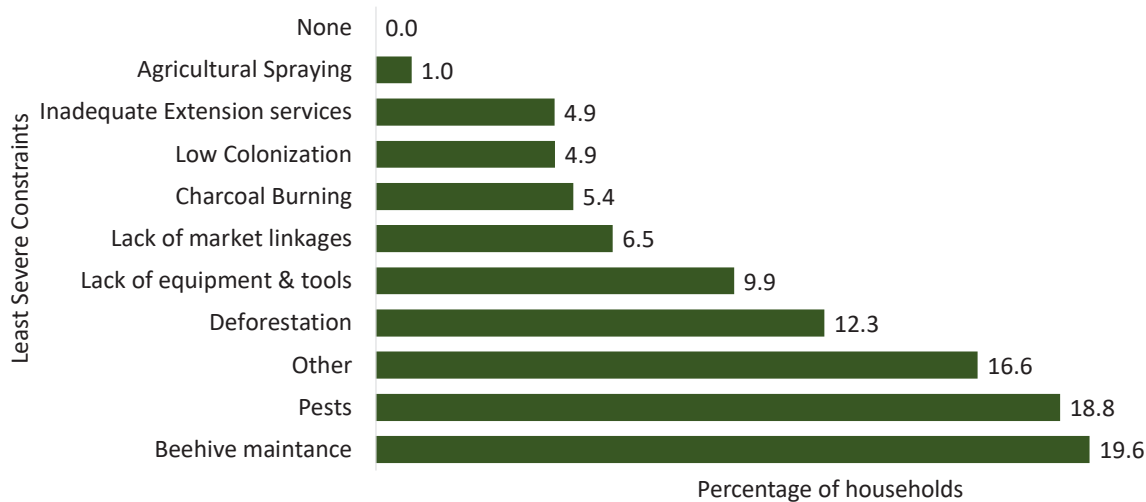
Figure 12.3 shows the least major constraint that households experienced. The least severe constraint was beehive maintenance at 19.6 percent, followed by pests at 18.8 percent. Agricultural spraying was the lowest at 1.0 percent.

Figure 12.3 Least Major - Constraint Households Experienced in Honey Production, 2023

12.6 Major Constraints in Honey Production Experienced by Establishments

Figure 12.4 shows the most severe constraint establishments experienced in honey production. Most severe constraints were pests at 24.5 percent, followed by inadequate management skills at 23.5 percent.

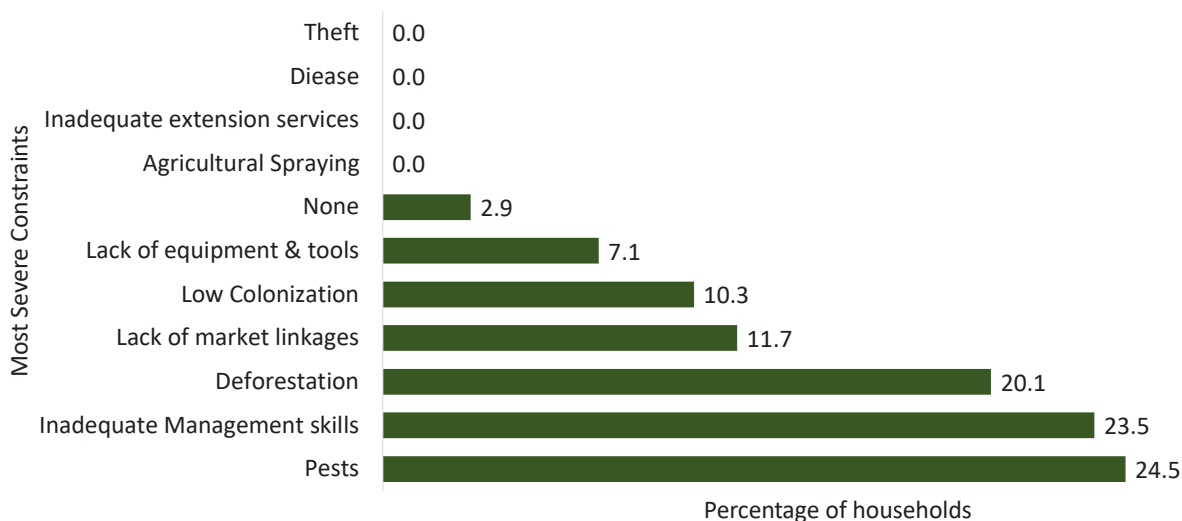**Figure 12.4 Most Severe Major - Constraint Establishments Experienced in Honey Production, 2023**

Figure 12.5 shows the second major constraint households experienced. The second major constraint was pests at 30.9 percent, followed by agricultural spraying at 15.9 percent.

Figure 12.5 Second Major - Constraint Establishments Experienced in Honey Production, 2023
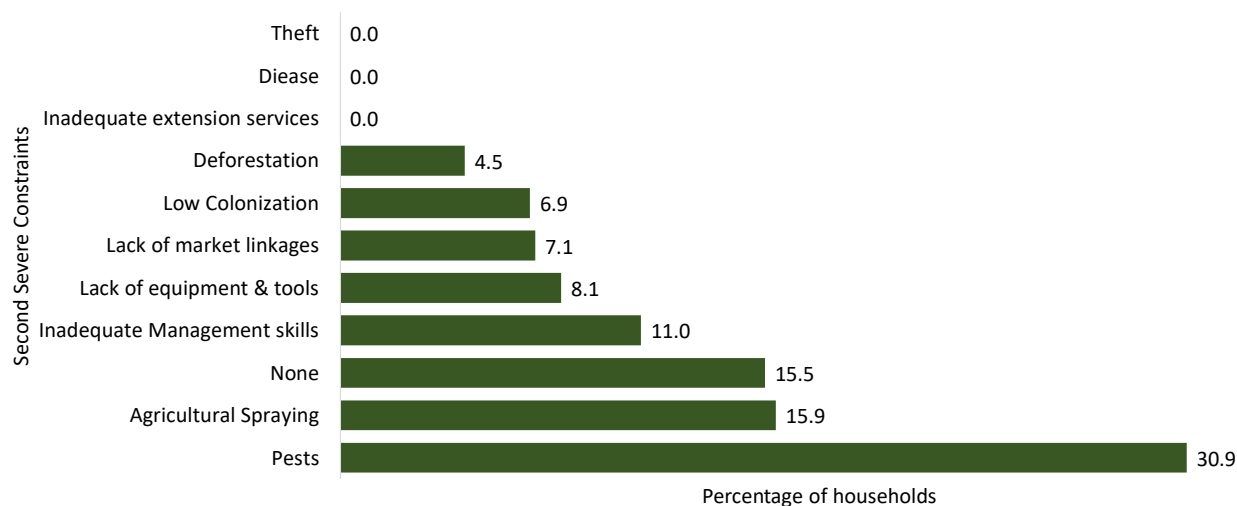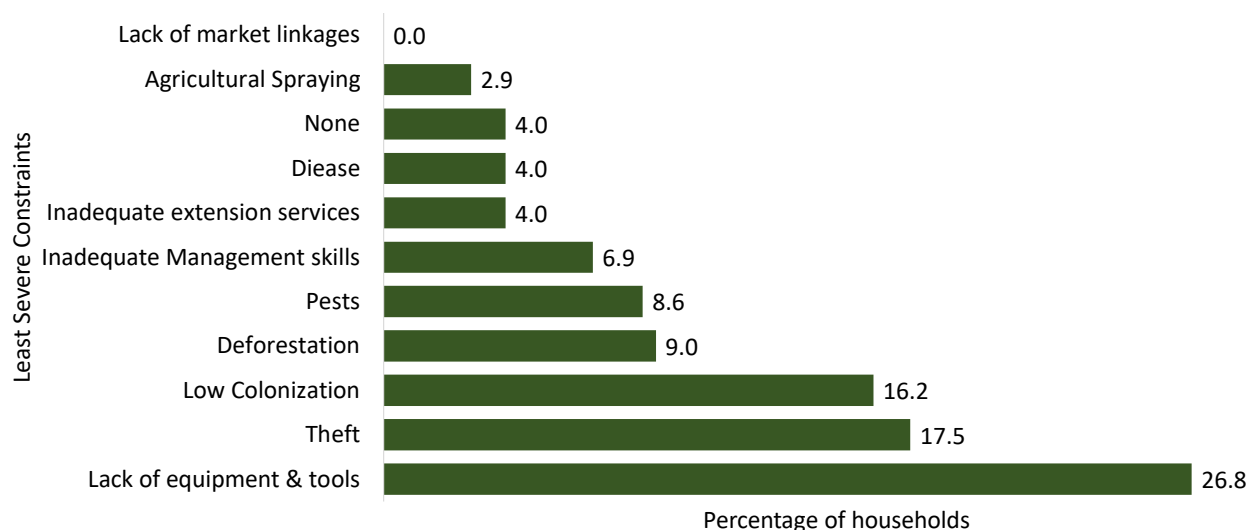

Figure 12.6 shows the least severe constraint that households experienced. The least severe major constraint was lack of equipment and tools at 26.8 percent, followed by pests at 17.5 percent.

Figure 12.6 Least Major - Constraint Establishments Experienced in Honey Production, 2023

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